



ECO-INCLUSIVE ENTERPRISES ACCELERATING SOUTHERN AFRICA'S GREEN AND INCLUSIVE ECONOMIES

SEED Impact Snapshot Southern Africa



SEED

promoting entrepreneurship
for sustainable development

Established by



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About SEED

SEED was founded in 2002 at the World Summit on Sustainable Development in Johannesburg by UNEP, UNDP, and IUCN. It is a global partnership for action on sustainable development and the green economy. Today, we seek to unlock the full potential of social and environmentally focused ('eco-inclusive') market-based enterprises. We help tackle climate change effects and solve the world's social problems, as captured in the Sustainable Development Goals (SDGs).

About this Impact Snapshot

SEED has been active in Zimbabwe since 2009, in Malawi since 2014 and in Zambia since 2018, thanks to its partner the Government of Flanders. Our enterprise support programmes in those countries help small and growing enterprises with business development, capacity-building and training. Meanwhile, our ecosystem programmes focus on policy, financing and collaboration instruments that multiply the social, environmental and economic impact of entrepreneurship.

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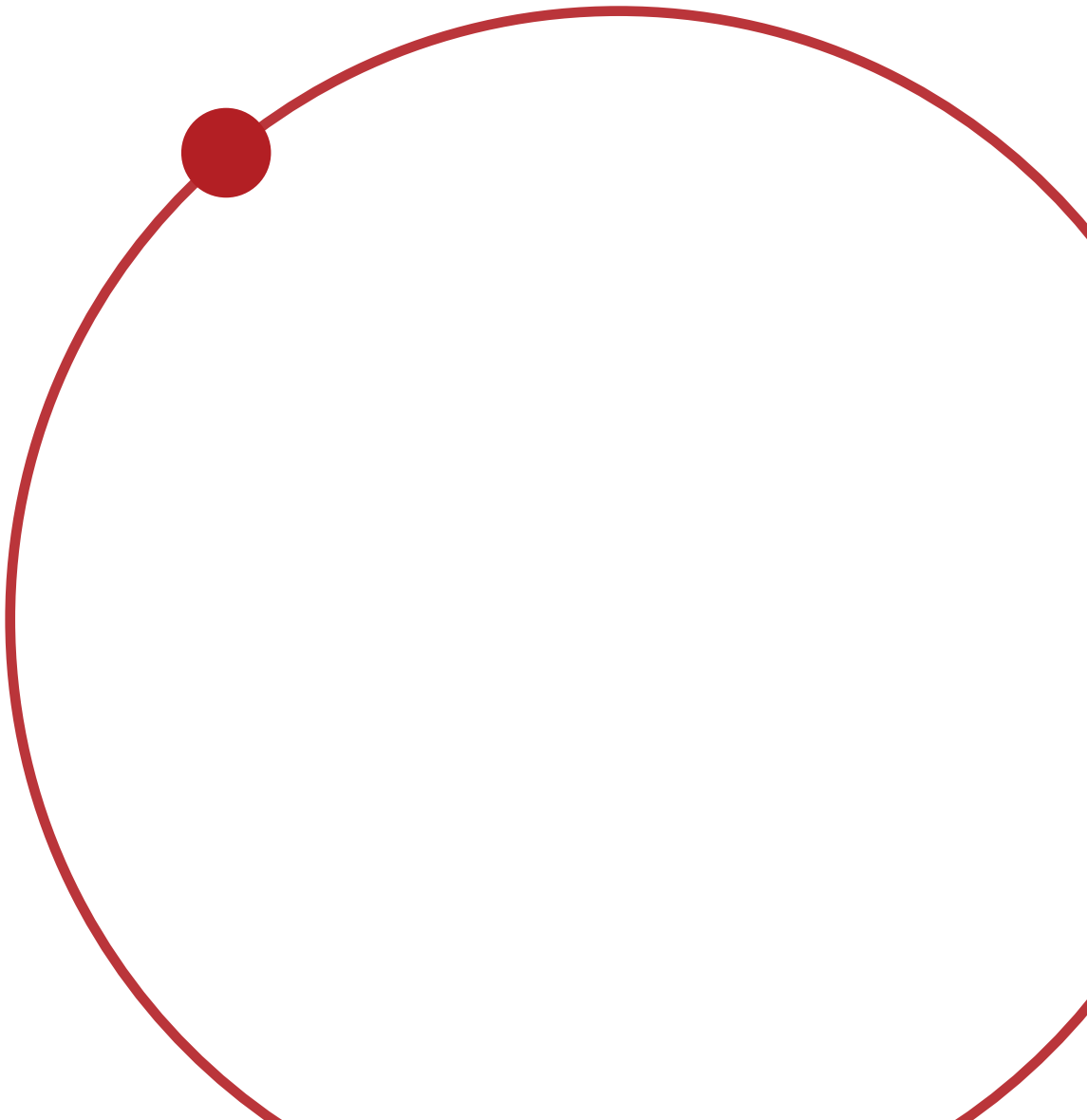
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EXECUTIVE SUMMARY

Micro, Small and Medium Enterprises (MSMEs) make up the fabric of most societies and account for 90% of registered firms worldwide, provide 50% of the jobs, and contribute well over 35% towards the GDP of emerging economies (WBG, 2017). At SEED, we focus on a specific sub-segment of MSMEs; enterprises which apply and promote green business models while including low-income people in their value chain as employees, suppliers, distributors, or consumers. These 'eco-inclusive enterprises' contribute significantly to the social, environmental and economic empowerment of 5.2 billion people worldwide at the bottom of the pyramid.

What emerges from this report is a picture of locally embedded enterprises - the majority driven by local, often young and female entrepreneurs - driving the changes sought in the Sustainable Development Goals (SDGs), and their country's respective Nationally Determined Contributions (NDCs). These enterprises are more successful and more profitable than mainstream small and medium businesses. They have a significant impact on curbing emissions, promoting green technologies, and preserving energy, water, and other resources. Beyond that, they create decent and stable employment for women, youth, and the poor. And by developing innovative and sustainable natural resources management they are driving innovation and responsible consumption.

Our enterprise impact data and analysis identifies a contribution to 11 SDGs overall. Surveyed eco-inclusive enterprises report a high rate of success, with 82.5% of them still in business, despite facing challenges related to access to finance and market information and the need for development of business management skills. Growth is strong among surveyed enterprises, with 88% of them experiencing positive yearly sales growth and 71% generating revenue, outperforming mainstream and other social enterprises.

The stability of our surveyed enterprises drives them to create large positive environmental impact. Operating across different sectors and facing varying climate challenges, eco-inclusive enterprises contribute to climate action. Ninety-five percent of surveyed enterprises implement climate mitigation and/or adaptation practices and technologies, thus reducing over 500 tonnes of CO₂ equivalent per enterprise on average and generating more than 9,240 kWh of renewable energy, mainly by offering solar solutions.

Impacts created by our surveyed enterprises go beyond the climate arena, from fighting hunger, saving water and forest to encouraging responsible consumption and production. Fifty-nine percent of surveyed enterprises focus on increasing and providing food security. Surveyed enterprises managed 680 hectares of land sustainably through their direct activities and those of their beneficiaries. In 2018, the average surveyed enterprise recycled 287 tonnes of material, which is equivalent to 11,000 gallons of oil; and saved 10,300 m³ of water, for a total amount of water saved among enterprises equivalent to the water consumption of 3,235 people in Malawi in one year.

In the social sphere, eco-inclusive enterprises are drivers of decent employment and inclusive growth. They work towards achieving gender equality and equality for marginalised populations. It is encouraging to see 51% of enterprises are women-led and that 40% of the enterprises' employees are female. In 2018, surveyed enterprises offered 18.5 jobs per enterprise, out of which 39.5% were offered to people at the Bottom of the Pyramid (BoP) and among all 80 surveyed enterprises they served 1,404 people in the BoP, which represents 33% of their total beneficiaries.

This snapshot helps to reveal the versatility of the impact of eco-inclusive enterprises. It also helps to clarify where the potential is for their SDG contributions.

1. SETTING THE SCENE

Early 2020, we surveyed 80 eco-inclusive enterprises from Malawi, Zambia and Zimbabwe to get a sense of the yearly impact they make in their communities and beyond. This report details those findings. Enterprises worked at different development stages - from the early idea stages of inspiration and concept-building to development and replicating proven models. Respondents operated across 6 sectors, with almost two thirds working in the field of sustainable agriculture. Respondents were drawn from our SEED Awards (Catalyser recipients), Starter and Replicator programmes (Figure 1. Number of enterprises surveyed). Information on their environmental, social and economic impact was reported for the year 2018¹, so all data reported is annual rather than historical.

Respondents were classified according to their registration year, further referred to as age of the enterprise, to analyse differences among enterprise age groups. The groups are those active less than two years, those in operation for 2-3 years and those enterprises that have been in business between 4-9 years since registration.

¹ This survey took place in mid 2019. For the sake of comparison enterprises were asked to report on the previous calendar year (2018). This means that some SEED programs were ongoing in 2019.

The **SEED Starter programme** guides participants from the early stages of ideation to the generation of a viable business plan and launch of an enterprise. Participants work in teams during Starter workshops to blueprint and refine their business plans, supported by peer-learning and expert guidance.

The **SEED Catalyser** guides participants to refine their business model in order to optimise their environmental, social and economic impacts and improve investment readiness as they scale-up. Participants are led by experts in small group workshops, towards the development of a comprehensive business growth plan that enables enterprises to set and reach their growth targets.

The **SEED Replicator** pairs (aspiring) entrepreneurs with established enterprises that have successfully implemented eco-inclusive business models in another location. Experts guide candidate Replicators through a series of workshops to start their enterprise, inspired by the secrets of other successful enterprises.

The **SEED Awards for Entrepreneurship in Sustainable Development** is an annual awards scheme designed to identify the most innovative and promising locally led start-up eco-inclusive enterprises in developing and emerging economies. Historically all SEED Award Winners joined the SEED Catalyser programme and some later the Accelerator programme. As of 2019, SEED Award Winners join the SEED Accelerator programme while Awards Finalists join the Catalyser Programme.

Number of enterprises surveyed

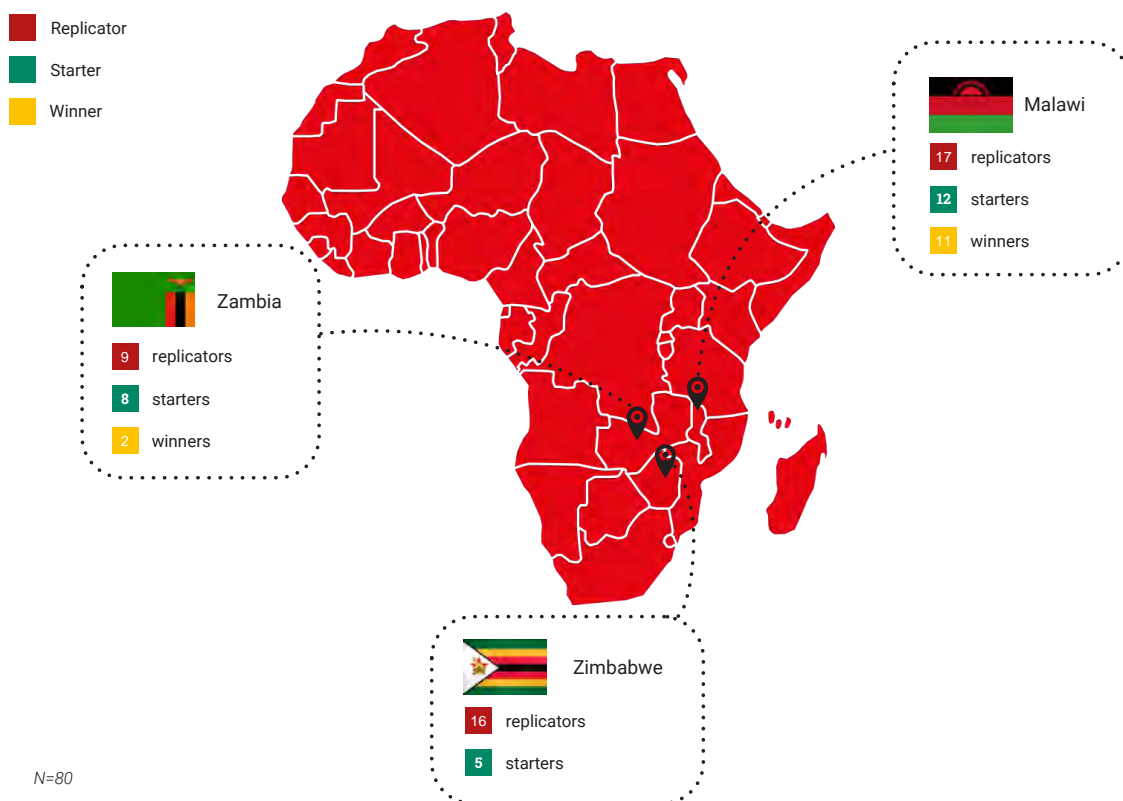


Figure 1. Number of enterprises surveyed

SEED definition of eco-inclusive enterprises:

- are micro, small and medium-sized enterprises (MSMEs) that employ between 5 and 200 people (OECD, 2005)
- use market-based mechanisms to drive global change towards green and inclusive growth
- operate at community level, often including marginalised peoples in the value chain - thereby strengthening local economies with innovative solutions

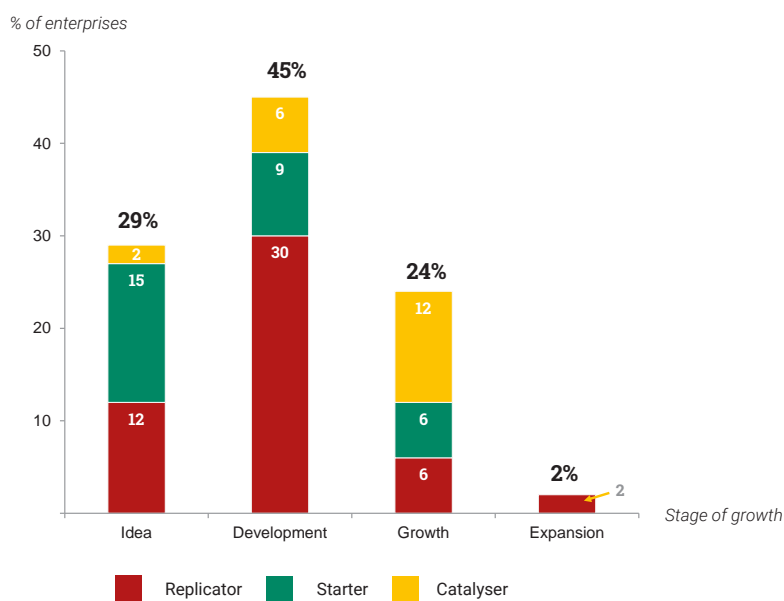


Life Cycle Stages

The surveyed eco-inclusive enterprises can be classified into four stages: idea stage, development stage, growth stage and expansion stage. (Figure 2. Life Cycle Stages of Eco-inclusive Enterprises). The majority of surveyed enterprises find themselves in the idea and development stage - something that is in line with the rest of Africa, where early-stage entrepreneurship² is prevalent (Bosma & Kelley, 2019).



Life cycle stages of eco-inclusive enterprises



N=66

Idea: where the enterprise is still in the *early stages* and its products are being tested on a *small scale*

Development: where the idea has been tested, *the customer base is expanding* and the business model is being consolidated

Growth: where the enterprise is expanding to *new customer bases*

Expansion: where the enterprise model is expanding or *being replicated* in other markets



62% of catalysers reported being in a growth stage, whereas **50% of starter enterprises** reported being in idea stage

Figure 2. Life Cycle Stages of Eco-inclusive Enterprises

² The Global Entrepreneurship Monitor defines entrepreneurship as „Any attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of an existing business, by an individual, a team of individuals, or an established business“ and defines early-stage

Early vs Later Stage Enterprises

SEED Starter participants have only recently taken the first steps towards building an enterprise, while Catalysers have an existing model and business already.

The majority of Catalysers (62%) report being in a growth stage, the stage at which the enterprise is expanding its customer base. Half of the starter enterprises report being in an idea stage, the stage in which they are testing their product. Most of the younger enterprises (up to three years old) are in earlier stages (ie idea and development stage) while more established ones are growing. 40% of the older enterprises (more than three years since registration) are still developing their idea, and have not been able to move forward to the development stage (Figure 3. Differences among enterprises age).

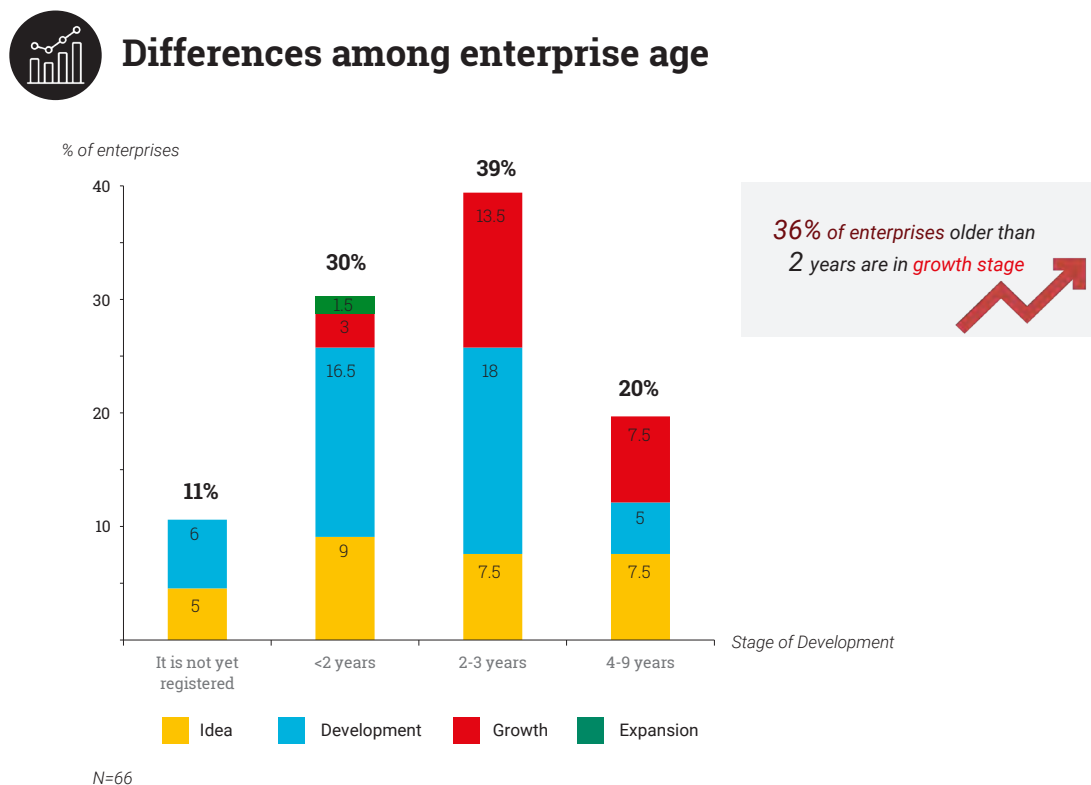


Figure 3 Differences among enterprises age

Size of operations and staff

When it comes to size of operations and staff, the majority of surveyed enterprises can be classed as micro-businesses. Sixty-eight percent of the enterprises are micro-enterprises, twenty-four percent can be classed as small enterprises, and only eight percent are medium to large enterprises. Overall, surveyed enterprises employ an average of 18.5 people³. The micro and small-sized enterprises employ an average of 6 staff and 19 staff respectively. The surveyed medium and large eco-inclusive enterprises employ an impressive average of 122 employees, showing the employment potential of activities that support enterprises to scale (Figure 4. Enterprises and their employment size).

³ Out of 72 responses

Enterprises and their employment size

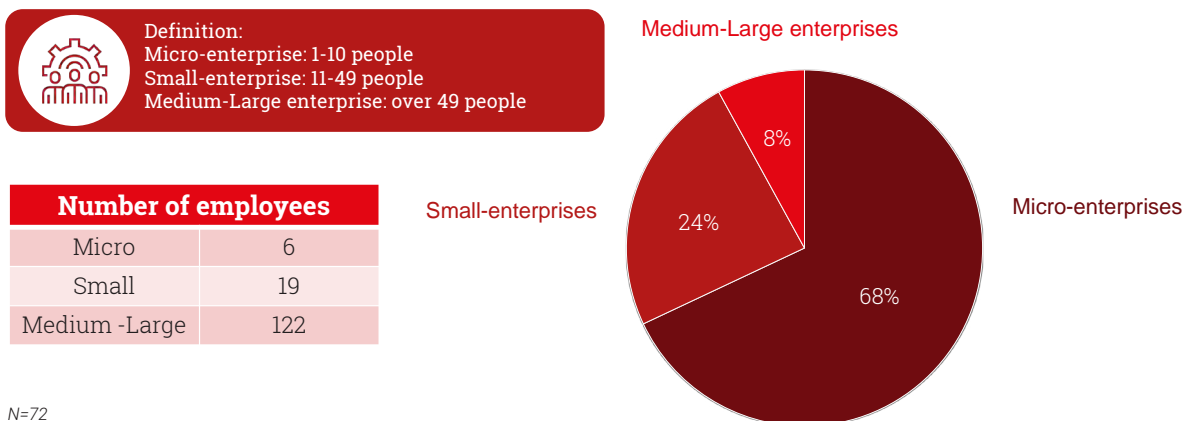


Figure 4. Enterprises and their employment size



Enterprise Spotlight: Apocalypse Waste Management Solutions

Salima, Malawi

SEED Starter Team 2018

The enterprise provides a convenient door to door collection of waste from households, offices, workshops, rice mills, marketplaces, hotels, lodges and more. The organic products are separated and then processed into manure and briquettes. The recyclables like plastics are used to produce plastic interlocks while metallic waste is sold to recycling companies. The residual waste is properly disposed of.

Through its business model, Apocalypse Waste Management Solutions reduces pollution and protects local forests by producing sustainable briquettes as sources of energy. At the same time, it provides decent work and incomes for its employees.



Climate Impact

Recycled 370 tonnes of waste in 2018, preventing pollution and dumping



Social Impact

- Employs 10 people (70% youth)
- Served 240 customers in 2018

2. CHALLENGES AND SUCCESS STORIES

Highlights:

- **82.5% of supported enterprises from 2009 to 2018 are still in operation**
- **The majority of enterprises (74%) seek between USD 50,000 and USD 100,000 of funding**

Set-backs and challenges are common for MSMEs, but especially common for start-ups in developing markets. Access to finance and quality staff, issues with heavy administrative requirements, lack of infrastructure, the obstacles that eco-inclusive enterprises face are manifold. In light of these challenges, the success rates of eco-inclusive enterprises are impressive; 82.5% of surveyed enterprises continue in business. Only 17.5% of enterprises have been frozen or discontinued over the survey period (2009-2018). By comparison, failure rates of mainstream MSMEs range from 70% and 85% in the first three years for Zambia and Zimbabwe and even 90% within 10 years of starting out for Malawi (Katubiya, 2015; Majanga, 2015; Mudavanhu, et, al., 2011).

Success for SEED Catalysers is outstanding; all of them continue in operation. For enterprises who participated in the SEED Starter programmes, out of the 25 responding enterprises, 5 are frozen or discontinued (20%). And finally for Replicator participants, 21% are frozen (and none discontinued).

The population size of SEED Award winning enterprises in Malawi, Zambia and Zimbabwe is 23. A direct follow-up was done for these enterprises to determine the error with the sample. As a result, we found 15 out of the 23 enterprises (65%) continue in business, whereas 8 are presumed to have stopped operations as a result of not being able to establish direct contact with the enterprises. This can mean that the enterprises that continue in

business are more likely to share information on their enterprise, leading to a success rate bias in the results shown in this report.

What Challenges do Eco-inclusive Enterprises face?

The eco-inclusive enterprises we surveyed indicated access to finance as their major challenge and also the main reason to have stopped or paused their operations. This is followed by a lack of access to market information, lack of business management skills and lack of market demand or customer awareness.

Years of experience with finance aspects of entrepreneurship has taught SEED that there are many challenges wrapped up in their concern on access to finance, ranging from accessing start or growth capital to high interest rates or stringent payback conditions. While enterprises across the world struggle with access to finance, this trend tends to be exacerbated for eco-inclusive enterprises due to risk perceptions and business models that don't fit more traditional financing structures.

Lack of market information is a commonly cited challenge that has to do with a lack of information on market or industry trends, size of the market and other relevant information that might help hone their model, business case or secure investments. Business owners often lack insight into the local and global market, resulting in enterprise leaders relying on their own expertise and judgment to make decisions (Al Mubarak, 2016) (Figure 5. Top challenges).

Other interesting challenges relate to a nascent market, with a lack of demand or buy-in from the community on products and services, pointing to the need to build the market for such products and services in these countries.

Top challenges

The eco-inclusive enterprises we surveyed indicated these top challenges:



N=80

Figure 5. Top challenges

In general, these top challenges shown in Figure 5. are similar for all enterprises, and no large differences are found among enterprises of different business age or stage of development. This indicates that generic support from intermediaries and government stands to benefit enterprises of different sizes and stages.

Unpacking the Access to Finance Challenge: Financing Needs and Fundraising

Eco-inclusive enterprises often rely on mixed or multiple sources of funding. Grants and subsidies and personal funds are common in their early stages, and sales revenue, equity and debt in the later stages of development.

Multiple sources to access finance bodes well with the interdisciplinary nature of eco-inclusive enterprises. However, the risk perceptions of traditional finance providers, and lack of access to 'missing middle' funding, means eco-inclusive enterprises are mostly underfunded, underserved and unable to actualise their full potential as significant SDGs contributors.

65 enterprises reported financing needs, a total need was identified of 12.4 million USD over the next year (2019). On average, this means funding of 191,000 USD per surveyed enterprise, of which 41.6% is expected to be raised as equity, 27.4% from grants, 14% as debt, 12% in personal funding and 5% from other sources (Figure 6. Finance: Access Challenge and Fundraising)

The amount needed per enterprise varies from a few thousand dollars to over 1,750,000 U.S dollars. The majority of enterprises (54%) seek up to USD 50,000, 22% seek from USD 50,000 to 100,000 and the final 20% of enterprises vary widely from 100,000 up to two million dollars.

Enterprises in the idea stage tend to have smaller finance needs than enterprises in the development and growth stage, stages where they require more capital to continue expanding their operations. Enterprises in the development stage seek the highest amount. (Figure 6. Finance: Access Challenge and Fundraising)

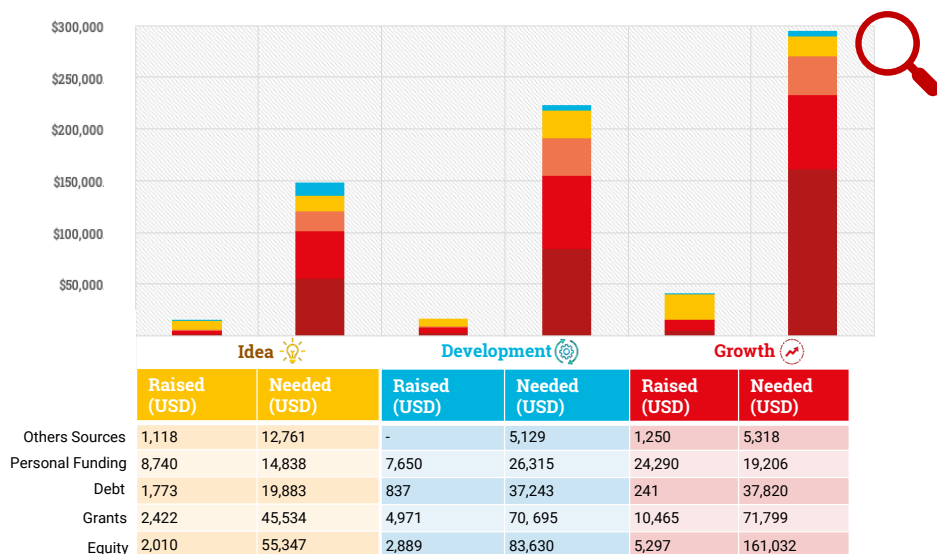
The survey results suggest that the eco-inclusive enterprises were able to raise funds from multiple sources demonstrating that social and environmental objectives in enterprises can go hand in hand with economic development, even in developing markets.

Over the survey period, 55 enterprises reported having raised funds in that year (69% of enterprises). Together, they raised a total of 1,276,100 USD from equity, debt, grants and personal funding, which translates to 23,200 USD per surveyed enterprise. See below for the breakdown per enterprise (Figure 6. Finance: Access Challenge and Fundraising)

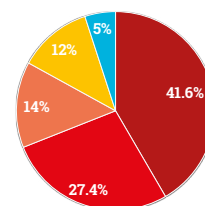


Finance: Access Challenge and Fundraising

Amount of finance needed and raised per stage of development

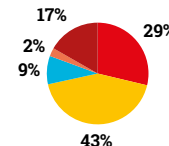


On average, the surveyed enterprises seek **191,000 USD** in funding across different types of funding:



65 enterprises reported a total **financing need of 12.4M USD** over the next year

On average, the surveyed enterprises raised **23,200 USD** in funding in 2018:



55 enterprises reported a total of **1.27M USD of funds raised** in 2018

Figure 6. Finance: Access Challenge and Fundraising

In line with the start-up nature of the eco-inclusive enterprises SEED surveyed, it is not surprising that the highest amount of funding raised is from personal funding and grants. The small amount of funding raised in equity, compared to the large amount expected to be raised, illustrates the difficulties that these enterprises face to identify and access equity local or international investors. The small amount of funding raised in debt, compared to the large amount expected to be raised, illustrates the difficulties that these enterprises face when trying to access commercial finance for their operations.

All in all, this gives a clear indication to finance actors and ecosystem actors designing finance instruments of what amount of funding is most needed and how much of it is needed. It also points to the need for wrap around enterprise support to navigate more complex sources of funding and to build internal capacity for fundraising and to handle finance.

Success and development stages

A mixed picture emerges when it comes to self-reported success rates. Out of the 80 surveyed enterprises, just under half are meeting self-reported growth and business expectations. Forty-one percent are meeting their growth and business expectations as planned or exceeding them (7.5%). Encouragingly, 81% is experiencing sales growth.

The survey clearly indicates that younger enterprises struggle more; 71% of the enterprises that are frozen or discontinued are unregistered enterprises or have been registered for less than two years. (see next section for the reasons they are discontinued). Overall, older enterprises tend to meet expectations or exceed them, whereas younger ones struggle more; which may reveal that enterprises are sometimes over ambitious and/or that enterprises are struggling to start their operations (Figure 7. Growth and Business Expectations). These findings indicate a strong need for business development support and formalisation of early stage enterprises.



Unpicking success

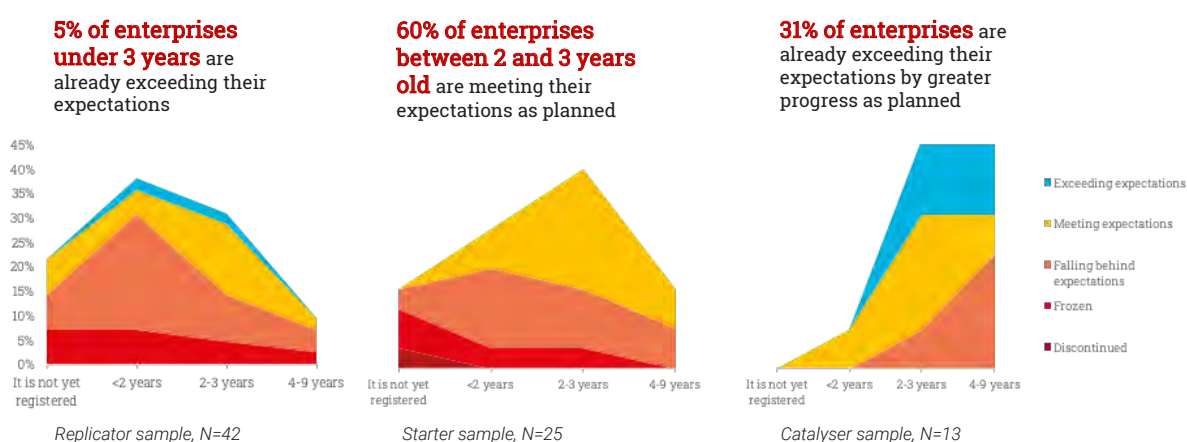


Figure 7. Growth and Business Expectations

When focusing only on Catalyser and Starter enterprises, the relation between the current status and the age of the enterprise is clearer, as expected. For the Starter group, of which the majority of enterprises are between 2-3 years old, the majority of them (60%) are meeting their expectations as planned. For the Catalyser respondents, considering the majority of them (90%) have been registered for between 2 and 9 years, it is not surprising that 31% are exceeding their own expectations.



Enterprise Spotlight: Ziweto

Improving the rural livestock value chain through affordable veterinarian services

Lilongwe, Malawi

SEED Africa Award Winner 2016

Ziweto provides smallholder farmers with veterinarian services through a network of franchise shops in remote rural areas. The franchises also offer trainings on sustainable animal husbandry and facilitate the smallholders' market access as intermediaries.

By improving the productivity of the livestock value chain, Ziweto creates many positive impacts including stable and decent employment and increased livestock productivity of local farmers, while promoting sustainable practices in large areas given by the reduction in the use of chemical fertilisers and decreased negative effects from the use of conventional antibiotics.

In 2016, Ziweto was selected as a SEED Africa Award Winner and recently was able to raise significant funds that will help the enterprise to scale-up and achieve their full impact potential. The enterprise has received in total \$100,000 from the Malawi Innovation Challenge Fund and the African Development Bank. All this was accomplished despite many challenges that the enterprise had to overcome such as lack of collateral due to target investors not being located in the country. Participation in trainings, incubation and mentorships, including the SEED awards, facilitated Ziweto's investment readiness, and will allow them to continue and increase their positive impact in their community.



Environmental Impact

Together with their beneficiaries, **1,000 ha of land were under sustainable management in 2018**, decreasing the negative impacts of conventional practices



Social Impact

- Offered 114 jobs in 2018 (79% BoP and 44% women)
- Served 10,000 people in 2018, out of which 9,800 are at the BoP



Examining Failure

Highlights:

- **17.5% of surveyed enterprises report being frozen or discontinued.**

In the difficult environment that eco-inclusive enterprises operate in, it is not surprising to find some enterprises that have been discontinued. Over 2009-2018, 14 enterprises - 17.5% of the total - report they are no longer operating or are frozen, the latter meaning that these enterprises have ceased their operations, but may take them up again. Only one enterprise or 1.3% of the surveyed enterprises have put an end to their operations.

The enterprises that are no longer operating cite multiple factors. These range from lack of access to finance, lack of access to technology and infrastructure, lack of access to business development services, difficulties in access to markets, to lack of research and development opportunities. Unsurprisingly, the main reason these enterprises are discontinued is access to funding, which means a lack of access to grants or loans, or possibly access under prohibitive conditions (Figure 8. Examining Failure)

While failure is uncommon among the surveyed eco-inclusive enterprises, it does speak to the difficult context in which they operate. It also speaks to the need for more supportive finance and capacity building for these enterprises, if they are to survive and thrive to make significant contributions to the SDGs.

Examining failure

The enterprises that are no longer operating cite multiple factors:

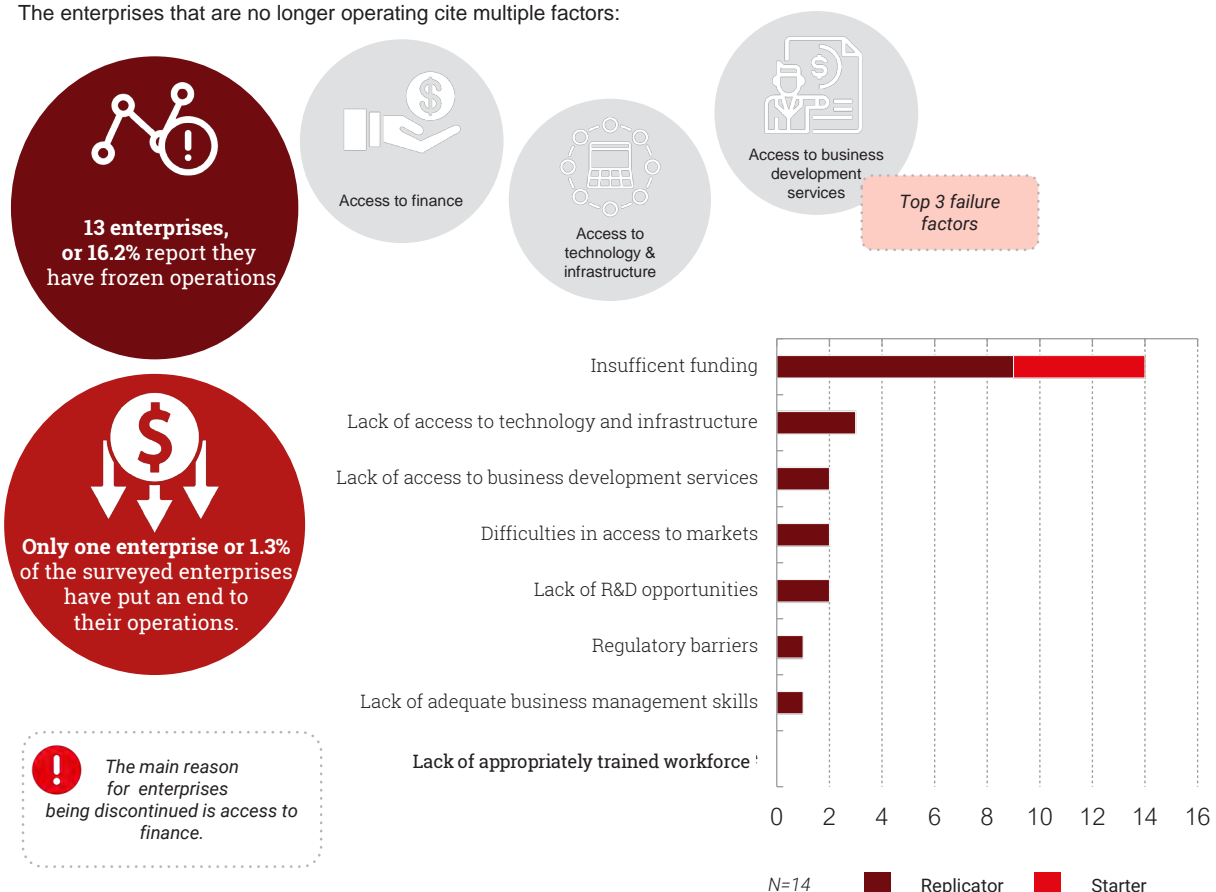


Figure 8. Examining Failure

3. ENVIRONMENTAL AND CLIMATE ACTION

Relevant SDGs



Eco-inclusive enterprises offer affordable, scalable solutions that can lead to cleaner, greener, more resilient local economies - in line with the future world envisaged in the SDGs.

Eco-inclusive enterprises offer affordable, scalable solutions that can lead to cleaner, greener, more resilient local economies - in line with the future world envisaged in the SDGs. By engaging in climate change mitigation and adaptation activities locally, eco-inclusive enterprises are at the forefront of climate action. Operating in developing economies, eco-inclusive enterprises are the first to experience climate change effects, but are also champions in tackling them. Surveyed enterprises are highly aware of their country's commitments towards climate action. Out of 78 enterprises, 37% are aware of the (I)NDCs and of those, almost all of them (79%) have knowledge of their own country's NDC and 58% are aware of the potential role that it plays for their enterprise or sector. Awareness of the NDCs enables them to maximise their positive climate action impact by understanding their specific country conditions, goals, and plans.

Through their pioneering, environmentally sustainable business models, they provide sustainably produced consumer goods and services, thus contributing towards realising a greener and cleaner economy.

Through their activities and products, eco-inclusive enterprises contribute to climate action, reducing over 500 tonnes of CO₂ equivalent per enterprise on average. Through the provision of affordable and clean energy, mainly by offering solar solutions, they generated more than 9,240 kWh per enterprise in 2018. Moreover, efficient water-use, especially in the sustainable agriculture sector, leads to significant water reductions. And finally, recycling or upcycling waste materials into products and processes meant these enterprises made contributions to the national recycling rates of their respective countries. Although the impacts of eco-inclusive enterprises towards reaching national goals may not seem paramount, the aggregate impact of the many eco-inclusive enterprises is key to reaching the SDGs.

“ [...] Our enterprise contributes to the NDCs by engaging women and youth in its activities resulting in rural poverty reduction and creation of job opportunities, reduced GHG emissions due to reduced fertilizer use and less turning of soil; and biodiversity preservation due to reduced tillage.”

- Musechi Enterprises Limited, Zambia

The Climate Frontline

Highlights:

- **96% of surveyed enterprises reported experiencing the impact of climate change, with increased droughts, increased food scarcity, and decreased crop productivity the top three challenges cited.**
- **95% of surveyed enterprises implement at least one adaptation and/or mitigation practice.**
- **37% of enterprises have knowledge about the Nationally Determined Contributions (NDCs)**

What emerges clearly from our data is that eco-inclusive enterprises are at the forefront of experiencing and tackling climate change. Ninety-six percent of the 78 enterprises who responded experience the impact of climate change, with drought (81%), food scarcity (73%) and crop productivity (69%) the most commonly felt climate-related effects (Figure 9. Climate change challenges and solutions). Beyond the strain of such effects on often already challenged communities, these figures also point towards the destabilisation of crucial systems that support human basic needs such as our food system and water sources.

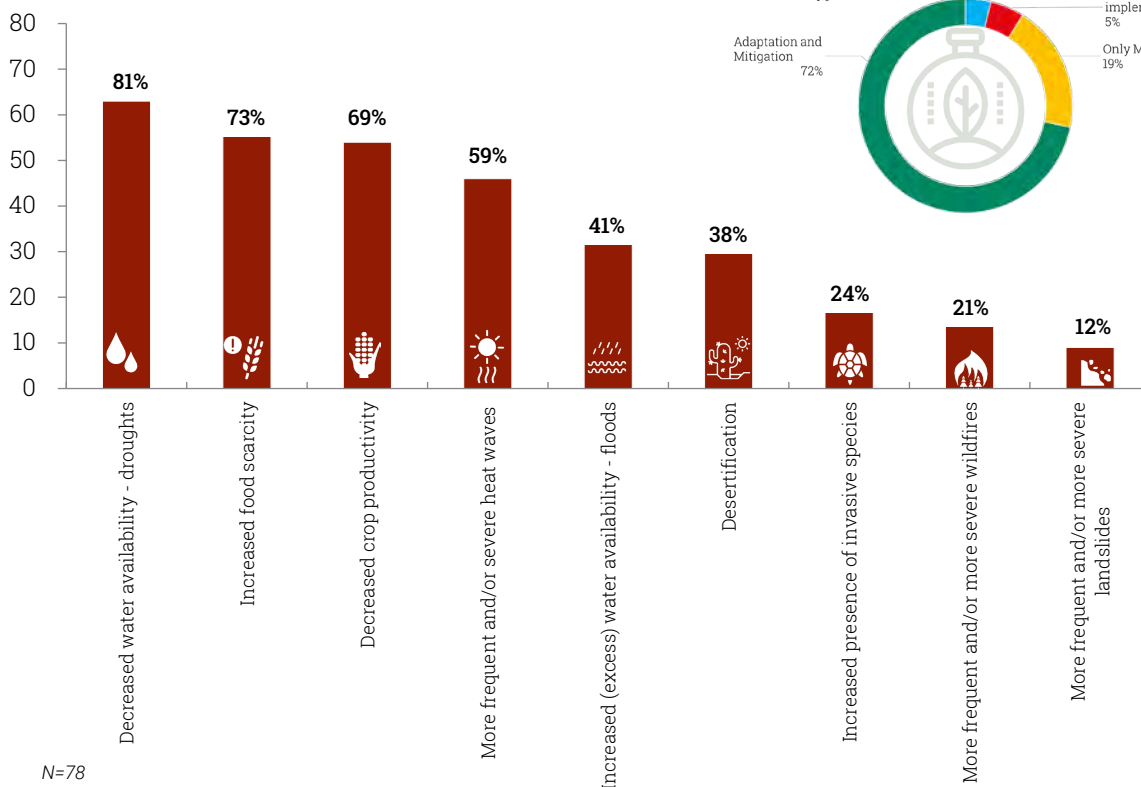
Encouragingly, eco-inclusive enterprises are directly engaged in tackling climate change in their communities, with 95% engaged in mitigation and/or adaptation activities. Nineteen percent of enterprises are in mitigation only, and 4% in adaptation only (Figure 9. Climate change challenges and solutions).



Climate change challenges and solutions

Climate impacts experienced by enterprises and/or their stakeholders

Number of Enterprises



Climate change solutions driven by eco-inclusive enterprises

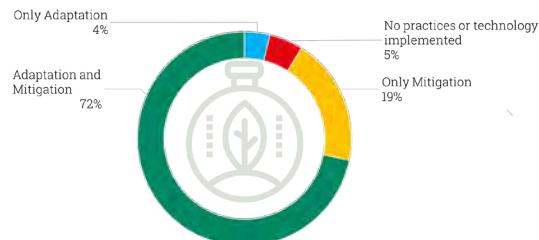


Figure 9. Climate change challenges and solutions

When zooming in into the countries, the top three challenges perceived by the enterprises tend to be the same as the ones described above, revolving around droughts and its impact in agriculture. Enterprises located in these three neighbouring countries perceive more frequent droughts and increased food scarcity. In Zimbabwe, two thirds of respondent enterprises also reported increased frequency or severity of heatwaves, fitting with the main type of challenges perceived (Figure 10. Top climate change challenges in each country).

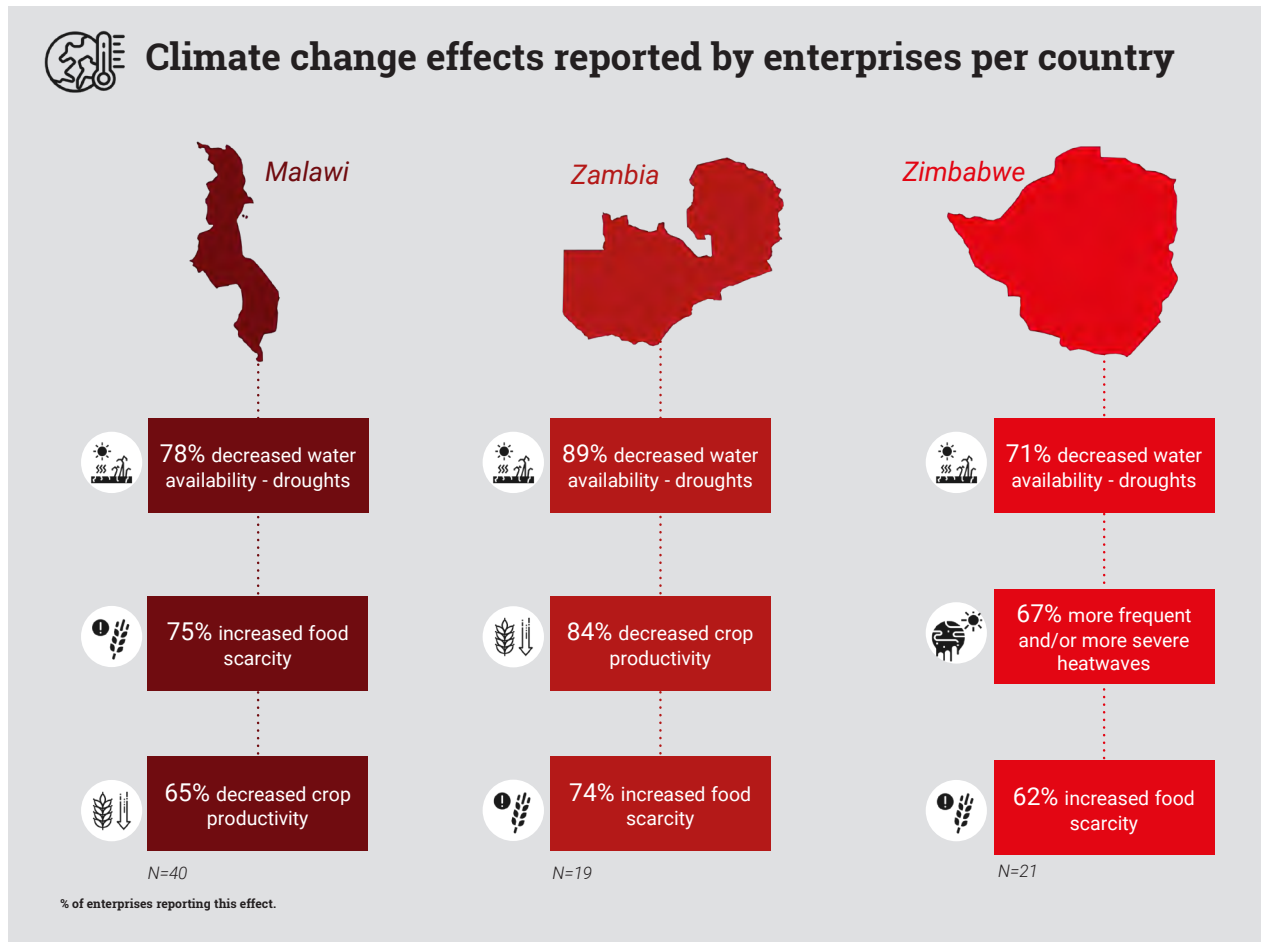


Figure 10. Top climate change challenges in each country

Furthering Climate Adaptation in Communities

Highlights:

- **76% of surveyed enterprises implement at least one practice or technology to adapt to climate change**
- **55% of enterprises that report being involved in adaptation are engaged in sustainable agriculture practices**

Seventy-six percent of surveyed enterprises have supported their beneficiaries or other stakeholders in adapting to climate change by implementing at least one related technology or practice.

Climate Change in Africa



Dramatic changes will occur in the continent under a no-adaptation and mitigation scenario

Summer temperatures would increase 4-7°C
with more likely droughts, highly unusual heat events and aridity increasing up to 40%



Food production would be highly affected

Maize and wheat production would decline by 20-35% and 10-20% respectively

Animal protein supply would decrease

Marine and freshwater fish production would decline and the rate of weight gain for cattle would drop up to 16%



SEED surveyed enterprises tackle this scenario by implementing **adaptation** and **mitigation** practices and technologies



Figure 11. Climate Change in Africa

The most implemented adaptation practice is increasing crop resilience and productivity, with 55% of the enterprises engaged in this activity. This includes activities ranging from distributing or producing sustainable fertilisers to spreading or engaging in practices on greenhouse crop management, precision agriculture, conservation tillage and crop rotation. The second ranked practice is engaging in water management practices which includes leakage management, water accounting, irrigation efficiency, rainwater harvesting, watershed conservation, source water protection and river restoration. Almost half of the enterprises engage in agro-forestry practices, and 41% of enterprises focus on sustainable land management training for stakeholders. About one third of the enterprises are engaged in livestock management, which includes manure livestock disease, pasture and grazing land management as well as climate tolerant livestock and domestic manure production (Figure 12. Climate change adaptation technology and practice).

Innovation in Climate Technology

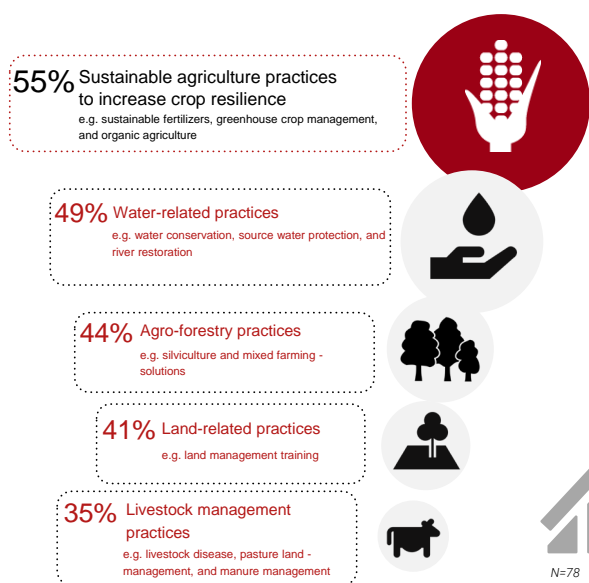
Highlights:

- **91% of surveyed enterprises engage in activities to mitigate climate change**

One of the key assets of eco-inclusive enterprises is their innovative potential. The survey data give a clear picture on the widespread development and use of innovative technologies.

With over 2.5 billion people in developing countries lacking access to constant electricity, it is encouraging to see that 49% percent of all enterprises are active in developing and/or offering solar technologies. This includes solar technology for cooking, solar powered water purification or water pumps, solar heating, lamps, and lighting. Enterprises are also focused on developing and offering other types of products and technology, 33% of them focus on water related technologies such as water purification filters, clean technology for pumping, and water conservation technology. Twenty eight percent of surveyed eco-inclusive enterprises are focused on

Climate change **adaptation** technology and practices



Climate change **mitigation** technology and practices

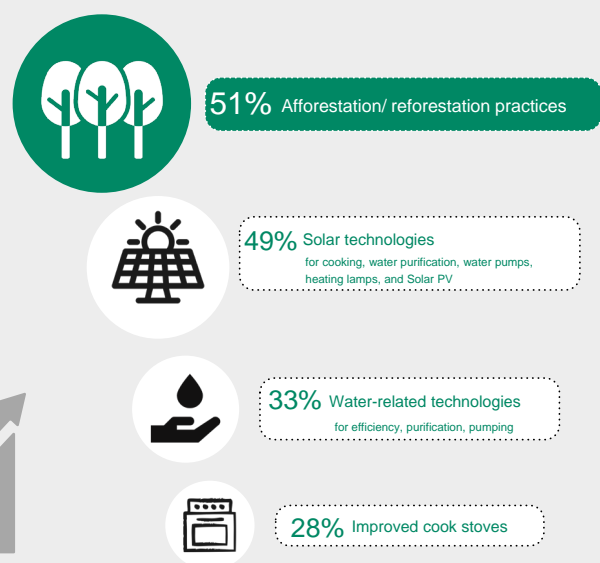


Figure 12. Climate change adaptation and mitigation technology and practices

providing improved cookstoves such as waste briquettes powered or fuel efficient cookstoves (Figure 12. Climate Change Mitigation Technology and Practice)

These activities generate multiple co-benefits including health benefits associated with water and air pollution reduction, extending of schooling or business hours due to longer lighting.

The Impact of Eco-inclusive Enterprises on the Environment

Highlights:

- **The average surveyed enterprise saved 523 tonnes of CO₂ (equivalent to 111 passenger vehicles driven in one year) and recycled 287 tonnes of material (equivalent to 11K gallons of oil) in 2018**
- **The average surveyed enterprise reports 680 hectares under sustainable management as a result of their direct activities and its beneficiaries**

Below you will find a snapshot of the quantifiable impact our SEED-surveyed enterprises made in 2018. It highlights the many ways in which eco-inclusive enterprises regenerate and sustain the environment. Additional activities which are difficult to quantify, but are nevertheless significant, include awareness raising activities, working for policy reforms in their respective countries or contributions to saving endangered species.

In line with the mitigation activities of enterprises, the major impacts of the collective eco-inclusive enterprises lie in their avoidance of emissions. Sixty percent of the enterprises reported at least one measured impact in this respect. On average, over 2018, each reporting enterprise saved 523 tonnes of greenhouse gas (GHG) emissions and recycled 287 tonnes of waste. Together the surveyed eco-inclusive enterprises have saved the equivalent of the yearly emissions of nearly 2,000 vehicles and they have saved over 7,000 tonnes of waste, the equivalent of two days worth of the world's consumption of oil.

With over 60% of enterprises in agriculture, it's unsurprising to see significant activities in sustainable management and reforestation practices. Collectively surveyed eco-inclusive enterprises have planted over 100,000 trees, an area of 140 soccer fields⁴, which translates to 51,700 planted trees per reporting enterprise. Enterprises report on average 680 hectares under sustainable management as a result of their direct activities and its beneficiaries'. Together they have 23,112 hectares under sustainable management, equivalent to the size of the city of Blantyre in Malawi (Figure 13. Eco-inclusive enterprises environmental impact).

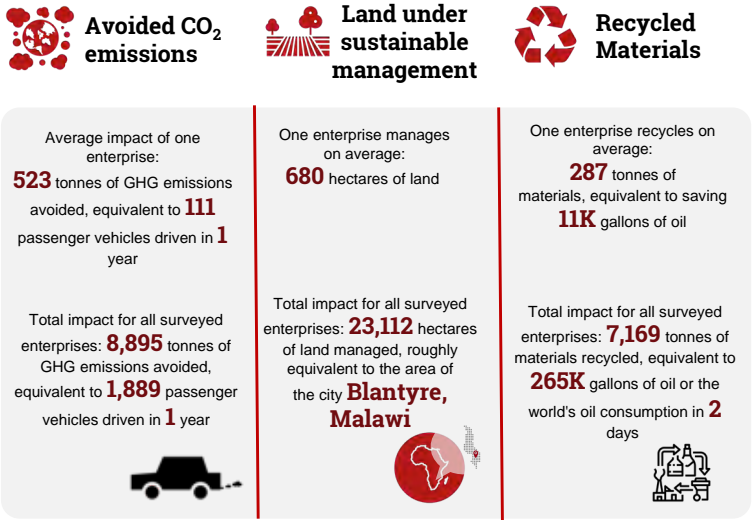
While the surveyed enterprises often contribute multiple positive impacts, their quantifiable impact is usually highest in the sector they are in. Enterprises in the sustainable agriculture sector manage sustainably more land on average than enterprises in other sectors, they and/or their beneficiaries have 766 ha under management. What is surprising is the potential of enterprises in the green technologies sector, recycling 1,580 tonnes of

⁴ Based on an approximation of 9m²/tree (Allain, 2019)

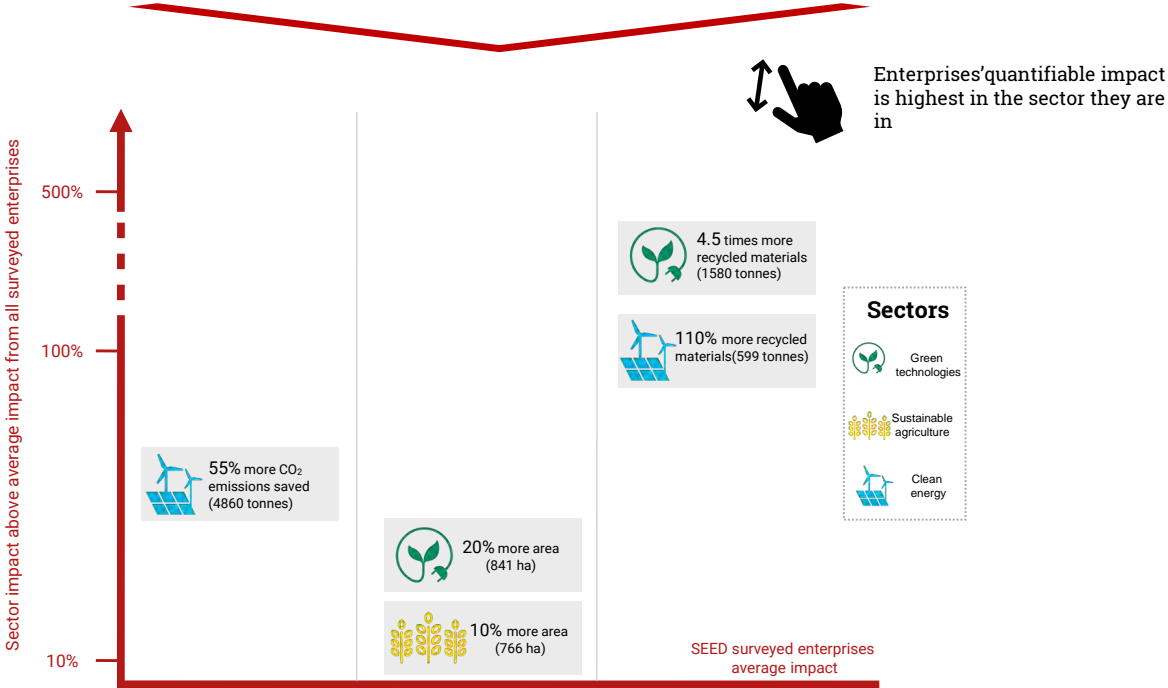
waste on average last year while also contributing above average to managing land sustainably, with 841 ha. Finally, enterprises in the clean energy sector saved 810 tonnes of CO₂, 50% more than the average enterprise in the other surveyed sectors (Figure 13. Eco-inclusive enterprises environmental impact)

The results paint a clear picture of the significant impact eco-inclusive enterprises can make, both individually and collectively, conserving natural resources with interrelated effects for green economic growth.

Eco-inclusive enterprises environmental impact across all sectors



Sector contribution to environmental impact



* Values compared to the average surveyed SEED-supported enterprise

Figure 13. Eco-inclusive enterprises environmental impact

The Impact of Eco-inclusive Enterprises on Resources

Highlights:

- **SEED supported enterprises saved on average 10,300 cubic meters of water and 5,539 kWh of energy during 2018**
- **The average surveyed enterprise generated 9,240 kWh of energy from renewable resources in 2018**

In 2018, surveyed enterprises generated on average 9,240 kWh of energy from renewable sources. These sources included biowaste, biodigesters, solar energy and hydropower installations. Among reporting enterprises, a total of 138.6 thousand kWh of energy was produced from renewable resources, which translates into the electricity consumption of 133 people in Zambia for one year. Considering only 47.7% of the population of Sub-Saharan Africa has access to electricity, the relevance of eco-inclusive MSMEs striving to offer access to clean and affordable energy has never been larger.

The survey also shows a strong resource saving with enterprises. Through their products, services and practices, the surveyed eco-inclusive enterprises saved on

average 10,300 cubic meters of water, adding up to a total of 175 thousand cubic meters collectively, the equivalent of the yearly water consumption of 3,235 people in Malawi (African Development Bank Group, 2016). Meanwhile, 5,539 kWh of energy was saved on average per enterprise in 2018, the equivalent to saving the energy use of 139 people in Zambia for one year (World Data, 2015) (Figure 14. Environmental impact: energy saved, renewable energy generated & water saved).

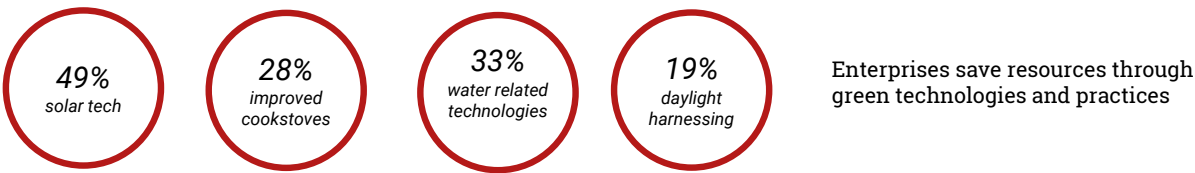
Many enterprises for instance use daylight in their processes and promote efficient transport among their employees. Nineteen percent implemented daylight harnessing in their business, by designing or modifying their installations to minimise the use of artificial lighting; and another 19% promote the use of non-motorised transport within their business

When looking at the different sectors, enterprises in the clean energy sector generated on average 14,267 kWh of energy from renewable resources, 54% above the average of the whole sample. Similarly, enterprises in the sustainable agriculture sector generated 18716 kWh of energy from renewable resources on average, and saved 22% more water, amounting to 12,562 cubic meters (Figure 14. Environmental impact: energy saved, renewable energy generated & water saved).






Kukula Solar, Zambia

Environmental impact: Renewable energy generated, water saved & energy saved



Eco-inclusive enterprises environmental impact on resources across all sectors

<p>Average impact of one enterprise:</p> <p>9,240 kWh of energy generated from renewable sources</p> <p>Total impact of all surveyed enterprises:</p> <p>138.6K kWh of energy generated from renewable sources, equivalent to 3,175 square meters of forest preserved in 1 year</p>	<p>Average impact of one enterprise:</p> <p>60,300 cubic meters of water saved</p> <p>Total impact of all surveyed enterprises:</p> <p>75K cubic meters of water saved, equivalent to the water consumption of 3,235 people in Malawi over 1 year</p>	<p>Average impact of one enterprise:</p> <p>5,539 kWh of energy saved</p> <p>Total impact of all surveyed enterprises:</p> <p>88.6K kWh of energy saved, equivalent to the energy use of 139 people in Zambia over 1 year</p>
 <p>Renewable Energy Generated</p>	 <p>Water Saved</p>	 <p>Energy Saved</p>

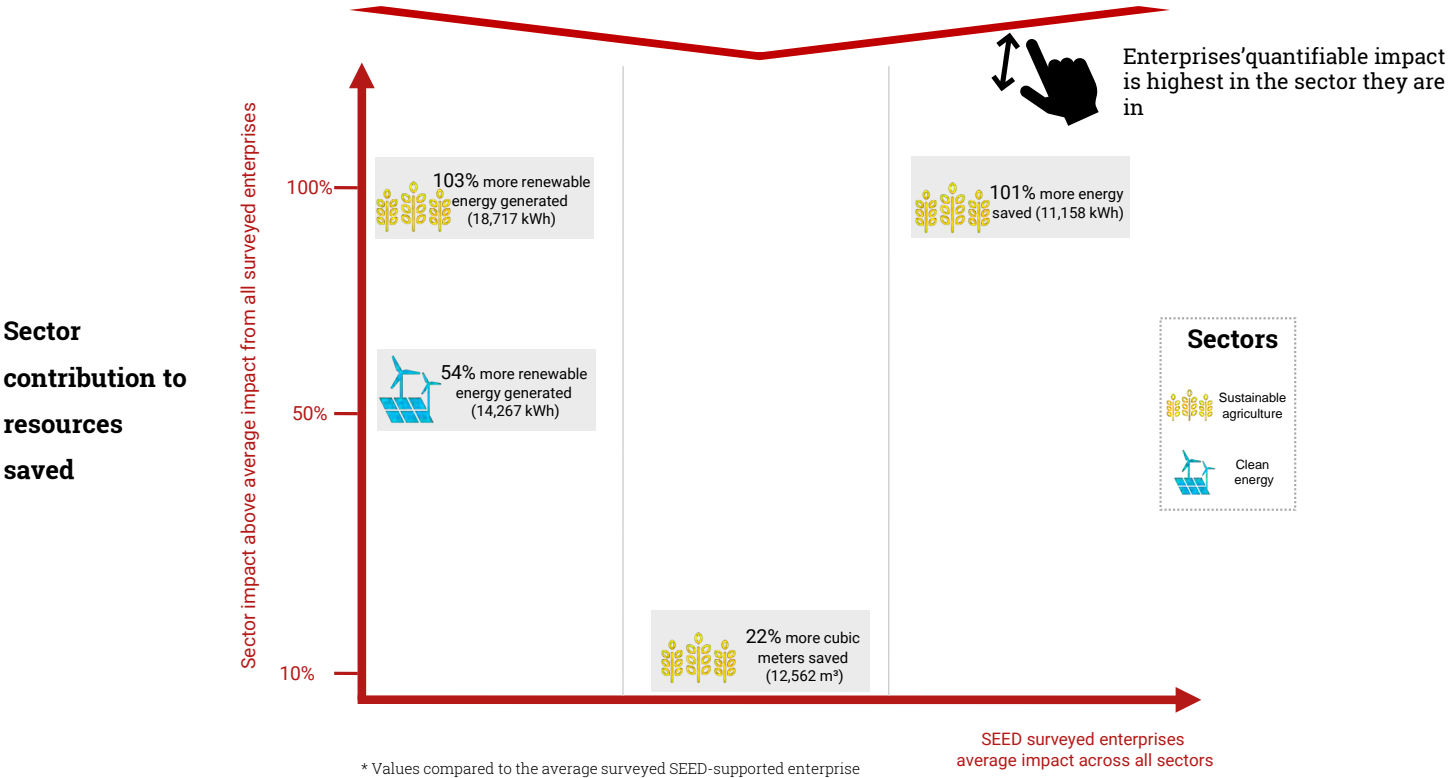


Figure 14. Environmental impact: energy saved, renewable energy generated & water saved



Enterprise Spotlight: RECAPO CBO

Distributing clean and affordable energy in rural Malawi

Chizuma Village, Malawi

SEED Africa Award Winner 2015

Based in Chizuma Village, Malawi, RECAPO provides households in rural Malawi with solar home systems, offering them Pay-As-You-Go plans. Within the plan, two LED bulbs and a cell phone charger are installed for a small initial charge and a weekly activation fee in the first 20 months of use. These costs can be more easily afforded by households than buying a system upfront.

As an additional service, the enterprise offers seminars on renewable energy and raises awareness on the dangers and environmental impacts of kerosene lamps, candles and battery-powered torches.

By offering a clean energy solution, RECAPO not only mitigates climate change; decreasing carbon emissions, but also contributes to improving air quality, reducing the risk of respiratory disease among rural populations. By providing affordable solar lighting, it enables two hours more study time for children per day, while helping families reduce expenditures.

In recognition to RECAPO's environmentally sustainable and socially inclusive business model, the enterprise was selected as a SEED Africa Award Winner in 2015.



Environmental Impact

Generated 20,400 kWh of clean energy, reducing greenhouse gas emissions and air pollution



Social Impact

- **Employs 9 people (44% BoP and 44% women)**
- **Served 1,800 people in 2018,** providing them with access to affordable energy, and contributing to increased study time in homes



Setting an example in Environmental Practices

- **49% of enterprises train their staff on green practices, increasing their own capacity and setting an example**

The surveyed eco-inclusive enterprises also promote best practices in protecting the environment. In this way, they set an example for mainstream businesses on how to conduct business responsibly, and fulfill an important awareness raising function with staff and their communities.

Eco-inclusive enterprises build up their own capacity and knowledge to mitigate climate change effects and that of their staff, 49% train their staff on green practices such as sustainable resource use. Alongside, 66% of surveyed enterprises have established environmental objectives and plans and 35% are already monitoring their performance using well established and developed KPIs. The latter is key in being able to monitor and improve on impact towards the SDGs (Figure 15. Exemplary Environmental Practices).

Exemplary environmental practices



Figure 15. Exemplary Environmental Practices



4. SOCIAL AND ECONOMIC IMPACT

Relevant SDGs



Eco-inclusive enterprises promote inclusive and sustainable economic growth, employment and decent work for all.

Eco-inclusive enterprises promote inclusive and sustainable economic growth, employment and decent work for all. Thus, they contribute towards multiple SDGs including No Poverty, Quality Education, Decent Work and Economic Growth, Gender Equality and Reduce Inequality.

A key asset of eco-inclusive enterprises is their engagement with poor (sometimes also called base of the pyramid, BoP) and marginalised populations. Eco-inclusive enterprises generate local employment within their supply chain, as partners, suppliers and service procurers, and as direct employers. These employment opportunities mean jobs and training to marginalised groups that are more vulnerable to poverty, contributing to the global fight against poverty. Women are routinely included in their businesses and value chain as suppliers, distributors and consumers.

Fifty-four percent of the jobs created by our surveyed eco-inclusive enterprises is offered to people at the BoP and 40% of that employment goes to women. This paints a clear picture of what these enterprises can contribute in the way of reducing inequality and poverty and achieving gender equality. Furthermore, through staff training, a best practice conducted by 88% of surveyed enterprises, enterprises fulfill the principles of offering decent growth while also advancing towards goal 4. Quality Education, by promoting lifelong learning opportunities.

Promoting entrepreneurship and innovation is a core principle for these enterprises, therefore they inspire change within and beyond their own entrepreneurial activities.



Generating Prospects and Income for Marginalised Populations

Highlights:

- **Women empowerment: 51% of SEED supported enterprises are women-led. And on average, 40% of the enterprises' employees are female.**
- **Youth⁵ empowerment: 43% of eco-inclusive enterprises are youth-led, and on average 53% of employees are youth.**

Empowering women in the economy and closing gender gaps in the professional sphere are key to achieving the 2030 Agenda for Sustainable Development. Eco-inclusive enterprises show us that when more women work, there is higher economic growth. Women's economic empowerment boosts productivity, increases economic diversification and income equality.

Female empowerment is a major focus of SEED-supported enterprises. Out of 80 surveyed enterprises, 51% are female-led, with 40% average proportion of women employees. Forty-five percent of enterprises are very explicitly focused on promoting gender equality, they consciously implement benefits and activities to further gender equality; equal wages and promotions, maternity and paternity leave and childcare as an employee benefit.

Further down the value chain, 79% of enterprises have women customers, with an average proportion of 53% female customers per enterprise; 28% engage with women suppliers and 72% with women distributors.

Besides women, eco-inclusive enterprises are also focused on youth (under 30). With a growing young population in developing countries, their contribution is crucial to empowering new generations. Eighty-two percent of eco-inclusive enterprises employ youth, with an average of 53% young employees per enterprise; while 43% of enterprises are youth-led. (Figure 16. Gender equality and youth employment and Figure 18. Breakdown of jobs created and beneficiaries supported).

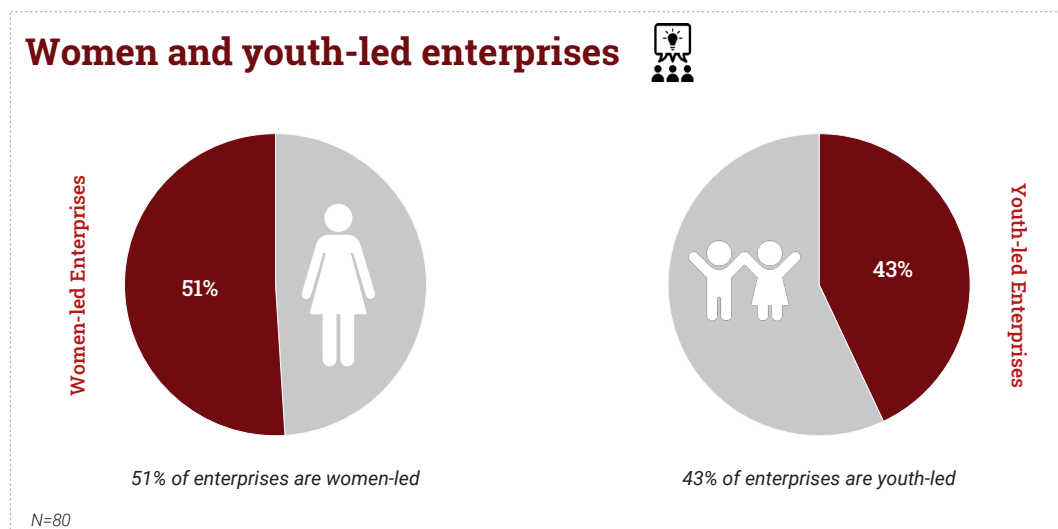


Figure 16. Gender equality and youth employment

People living at the Base of the Pyramid (BoP) lack access to basic goods and services such as primary health care, clean water, proper sanitation and basic education. Excluded in traditional business models, the BoP sustains their livelihoods through activities in the informal and subsistence economies and often rely on non-profit organisations and government programmes to serve their basic needs.

The majority (63%) of surveyed enterprises employ people at the BoP. On average they employ 7 staff from this group (39% out of the total employees per enterprise).

All together surveyed enterprises directly employed 717 people at the BoP over 2018, while they collectively worked with 102,336 additional people at the BoP (including customers, suppliers, and distributors) up and down the value chain. Eco-inclusive enterprise employment of people in the BoP is a promising addition to existing philanthropic or government programmes that often need basic needs, but don't achieve economic empowerment (Figure 17. The base of the pyramid).

⁵ The SEED survey for this report defines youth as those persons under the age of 30 years old.

The Base of the Pyramid (BoP)

People living at the Base of the Pyramid (BoP) lack access to basic goods and services, and are often excluded from traditional business models.

63% of the surveyed enterprises employ people at the BoP.

On average they employ 7 staff from this group (39% of the total employees per enterprise)



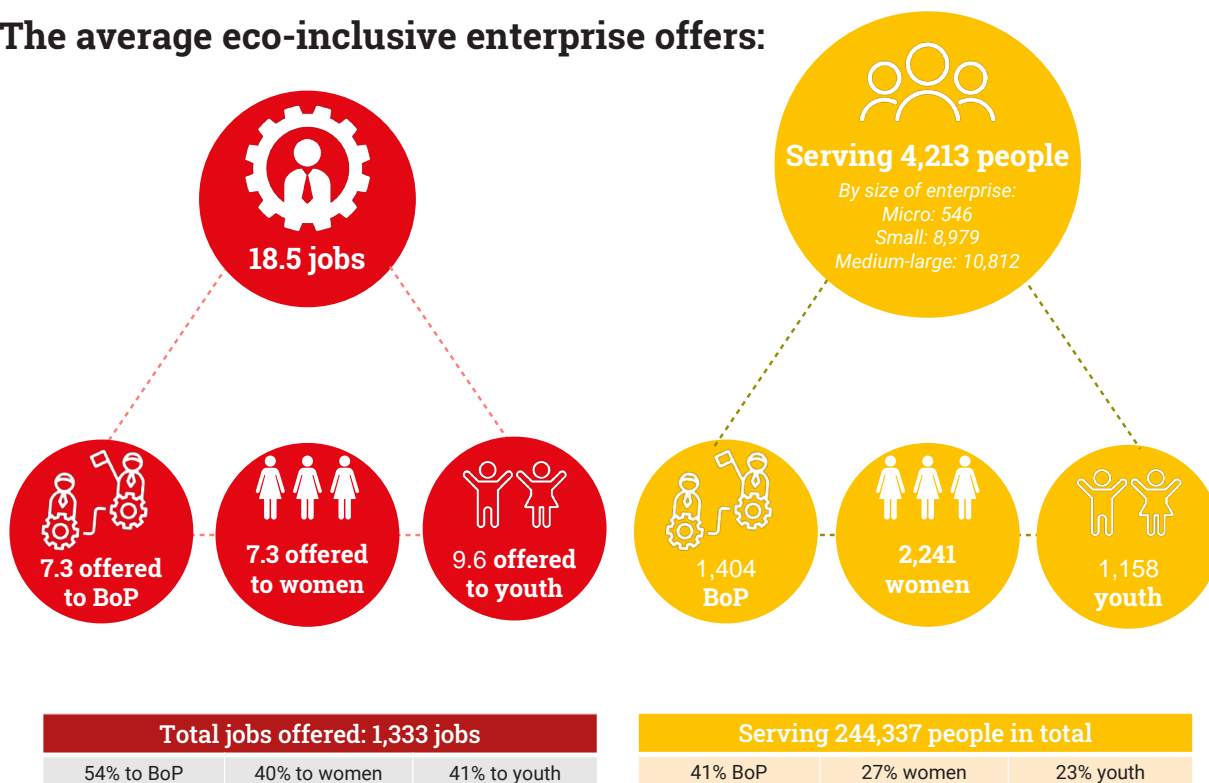
All together they directly employ **717** people at the BoP over 2018,

while they collectively work with **102,336** additional people at the BoP.

N=72

Figure 17. The Base of the Pyramid

The average eco-inclusive enterprise offers:



N=72

Figure 18. Breakdown of jobs created and beneficiaries supported

Decent Work for All

Highlights:

- **88% of surveyed enterprises offer at least one type of training for their staff, including skills-based, life-skills, health and safety, and environmental and social performance trainings**

In line with SDG 8 on Decent Work and Economic Growth, eco-inclusive enterprises protect labour rights and promote safe working environments for their employees. The enterprises in this survey are certainly trailblazing when it comes to promoting best practices but the figures also speak to the lack of qualified staff and available training locally.

Around half of the enterprises (45%) are focused on

offering decent jobs⁶. In line with that, they offer training to their employees, professional (i.e., health and safety) and life skills training and also training on environmental and social performance.⁷ Hereby they ensure work that is productive, and improving the prospects of their employees on personal development and social integration (ILO, 2020).

Eighty-eight percent of surveyed enterprises offer at least one type of training for their staff. Three out of four of the surveyed eco-inclusive enterprises offer skills-based training and over half (58%) offer life skills training. The latter includes decision-making and problem-solving, communication and interpersonal skills, time and financial management, and soft skills learning. Thirty-eight percent offer health and safety training, and a small percentage of surveyed enterprises offer exceptional benefits to their employees such as education subsidies and stock ownership (16% and 15% respectively) (Figure 19. Training of employees)

Training of Employees

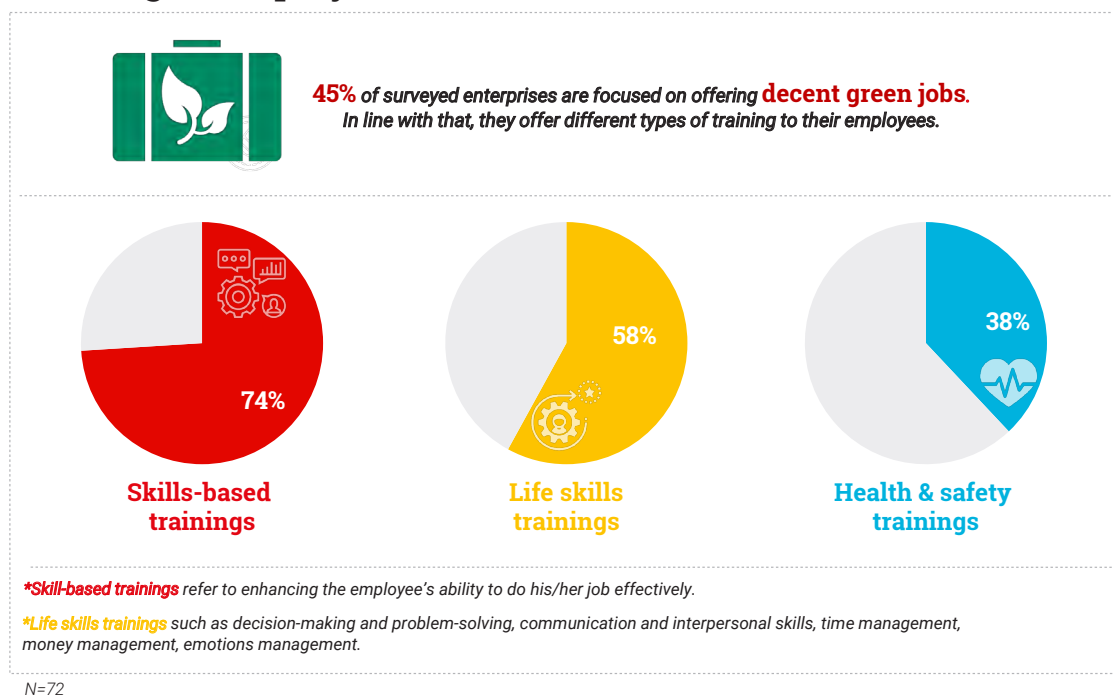


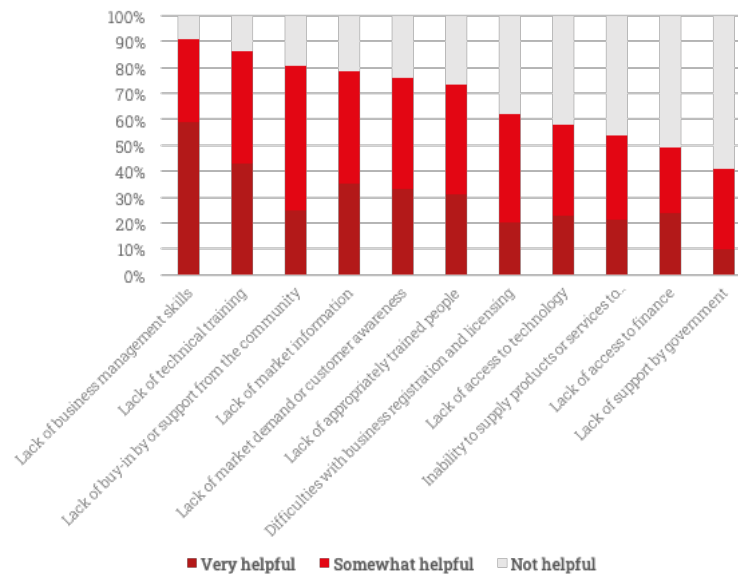
Figure 19. Training of employees

⁶ Decent work "is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men" (ILO, 2020)
⁷ Environmental performance training refers to capacity building in environmental care, both within the company and in the staff's private life. Social performance training refers to achieving the organisation's social goals and creating value for clients. Examples of this type of training include: acceptable practices for payment collection; enacting gender sensitivity; handling client complaints appropriately.

Not only is staff training by the enterprise important to increase the value for the business. The training and support received by the enterprises from SEED has also helped them overcome many challenges, and helps establish best training practices among the enterprises. Particularly, SEED training is ranked helpful by a large majority of surveyed enterprises when facing or overcoming challenges related to lack of business management skills (91%), lack of technical training (86%) and lack of buy-in or support from the community (81%) (Figure 20. Ranking of the SEED support by surveyed enterprises)



How helpful has SEED support been to tackle challenges?



N=72

Figure 20. Ranking of the SEED support by surveyed enterprises

Training staff members increases the value of an employee's contribution to the business (Accounts and Legal, 2017), the enterprise's performance and the chances of an enterprise to stay in business (UKCES, 2010). It is therefore encouraging to find that the great majority of surveyed SEED supported enterprises engage in training activities. Here they rank slightly above regular MSMEs in developed countries; 60% to 70% of regular MSMEs in developed countries offer staff training and development (UKCES, 2010; Accounts and Legal, 2017; Abdul et al, 2017), and even more impressive considering the figure in developing countries, where only about 39% of MSMEs offer training to their employees (Almeida et al., 2015)

Witnessing Impressive and Inclusive Growth

Highlights:

- **81% of surveyed enterprises have experienced positive yearly sales growth.**
- **71% of surveyed eco-inclusive enterprises generate revenue, compared to 57% of social enterprises.**

Our survey proves that eco-inclusive enterprises are economically viable actors that experience decent profit margins and growth rates.

The majority of surveyed eco-inclusive enterprises are going strong, a testimony to their innovative approach,

local embeddedness and tenacity. But also to the growing market of green products and services in Zambia, Zimbabwe and Malawi.

Unpacking this success, we see some interesting factors emerge. The majority of enterprises (59%) are growing their sales between 1 and 10% per year, with only 19% experiencing negative or no growth in sales.

For the 22% of surveyed enterprises that are experiencing high growth (growth of over 10% in sales revenue per year on average since their establishment), contributing success factors include product quality (innovative, efficient and low cost products), branding and marketing, support from SEED and similar organisations, partnerships and training.

It is not surprising to see that enterprises in the growth stage who are more consolidated experience higher growth rates on average than enterprises who are in earlier stages. However it is surprising and encouraging to find several enterprises in the development stage that are already experiencing high and very high growth (31% of the enterprises in the development stage)

When looking at enterprises' success it becomes clear that enterprises need support along every stage of their development, from product testing to business model consolidation and expansion. Business support that includes marketing and business management training proves key to ensure high success rates.

Sales growth and success stories

The majority of enterprises (59%) are growing their sales with between 1- 10% per year

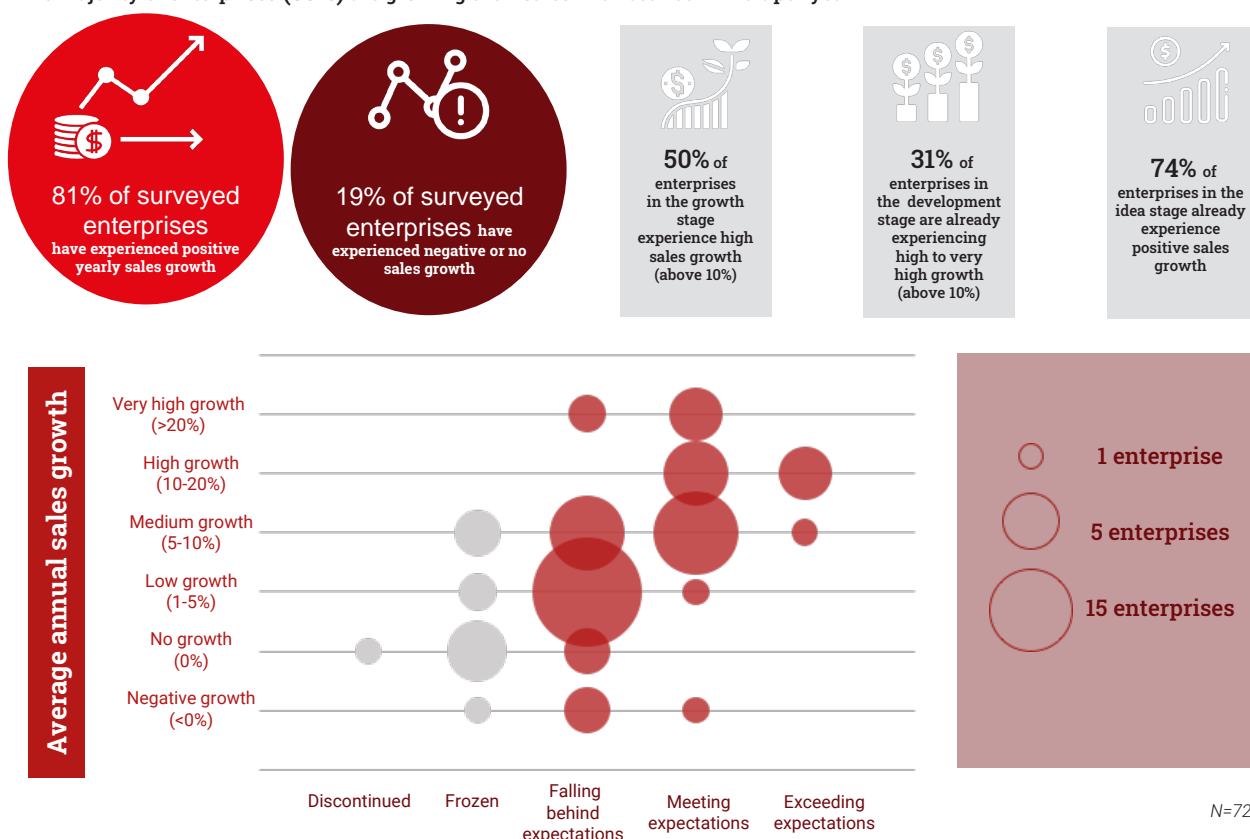


Figure 21. Sales Growth and Success Stories.

Sales growth reported by surveyed enterprises proves that green and socially inclusive business models are as profitable as regular MSMEs and social enterprises, and in some cases, more profitable. It is remarkable that a large portion of this high growth is driven by enterprises that are in the idea and development stage, with 55% of the enterprises experiencing high and very high growth being in the idea or development stage (Figure 21. Sales Growth and Success Stories).

The Global Entrepreneur Monitor (2011) reports that 4% of active entrepreneurs experience high growth⁸ (Morris, 2011), our eco-inclusive enterprises do markedly better, with 22% of surveyed enterprises reporting high growth.

Eco-inclusive enterprises also fare better when compared to other social enterprises. Seventy-one percent of surveyed enterprises are revenue generating, while 57% of social enterprises⁹ generate revenue (Figure 22. Eco-inclusive enterprises compared). (Research by global hub network Impact Hub in Vandro & Leitner, 2018). These figures clearly speak to the market opportunity of the green economy.

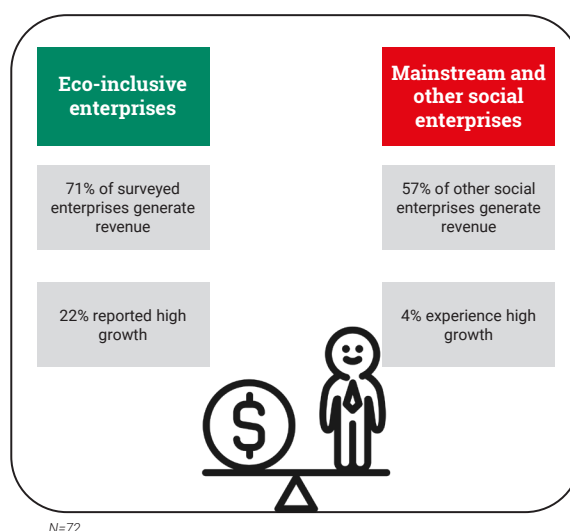


Figure 22. Eco-inclusive enterprises compared

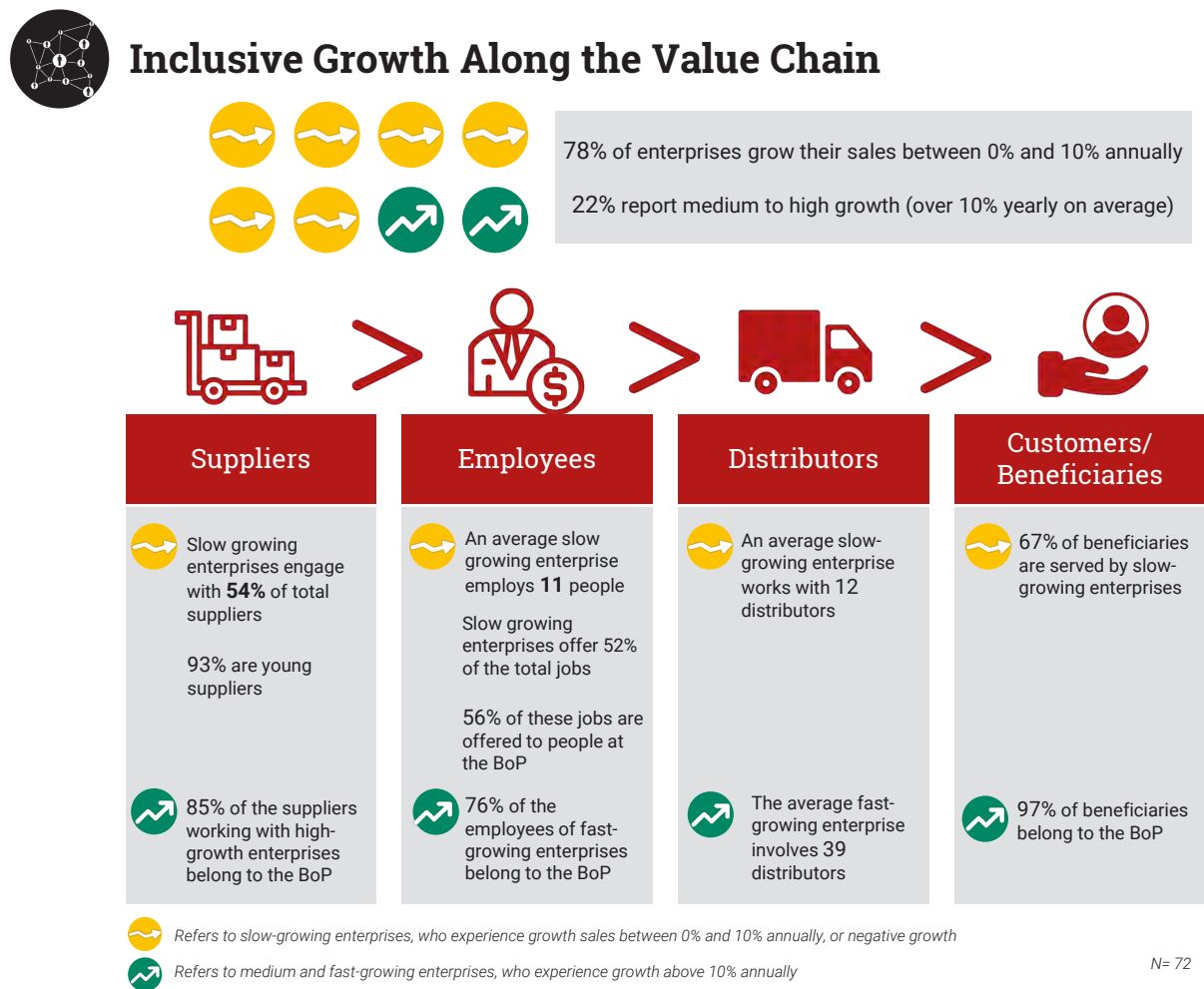
Normally, enterprises' sales growth contributes to the country's economic growth and GDP, but growth does not mean inclusive growth.¹⁰ Conversely, no growth or slow growth does not strictly mean that no inclusion and equal

⁸ The GEM studied 70,000 active entrepreneurs (Morris, 2011).

⁹ Impact Hub studied 16,000 social enterprises (Vandro & Leitner, 2018).

¹⁰ The OECD defines inclusive growth as economic growth that is distributed fairly across society and creates opportunities for all.

opportunities are being created. What our results show is that indeed, fast growing enterprises create inclusive growth. Out of the 516 jobs generated by high growing businesses, 76% are offered to people at the BoP. In fact, up and down the value chain, they engage with 2,473 individual or local suppliers and 513 distributors to serve 79,243 customers, of which 97% are people at the BoP (Figure 23. Inclusive opportunities and growth along the value chain)



5. SYNTHESISING THE ENTERPRISES' IMPACT THROUGH THEIR SDG CONTRIBUTIONS

The earlier impact data sheds light on enterprise challenges, growth potential and their impact promise for all three dimensions of the triple bottom line; green, social and economic. What emerges clearly is a picture of micro, small and medium, locally embedded and inclusive enterprises, with a majority driven by young and female entrepreneurs. Enterprises with a significant and quantifiable impact on curbing emissions, promoting green technologies, and preserving energy, water and other resources.

When analysing their data further through the lense of the SDGs it becomes clear that those Malawian, Zimbabwean and Zambian eco-inclusive enterprises contribute to 11 of the 17 Sustainable Development Goals (SDGs). Their activities generate decent employment (goal 8), reduce poverty (goal 1) and (gender) inequalities (goal 5, 10) and increase green economic growth (goal 8). As the world experiences the negative effects of climate change, they mitigate and adapt to climate change and regenerate the environment (goal 13) at the same time that they offer clean and affordable energy (goal 7) and practice responsible production (goal 12). Enterprises don't go this alone. Sharing knowledge, expertise, technology and financial resources, across different stakeholders groups, particularly amongst marginalised populations, makes partnership a core strength of a SEED-supported eco-inclusive enterprise. (Goal 17).

While pursuing their own social objectives, eco-inclusive enterprises contribute to a lesser extent to achieve other SDGs such as quality education through training offered to staff (goal 4), life on land (goal 15) by managing sustainably a large area to provide agricultural products, at the same time contributing to fighting hunger (goal 2). Thus, eco-inclusive enterprises are proving, day to day, that it is possible to achieve social and environmental goals while being profitable. (Figure 24. Highlights of SEED supported enterprises).

This data analysis show the significant contribution of a particular subset of MSMEs; eco-inclusive enterprises, to the Sustainable Development Goals. The above illustrates the significant impact of these actors on the interlinked SDGs of economic growth, employment and sustainable consumption and reducing inequality. Meanwhile, by curbing carbon emissions and promoting green technologies, these actors are also at the frontline of water, resource efficiency and waste prevention. These findings are cause for optimism demonstrating that the future ahead has many opportunities for eco-inclusive enterprises, and their partners, to maximise their impacts while making significant contributions towards the SDGs.



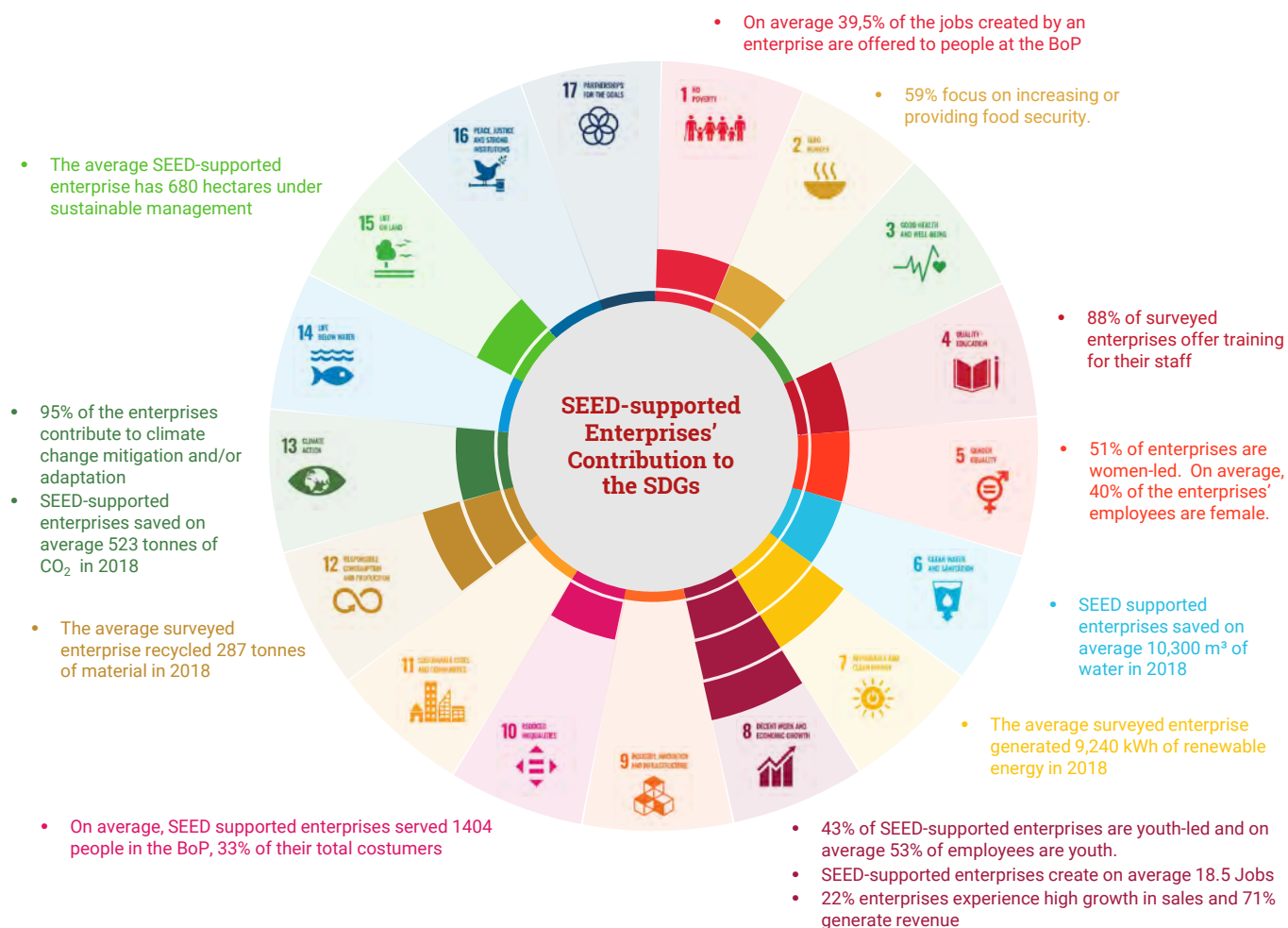


Figure 24. Highlights of SEED supported enterprises



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