

ABOUT AGDEVCO

AgDevCo is an impact investor which aims to contribute to the transformation of African agriculture from subsistence farming to a modern, commercial sector. AgDevCo provides debt, equity, and hands-on support to establish and develop commercial-scale agribusinesses. It has invested over \$178 million into 53 agribusinesses across 9 African countries. AgDevCo considers the indirect and systemic impact of its investments, as per the IFC impact management principles⁴, and uses qualitative case studies to monitor these changes.

ABOUT THIS CASE STUDY

This independent case study analyses the transformational impact of AgDevCo's investment in Westfalia Fruto Moçambique ("Westfalia"), using AgDevCo's revised transformational change framework. It was prepared by IPE Triple Line in October 2019 following a field visit to Chimoio, Zembe, Sussundenga and Catandica. This builds on two similar case studies published by AgDevCo on the transformational impact of investments in Zambia and Malawi.

The study is based on data collected through focus group discussions and interviews with Westfalia management, farm and warehouse employees, producers from the Manica Litchi Growers Association, commercial producers, contractors, and small local business owners.

The research used a methodology based on network analysis, focusing on the links and flows between various actors. Quantitative and qualitative data was used to construct simple maps of pre- and post-investment networks, which allowed us to build a visual picture of how the AgDevCo investment has had an impact, and how this has changed over time.

SUMMARY

Westfalia Fruto is the Mozambican subsidiary of a leading multinational supplier of fresh fruit to international markets. This study explores how AgDevCo's investment has helped connect local producers to export markets, contributing to the growth of the fruit sector in Mozambique, lifting up emerging farmers in the region, and stimulating local economies.

¹The IFCs framework for impact investing. More information at www.impactprinciples.org



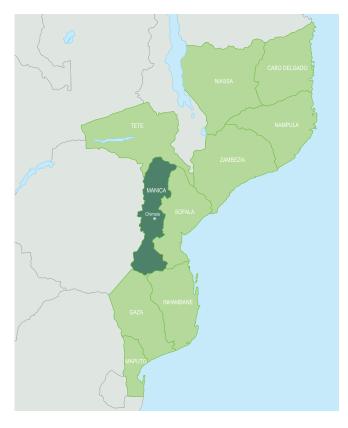
THE CONTEXT

THE COMPANY

Westfalia Fruit is a leading multinational supplier of fresh fruit to international markets. Through its vertically-integrated supply chain, the group grows, sources, ripens, packs, processes and markets quality avocados and other produce – across the year and across the globe. Located in Manica Province, its Mozambican subsidiary Westfalia Fruto was established in 2014. The company grows Carmen and Hass avocadoes under micro jet irrigation on a 250ha farm located in Zembe. These avocados are then exported to South Africa and Europe. Westfalia also provides packing and marketing services through its Chimoio packhouse facility, providing access to export markets to other commercial producers in the region, as well as emerging farmers from the Manica Litchi Growers Association. As a result, the company is facilitating job creation in a rural location with limited formal employment opportunities, enabling local litchi producers to increase their income, and encouraging the growth of the Mozambican fruit production sector.

AGDEVCO'S ROLE

AgDevCo has played a key role in the establishment of Westfalia Fruto. Leveraging their experience and knowledge of the nascent Mozambican avocado industry, together with IFC they have engaged with major avocado producers in South Africa to attract interest in developing a commercial avocado hub in Mozambique. After Westfalia expressed interest, AgDevCo facilitated a feasibility study, and influenced the design of the project – especially by encouraging the company to work with smallholder farmers in the region. In 2014, AgDevCo took a 25% equity stake (\$2.0M invested to date) to provide greenfield financing for the establishment of the Zembe estate to grow avocado, and provided



Westfalia with a €00k loan to purchase farming equipment and for working capital purposes. In 2019, following the success of the Zembe operation, AgDevCo committed additional funding for the first phase of expansion (100ha) of Westfalia's operations at a second farm located in Catandica and for upgrades to the company's packhouse –bringing the total amount invested to \$5.65M.

DIRECT IMPACT IN 2018²



190

Full-Time equivalent (FTE) jobs created and sustained



36%

of employees are women





27

Commercial and emerging farmers linked to export markets



\$917k

Total value of fruit exports





AGDEVCO'S VISION FOR TRANSFORMATIONAL CHANGE

AgDevCo investments do not only generate direct impact, but in many cases can have a transformational impact on the local economies in which they are located. These more indirect impacts are referred to as economic transformational change.

Transformational change:

"Wider knock-on effects in markets and rural communities, as a result of changes for AgDevCo investees and the smallholders that they work with.

These ripple effects can include (but are not limited to) economic spill-over activity, behavioural changes of other companies and farmers, and increases in economic activity along value chains"

AgDevCo investments create transformational change in two key ways:

- > Crowding-in of investment: the investment can indirectly result in the growth and expansion of the overall value-chain.
- > Community uplift: the investment can also stimulate the local economy of the communities with which it is working, leading to the emergence of new economic actors and job opportunities.

In order for these changes to occur, investments have to have certain characteristics. Understanding these characteristics can tell us something about the potential for transformational change of each investment.

- > The investment introduces a new agricultural industry to an area: the investment establishes the commercial production, processing or value-addition of a crop or livestock in an area where it was not previously grown. The investment could also be introducing smallholder commercialisation of the product.
- > The investment's direct impact is geographically concentrated: the investment will formally hire a high number of employees, or work with smallholder farmers living in the same geographic community, and provide them with and a significant income uplift. It can also plan on sourcing goods and services locally and spread good business practices. This is likely to lead to increased purchasing power, demand, and formalisation, and ultimately lead to community uplift.
- > The investment provides supportive infrastructure and services: the investment will provide services or infrastructure that have the potential to unlock increased efficiency of an agricultural value chain and lead to its growth. This could include input provision (seed, fertiliser, crop protection, finance, tools and machinery), skills training, policy and regulatory improvements (e.g. lab testing or market information services).

The diagram below summarises how AgDevCo conceptualises transformational change. The potential for change is identified at the investment level, and the impact is measured at the system level. The transformational change mechanisms are the way in which potential transformational change is turned into impact, and provide an indication of what kind of evidence might suggest that this is occurring.

Figure 1. AgDevCo's approach to transformational change

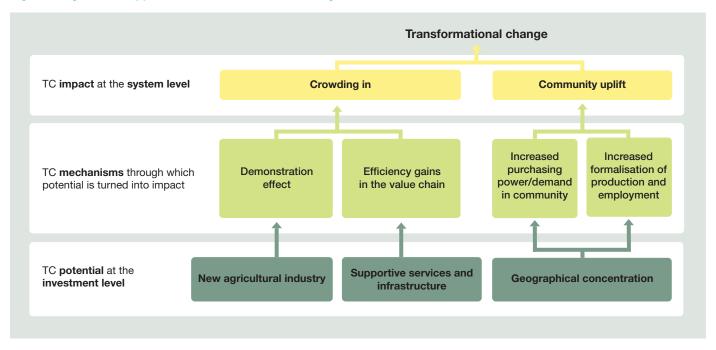


Figure 1 summarises the way AgDevCo conceptualises and measures transformational change in its portfolio. The potential for change is identified at the investment level, and the impact measured at the system level.

WESTFALIA TRANSFORMATIONAL POTENTIAL

Westfalia was selected as a case study because of its high potential for transformational change. By demonstrating Mozambique's climatic and seasonal advantages over South Africa for crops such as mangoes and avocadoes, the investment was expected to encourage other investors to follow suit ('crowding-in'). AgDevCo also intended Westfalia to act as a ''nucleus farm" by providing other growers in the region with access to technical knowledge, infrastructure, and a link to export markets, benefiting not only commercial players but also smaller producers (providing supportive services and infrastructure). Finally, by creating jobs in an area with very few employment opportunities, it was envisioned that the investment could boost the local economy (community economic uplift).

By examining Westfalia's impact on its network, this case study aimed to identify any emerging signs of transformational change and to better understand the mechanisms leading to these indirect economic effects.



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NETWORK CHANGES

The case study methodology used a network analysis approach, which tries to understand the ways in which each investment is connected to different actors, from their employees, to other commercial producers and smallholder farmers, suppliers and buyers. This allowed us to build a visual picture of how the AgDevCo investment has had an impact (Figure 2), and to observe how it changed the network's shape.

As shown on the map on the left, litchi was already grown locally by farmers prior to Westfalia's establishment, but prices were low. Initially, litchi production had been encouraged by high prices, and the fruit was sold locally. However, as more and more small producers entered the local market it quickly became saturated, and prices collapsed from \$0.65/kg to as low \$0.15/kg. This price instability is represented on the map by the dotted arrow.

Some commercial players had also started the process of establishing growing operations for litchis and avocadoes in the region, but had not developed the infrastructure required to export their production. These producers started formally employing workers from the area, most of whom were formerly subsistence farmers. Employment opportunities remained scarce. Before setting up its Mozambican subsidiary, Westfalia already had established operations in South Africa, selling produce both to the local and international export markets.

The establishment of Westfalia in Manica province has led to the development of new actors and 7 new relationships, shown in yellow on the map on the right. The company established a farm located in Zembe, and a packing facility in the city of Chimoio, providing 190 Full-Time Equivalent (FTE) jobs (36% filled by women) to permanent and temporary workers in the area. Westfalia's links to South African and European markets and the packhouse facility in Chimoio created a route to export markets for both commercial producers in the area and emerging farmers. Access to these markets has allowed them to increase their earnings by benefiting from higher prices, and encouraged new farmers to start growing litchi. By creating demand for inputs and services such as pest control, transport and electricity, Westfalia also contributed to the growth of local businesses.

Westfalia also indirectly strengthened 10 existing linkages between other actors. By increasing the purchasing power of its employees with \$224k being paid in annual wages, and by indirectly contributing to the employment and local spending of two agribusinesses using its marketing services, the company encouraged greater spending and demand for goods and services from local businesses in Chimoio, Zembe and nearby town of Sussundenga. The increased production associated with the access to export markets also increases the demand for goods and services from the other commercial producers. This has increased economic activity for various local businesses, ranging from input suppliers, building material retailers and informal household goods shops, to pest control service providers. The potential for local emerging farmers to develop commercial operations through taking advantage of the market opportunity provided by Westfalia has also encouraged the German Corporation for International Cooperation (GIZ) to establish a support programme around production and business management skills for emerging farmers from the Manica Litchi Growers Association.

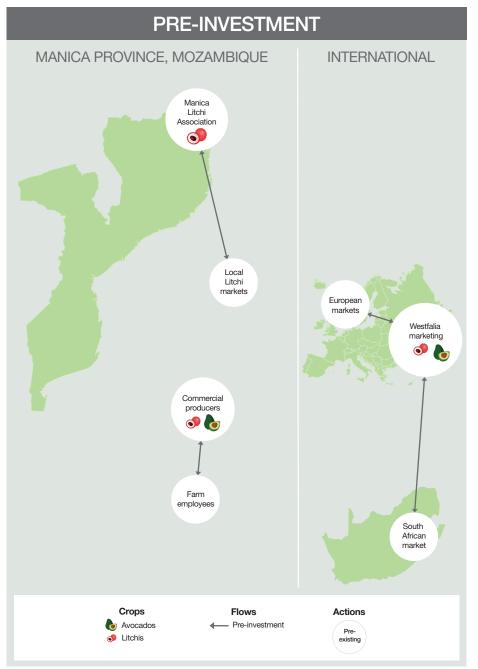
As shown by the blue circles and arrows, the transformational impact of Westfalia is expected to continue to increase in the future. The extension of Westfalia's growing operations to a new farm in Catandica will create additional job opportunities for the local community, and the litchi plantations newly planted by emerging farmers will mature, enabling the number of emerging farmers exporting to rise from 27 (3 women) to over 200. This would further increase local purchasing power in Catandica and contribute to the growth of local businesses. By demonstrating the profitability of commercial fruit production in Mozambique and providing both expertise and access to export markets, Westfalia has attracted the interest of other commercial players that could establish operations in Mozambique. Finally, as production increases, Westfalia intends to tap into new markets, including India and China, in order to ensure future sustainability.

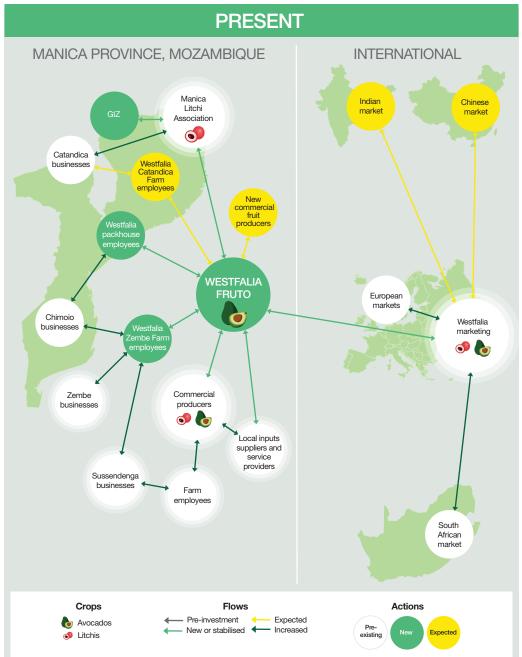






Figure 2: Network changes following AgDevCo's investment in Westfalia Fruto







EMERGING SIGNS OF CROWDING-IN

Analysis of AgDevCo's investment portfolio has shown that transformational change generally only occurs over a long period of time. However, there is some compelling evidence suggesting that the supportive services and infrastructure provided by Westfalia are starting to catalyse the growth of the Mozambican fresh fruit sector by crowding-in new actors and funding.

SUPPORTIVE SERVICES AND INFRASTRUCTURE

Westfalia has used its expertise and infrastructure to link local producers to export markets for the first time, which contributes to the growth of the fresh fruit sector. Westfalia facilitates access to exports markets in two main ways:

- > Firstly, through the Westfalia Group's marketing company, Westfalia is able to facilitate the sale of fruit produced by other growers in Mozambique to customers in South Africa and Europe. In 2018, these growers included two large commercial agribusinesses and 22 emerging farmers (3 women), who sold 580 tons of avocados and 380 tons of litchis on export markets facilitated by Westfalia. Access to international markets has enabled producers to considerably increase the price at which they sell their products, especially as Mozambican production often enters the market slightly ahead of other producing countries (such as Madagascar). For example, litchi growers now often sell their produce for \$1.35 per kilo, as compared to \$0.65 on the local market thus doubling their revenues.
- In order to be sold on export markets, fruit needs to comply with international industry standards by meeting a set of phytosanitary and ethical requirements. In order to enable emerging farmers to sell their fruit abroad, Westfalia has facilitated their GlobalG.A.P certification by training them on how to change their practices to comply with the trademark's standards, and crowding-in donor support to cover the cost of certification. The GlobalG.A.P certification scheme can require a range of new operational practices and record keeping which small holder farmers may not be familiar with. However, as Westfalia illustrates, with the right support it can be implemented in smallholder production systems. This means that emerging farmers are now able to integrate into the global litchi value chain, from which they were previously excluded.

GLOBALG.A.P: an independent certification system for Good Agricultural Practices:

Recognized in over 120 countries, GLOBALG.A.P is the world's leading harmonized agricultural standard. The GLOBALG.A.P. Integrated Farm Assurance (IFA) Fruit & Vegetables Standard encompasses all stages of production, from pre-harvest activities (such as soil management and plant protection product application) to post-harvest produce handling, packing and storing. It covers aspects such as Food Safety, Traceability, Workers' Occupational Health & Safety, and Environmental Sustainability.

The certification is fruit-specific, but most standards apply to all types of agricultural production. In addition, it can be complemented by add-ons certifying adherence to stricter standards in specific areas, including a module on ethical social practices (GRASP) – which is used by Westfalia and the exporting emerging farmers. To get GLOBALG.A.P certified, producers have to be audited by an accredited Certification Body. Licensed Farm Assurer can provide consultancy services to help with audit preparation.

This means that to get their litchi production certified, emerging farmers have to comply with a set of requirements such as building sanitation facilities for workers to use, developing hygiene procedures, using protective clothing and equipment, keeping a record of production and sales, and storing fertilisers separately from harvested crops. Farms have to undergo an annual audit, which in this case is facilitated by Westfalia. The company's inclusion of emerging farmers into the export value chain thus requires and catalyses productivity and quality improvements.

EFFICIENCY GAINS



Investments can lead to efficiency gains by providing a service or infrastructure to others in the value chain.

Access to Westfalia's packhouse and marketing services is improving the cost-effectiveness of growing fruit in the area. For example, by using Westfalia's GlobalG.A.P-compliant Chimoio packhouse to process their fruit, the two other commercial avocado and litchi producers in the region have avoided the need to build their own packing and marketing infrastructure (which represents a large up-front cost for growers). In light of future expansion plans and expected increases in smallholder production, Westfalia is considering building a second facility in Catandica, which would result in transport savings for the emerging farmers in that area.

Based on their successful relationship with emerging farmers, Westfalia was also able to crowd-in additional financial and technical support from donors that contribute to increasing their productivity and profit:

- Since 2017, the German Corporation for International Cooperation (GIZ) has been training the 229 Manica Litchi Growers Association producers to better understand the business side of their agriculture activities for example by providing training on the way in which international export markets work, and facilitating the Association's relationship with Westfalia. According to GIZ, Westfalia's work with emerging farmers highlighted the potential for these growers to transform their operations, and for other smallholder farmers in the region to take advantage of this opportunity. This led to the roll-out of the training programme in the Chimoio and Catandica area, as the association was selected as a target beneficiary. 22 of these farmers already export their production through Westfalia, with another 160 growing litchi that has not yet reached maturity but will be marketed through Westfalia. GIZ has also assisted the Association to change its legal status from a non-profit to a for-profit cooperative. As such, the Association is now legally allowed to negotiate contracts for its members, and to make a profit out of services it provides to its members such as training, harvesting assistance, or finding markets for the fruits that fail to meet Westfalia's requirements.
- > Westfalia was also able to secure additional funding from the Beira Agricultural Growth Corridor (BAGC) Catalytic Fund to provide irrigation infrastructure (as part of a larger support package) to close to 200 producers from the Manica Litchi Growers Association. Water scarcity is a major hurdle to fruit production in Southern Africa, and access to irrigation is expected to significantly improve both the yield and the quality of the fruit being produced by smallholder farmers. This will allow the farmers to produce higher volumes of "export-ready" crops.

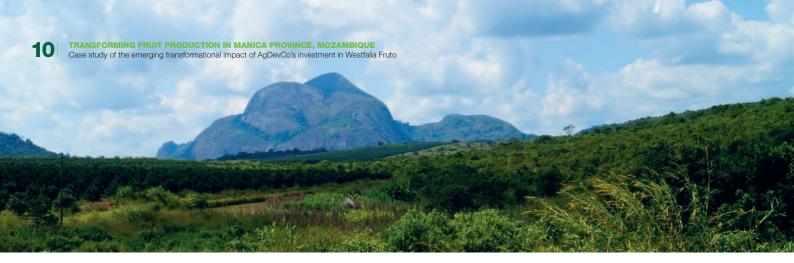
NEW ENTRANTS



New entrants are other producers that have entered the market following the investment's establishment. When their entry can be linked to the investment, it is evidence that it is contributing to the growth of the value chain.

Westfalia has enabled new producers to enter export markets, but also encouraged farmers in the area to start growing litchis. In only three years, the number of emerging farmers exporting litchis through Westfalia has already grown from 6 to 22. This number is expected to rise rapidly in the near future: the Manica Litchi Growers Association has already gained 162 additional members since the association started marketing their litchi production through Westfalia. In order to take advantage of the access to market provided by Westfalia, many of these new members (most of whom previously focused on food crops for the local market) have planted litchi orchards, which will reach production maturity in 2 – 3 years. Together with the installation of irrigation infrastructure, this will lead to a rapid increase in export-level quality yields. Since the average size of these plantations is 1ha, the association estimates that their partnership with Westfalia may have influenced the planting of about 34,000 trees.

There is also some evidence that other players have showed an interest in establishing commercial farming operations in the region, based on Westfalia's demonstrated success and the availability of local expertise and infrastructure. The company has conducted growing trials and land identification for several prospective commercial growers who would then utilise Westfalia's packing and marketing services. The interest is not limited to the avocado and litchi value chains, but also extends to other fruit crops sharing the same early harvest window, such as citrus fruits.



INCREASES IN UP-OR DOWN-STREAM ACTIVITY IN THE VALUE CHAIN

By increasing production levels, the investment can also impact other players in the value chain, contributing to their growth.

Westfalia has increased local demand for agricultural inputs and support services, stimulating down-stream economic activity. For example:

- > Since 2017, Westfalia has purchased fertiliser from Omnia. The South African company started operating in Mozambique in 2012, but only established a warehouse in the Chimoio area in October 2018, following an increase in local demand. Westfalia has played a significant role in driving up demand, through its own purchases, but also by demonstrating the impact of using fertilisers. In particular, Westfalia has encouraged Manica Litchi Growers Association producers to access appropriate fertilisers which are now available in the region due to Omnia's presence. These fertilisers enable them to achieve higher yields and a higher quality of produce.
- > Since 2018, Westfalia has contracted a small local enterprise to provide them with pest control services. The relationship has enabled the contractor to increase its client base and profit, leading to the hiring of one additional full-time staff member. It has also contributed to improving the company's credibility by demonstrating to other commercial businesses that reliable pest control services were available locally. Westfalia has similar arrangements with local contractors and transport companies.

THE GENDERED IMPACT ON VALUE CHAINS

To assess differences in how transformational change is likely to impact between men and women, we have looked at impact through a gender specific lens – using data disaggregated by gender and interviewing women and men separately whenever possible. However, our ability to assess the gendered impact on value chains was restrained by our limited access to other companies.

Nevertheless, we found that women tended to benefit less than men from the increased demand for goods and services. Indeed, the sectors concerned (transport, agro-dealing, pest control) are widely male dominated. Economic stimulation is not sufficient to integrate women into industries from which they are currently excluded. It has to be accompanied by a deliberate effort to hire women, empower them to start their own businesses, and encourage behavior change regarding traditional gender roles – systemic issues that often fall outside of the scope of AgDevCo's investments. In the Westfalia example, the impact for women is seen through direct employment. There is also a difference between how women and men spend their salaries and therefore their contribution to community uplift is different.

CROWDING-IN OF ADDITIONAL FUNDING

By demonstrating the effectiveness of their business model and their developmental. Impact, projects can attract additional funding to the project, region or value chain.

Westfalia's performance has encouraged other stakeholders to provide additional funding. Following an initial commitment of \$3.6M, AgDevCo has committed an additional \$2.4M in the company to finance its expansion. Westfalia has also crowded-in more than \$1.2M in donor funding for the Manica Litchi Growers Association, including support from GIZ and the BAGC Catalytic Fund.

EMERGING SIGNS OF COMMUNITY UPLIFT

Community uplift usually takes place when an investment impacts a large number of beneficiaries concentrated in an isolated area. Westfalia's operations result in additional resources flowing to three main groups of people, each of which is in a different geographic location: packhouse employees living in the provincial capital of Chimoio, farm workers working out of Zembe, and producers from the Manica Litchi Growers Association, most of which are located in the vicinity of Catandica.

INCREASED SPENDING IN LOCAL COMMUNITIES

Investments can boost demand for goods and services both directly, by spending money in local businesses, and indirectly, by paying wages and purchasing fruit from local producers.

Westfalia has both increased and created new money flows in the communities where it operates, boosting demand and spending from different groups. The company employs 118 permanent staff (21% of whom are women): 100 to work on its plantations in Zembe, and 18 to work in the Chimoio packing facility. In addition, significant numbers of both farm and packhouse workers are hired on 3-month contracts during harvesting season. For example, in 2018, Westfalia hired 275 seasonal workers (50% women). These jobs represent significant increases in income for workers, most of whom had never been formally employed and were either engaged in small scale agriculture or piece work before working for Westfalia. In total, over the past year (2018/19), Westfalia injected \$223k into the local economy through employee wages.

This additional income has increased purchasing power, but its impact differs between men and women. Female workers interviewed tended to be widowed or divorced, and as the main breadwinner and head of their households, spent their income meeting basic expenses such as food and school fees. Male employees, however, more frequently reported spending the additional income on building or improving their homes, on transportation such as motorbikes and bicycles, or investing in livestock. Female employees were thus less likely to contribute to economic spill-over effects. Spill-over effects were also mitigated by the fact that about 10 to 20% of workers were economic migrants, and thus incurred additional costs such as rent and transportation traveling between their homes and their place of work.

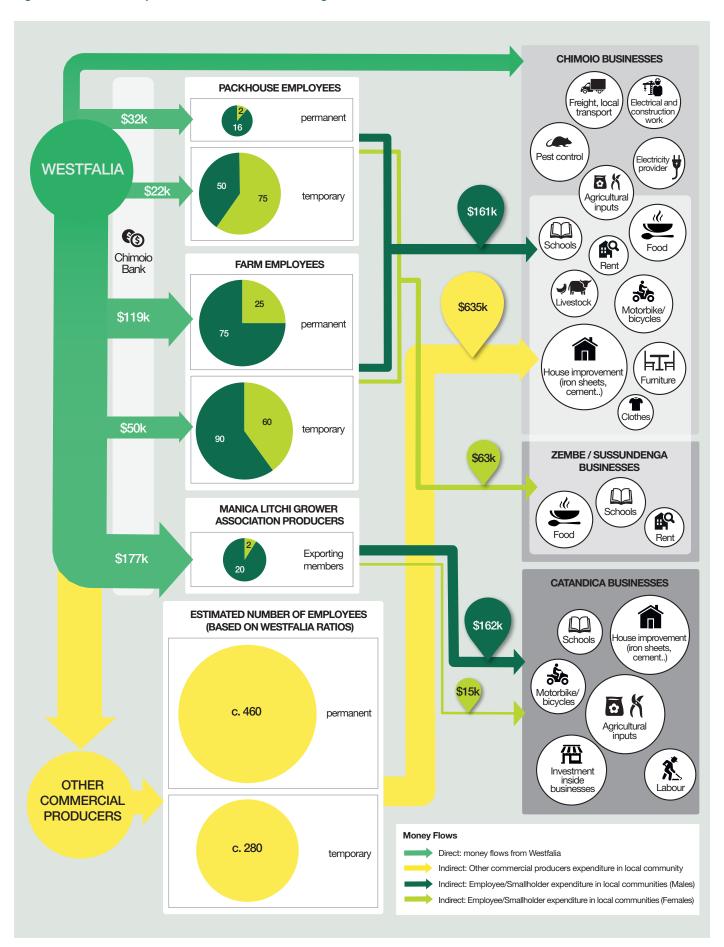
Another group to benefit is the farmers from the Manica Litchi Growers Association. In 2018, Westfalia facilitated the sale of 130 tons of litchis from emerging farmers, generating an estimated average revenue of about \$8000: an estimated increase of over \$4000 compared to their pre-investment incomes.⁴ Similarly to Westfalia employees, farmers use their additional income for activities such as investing in their homes (for example installing an iron sheet roof or building an additional room), transport and education, in addition to investing in their farms to increase production. Being significantly more well off than employees, these emerging farmers have a much greater purchasing power, and so have the potential to have an even greater impact on the local economy in Catandica – including by employing local labour to work on their litchi plantations. For instance, during harvest time, farmers typically hire 2 to 3 temporary workers. There is also some early evidence of farmers investing their income in side businesses, for example by opening small shops.

Westfalia also directly contributed to increasing local demand for goods and services, with the company being a significant purchaser of agricultural inputs, hiring a local pest control firm, using local transport companies to move produce and through construction and refurbishment of their packhouse and plantation.

Finally, by enabling other commercial producers to export, Westfalia may have indirectly facilitated job creation. Assuming that the two other commercial exporters have the same production to employee ratios as Westfalia, 2018 production figures suggest that there are over 460 permanent and 280 temporary employees in the region. If salaries are in line with those paid by Westfalia, this would represent an additional \$635k being spent in local businesses.

Figure 3 illustrates how the increased spending by Westfalia flows into local businesses through wages, farmer income and direct spending, and the different types of good and services purchased in 2018. In total, it is estimated that Westfalia injected an additional \$400k to \$1M into Manica province.

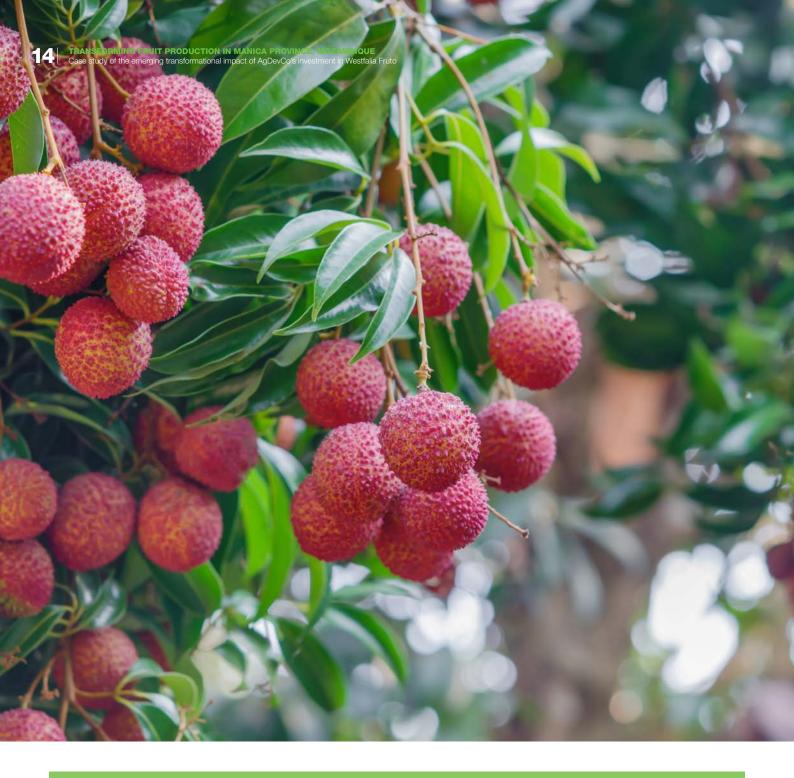
Figure 3. Westfalia's impact on increased demand for goods and services in Manica Province in 2018



The transformational impact of this increased demand is not only dependent on the geographical concentration of beneficiaries, but also on the communities' distance to economic centres. Although situated in two separate areas, all of Westfalia's direct employees' reported spending most of their wages in Chimoio. While 64% of employees work on the Zembe plantation, the income uplift has often increased demand for goods and services that are either not available in Zembe or Sussundenga, or are significantly cheaper in Chimoio. This means that the proximity of the farm to the fifth biggest city in Mozambique mitigates the spill-over effect in Zembe and Sussundenga, as the additional income is not all being spent in these local businesses. However, there is still evidence that increased demand has had an impact on these two towns, particularly for smaller everyday items. Shop owners reported an increase in sales especially towards the end of the month. The spill-over effect is also stronger in Catandica, which is situated 142km away from Chimoio. While the number of farmers selling fruit through Westfalia is still too small to significantly impact the local economy, future expansion of Westfalia's operations and the expected increase in smallholder production could lead to a significant impact in the near future.

Income generated by Westfalia Towns where the money is spent Money flows CATANDICA **EMERGING FARMERS INCOME** Nyanga National Park Parque Nacional da Gorongosa **CHIMOIO PACKHOUSE EMPLOYEES** INCOME **FARM EMPLOYEES ZEMBE INCOME** (4) SUSSUNDENGA

Figure 4. Money Flows



NEW ECONOMIC ACTORS AND EMPLOYMENT OPPORTUNITIES

Increased incomes and purchasing power can lead to the growth of local businesses, creating new employment opportunities, or encourage people to start new businesses.

There is some anecdotal evidence that the increase in local purchasing power has contributed to the establishment of new small businesses. For example, in 2018 a small shop opened opposite the entrance to the Zembe estate to sell essential household items as well as simple sewing services to farm workers. The shop owner was able to generate enough revenue to build both a new shop and a house. Similarly, the growing demand for fertilisers and seeds from litchi farmers in Catandica resulted in the establishment of at least one new small scale agro-dealer, and the expansion of another. The provision of supporting services to Westfalia is another area of growth, with a community project being established to manage the bee hives on the estate required to pollinate avocado flowers. However, in this particular instance the lack of a clear market for honey in the area represents a constraint to expanding this type of activity.

Greater incomes can also enable farmers and employees to diversify their income generating activities. While it may be too early for this diversification to have taken place, in focus group discussions at least one of the litchi producers reported having been able to invest in a small shop where his wife sells vegetables, oil and other basic household items.

FORMALISATION OF PRODUCTION AND EMPLOYMENT

Investments can also contribute to community uplift by changing behaviour and practices, for example by fostering the shift from subsistence to commercial production, or the adoption of labour standards. This contributes to the achievement of SDG 8 by providing more opportunities for formalised, decent work.

Westfalia has contributed to the formalisation of employment in the region and encouraged the inclusion of women in the labour force. Formal employment opportunities are scarce in the area – even in Chimoio. The majority of the population is engaged in subsistence agriculture, with income generation largely coming from informal vegetable trading, and piece work. Westfalia is one of a few companies in the region to provide full-time jobs and formal seasonal contracts. By encouraging female employment (especially in the packhouse where 60% of seasonal workers are women), Westfalia is also challenging traditional gender roles whereby women are often expected to stay home to take care of children and run the household. 34% of Westfalia's estate workers are women, and are often introduced to the company by other female workers, and mostly work in groups of women. Westfalia has also hired women into leadership positions, such as the packhouse manager.

Access to export markets and the adoption of GlobalG.A.P standards, which are now a requirement for all members of the Manica Litchi Growers Association, have also changed the mind-set and production practices of emerging farmers. For example, the litchi producers have become more market-oriented, understanding the requirements of international markets and the benefits of certification. While current certification is for litchi, as the majority of the GlobalG.A.P standards are not crop-specific (and are implemented across the entire farm and not only the litchi orchard), they are already close to meeting standards for other fruit crops. Farmers were aware that this may be an opportunity to further expand and access export markets.

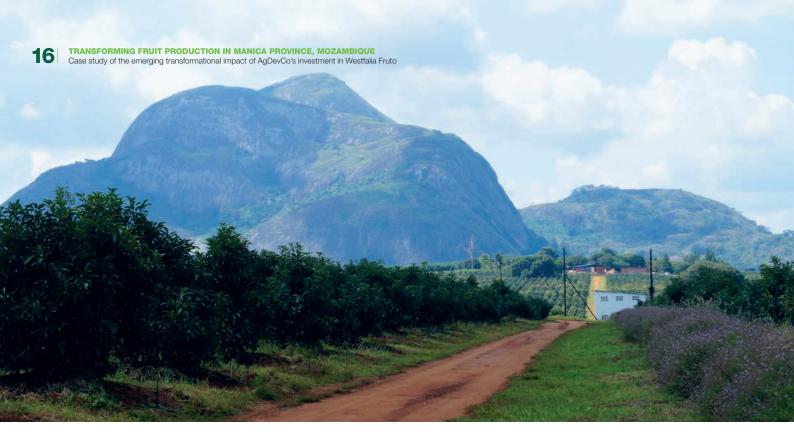
GlobalG.A.P and investor compliance with labour standards, namely by requiring farmers to issue contracts for permanent and casual workers and prohibiting all work from children below 18, is already in place and so has impacted on the labour practices in the area. Moreover, farmers are encouraged to progressively comply with stricter standards, which can open the doors of new clients. For example, the Association's most successful producer, who owns a 20ha farm, now has sufficient revenues to pay workers the minimum wage. This will allow him to apply for additional certifications (such as SMETA), which will allow him access to other retailers (such as TESCO) who require this.

FINANCIAL INCLUSION

Linked to the formalisation of production and employment, the spread of the use of formal financial services can also contribute to creating an enabling environment for businesses and foster new economic activities.

Westfalia plays a role in connecting local communities to formal financial services providers. Both employees and litchi producers are paid via a bank account – even though this is not a legal requirement in Mozambique. Most of the workers and growers interviewed did not have a formal bank account before they started working with Westfalia. The company played a key role in encouraging and facilitating the adoption process, leading to greater financial inclusion for the employees. While in most cases the monthly wage is withdrawn shortly after pay day in one transaction, some employees have been using the account to save small amounts of money, or using the account for other transactions (such as for another small business). There are also differences in how men and women use the formal financial system, with female workers tending to use their bank account less. This is partly due to the fact that they have a lower savings capacity overall, but also to a lack of familiarity and trust – most female interviewees preferred to save through saving groups.





CONCLUSION

By identifying emerging signs of transformational change from Westfalia, AgDevCo was able to enhance its understanding of the mechanisms leading to transformational change. Figure 5 summarises the logical pathway from Westfalia's investment level changes to the expected transformational impact, as well as the emerging evidence gathered though this case study.

162 new **Transformational change** members of Communitythe Manica New New staff run hive Litchi Growers shops in hired by Association Zembe and pest control catandica company **Community uplift Crowding In** TC impact at 118 New Over the system warehouse permanent and level \$3.5M of \$130k 275 temporary built by input additional paid to litchi workers formally supplier funding growers employed TC mechanisms GlobalG.A.P Demonstration Efficiency gains in the Increased Increased through which standards value chain formalisation of effect purchasing potential is turned broadly production and power/demand into impact adopted in community employment Access Trials to export Increased Growers more and land markets Increased \$223k in cost market-minded, identification for financial employee efficiency adhesion to a few prospective inclusion wages GlobalG.A.P companies standards TC potential at New agricultural Supportive services and the investment Geographical concentration industry infrastructure level

Figure 5. Westfalia's path to transformational change

Most of Westfalia's transformational impact comes from the supportive services and infrastructure it provides to commercial and emerging fruit producers located in the Manica Province. Access to the packhouse and marketing services provided by Westfalia has led to efficiency gains, while producers have been able to sell their produce at a premium by accessing export markets. Westfalia's support in assisting emerging farmers to achieve GlobalG.A.P certification has provided a new market to these producers, which in turn has contributed to raising interest in commercial fruit production in Mozambique. By increasing efficiency in the value chain and demonstrating the profitability of growing fruits such as litchis and avocadoes in the region, Westfalia has encouraged new local farmers to start growing litchis, and contributed to the growth of suppliers and service providers in the agricultural value chain.

Westfalia has also indirectly contributed to increasing economic opportunities at the community level. By providing formal, full-time or temporary employment to close to 400 people who collectively earn over \$200 000, and by enabling emerging farmers to double their income, Westfalia has played a part in increasing purchasing power and demand at the community-level. By introducing farmers from the Manica Litchi Growers Associations to export market requirements and GlobalG.A.P standards, Westfalia has also had an impact on the formalisation of production, and has encouraged both good agricultural and labour practices. Both increased demand and behaviour change can be linked to the establishment of new businesses in Westfalia's beneficiaries' communities.

This early evidence of impact highlights trends that, if sustained, could lead to wider transformational change and create a significant fruit export industry in Mozambique, affecting thousands within and outside of the value chain. For instance, the number of emerging farmers exporting litchi is expected to increase by over 700% in the next few years, as the more than 30 000 trees already planted begin to produce fruit. Access to irrigation will enable producers to grow better quality fruit and raise production levels, opening the way to new markets such as China and India. Increased fruit production would provide new economic opportunities up and down the value chain, for example by increasing the need for packhouse labour (including in the new packhouse facility planned for Catandica), increasing demand for agricultural inputs, and in support services such as transport. In addition, the expertise and infrastructure made available by Westfalia could crowd-in additional commercial players in the fresh fruit sector, further increasing both production and employment.

Emerging lessons

In addition to catalysing transformational change in the fruit sector in Mozambique, Westfalia's experiences in establishing commercial export operations provide some other interesting lessons:

Providing access to export markets can result in significantly greater incomes for fresh fruit producers such as litchi and avocado growers, even without accompanying investments in processing or value addition. Access to export markets does not however provide greater price stability that local markets - and perhaps even less.

There are strong demonstration effects when working with emerging farmers, especially when producers are organised in an association. In the case of Westfalia, only 4 farmers initially sold litchi through Westfalia, while now over 200 are on track to start producing commercial grade litchi in the next few years. However, women are less likely to benefit as they tend to have access to less land and capital.

Meeting international certification standards is difficult, but not impossible for emerging farmers. Meeting GlobalGap standards has required training and investment from both Westfalia and GIZ, but given that meeting the standards for one crop helps with certification for other crops, has the potential to help farmers diversify and hence reduce dependence on a single crop. Meeting these standards has also assisted in formalising labour practices and implementing basic health and safety guidelines, contributing towards SDG 8.

Transformational change is not only about production and financial transactions but requires behaviour change in a number of areas, for example new production techniques including adherence to global standards for export markets, business management skills, and shifts in attitudes towards traditional gender roles. While these are all catalysed by commercial investment and soft finance other aspects may require partnerships with non-commercial actors (e.g. GIZ).

Transformational change does not always come from smallholder farmers: in this case Westfalia is working with larger, emerging farmers who work with more land and so are able to generate indirect job creation and have greater purchasing power. This in turn drives additional community uplift spillovers. This demonstrates the importance of taking a holistic view of impact, as only focusing on the direct beneficiaries (emerging farmers) can mask the true transformational change taking place.

