



# JOURNEYS TO SCALE

An Evidence-Based Framework and  
Comparative Analysis of  
Eco-Inclusive SMEs



## Imprint

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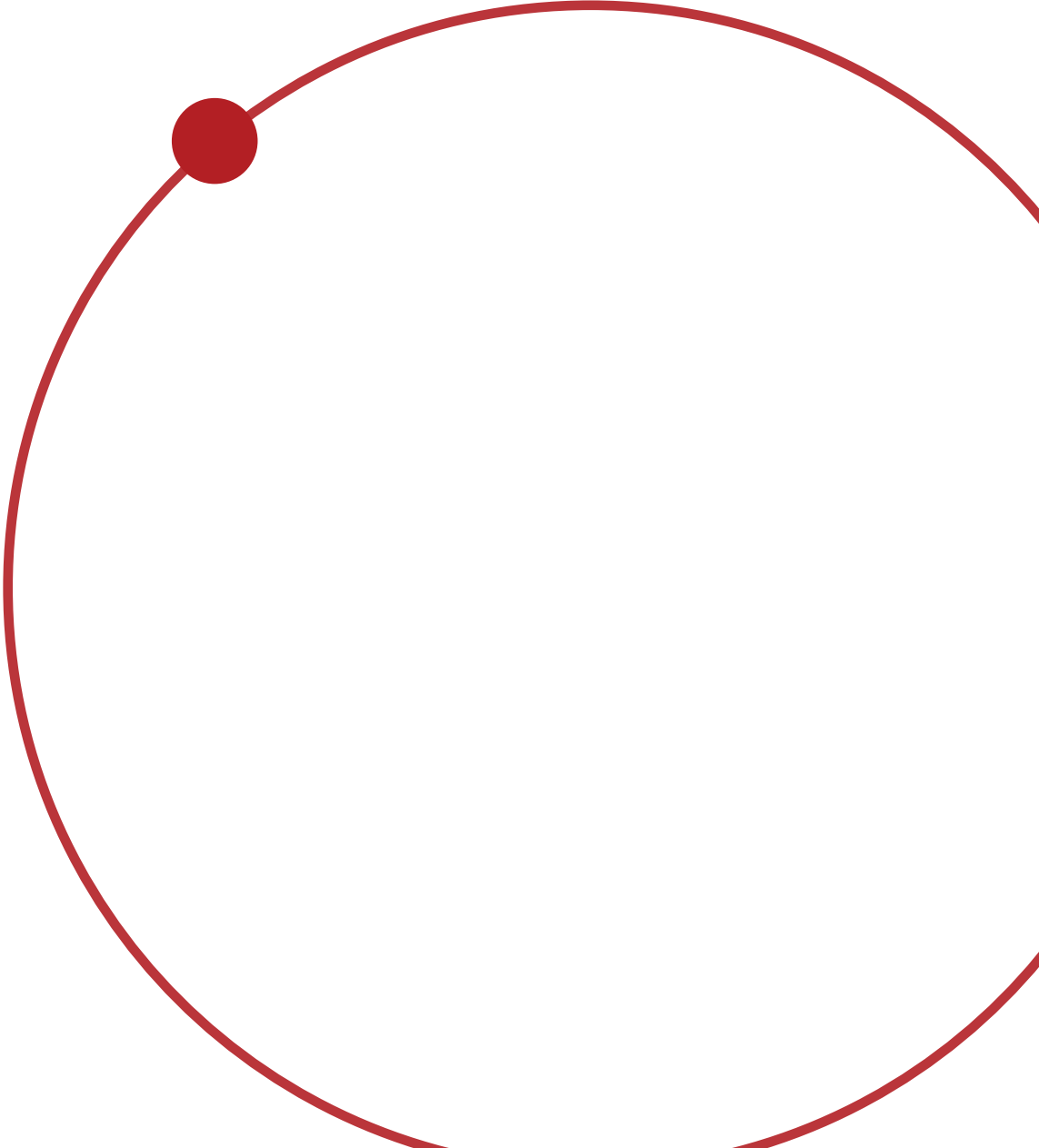
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## LIST OF ABBREVIATIONS

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<b>CAPEX</b>	Capital expenditure
<b>FI</b>	Financial institution
<b>GDP</b>	Gross domestic product
<b>OPEX</b>	Operational expenses
<b>SKU</b>	Store-keeping unit
<b>SME</b>	Small and medium-sized enterprise

# EXECUTIVE SUMMARY

The struggle to combat global environmental degradation and the progress in including socioeconomically marginalised communities in global value chains are both fundamentally dependent on small and medium-sized enterprises (SMEs). Frequently coined as the “backbone” of countries’ economies due to their contribution to global employment and GDP (Alibhai et al. 2017), SMEs can deliver environmental and social impact on the ground by alleviating communities from poverty and equipping them with capacities to engage in environmentally sustainable behaviour. SMEs achieve this through their local rootedness in highly vulnerable communities and the involvement of such groups into their value chains (SEED 2021).

As a sub-group of SMEs, eco-inclusive enterprises specifically focus on providing socially inclusive and environmentally sustainable impacts through their business activities. While these enterprises have received increasing attention from economic development actors, climate and broadly environmentally focused organisations as well as business development supporters in recent years; their specific business journeys and characteristics remain only insufficiently investigated in previous research.

In this primary edition of a series of reports, we illuminate the black box of eco-inclusive entrepreneurship by providing readers with a first-of-its-kind comprehensive typology on eco-inclusive enterprises. Our contribution encompasses a categorisation of different types of eco-inclusive SMEs, as well as a comparative analysis of their characteristics and differences. The typology and analysis are informed by over 20 years of supporting more than 1000 eco-inclusive entrepreneurs across Asia, Africa and the Americas, and enriched by 36 in-depth interviews we conducted with nine SEED Awards Winners or Finalists between June 2020 and June 2021.

As a key result of this report, we identified four distinct eco-inclusive SME archetypes: Disruptors, Impact Drivers, Steady Growers and Necessity-driven Enterprises.

- **Disruptor** enterprises have at their core the product or service-based innovation of tech-enabled green products/ services that disrupt established markets. These products or services involve multi-year R&D processes and numerous financial and research partnerships. Disruptor enterprises have both exponential growth potential and a high risk of failure.

*Disruptor example:* **Mycotech** is an Indonesia-based enterprise that developed mushroom based vegan leather to replace animal-based and environmentally harmful synthetic leather in the international fashion and furniture industry.

- **Impact Drivers** focus on creating green and social inclusivity movements through their large networks of marginalised input suppliers, civil society actors and distributors. Impact Driver enterprises sell products/services with strong ties to local wisdoms and environmentally sustainable traditional practices; and raise public awareness through extensive concerted campaigns.

*Impact Driver example:* **Last Forest** from India collects honey-based products from indigenous communities that engage in sustainable wild honey harvesting. The enterprise uses extensive resources to raise awareness on traditional sustainable livelihood practices and the health benefits of organic consumable goods.

- **Steady Growers** are enterprises with proven business models that offer large quantities of (manufactured) green products or services in markets with large demand. As Steady Growers navigate in highly competitive industries, they are focused on continuously innovating on business processes to gain a competitive advantage. Steady Growers employ most staff among our eco-inclusive enterprise types.

*Steady Grower example:* **Green Bio Energy** offers organic waste-based eco briquettes to communities in Uganda, where an estimated 94% of the population depends on firewood or wood-based charcoal for cooking (Uganda Bureau of Statistics 2016).



- **Necessity-driven Enterprises** are SMEs who are based in communities that are particularly marginalised and socio-economically disadvantaged – often found in localities characterised by extreme ruralness or informal settlements. They often provide the only viable employment opportunities among community members. Necessity-driven Enterprises' main focus is economic survival, however, they often create impact “on the way” by looking for cost-efficient production inputs, e.g. through waste collection, recycling or upcycling.

*Necessity-driven example:* **SiyaBuddy** is a waste recycling SME based in Mozambique-bordering Nkomazi municipality, South Africa. The enterprise collects and processes waste from the local landfill site, and buys waste from the communities' waste pickers, who are often illegal immigrants. SiyaBuddy gradually expanded from bottle recycling to paper and plastic, thereby reducing the community's soil contamination considerably.

In the following report, these different enterprise types are analysed and compared focusing on crucial dimensions in eco-inclusive enterprise journeys, namely enterprise growth, innovation, impact, ecosystem and finance. This journey lenses will help to characterise the different enterprise types along their journeys to scale.

### A Typology for Future Action

This typology helps to reveal the diversity of eco-inclusive enterprises, and the corresponding diversity of their support needs. The insights gained through this report shall help support organisations to understand what needs to be done to better tailor their programmes to the specific needs of a specific eco-inclusive enterprise profile. Each of the four enterprise types are characterised by distinct features which are critical to leverage and support the individual enterprise journey.

To unlock the potential of eco-inclusive enterprises as SDG frontrunners, support organisations need to continue to experiment, refine, and scale a wider variety of support options. This typology calls for the creation of a more diverse and robust ecosystem of support providers serving the needs of different enterprise profiles at their different stages to scale.

We hope this typology can inform future action roadmaps, research agendas and support programmes serving the eco-inclusive SME sector as a whole. At SEED we will be expanding this research while integrating it into our existing enterprise support and ecosystem building programmes. Furthermore, this typology is envisaged to provide a hands-on guidance for eco-inclusive enterprises providing lessons and insights into potential challenges and opportunities in their individual journeys to scale.



# 1. INTRODUCTION

Accounting for 95% of registered businesses and over 50% of jobs worldwide, and contributing to well over 35% of GDP across emerging economies (Alibhai et al. 2017), micro-, small and medium-sized enterprises (hereby SMEs) are a fundamental economic actor in the global economy.

SMEs play a particularly important role among socio-economically marginalised communities in low- and middle-income economies. SMEs alleviate poverty, creating four out of five new formal jobs in emerging markets and absorbing the lion's share of the informal workforce in low-income countries (UNDESA 2020). The employment opportunities offered by SMEs particularly empower disadvantaged or vulnerable groups, such as women or youth (Alibhai et al. 2017; IIED 2016). SMEs' local embeddedness – responding to local demand and needs – in rural and urban communities is pivotal to enabling socially inclusive, equitable development.

As a smaller sub-segment of SMEs, **eco-inclusive SMEs** similarly include low-income and vulnerable groups in their value chain as employees, suppliers, distributors and consumers. However, they differ from conventional SMEs by distributing, applying and promoting green products and services, enabling even deeper and wider social and environmental – or eco-inclusive – impacts.<sup>1</sup> Against the backdrop of the potential green and social impact that eco-inclusive SMEs can deliver, this enterprise group remains overlooked in current research. With the exception of research on eco-inclusive enterprise definitions and traits (e.g. OECD 2018), no comprehensive taxonomy<sup>2</sup> of eco-inclusive SMEs<sup>3</sup> exists. Looking at the support landscape, finance and capacity building for green and social enterprises are increasingly offered by national and international development, environment and climate players. To enable effective and tailor-made support programmes for eco-inclusive enterprises, we deem it necessary to properly grasp the characteristics and heterogeneity of different eco-inclusive enterprise profiles – which this report set out to do.

## What is a micro-, small or medium-sized enterprise (SME)?<sup>4,5</sup>

There are various definitions of smaller enterprises across countries and organisations. We approach SMEs in this paper based on the International Finance Corporation's (IFC 2012) working definition of micro-, small and medium-sized enterprises visualised in the table below.

**Table 1: Defining SMEs**

Indicator	Micro	Small	Medium
Employees	1 < 10	10 < 50	50 < 300
Total annual sales	<USD 100,000	USD 100,000 < USD 3 m	USD 3 m < USD 15 m

Source: IFC (2012).

20 years of experience in supporting over 1000 enterprises has taught SEED that there are vastly different enterprise needs depending on their development stage. Based on extensive information gathering in the framework of our SEED **Starter**, **Replicator**, **Catalyser** and **Accelerator** enterprise support programmes, we condensed our insights of enterprise profiles into a typology of eco-inclusive SMEs that best captures enterprises' realities.

1. **Disruptors**
2. **Impact Drivers**
3. **Steady Growers**
4. **Necessity-driven Enterprises**

<sup>1</sup> We intentionally exclude from our definition of eco-inclusive SMEs those micro-sized enterprises that tend to stay informal, have limited impact and a small growth potential.

<sup>2</sup> The term "taxonomy" is borrowed from biology and used to describe the approach of "naming, describing and classifying organisms" (CBD 2021). We adopt the same strategy, albeit seeing eco-inclusive enterprises as the organisms to investigate.

<sup>3</sup> The OECD (2018) Issue Paper "SMEs: Key Drivers of Green and Inclusive Growth" introduces the concept of "green and socially inclusive SMEs" and outlines different versions of eco-inclusive enterprises (eco-innovators, eco-entrepreneurs and eco-adopters". This report, however, rather resembles a market opportunity and institutional framework study than a clear-cut taxonomy approach.

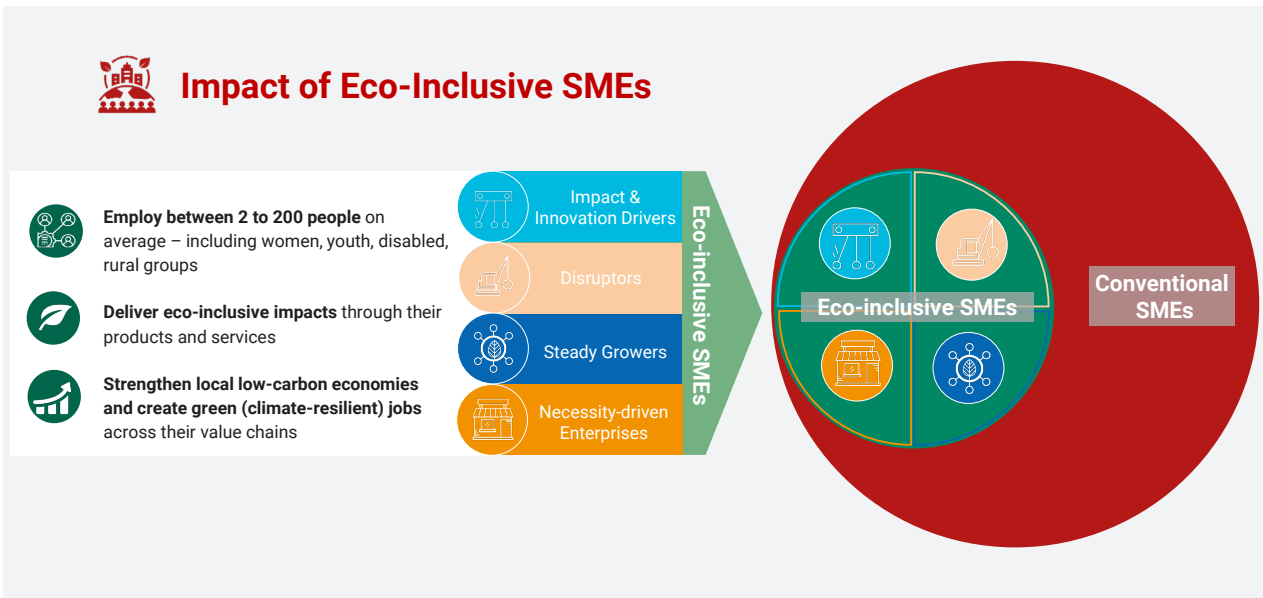
<sup>4</sup> An enterprise is ascribed a firm class when it meets at least one of the two indicators.

<sup>5</sup> We refer to the term SME instead of MSME since it is the more common form of abbreviation. Although other publications on SMEs omit micro-sized enterprises, we explicitly include them as part of this enterprise cluster.

Although this is a pioneering work for the realm of eco-inclusive SMEs, this typology approach benefitted from previous trailblazing efforts by other organisations that look at SMEs more generally. Notably, we took inspiration from “The Missing Middles” report by Dalberg (2018), in which SMEs were categorised to gain insights into their financial needs.

With the help of this eco-inclusive enterprise profile segmentation, this report examines and compares common characteristics, challenges and pathways experienced by eco-inclusive SMEs. To do this, the different enterprise profiles are analysed and compared focusing on crucial dimensions in eco-inclusive enterprise journeys, namely Enterprise Growth, Innovation, Impact, Ecosystem and Finance. This analysis is supplemented with anecdotal data from 36 in-depth interviews with nine SEED-supported enterprises.<sup>6</sup> What emerges is a comprehensive image of the diverse routes and realities of eco-inclusive enterprises on the ground. As a first of its kind, this publication offers a typology and analytical framework that will be further validated and built out in its next iterations.<sup>7</sup>

Figure 1: Impact of Eco-Inclusive SMEs



6 Of the nine enterprises interviewed, two were categorised as Disruptors, three as Impact Drivers, two as Steady Growers and two as Necessity-driven Enterprises. For a complete list of interviewed enterprises, see the Annex.

7 For an outlook into our next report, see Chapter 4.





## 2. FRAMEWORKS

### 2.1 Conceptual Framework – Eco-inclusive SME Profiles

The following pages outline the different eco-inclusive SME profiles that will guide this report. It should be noted here that the outlined profiles represent ideal-type versions of particular enterprises – this simplified categorisation can arguably not capture the complexities, dynamics and

hybrid formations that SMEs are engaged in during their enterprise journeys. It does, however, provide readers and adopters with a potent tool to analyse and understand the realities of eco-inclusive SMEs.

#### Eco-inclusive Profiles

**Disruptors** challenge senior market competitors with disruptive product/service innovation, with the potential to shake up established global markets. While disruptors have high growth, impact and scale potential, they are also at a significant risk of failure. Disruptors require substantial initial funding and numerous partnerships to take off due to the R&D required to develop product prototypes. While their growth (in terms of revenue) might be slow in initial enterprise stages, with completed product/service development, Disruptors may unlock exponential growth.

**Impact Drivers** typically create or join a large network of public, private and civil society actors; and create movements pertaining to ecological or social goals rather than being restricted to traditional enterprise activities. Impact Drivers operate with innovative business models and processes and continuously add low-tech products or services to their portfolios. These products/services are based on local wisdoms and traditional practices. Due to their focus on solving social and environmental problems with activities sometimes resembling those of NGOs, Impact Drivers may find it difficult to attract larger non-grant financial funds. Consequentially, Impact Drivers' activities are largely revenue-based.

**Steady Growers** operate based on proven business models in established core economy markets. They operate alongside a diverse set of market competitors. Steady Growers navigate these markets by offering eco-inclusive and resource efficient products and services, catering to customers' saving, health and environmental preferences. Based on their business model robustness, Steady Growers often experience continuous growth, and are generally characterised by high business replicability potential. The lively competition that Steady Growers are exposed to leads to a constant need for process innovation in order to gain a competitive edge over other market actors. Due to their innovation and growth profiles, such enterprises steadily expand their environmental effect from regional to national levels by increasing product or service sales.

**Necessity-driven enterprises** operate based on a dual need: firstly, necessity-driven enterprises' primary focus is on sustaining the livelihoods of their owners and employees, which is particularly important in already marginalised and socioeconomically disadvantaged communities, where Necessity-driven Enterprises may be one of the only providers of employment. Secondly, these enterprises serve traditional and highly localised markets with essential products and services, usually in the fields of agriculture, manufacturing and retail. Necessity-driven Enterprises commonly enjoy small-scale incremental growth and offer low innovation. With firm survival and the securing of livelihoods as primary concerns, these enterprises typically deliver green and social impact "along the way" when looking for cost-efficient inputs, e.g. through waste collection, recycling or upcycling.



## SEGMENT PROFILE

# DISRUPTORS

### ► Profile Characteristics



#### Growth

- 'Hockey-stick-style' growth trajectory due to focus on R&D
- High growth and scale potential
- High risk of failure



#### Innovation

- Multi-year R&D process that involves various partnerships
- Focus on tech-enabled physical product innovation
- Low number of different products innovated



#### Impact

- Environmental and economic impact achieved through product sales
- Later, but exponential impact potential
- Global challenges are addressed on potentially global level



#### Ecosystem

- Challenge senior actors in established industries
- Engaged in numerous partnerships for R&D, business development support programmes, enterprise collaborations



#### Finance

- Dependence on extensive funding in early R&D phase
- Early financial readiness
- Larger ticket sizes
- Later step-up in revenues

### ► Model Enterprise

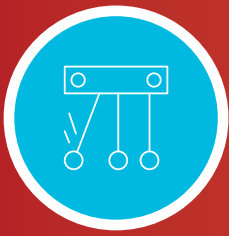
Disruptors are innovative businesses within established industries, such as textile, agriculture and energy, that focus on attaining impact at scale through products starkly increasing in demand. Within these industries, they address previously un- or underserved customer preferences pertaining to growing climate change or environmentally sustainable needs. Disruptive enterprises are tech-enabled ventures with a clear focus on physical product development.

- **Innovative businesses within established industries**
- **Extensive, often multi-year product development phases**
- **High impact and growth potential, but also high risk of failure**

### ► Enterprise Example



**Mycotech** is a disruptive enterprise from Bandung, Indonesia, which produces vegan leather fashion products made from processed mushrooms. As a substitute for animal-based leather, Mycotech's products aim at changing the game of the textile and fashion industry by offering their mylea leather B2B to create environmentally friendly shoes, hand bags and watches.



## SEGMENT PROFILE

# IMPACT DRIVERS

### ► Profile Characteristics



#### Growth

- Quick initial growth jumps
- Critical growth point when sustained growth requires professionalisation
- Moderate risk of failure



#### Innovation

- Innovative low-tech products within niche markets
- rapid innovation phases with frequent product additions
- Innovation often based on local culture or traditional practices



#### Impact

- Environmental and social impact priority over profit maximisation
- Impact through movement creation and mindset change
- Local to national challenges addressed on national to global level



#### Ecosystem

- Work on building network with distributors, supporters and supplier organisations
- Frequent cooperations with philanthropic and green NGOs
- Fairness to suppliers core interest



#### Finance

- Investments largely financed through revenue
- Typically high revenue
- Finance readiness achieved during enterprise journey
- Smaller ticket sizes

### ► Model Enterprise

Impact Drivers are enterprises that add unique value in markets through their focus on eco-inclusiveness and extensive social impact reached through generating a movement, involving civil society organisations, private supporters, public institutions and other companies. Frequently, Impact Drivers act as distributors of products that had value added by highly vulnerable groups such as poor, disabled, indigenous, or women communities. These products are influenced by local cultures, wisdoms and practices. Impact Drivers are active in virtually any industry, with larger concentrations in industries that require low capital intensity such as textile, agricultural, artisanship and lifestyle sectors.

- **Low-tech rapid product innovations influenced by local knowledge and resources**
- **Priority on environmental and social impact over profit maximisation**
- **Extensive collaboration in partnerships**

### ► Enterprise Example



**Daily Dump** is the first business in India to design a home composter adapted for tight urban spaces, reducing urban waste pollution and tapping urban organic waste as a valuable resource for agriculture. Daily Dump also puts significant effort into raising awareness on composting and reducing waste through in schools and communities. The enterprise has since sold over 64,000 composters and transformed more than 45 tons of organic waste into highly nutritious soil.

Interested in Daily Dump's story?  
[Watch their virtual case study](#)





## SEGMENT PROFILE

# STEADY GROWER

### ► Profile Characteristics



#### Growth

- Proven business model
- Rather steady enterprise growth
- High replicability potential



#### Innovation

- Few incremental product innovations in established markets
- Innovativeness often focused on processes to gain competitive edge



#### Impact

- Environmental and social impact achieved by selling high amount of green & efficient products
- Impact through continuous scale
- Regional challenges addressed on regional to national level



#### Ecosystem

- Development of franchise-like distributor network
- High number of competitors with low overall cooperation between enterprises



#### Finance

- Early financial readiness
- Extensive funding options due to robust business model
- Steadily increasing revenue rates

### ► Model Enterprise

A model Steady Grower enterprise is a locally or regionally established business with an expanding customer base, usually found in the fields of agriculture, construction, energy or manufacturing. Oftentimes, Steady Growers offer a valuable solution for currently available but inefficient products and services, for example in the form of high quality organic manure, efficient and environmentally sustainable heating resources or long-lasting eco-bricks as building material.

- **Incremental product innovation in established markets**
- **Proven business models with continuous enterprise growth**
- **Product sales through large amount of retailers**

### ► Enterprise Example



**Green Bio Energy (GBE)**, our 2014 SEED Low Carbon Award Winner, is a Ugandan business that offers low-income families access to cost-saving, eco-friendly and energy safe solutions by producing agricultural waste-based charcoal briquettes and eco stoves, thereby offering an alternative to dominant but inefficient and environmentally damaging mainstream charcoal products and stoves.

Interested in GBE's story?  
[Watch their virtual case study](#)







## SEGMENT PROFILE

# NECESSITY-DRIVEN ENTERPRISES

### ► Profile Characteristics



#### Growth

- Low growth rate in first enterprise years
- Often start operations informally
- Low risk of failure



#### Innovation

- Products are low-tech and labour-intensive, with low degree of product innovation
- New products based on deriving use cases from available resources
- Focus on process innovation



#### Impact

- Economic impact priority through sales
- Green impact created while looking for cost-efficient inputs, social impact via providing employment and products for vulnerable groups
- Local challenges addressed locally



#### Ecosystem

- Operate in traditional, low-tech and labour-intensive sectors in highly localised markets
- Low number of direct competitors
- Partnerships few but longstanding



#### Finance

- Initial difficulty to attract external funding
- Low initial financial readiness
- Smaller ticket sizes

### ► Model Enterprise

Necessity-driven enterprises are the most common of the four eco-inclusive MSME segments. They are necessary as they provide employment and revenue in poor communities and provide community members with often existential products or services. They are found in any low-tech and labour-intensive economy, typically operating within small-scale agriculture, construction, manufacturing, waste and energy industries. Often, these enterprises are either fully run by families or have started to hire a few employees outside the nuclear family. Necessity-driven enterprises commonly rise from initial informality to a formal business status in their growth journey.

- **Low-tech and labour-intensive products that produce green impact “on the way”**
- **Provides needed products and employment in poor communities**
- **Often start their journeys informally**

### ► Enterprise Example



**Siyabuddy** collects and processes waste from a landfill site in rural South Africa as well as from multiple municipal sources such as shopping centres and farms. With a team of waste collection and processing staff and independent waste pickers, they recycle and sell over 100 tons of waste per month, significantly reducing local pollution and soil contamination, supporting South Africa’s circular economy movement and involving local low-income communities in their value chains.

Interested in Siyabuddy's story?  
[Watch their virtual case study](#)



## 2.1 Analytical Framework: Journey Lenses

The pathways of enterprises to reach entrepreneurial success and scale are extremely diverse and guided by internal business decisions and structures as well as external factors. SEED sees comprehensive explorative value in deconstructing the challenges different enterprise types encounter, which priorities they set and which solution pathways they ultimately choose.

Based on the extensive insights that SEED accumulated in its support of eco-inclusive enterprises globally, five main enterprise lenses – or journey dimensions – were identified. These are:

1. Growth Lens
2. Innovation Lens
3. Impact Lens
4. Ecosystem Lens
5. Finance Lens

Together, these five dimensions cover topical arrays necessary for SMEs regardless of enterprise type (growth, innovation and finance) and elements that are particularly essential for enterprises striving to contribute to solutions for social and environmental issues (impact and ecosystem). Naturally, these different dimensions are inextricably intertwined in reality, they thus are to be approached as analytical tools rather than distinctively experienced trajectories.

In the following analysis section, the four enterprise types – Disruptors, Impact Drivers, Steady Growers and Necessity-driven Enterprises – are investigated across these five dimensions. As we perceive enterprises as dynamic actors, we seek to analyse the respective enterprise profile journeys over time. Where deemed sensible, we additionally extract features of trajectories where differences between enterprise types stand out most prominently. These aspects can relate to challenges, needs, success factors or channels within the respective dimension. Each journey dimension concludes with spotlights, in which the specific journeys of some of our interviewed enterprises are illustrated.



### Growth Journey

Whether or not an SME is growing is the central question when conventionally assessing business success. Although potentially encompassing various performance indicators such as product/service sales, external funding of staff size, growth is most prominently associated with increase in revenue – which is also our angle of inquiry. The growth journey analysis chapter provides a comparison between the enterprise types' differing

- 1) *(revenue) growth trajectories, as well as*
- 2) *strengths of and challenges to (revenue) growth.*



### Innovation Journey

Borrowing from Baregheh et al. (2009), this report approaches the concept of innovation as a “multi-stage process whereby organisations transform ideas into new/improved products, services or processes, in order to advance, compete and differentiate themselves successfully in their marketplace” (ibid: 1334). The Innovation dimension analysis

- 1) *sheds light onto the innovation trajectories with focus on innovation*
  - a. *type and degree*
  - b. *rate and intensity*
  - c. *tactics*

Innovation **types** refer to what is being innovated – looking at products/services, business models, or processes. The **degree** of innovation can be assessed as no/low, incremental, disruptive and radical.<sup>8</sup> Innovation **rate** refers to the speed that innovating products or processes take, while innovation **intensity** regards the number of innovations in a given timeframe (Kogabayev & Maziliauskas 2017). Innovation **tactics** refer to innovation strategies employed to reach particular goals (Doblin 2013).

<sup>8</sup> To approximate innovation types and degrees we borrow from the Digital Innovation Landscape Model by GIZ Innovation Factory.



## Impact Journey

In line with the triple bottom line concept, this report defines impact as threefold: environmental, social and economic. These impact fields are often contingent on each other: an enterprise scaling their sales of organic menstrual pads for rural communities is economically successful, reduces inorganic waste and has a direct positive socioeconomic effect on the community as female student dropout rates are reduced. Impact is also relevant if it occurs indirectly: The pads-producing business might need to employ more workers to keep up with demands, which creates long-term economic spill-over effects to the community at large. Understanding environmental, social and economic impact of any sort as inherently interrelated, the impact dimension section seeks to investigate

*1) how such impacts are achieved and relate to each other across enterprise types over time; and*

*2) what challenges are tackled through which impact channels.*



## Ecosystem Journey

We define a (business) ecosystem as encompassing all public, private or civil society institutions that an enterprise engages with during its development journey. This includes traditional markets made up of customers, partners and competitors, but also involves institutional frameworks and regulations such as production safeguard policies or export subsidies that affect businesses' operations. The ecosystem dimension therefore illustrates

*1) how eco-inclusive enterprise types differ in engaging with ecosystem organisations over time.*

Since we are additionally interested in how eco-inclusive enterprises may contribute to systemic changes, we furthermore examine

*2) the breadth and depth of ecosystem change contributions.*



## Finance Journey

Disruptors, Impact Drivers, Steady Growers and Necessity-driven Enterprises exhibit a wide array of distinct characteristics when it comes to the ways in which the different enterprise types have financed their business journeys. Finance relates to both external funds obtained (equity, loans, grants or blended) and revenues generated internally. The finance dimension analysis investigates in-depth

*1) how these enterprises have managed and structured their financial inflow over time and*

*2) what financial needs these enterprise types have as well as how difficult it is for them to attract funding.*





## 3. COMPARATIVE ENTERPRISE PROFILES

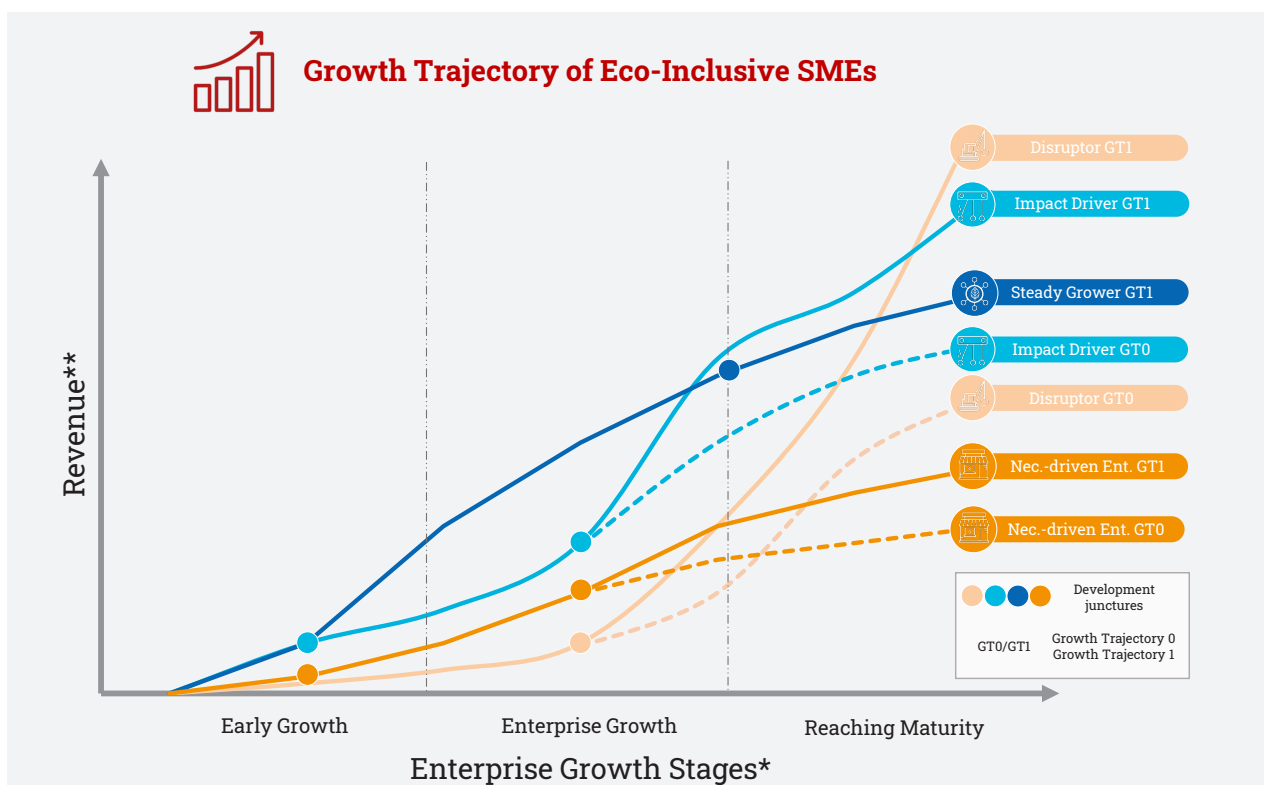
### 3.1 Growth Dimension

#### Growth Trajectory

One sensible analytical lens to investigate different growth trajectories is by looking at enterprises' revenue development over time. "Revenue" suits as a primary indicator for growth for its ease of illustration and

comparability— however, it should be noted that growth comes in a variety of ways, such as staff development, production milestones or sustainable impact created. Although marginally touching upon the latter indicators, this section is largely limited to growth as revenue.

Figure 2: Stylised Growth Trajectories of Eco-Inclusive SMEs



Source: own visualisation, inspired by Dalberg (2018).

\* Enterprise Growth Stages are inspired by the VIRAL Framework by Village Capital, utilised to designate what developmental stage companies find themselves in. For the sake of simplicity, the enterprise growth stages are proxies for grouped VIRAL company development stages. Specifically, 'Early Growth' correlates with VIRAL stages 1-4, the 'Growing Enterprise' stage includes VIRAL stages 5 to 7, while the 'Maturity' growth stage reflects VIRAL's level 8 and 9.

\*\* The growth trajectories displayed in this visual are stylised and do not represent individual SME revenue data.

The figure above visualises how growth "moves" differently across idealised enterprise profile journeys. **Necessity-driven Enterprises** showcase the lowest growth in terms of revenue, however, as further examined in the **Finance Journey Analysis**, they also operate with minimal external funding. A further reason for their incremental growth trajectory is that Necessity-driven Enterprises are frequently established in poor communities with low employment opportunities. Necessity-driven entrepreneurs often prioritise secured income for themselves and their employees (who are often family members) over scale. Necessity-driven enterprises thus tend to have the highest risk aversity.

Enterprises categorised as **necessity-driven** usually start off as informal, or "grey" enterprises. The need for funding tends to drive their business formalisation. Working in bread-and-butter industries such as small-scale agriculture, manufacturing, construction, waste and energy with little or no opportunities to acquire equipment needed for improving production; Necessity-driven enterprises display the lowest growth rate within their initial enterprise years. They reach their first critical enterprise development point upon formalisation. With that often comes external finance (through friends, small loans or grants), which in turn permit necessity-driven entrepreneurs to purchase machinery needed for more efficient production. This regularly kick-starts growth through increased production output, productivity and attractiveness to potential investors.



Acceleration somewhat slackens when Necessity-driven Enterprises move towards maturity stage, as the often non-professional backgrounds of enterprise founding teams stand in the way of scaling operations. These enterprises often reach a second critical point in their ventures, where professionalisation of the team and business processes are necessitated to enable not only scale but also scale-required equity or larger credit infusions. If this cannot be realised, enterprises follow a low growth trajectory (GT0); but if it can, necessity-driven enterprises can reach significant growth rates (GT1). The story of South African SiyaBuddy, further portrayed in the finance journey analysis, makes for an insightful point of how the two enterprise founders have navigated from slow initial development, to production acceleration and to now a need for equity to scale.

Interestingly, **Disruptor** enterprises showcase somewhat similar initial growth patterns as Necessity-driven enterprises do. This is largely due to Disruptors' prioritisation of R&D development and a centralisation of resources and efforts geared towards designing a minimum viable product (MVP) and developing it further to enable serial production. Product development for both interviewed enterprises, Mycotech from Indonesia and AET AFRICA from South Africa, took multiple years, during which revenues from previously designed products remained low.

Disruptor enterprises usually face their pivotal enterprise journey point after completion of their first product or service development series. It is critical for disruptor entrepreneurs to simultaneously secure external (equity) funding to cover operating expenses (OPEX) and capital expenditure (CAPEX) associated with serial production kick-off, while also shifting efforts and resources to creating critical exposure within the market. If Disruptors succeed, they unlock exponential growth potential (GT1). Disruptors are therefore characterised by high reward and high-risk entrepreneurial behaviour.

**Steady Grower** enterprises stand out in their growth journeys in that they are the only enterprise type without critical bumps in their model type early growth trajectory. Steady Growers are often equipped with significant external funding early on in their enterprise journey that is employed to establish professional teams and larger-scale production facilities. Combined with relatively low product/service development costs associated (e.g. by providing pre-assembled solar systems, recycled pavement blocks or eco charcoal), these enterprises could technically produce in large quantities from the outset. As the products and services they provide have a steady demand, In its stylised form, Steady Growers' overall revenue growth may be closest to linearity.

Interviewed Steady Grower entrepreneurs Green Bio Energy from Uganda and ONergy from India have further mentioned that increased loan repayment pressures in their late enterprise growth stage accelerate reconsiderations on the strategic orientation of their enterprises, often resulting in dropping particular activities or centralising efforts. The combination of taking up substantial liabilities to kick-start with serial production while benefitting from offering established and demanded products thus results in a medium enterprise risk profile.

The growth of our interviewed **Impact Drivers**, Last Forest and Daily Dump from India and Indonesian Rahsa Nusantara, is characterised by impressive initial growth rates. Early growth among Impact Drivers seems to be rooted in the type of products that these enterprises offer: artisanal or lifestyle products such as environmentally friendly lotions, sustainably produced honey or textiles usually require low complexity production facilities and inexpensive machinery. Furthermore, the connectedness of Impact Driver enterprises with their ecosystem drives increased product/service exposure. Interviewed Impact Drivers' initial revenue growth rates are frequently topped by further growth acceleration, which was often connected to enterprises moving product sales to digital platforms. This finding is surprising, given that ideal type Impact Drivers often prioritise systemic transformation to socially inclusive and environmentally sustainable modes of living over profit maximisation.

Similar to the case of Steady Growers, Impact Drivers' revenue increase correlates with a continuous rise in employed staff. Impact Drivers, however, appear to reach a crucial development point when revenue exponentially increases for a sustained period – as showcased in the **Growth Spotlight** of Rahsa Nusantara . The ability to professionalise systems and processes tends to determine if sales increase. Impact Driver entrepreneurs require external equity funding and business development support. If this can be achieved, continued strong positive growth can be achieved (GT1), however, if business restructuring cannot be realised, inefficiencies within the enterprise will stunt growth (GT0).

## Success Factors and Challenges

Compared to Steady Growers, **Necessity-driven Enterprises** typically suffer from lower levels of financial literacy and financial management systems in place, resulting in potentially stagnant growth trajectories. Furthermore, the predominantly revenue-based balance sheets of Necessity-driven Enterprises imply a high level of vulnerability to purchasing power shocks like the economic effects of the COVID pandemic. These challenges, however, are somewhat eased by the family and community-based support Necessity-driven Enterprises receive; office and production facility rental rates, small-scale donations and smaller informal zero to low-interest loans.

**Disruptor enterprises'** extensive and lengthy product or service development process can only be sustained because of the enterprises' ability to attract an ecosystem of R&D partnerships with public research institutions and governmental business support programmes. Furthermore, it is critical for Disruptors to be able to create buzz via media exposure – oftentimes, these enterprises can capitalise on the “breakthrough” character their innovations have. The major challenge of Disruptor enterprises is connected to its product/service development: Disruptors take time to reach profitability, and are under high pressure to deliver impressive growth rates instantaneously after serial production is initiated.

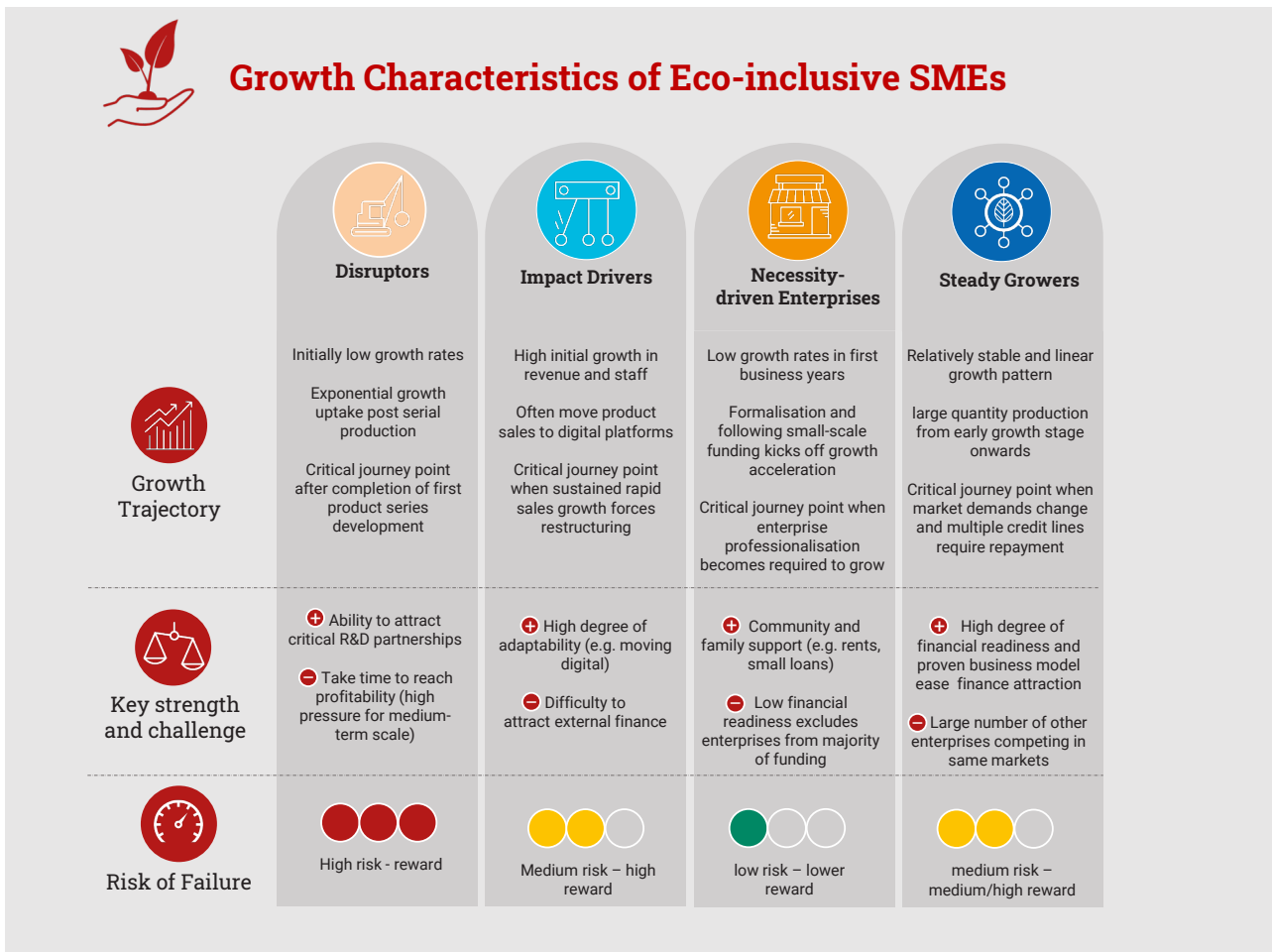
The major strength points of **Steady Grower** enterprises are their early financial readiness combined with proven business models that are established and accepted among financiers. Furthermore, they offer products/services whose benefits are known by potential

consumers. On the downside, however, such business models are often implemented by numerous other enterprises. Steady Growers' major challenge to growth, therefore, is to come out ahead of their competitors.

Similar to Necessity-driven Enterprises, **Impact Drivers** are also highly vulnerable to economic downturns such as the COVID pandemic as their operations are mainly revenue-backed. Likewise, Impact Drivers experience

difficulties to attract capital at critical points. Conversely, these enterprises are extremely adaptable to financial shocks due to their lean business structure – enabling rapid business transformations, product/service shifts and digital transformation. Assisted by numerous partnerships and ecosystem supporters, Impact Drivers furthermore benefit from increased exposure and sales possibilities (e.g. through distributor shops).

Figure 3: Growth Characteristics of Eco-Inclusive SMEs



Source: own illustration

### 3.2 Innovation Dimension

#### Innovation Trajectories (Innovation type, rate, intensity and tactics)

As outlined in the analytical framework chapter, we approach innovation by exploring different innovation components. We are therefore examining eco-inclusive SMEs' innovation according to innovation

- 1) type (if products, processes or business models are being innovated) and degree (whether innovations show no/low, incremental, disruptive or radical potential),
- 2) rate (the speed at which innovations take place) and intensity (number of innovations) and
- 3) tactics (what strategies are employed to reach particular goals).

**Disruptor** enterprises are largely focused on product/service innovation. Enterprise innovation is disruptive by shaking up established markets by the creation of new, tech-enabled products or services.

This product or service development processes can take multiple years and involve numerous actors. This is due to the many steps that tech-enabled innovation potentially. In the case of AET AFRICA, who developed a geyser sleeve that considerably reduces water heating periods, this involved a diverse set of activities beyond mere product design, such as an institutionally implemented proofs of concept, concept and assumption validations by third party labs, energy efficiency and chemical composite tests as well as lengthy quality certificate and patent applications. To account for insufficient infrastructure,



## Steady Grower



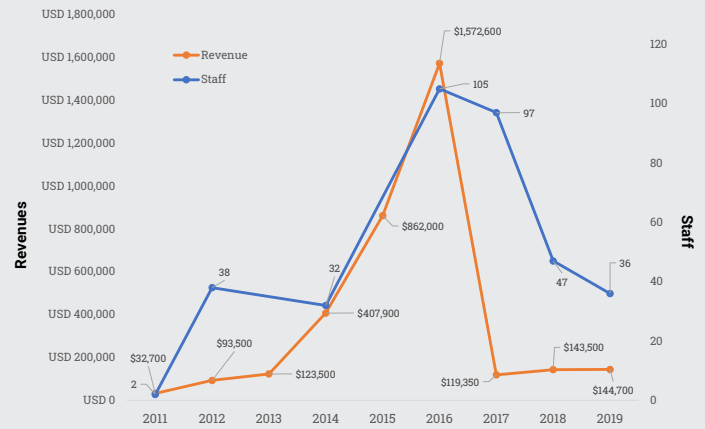
### Green Bio Energy, Uganda

GBE is a young, award-winning social enterprise, which offers low-income Ugandan families access to cost-saving, eco-friendly and safe energy solutions. GBE started producing and selling Briketi Charcoal Briquettes, the first brand of eco-friendly charcoal in Uganda, at the end of 2012, and started producing and selling its own brand of energy-efficient stoves, Briketi Eco Stoves, in July 2013. GBE has also recently started selling small amounts of solar lamps and water filters, both relevant to reduce pollution and enable money savings. Finally, GBE provides individuals and organizations with trainings on topics such as micro-enterprise management or briquettes production, and sells equipments for small-scale briquettes production.

#### Growth Trajectory

- ✔ In the early stages, the founders engaged in research and development for product and market innovation, and the enterprise is steadily doing so
- ✔ Early on, investments by the founders, family and friends were critical, and office and production were at the same location
- ✔ The enterprise is continuously engaging in market research, by organising focus group discussions, and collecting feedback
- ✔ In 2018, the enterprise sold off their cookstove business, to focus on scaling their briquettes business, thus the decline in revenue & staff
- ✔ To grow beyond the Ugandan market, the enterprise aims to operate franchise systems within the East African region

### Enterprise Growth Trajectory



#### Key Success Factors

- Experience-based strategy development
- Private investments key to kick things off
- Collaboration with micro-entrepreneurs for distribution of products

#### Key Challenges

- Research and development plus testing are expensive
- Disregardment of biomass as a product

## Impact Driver



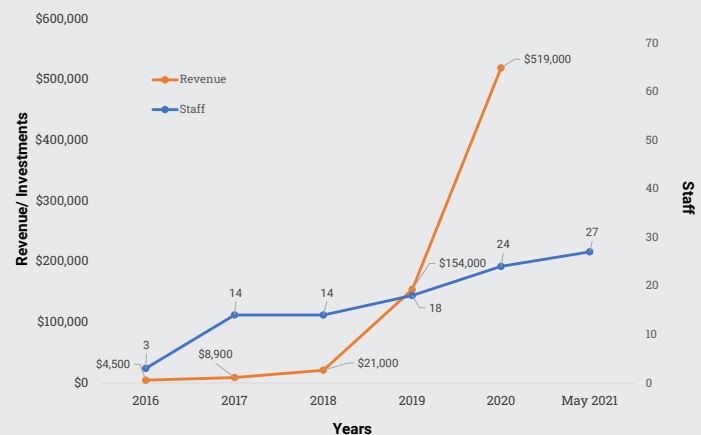
### Rahsa Nusantara, Indonesia

Rahsa Nusantara started with wisdom from Java Island through ready-to-drink products, tisanes, drippers, and supplements, designed as part of healthy lifestyle to prevent minor to severe illnesses such as NCDs. Their products are made naturally from local ingredients and they recycle their organic waste. Understanding that every locality holds inherited wisdom to solve local challenges, the enterprise strives to explore and provide the best of local wisdom for contemporary lifestyles and future legacy. With currently 70 stock-keeping units (SKUs), Rahsa has diversified its product range to fit a broad spectrum of purposes, always centering around local wisdom and biodiversity.

#### Growth Trajectory

- ✔ has holistic approach to health that rests upon empowering local farmer communities and women
- ✔ Started with offline distribution to health shops
- ✔ Partnerships with instagram influencers proved as an efficient marketing tool
- ✔ COVID pandemic resulted in moving sales online, with booming success
- ✔ Growth increased in acceleration, however staff numbers could not adequately be increased
- ✔ Several organisational scaling initiatives could not be finalised due to lacking external funding

### Enterprise Growth Trajectory



#### Key Success Factors

- Perception of team and suppliers as family
- Lean business structure for adaptability
- Courage to trial and error as key to product diversification
- Focus on exploration of partnerships

#### Key Challenges

- Explosive growth leading to pressured team structure
- Difficulty to attract equity
- Lacking skills for specific product diversification efforts

financial resources and product development expertise, Disruptor SMEs require support by a diverse set of partners. Indonesian enterprise Mycotech, for example, collaborated with multiple international universities, Indonesian research institutions and corporations to start producing their mushroom leather products Mylea and Biobo (**see Innovation Spotlight**). Due to the costs incurred by such innovation processes, Disruptor enterprises usually only have a low number of products/services offered or in development. The long period that a product or service development phase takes, however, does not exclude Disruptor enterprises from continuously refining their products/services. Furthermore, to explore different product/service development and advertisement options, these enterprises are frequent guests to exhibitions and events. Finally, it should be noted that initial product development completion kicks off extensive product-market fit and optimisation periods through, for example, test product campaigns. Disruptors innovate on their operations processes particularly after their innovated products enter the market through serial production, with lean production and efficient distribution systems moving to the centre of attention.

The predominant innovation tactics that Disruptors engage in are product or service performance- and brand-based. The former relates to the conservation or environmental sensitivity aspect of the product or service offered, which stand out compared to other existent products. The latter refers to Disruptors often engaging in certifications and design aspects that highlight the enterprises' focus on ecological matters. Mycotech and AET AFRICA, for example, both invested significant timely resources in attaining b-corps and Greentag certifications.

**Impact Drivers** usually focus on business model and process innovation, and have disruptive innovation potential in these regards. However, incremental low-tech product or service innovation also takes place within Impact Drivers' product/service development teams.

Looking at process innovation, Impact Drivers develop a series of partnerships over time that range from cooperation to open technology exchange. Oftentimes, these partnerships are found in sales and marketing fields. Interestingly, the interviewed Impact Driver enterprises stated that at some point they chose to digitise their product sales, to accommodate the growing national customer base and explore international revenue potentials.

Conversely to Disruptors, **Impact Drivers** show frequent changes in their product/service portfolios. Product/service development is usually quick, since Impact Driver-offered products or services commonly require low R&D investments and fewer product development steps. Looking at Indian composter enterprise Daily Dump, the company moved from offering one composter in 2005 to now selling 16 home composter and two community composting systems. From initially offering six store-keeping units (SKUs) largely revolving around food supplements in 2017, Rahsa Nusantara from Indonesia boosted their portfolio up to 70 SKUs in May 2021. Among interviewees, changes in offered products or services were often a direct response to shifts in market demands, preceded by pragmatic analyses such as client focus group discussions and sample product campaigns.

The way in which Impact Drivers often advocate for a broader movement to attain system transformation to an ecologically and socially sustainable future is translated into particular business model and process innovation tactics.

Perhaps most importantly, Impact Drivers show instrumental innovation relating to customer engagement through, for example, off- and online information campaigns, communal clean-up projects, influencer sponsorships – which results in a “movement feel” that customers frequently refer to. This is supported by various public relations-based activities to align Impact Drivers' product or service portfolio with the overall value of the company's identity and brand. By constantly reconfiguring and expanding the collaborative, large partnership and supporter base, Impact Drivers pave the way to critical exposure and rapid spread of both enterprise ideals and products. The larger product or service demand is covered by Impact Drivers establishing widespread retailer distribution systems, and by setting up digital sales systems. Looking at product innovation, two of our interviewed Impact Drivers mentioned that they develop products rather rapidly on a trial and error base, with customer feedback being the integral indicator for further developments.

With their business models being robust and proven, **Steady Grower** enterprises usually engage in incremental product and more disruptive process innovation.

Steady Grower enterprises incrementally improve their already existing product/service lines without consistently offering new SKUs. Indian solar system producer ONergy, for example, developed a monitoring mobile phone application with which smallholder customers can control their water usage remotely, resulting in electricity savings. Steady Grower entrepreneurs from Ugandan Green Bio Energy and ONergy also stated that, in order to establish their enterprises against a multitude of competitors, they developed various customer support and maintenance programmes alongside their offered products.

Steady Growers only rarely alter their product portfolios in drastic ways– which is usually in the context of realising diminishing economic potential in holding on to specific products. Ugandan Green Bio Energy, for example, exited their cookstove business in 2018 to further pursue their eco briquette production as they saw their competitive edge in this product category. Interestingly, Steady Growers can reap benefits of short-term opportunities due to their already established larger-scale manufacturing sites. Green Bio Energy and Indian company ONergy used their facilities in 2020 to mass-produce Personal Protective Equipment (PPE) such as masks, face-shields, goggles and sanitisers against the backdrop of the COVID-19 pandemic.

Steady Growers' tendency to gain a competitive advantage towards its market competitors is often leading to innovations on business processes. These activities tend to focus on their value chains, manufacturing, sales systems as well as profit models. Apart from constant business optimisation, both ONergy and Green Bio Energy have over time developed their distributor partners into cooperations resembling franchises. Moreover, the Ugandan eco briquette provider has started to develop a pay-as-you-go system for its customers. Similar to this, ONergy adjusted their last-mile product distribution model from operating fully owned local hubs to working with local partners on a commission basis.

Turning to innovation tactics, Steady Growers' product or service innovation largely revolves around performance, i.e. ensuring that products are superior in quality to their competition, have more functionalities, or are more resource efficient. Furthermore, after sales service and maintenance functions are often added in Steady Grower enterprise portfolios to gain a further competitive edge. Process



innovation tactics are predominantly found in their network systems through establishing sales models, as well as their developing innovative profit models. Moreover, Steady Growers innovate on turning their manufacturing processes more flexible, to account for short-term production shift opportunities such as the COVID pandemic.

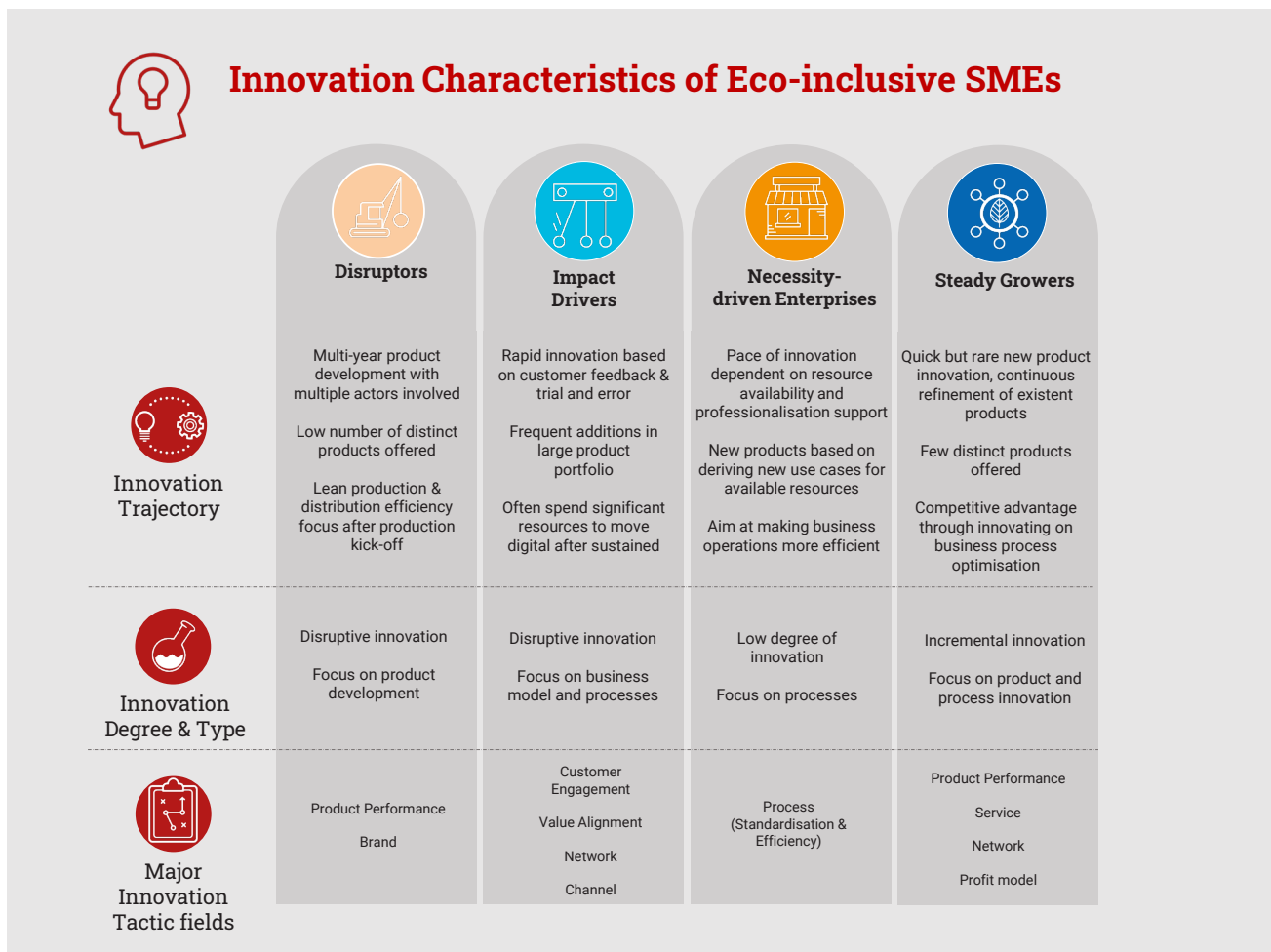
Looking at **Necessity-driven Enterprises**, product or service innovation is often restricted to the enterprises' needs to generate revenue as quickly as possible. Due to enterprises' limited resources, product/service and business model innovation potential is usually low. With limited potential customers within their local markets, Necessity-based Enterprises often focus on incremental process innovation aiming at reducing operational costs.

Necessity-driven enterprises' continuous innovation process for the sake of cost efficiency often takes the

form of overhauling production processes, improving inventory systems and exploring creative employment schemes. If Necessity-driven Enterprises do innovate on new products or services offered, these forms of innovations usually emerge by deriving new use cases for available resources that are not yet or insufficiently used. The innovation story of SiyaBuddy fittingly illustrates this: starting off by recycling bottles, the enterprise soon started to examine other unprocessed waste types on the landfill site they operated from. Soon after, they acquired necessary processing machinery and started recycling paper and plastic. Additionally, the enterprise started to take on non-recyclable black plastic and press them into construction bricks.

As outlined above, Necessity-driven Enterprise innovation tactics predominantly aim at process standardisation and efficiency.

**Figure 4: Innovation Characteristics of Eco-inclusive Enterprises**



Source: own illustration



## Impact Driver



### Daily Dump, India



#### Products



Daily Dump was the first company in India that designed handmade **home composters**, adapted for tight urban spaces and with a unique terracotta design. With a wide range of product lines those composters can serve the needs of smaller households and larger families.



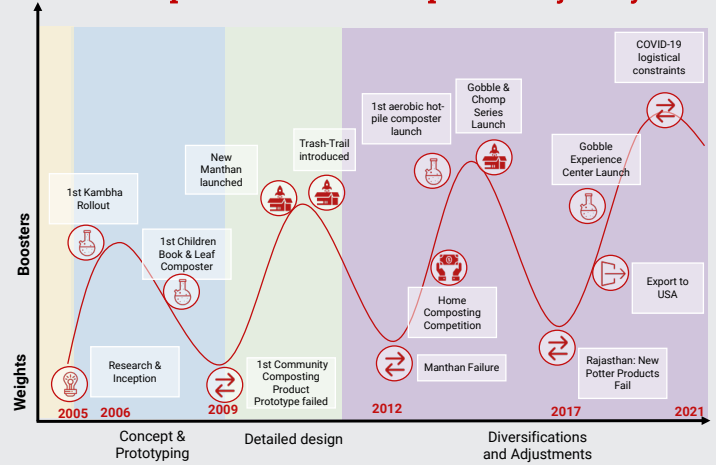
Daily Dump developed a decentralized **Community Composter** Product line and System that allows communities to manage, maintain and sustain their waste management initiatives. Through holistic support Daily Dump supports all stages of the waste management process.



#### Innovation

- ✔ **Open Source:** The terracotta composter range was designed to be “copied” in the sense that anyone who had the will to duplicate it, would be able to do it. The entire range is covered by a Creative Commons Licence of Attribution, Non-Commercial and Share Alike.
- ✔ **Environmental impact:** Daily Dump manages to keep more than 40 tonnes of wet waste out of landfills every day and saves 4.34 tonnes of CO<sub>2</sub> daily which would otherwise be emitted by transportation of waste and at landfills
- ✔ **Scalability:** Daily Dump started 14 years ago with a steady growth over time. They could demonstrate that there is a real need for this and they are today reaching 46,000 families to compost at home.
- ✔ **Customers as Ambassadors:** Daily Dump customers are at the same time outreach partners. They engage with Daily Dump because they like the solution and design. They are keen to become part of a movement bringing change with their fellow citizens.

### Enterprise Product Development Trajectory



## Disruptor



### Mycotech, Indonesia



#### Products



To make **Mylea**, fungal spores grow using agricultural plant waste as nutrition for a specific mushroom type. The fungus is then scraped off, dried and cut into different sizes. The leather is bought up by the fashion industry, and has resulted in Mylea shoes, watch wristbands, wallets, card tags and sandals.



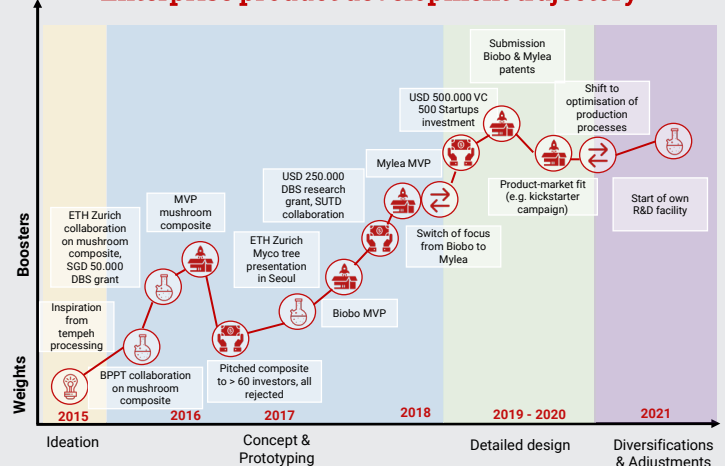
**Biobo** is created by hot-pressing the leftover substrate of Mylea. The result are bio-binderless boards that find main application in furniture production and interior design as board replacement. Like Mylea, Biobo is sold B2B



#### Innovation

- ✔ **Better than competition:** Fungi mycelium as superior substitute for leather based on tempeh production system. It does not need chemicals like other leather alternatives, grows rapidly, is water- and fireproof and has a low carbon footprint.
- ✔ **Environmental impact:** Each sqft of Mycelium leather saves 7.7kg of CO<sub>2</sub> and 77.500l of water compared to producing traditional cow leather.
- ✔ **Scalability:** Production takes 5-6 weeks vs. at least 2 years for animal-based leather, and Mycotech's products can be produced on demand.
- ✔ **Local inclusion:** Strong local community integration into value chain with local farmers as mushroom producers. At least 200 local farmers are continuously engaged in the production.

### Enterprise product development trajectory



## 3.3 Impact Dimension

### Impact Trajectories

Eco-inclusive enterprise decision makers put emphasis on delivering veritable social, environmental and economic impact. Eco-inclusive SMEs might choose various different paths to achieve and increase impact over the course of their business trajectory: be it through their products or services offered, fair and inclusive employment and benefits, or through charitable and awareness-raising activities.

**Disruptor** enterprises achieve major environmental and economic impact through the ground-breaking products or services they develop. They typically address regional or global challenges such as water scarcity or energy inefficiencies. They tend to work globally through, for example, scale-oriented production or international partnerships with other, larger enterprises.

In their early enterprise phases, **Disruptors** likely have a limited scope of impact. This is due to a high focus on R&D, where highly qualified and specifically trained staff is required. Social impact would typically take off after serial production commences. Both Mycotech and AET AFRICA, for example, pledged to employ locally, and focus on women employment, to achieve a positive community impact. Similarly, Disruptor enterprises probably exhibit low environmental impacts until production kicks off. Interestingly, Disruptor enterprises might tend to have strong preferences to “start right”: Mycotech, for example, put considerable effort into establishing circular economy principles before serial production started, and therefore secured a local partnership with which the organic waste residue that remained after production was re-processed into a substrate suitable for mushroom growing. Interestingly, Disruptors’ strategies to attain green certifications by third parties require them to focus on environmental monitoring and tracking, mostly involving regular impact reports.

**Impact Drivers** stand out as enterprises with a strong environmental and social impact prioritisation, even over economic performance. Achieving large-scale environmental impact is central to Impact Drivers’ activities. They do so with a mindset empowering local communities economically – through not only involving them in their value chains as employees or independent input suppliers, but also as distribution partners with equitable profit shares. The products that Impact Drivers offer typically build on local experience, cultures and systems, thereby showing how demanded products can be produced in a sustainable manner through traditional knowledge and practices. Impact Driver enterprise Last Forest, for example, sells and advocates for bee-based products that are harvested in traditional and ecologically sustainable ways by indigenous Kurumba communities in the Nilgiri Biosphere Reserve in Southern India.

Despite their focus on achieving broader system change, the three interviewed Impact Driver enterprises all performed exceptionally well in terms of their economic output. Impact Driver enterprises often use profits not only for business growth, but also to raise large-scale environmental awareness, often drawing considerable resources.

With their offered products or services, **Steady Growers** maximise environmental and social impacts in established markets. As an example, Green Bio Energy’s eco briquettes do not contribute to deforestation as they are made from organic waste, are cheaper, offer better burning qualities and emit no harmful smoke – as opposed to traditional wood-based cooking fuels. This directly creates a significant positive environmental impact as well as an indirect economic one, as customers save financial resources over time. ONergy, for example, provided 2100 solar pumping systems reaching 400 rural village communities impacting 23,000 households and herewith replacing at larger scale diesel generator water pumps.

Steady Growers employ the highest number of staff relative to the other eco-inclusive enterprise types. This is due to their production needs: their serial production is labour intensive, but oftentimes does not require highly specialised or educated workforce. These low entry barriers enable low-skilled community members to enjoy economic empowerment through fair salaries and skills development.

The geographies in which **Necessity-driven Enterprises** are based in frequently rank among the most vulnerable in their regions or countries. These are spaces burdened by high unemployment and poverty rates and critically underserved by public or civil society actors. Necessity-driven enterprises thus often offer some of the few opportunities to gain equitable incomes for the often low-skilled available workforce. This is impressively illustrated by the enterprise SiyaBuddy (**see Impact Spotlight**): founded in 2015, the enterprise managed to directly employ 28 staff before the COVID pandemic hit, and provided regular income to over 1000 waste pickers. Although not at the centre of their business operations, Necessity-driven Enterprises can contribute considerably to positive environmental effects. SiyaBuddy, for example, continues to process 120 tonnes of otherwise contaminated and buried waste. Apart from this direct green impact, however, both entrepreneurs from SiyaBuddy and AgriCentric have shared that whenever there are surplus resources, they engage in community skill development programmes and environmental awareness actions such as community clean-up days.

### Impact Channels, Challenges and Ranges

**Disruptor** enterprises achieve major environmental and economic impact through the ground-breaking products or services they develop. They typically address regional or global challenges such as water scarcity or energy inefficiencies, and orient their enterprises to tackle them globally through, for example, scale-oriented production or international partnerships with other, larger enterprises.

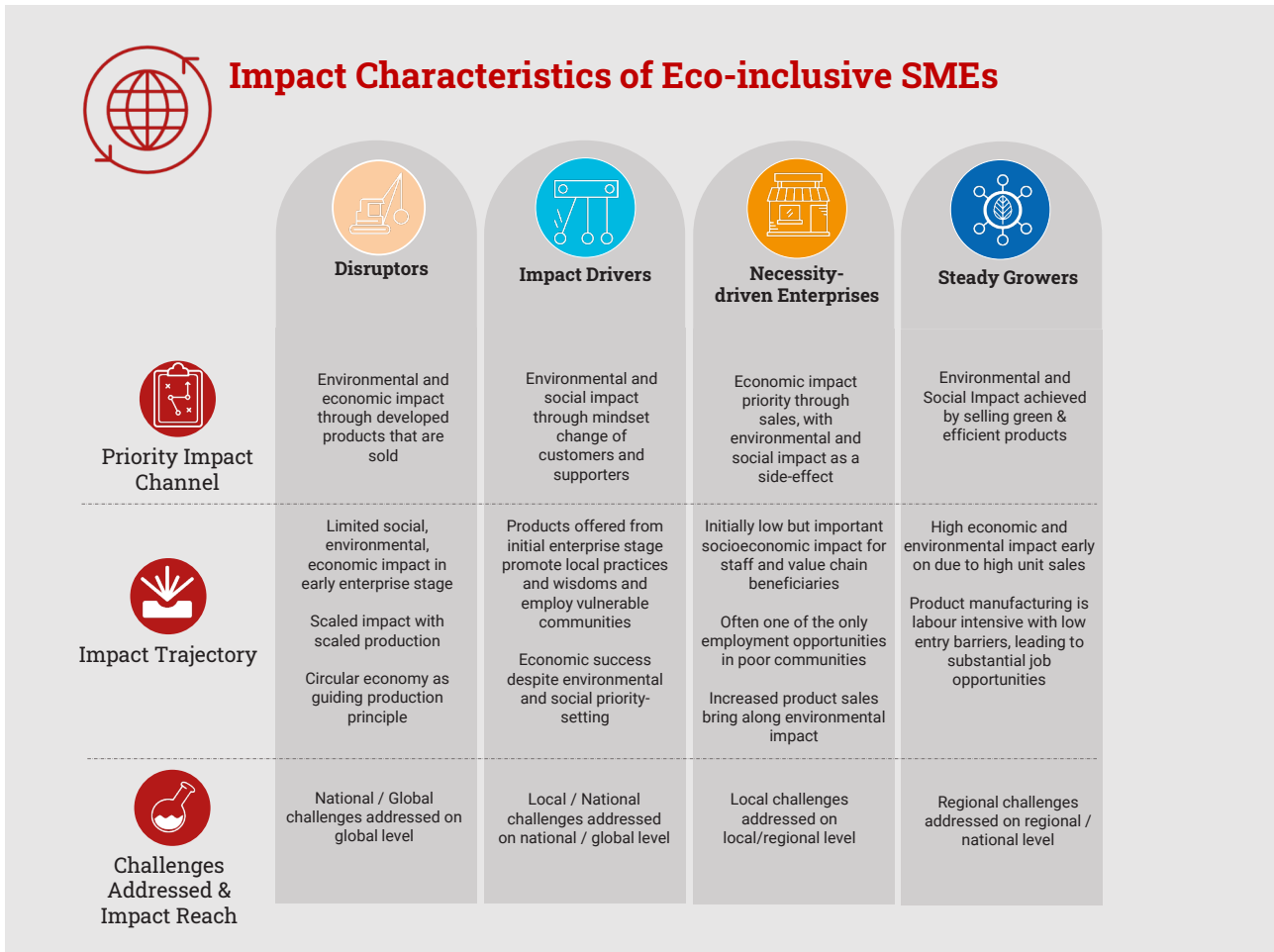
**Impact Driver** enterprises typically try to spearhead or contribute to a movement of public, private and civil society allies, with products or services delivered that support their cause. Impact Driver enterprises thus seek to achieve impact through mindset change, and address locally to regionally felt challenges while attempting to engage in national to global arenas.



**Steady Growers** have a clear focus of reaching sizeable social and environmental impact by sizeable economic success through targeting production to scale. These enterprises commonly tackle regional challenges and aim at providing solutions on a national to regional level.

**Necessity-driven Enterprises** focus on their own economic success, creating environmental and crucially needed social impact as a side effect. Being tightly interwoven with their local communities, such enterprises address local challenges with a local to regional range.

**Figure 5: Impact Characteristics of Eco-Inclusive SMEs**



Source: own illustration

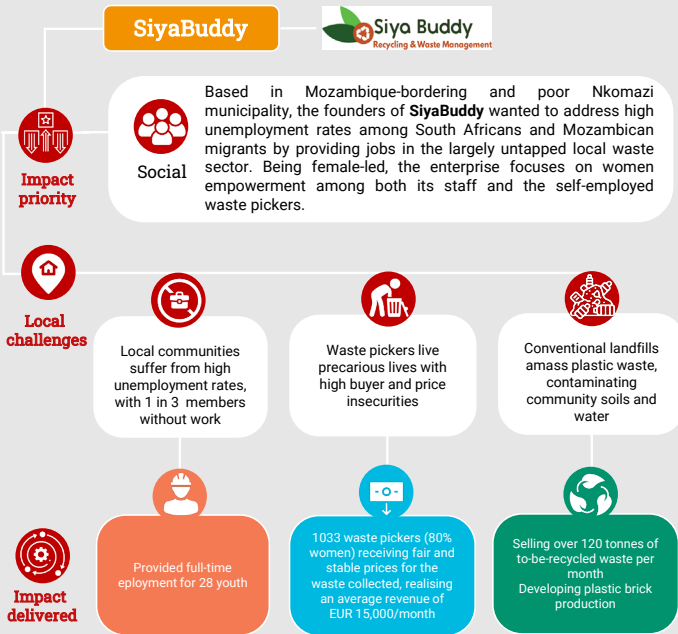




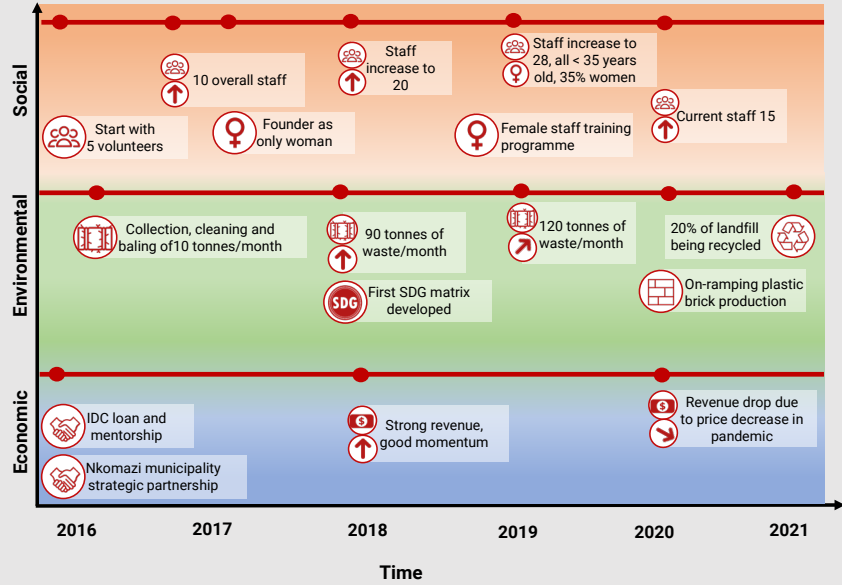
# Spotlight: Impact Journey



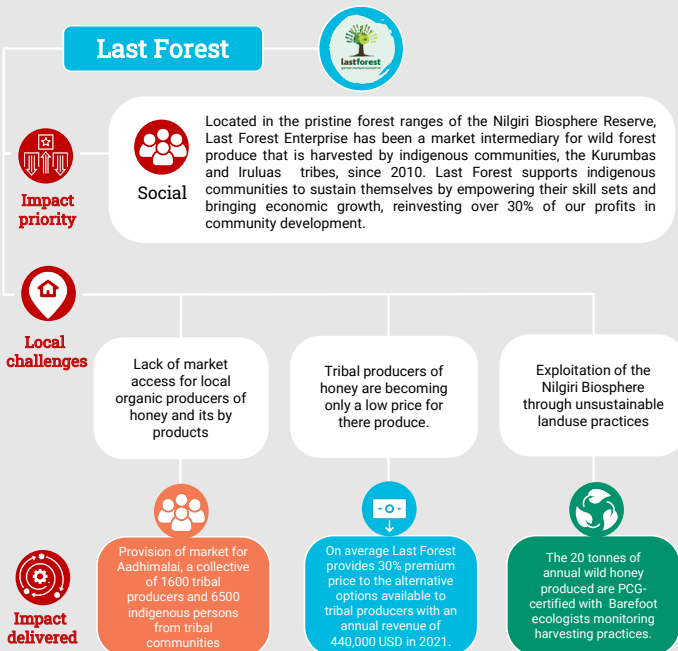
## Necessity-driven Enterprises



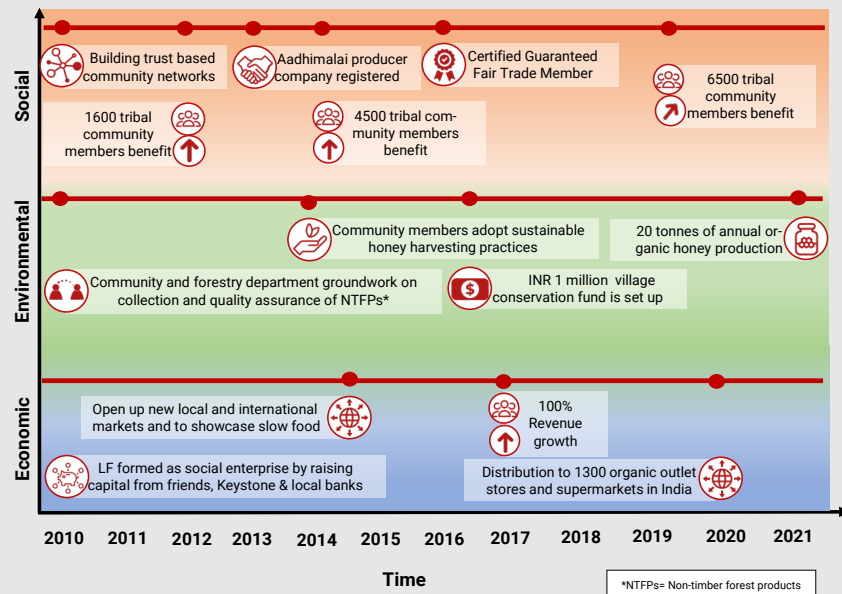
## Enterprise Impact Journey



## Impact Driver



## Enterprise Impact Journey



Interested in Last Forest's story?  
[Watch their virtual case study](#)



## 3.4 Ecosystem Journey

### Ecosystem Trajectories

Enterprises may be located in ecosystems characterised by low partnership and cooperation, or be integrally linked to partners that contribute substantially to scale growth and impact. Conducive guidelines and legal frameworks, willingness and proactiveness of key government or policy actors proves decisive for the success of any enterprise. Among the four archetypical enterprise types, it stands out that there is a pronounced lack of policies supporting eco-inclusive enterprise activities – all interviewed enterprises across countries and industries raised this point. A further shared experience was that enterprises are focused on expanding current or scoping future partnerships for more efficient resource usage in the framework of adopting circular economy principles. Lastly, it should be noted that all interviewed enterprises currently benefit from a general uptick in consumer interest for social, environmental or climate-related products or services.

Turning to our first enterprise type, **Disruptors** need frequent interactions with national and international R&D actors as well as financial entities during their product/service development stages. Underlined by the stories of Mycotech (see **Ecosystem Spotlight**) and AET AFRICA, Disruptor enterprises have established numerous partnerships with different types of research institutions and research funders in this initial phase. This is largely due to the different requirements and costs for each product/service development process that presuppose R&D facilities Disruptors do not initially have at their disposal. Similarly a function of resource limitations, our interviewed Disruptor enterprises seized any opportunity they get to explore new potential partnerships and attract product and brand exposure by attending product or service showcasing events such as hackathons, innovation competitions, tech exhibitions or demo days. R&D processes tend to put pressure on enterprises: if competitors manage to establish and distribute their products significantly earlier and within the same geographical market as disruptor SMEs, their survival is endangered. In both the cases of AET AFRICA and Mycotech, there is international competition with similar products, however, the disruptor enterprises were either first in developing their products or competitors are not yet active in the two enterprises' initial geographic markets.

When Disruptor SMEs complete their first product/service development phase and shift focus to scaling production and organisational development, they commonly seek business development support as their own business organisation experience is usually limited. AET AFRICA and Mycotech support this claim, as they have received extensive 1:1 support in multiple business fields such as finance readiness, export assistance, skills development and technology support. Disruptors might have it easier finding this kind of support, as accelerator programmes usually target disruptive product or service innovators (GALI 2021). Throughout their enterprise journey, Disruptor enterprises are furthermore in frequent interaction with product patenting and eco label certification entities, as these processes can take multiple years.

**Impact Drivers** lay focus on expanding their network of distributors and supporters early on in their enterprise journeys. As mentioned, this function is at the core of Impact Driver business operations, as their network maximises exposure and enables widespread product distribution. This network also includes various NGOs who further expand Impact Drivers' networks. Although the three interviewed Impact Drivers Rahsa Nusantara, Daily Dump and Last Forest have all stated that competition in their markets has increased, they expressed their support for such developments, as more producers of eco-inclusive products advance the enterprises' goals of systemic change.

Impact Drivers are often in touch with various institutions and certification organisations: as Impact Driver products are commonly based on vulnerable input suppliers and ecologically friendly production means, they tend to seek certification with sustainability labels like Fair Trade (see **Ecosystem Spotlight**). Two of our interviewed Impact Drivers have reported that their move to digital sales systems has made them more "visible" for authorities, thus they have stated an increase in interactions with regulatory bodies. Impact Driver enterprises offering consumable goods such as Last Forest engage frequently with food hygiene bodies to assure the upholding of standards.

Interestingly, statements by both Green Bio Energy and ONergy have indicated that the local communities **Steady Growers** initially cater for have had substantial influence over the initial design of the enterprises' business models and product/service portfolios. In the case of Green Bio Energy, for example, interviews with local leaders and a series of focus group discussions to jointly develop market campaigns largely shaped the idea of producing eco briquettes and efficient cook stoves. Over time, Steady Growers establish large distributor networks. Compared to those of Impact Drivers, however, these networks are more distinctly focused on revenue maximisation with limited organisational costs. Steady Growers tend to achieve this by establishing systems resembling franchise relations. ONergy, for example, has formed 45 last mile distributor partnerships that sell the company's solar products across India. Those partnerships were critical to build up local knowledge and to expand networks at the rural village levels, while keeping operations at ONergy level overall lean.

Steady Growers operate in established industries such as construction or energy. Firstly, this has the implication that there are many market competitors. Archetypical Steady Growers usually behave more competitively in their markets with relatively few joint activities and rare partnerships. Secondly, this means that Steady Grower operations are guided by a series of industry standards and regulations focusing on issues such as production safeguards or product quality.

What stands out with **Necessity-driven Enterprises** is that they navigate within an actor ecosystem that is smaller in relation to other enterprise types. This is rooted in both the relatively small range of such enterprises' operations and the often rural and/or poor communities that Necessity-driven Enterprises operate in. These contexts do not offer actors incentives to stay – be they enterprises, financial institutions or business development supporters.

In the relative absence of other potential partners, these enterprises seem, to some degree, dependent on establishing partnerships with community actors or reaching out to often public institutions engaged in economic development actors. In the case of SiyaBuddy, their partnership with the local municipality marked their business inception as they were granted waste reclamation rights on the condition that the enterprise would develop the local landfill site's infrastructure. Similarly, the long-term financial partnership with South Africa's Industrial Development Corporation proved absolutely essential in providing resources to kick-start operations. While input suppliers are usually found within the initial market reach of Necessity-driven Enterprises, it is important for these SMEs to quickly establish processing or distributing partnerships with regionally active enterprises, enabling greater revenue. As competitors are likewise rare in these communities, Necessity-driven Enterprises frequently first experience the pressures of competition when increasing their market reach.

### **Breadth and depth of contributions to ecosystem change**

Somewhat overlapping with questions of impact, we deem it sensible to examine how ecosystems that eco-inclusive SMEs are active in shift over time to become more socially inclusive and greener spheres. Given that eco-inclusive enterprises are agents that aim at this change through their activities, this begs the question of what part different eco-inclusive enterprise play in this change. Naturally, the breadth (how far system change reaches) and depth (to what degree systems are changed) of systemic change are highly dependent on which products, industries and geographies are investigated. Moreover, it is impossible to disentangle the effect of single enterprises from larger movements (e.g. waste recycling).

Archetypical **Disruptor** enterprises' predominant lever to bring about change is the disruptive product or service they bring into markets. With their orientation to interact on a global scale, Disruptor ecosystems (i.e. the actors and institutions they are engaged with) are consequentially vast. Given their rather small enterprise sizes and limited

production capacities, such enterprises are therefore likely not to be able to create a sizeable eco-inclusive ecosystem push on their own. Disruptors can, however, successfully ride these waves of systemic change along with other disruptive product/service providers: in the case of Mycotech (**see Ecosystem Spotlight**), a series of successful well-funded organic vegan leather enterprises have sprung up in recent years, indicating a broader move to non-animal leather in the global fashion industry.

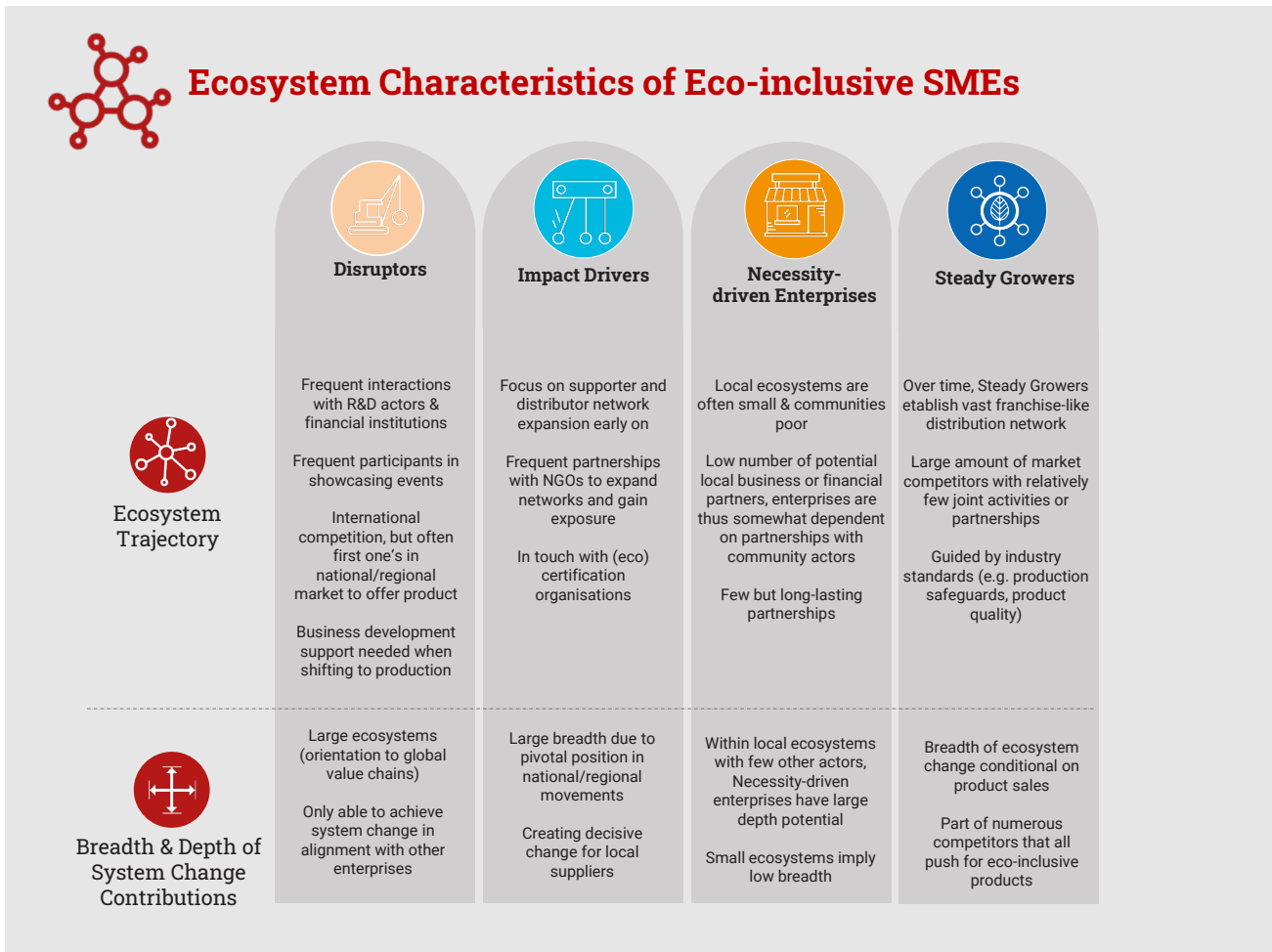
Compared to Disruptors, **Impact Drivers'** ecosystems are considerably smaller, thus systemic shifts (e.g. to broadly foster and consume organic food options) are, in theory, easier. Looking at one of Impact Drivers' main aim, to spearhead networks that change mindsets to reach systemic change, the sizeable traction and exposure that our interviewed Impact Drivers have on a now national scale is indicative of this enterprise type having the most pronounced system change breadth. Inspecting the effect of Impact Drivers on their input suppliers, anecdotal evidence from Daily Dump, Last Forest and Rahsa Nusantara underline that this enterprise type is creating long-term and substantial positive socioeconomic effects for the predominantly poor and/or indigenous communities they are working with.

Conversely to Impact Drivers, **Steady Growers** target system change less publicly. Steady Growers contribute to ecosystem change mainly through convincing customers (and therefore indirectly producers) that ecological and socially sustainable products can be better than conventional ones through the quality and cost saving traits of their products. The breadth of consumer preference change therefore is a function of their sales. Steady Growers are often facing a high density of competitors with similar business sizes, models and products/services offered, which likely have positive impacts on ecosystem change. ONergy, for example, demonstrated over time how to excel in a highly competitive mini-grid market in India iterating on their distribution logic and local partnership models.

As previous outlined, **Necessity-driven Enterprises** are rooted in local environments with relatively few other actors. Their main change engine regards the customers of and community beneficiaries of, as well as suppliers for their products or services. Both SiyaBuddy and AgriCentric highlighted how, in absence of other enterprises, they act as employment focal points in their communities, as well as singular actors for environmental sustainability. Viewing such local settings as their ecosystem, they have the potential for the deepest impact on system change among the four enterprise types. Similarly, this implies that Necessity-driven Enterprises have the lowest breadth, or reach of activities, to bring about system change.



Figure 6: Ecosystem Characteristics of Eco-Inclusive SMEs



Source: own illustration



Last Forest, India





## Disruptor

**Mycotech**

**Role of market actors**

**Strategic partners**  
Product development was heavily influenced by MYCL's supporters and partners since its start in 2015. Because the enterprise's products, Biobo and Mylea, required multiple years of R&D support and finance, strategic partnerships were an absolute necessity for the team.

**Boosting incubators**  
As a young team, Mycotech were able to receive business development boosts by being part of multiple incubator programmes.

**No regional competitors**  
Although western enterprises have entered the stage during the time that Mycotech developed its products, what stands out is that there is no sizeable competition in the ASEAN region.

**System Change**

**Problem**  
With cow leather still making up the majority of leather products and synthetic products made by using environmentally damaging chemical processes, there is an urgent need for more and high-quality organic vegan leather.

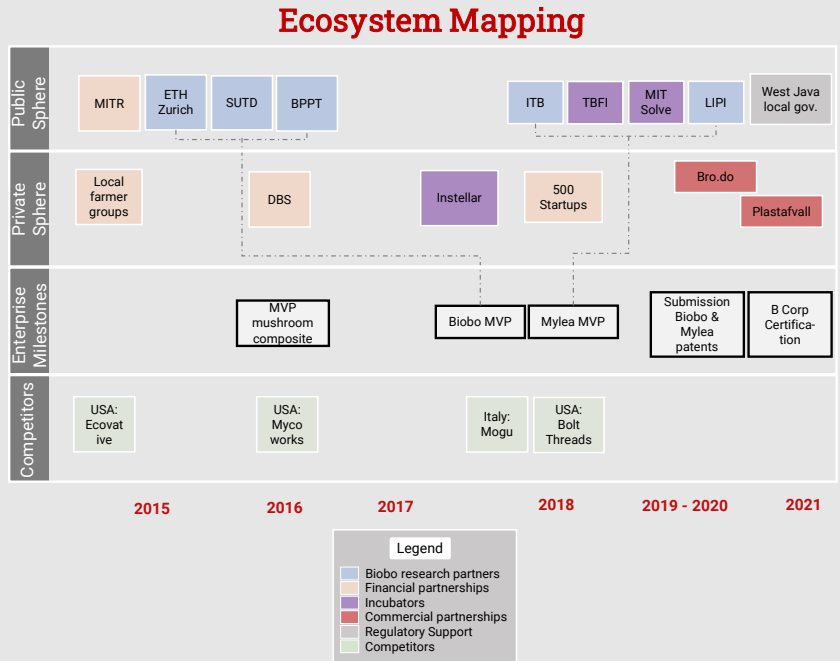
**Change engines**

Disruptive product: ●●●

Media presence: ●●●

Active network of changemakers: ●●●

**Dimensions of Change**  
The fashion industry is increasingly addressing environmental issues. Mycotech benefits from this as more international companies show interest in collaborations. Animal leather, however, still dominates the leather market.



## Impact Driver

**Last Forest**

**Role of Market Actors**

**Strategic partners**  
The institutional and organisational development of Last Forest was heavily supported by the Key Stone Foundation who also supported the set-up and development of the Aadhimalai producer group.

**Boosting marketing partners**  
The membership of Last Forest in multiple national and international organic and fair trade communities like IFOAM, Fair Trade International/India and Slowfood boosted the product uptake in India and Europe.

**Ecosystem Development**  
Last Forest generally could benefit of several organic and fair trade communities which helped the enterprise to position its products with like-minded resellers, communities and

**System Change**

**Problem**  
Indigenous communities are the last stewards of Indian Biosphere systems, while being among the most socioeconomically marginalised. Last Forest set out to protect the wisdoms of such communities, and provide healthy and sustainable biodiversity-based products to consumers.

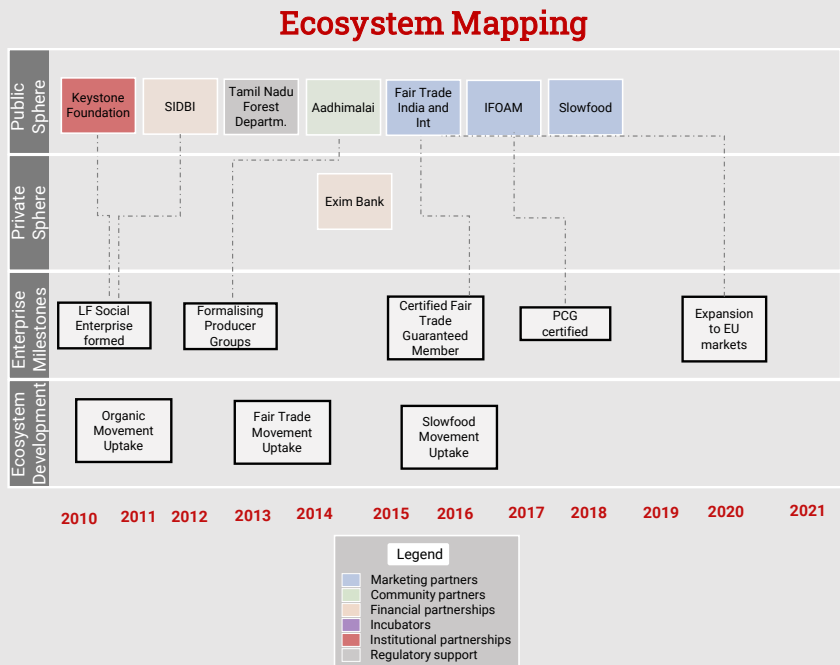
**Change engines**

Customer awareness: ●●●

Media presence: ●●●

Active network of platforms and partners: ●●●

**Dimensions of Change**  
The change that Last Forest could make benefited from a general growth in the organic and fair trade market in India and Europe during the last ten years. This growth allowed last forest to scale their operations in depth and width.



## 3.5 Finance Dimension

### Finance Trajectory

The finance journeys of eco-inclusive SMEs are generally characterised by a lack of financial products tailored to SME needs during their growth stage, commonly referred to as the “missing middle” financing gap (Alibhai et al. 2017). Although financial institutions have recently stepped up their support for SMEs generally (Dalberg 2020), smaller businesses are still regularly faced with sub-optimal financing opportunities. As green and socially-minded SMEs are often impact-driven, have unconventional business models, or offer new products or services, these struggles are even more pronounced with eco-inclusive enterprises. Whether or not such businesses can attain sufficient finance during their journey, therefore, is all the more depending on their financial readiness and the tapping of enabling financial actor networks. Given the diversity of financial markets and infrastructures as well as the differences between eco-inclusive SME types, this results in a rich body of finance journeys.

**Disruptors’** heavy focus on developing innovative products/services with a substantial involvement of high technology and need for frequent test and improvement loops imply a dependency on funding by external partners. Having to develop a product with high R&D costs without actual revenues along the way, this means that Disruptor enterprises are often initially funded by public institutions and innovation hubs, with R&D-concessional grants and credit lines. As previously mentioned, a critical guidepost for future external funding in the journey of Disruptors is their development completion and production rollout of their MVP(s). In the case of Mycotech, their multi-year R&D process which led to finalising their Mylea MVP in 2018, combined with extensive media exposure paved the way to receiving significant equity injections, as their product development progress boosted investor confidence in their enterprise path. Somewhat lacking the same level of media excitement, AET AFRICA is currently looking into different equity investment options. Similar to other high-tech innovation start-ups, Disruptors require longer to turn profitable. In our interviews, both Mycotech and AET AFRICA mentioned they have a four to five year breakeven plan post completion of their first product development phase and are both on track to realising their goal.

Somewhat opposed to disruptors’ dependency on external finance, our interviewed **Impact Driver** enterprises finance their operations largely based on revenues, with steady to exponential revenue growth over time. This is due to Impact Drivers’ difficulties to attract (larger) funds in their enterprise journey. If these enterprises receive funding, it is usually small-scale, and limited to debt or grants. Loan, which make up the lion’s share of our interviewed Impact Drivers funding, are predominantly provided by either public institutions, philanthropic NGOs or befriended investors.

The low average external funding, however, does not presuppose slow commercial uptake. Although the lack of (larger-scale) funding does constitute a barrier to transforming business structures and scaling production, the story of Rahsa Nusantara powerfully illustrates how a continuous focus on profitability through targeting

sales, marketing and product diversification can enable sizeable business growth among Impact Drivers with minimal external funding. Starting with a revenue of just USD 4,500 in 2016, the enterprise multiplied sales 115-fold, with sales reaching over half a million USD in 2020 (see **Growth Spotlight**). All interviewed Impact Drivers were profitable for several years. Being largely dependent on revenues, Impact Drivers’ operations are largely contingent on customer bases and their purchasing behaviour. Although the COVID-19 pandemic represented a challenge to all Impact Drivers interviewed because of the economic effects it had on customers’ purchasing power, the enterprises’ vast networks of ecosystem partners and a tendency to move digital to accommodate national and international eco-conscious and affluent customers resulted in coronavirus being rather a business opportunity than a barrier.

On the opposite spectrum of external funding, the **Steady Growers** in our sample display an impressive average external funding attained. Green Bio Energy (see **Finance Spotlight**), for example, attained over USD 900,000 in funding from 2012 to 2019. Interestingly, both Green Bio Energy and ONergy reported a diverse set of investors and donors, with (international) finance institutions (FIs), civil society organisations and entrepreneurship-minded foundations accounting for the majority of equity and loan investments. Steady Growers usually depend on debt and grants during the beginning years of their journey, as the production setup in industries such as construction or energy usually imply larger capital expenditures. Looking at revenue, Steady Growers are incrementally increasing their market share over time in a relatively steady manner. Both Green Bio Energy and ONergy interviewees stated they were profitable for several years.

Similar to Impact Drivers, Necessity-driven Enterprises only have marginal external funding options. This is due to their difficulty in being perceived as eco-inclusive enterprises and their low levels of innovation –barring them from a variety of green and innovation-targeting grants and loan products. Necessity-driven Enterprises have a low cost structure and lower production volume relative to other enterprise profiles (e.g. Steady Growers). Our interviewed Necessity-driven Enterprises further shared that they did not yet establish any equity partnerships. SiyaBuddy stated that this rooted in a mismatch between investor ticket sizes and needed financial injections, as well as in (high) reporting requirements.

Funding for **Necessity-driven Enterprises** enterprises is therefore often either loan or grant-based. Both financial instruments are usually derived from public institutions focused on economic development. Similar to the case of Impact Drivers, Necessity-driven enterprises’ financial success is largely conditional on the monthly revenues they achieve. In this respect, the COVID-19 pandemic has hit the interviewed enterprises hard. Due to their less developed ecosystem partner network and bread-and-butter products not being suitable for digital sales systems, the effects of the pandemic on customer purchasing power still constitutes a major detriment to scaling business operations. Having been previously profitable, both enterprises interviewed are currently on the way to breakeven (again) in 2021.

## Finance needs & ease of attaining funding

Interviewee Disruptor enterprises mentioned that gaining access to innovation-based grant and loan finance was relatively straight-forward and did not constitute a major barrier. AET AFRICA, for example, received a considerable credit after few months of business formalisation, which was the main funding source during the four years the development of AET's geyser sleeve took. Serial production, however, does not indicate an end to external funding needs: disruptors are continuously refining existent products or seek to diversify their product ranges, with according sizeable R&D expenses.

With enterprise focus shifting to sales maximisation which is accompanied by sales, marketing, logistics and production infrastructure investments; Disruptor SMEs commonly seek non-grant financial instruments to cover increasing OPEX and CAPEX costs. Interviewees shared that it took extensive effort to gain investors' confidence in their business models – Mycotech, for example, explained that their business pitches were denied by at least 70 venture capital and private equity firms prior to angel investors and start-up accelerator 500 start-ups partnering with the enterprise.

Compared to Disruptors, **Impact Drivers** do not require large start-up capital to enable serial production of their developed products due to their less pronounced focus on cost-intensive high technology products and lower capital intensity for the production process. While Impact Driver interviewees shared that grants and loans from foundations and befriended investors were the instruments they could resort to in the first years of their enterprise journeys, entrepreneurs have commonly expressed their desire to attain equity funding after their SMEs established themselves due to their business models. As Impact Drivers somewhat differ from the modus operandi of conventional enterprises by being guided by ethical principles and cooperation instead of competition, potential equity investors and commercial banks have frequently objected to the "NGO-ness" of some of their enterprise traits. Impact Driver interviewees expressed their frustration with this assessment, as they felt like equity investors were negligent of their otherwise profit- and scale-oriented strategies, often boasting with several years of proven profitability. In the case of Impact Driver enterprise Rahsa Nusantara, this lack of (equity) finance led to bottlenecks when the enterprise registered an exponentially increasing demand for their products. Without upfront capital needed to expand and optimise the production process, Rahsa could only dissatisfyingly move towards meeting their products' demand.

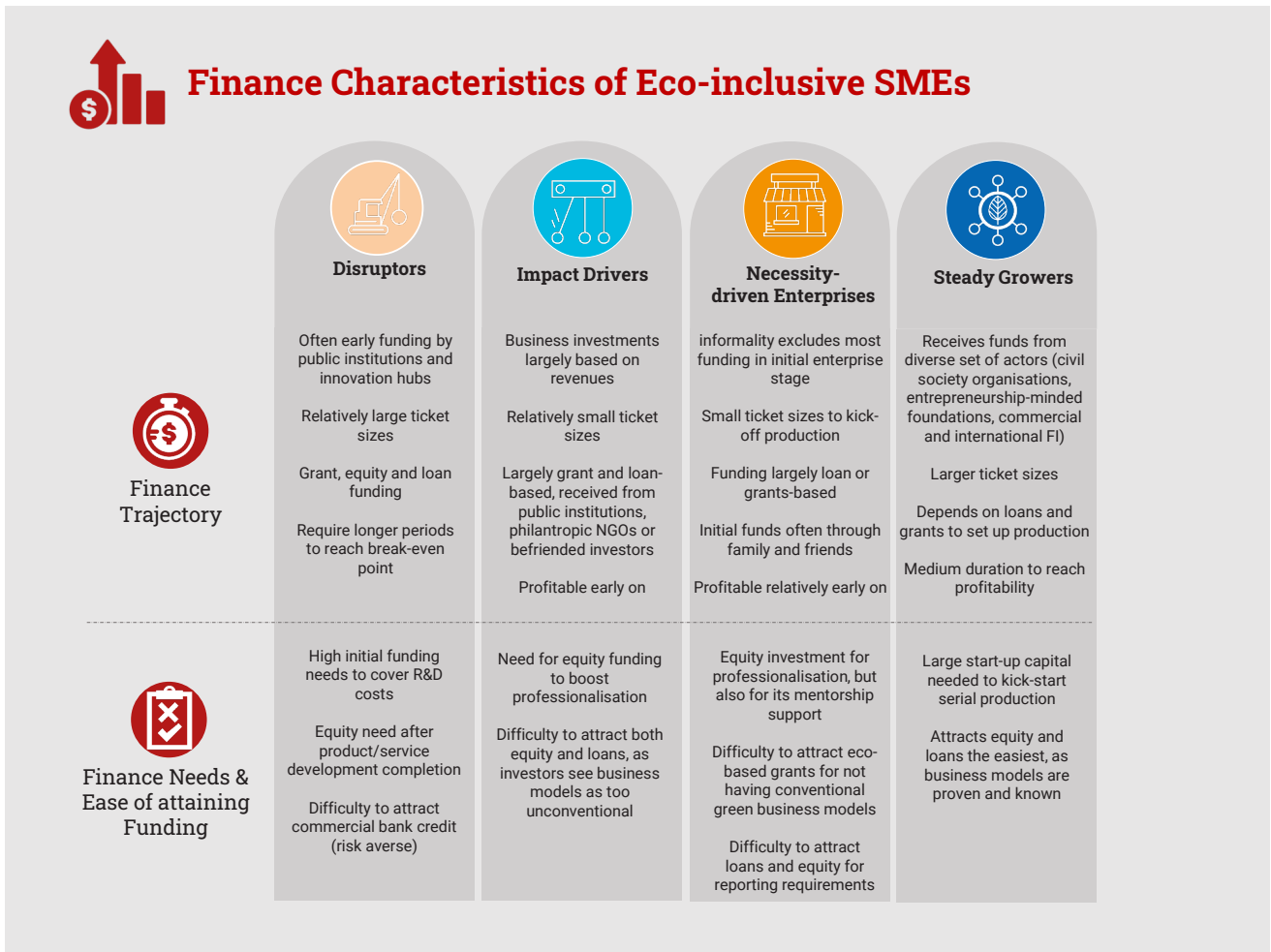
**Steady Growers'** early financial readiness and proven business models further often results in attracting funding with least issues among the four enterprise segments. Steady Grower products (e.g. solar systems, eco briquettes, upcycled pavement blocks, organic manure) are capital intensive, with a large share of upfront finance needed for purchasing adequate machinery and/or inventory. Interviewees Green Bio Energy and ONergy were able to obtain credit lines and equity after few years of operations which paved the way to scaling production. Steady Growers often find themselves at a critical juncture when loan repayment schemes coincide with economic downturns, such as in the COVID-19 pandemic. While grants were often additionally needed in the beginning of Steady Growers' enterprise pathways and appreciated for their flexibility, the high reporting costs and predominantly small ticket sizes of grants were mentioned as a reason to lean more towards loans and equity in the future.

The success of **Necessity-driven Enterprises** is often presupposed by whether or not they are able to reach financial readiness in time. This struggle, however, is exacerbated by a chicken-and-egg problem: Necessity-driven Enterprises often start informally and are therefore unworthy of credit, but need grant or loan tickets to kick-off production and financial readiness. Oftentimes, this cycle can only be broken by friends and family-based financial assistance. Production among Necessity-driven enterprises commonly necessitates machinery or inventory, whose purchases in light of tight finance remain a major barrier to success.

Necessity-driven enterprises who sustained medium-term growth often require equity infusions, firstly because of financial needs to scale, but secondly for the "brain investment" needed. The CEO of SiyaBuddy shared that "enterprises like [us] often lack professional backgrounds and support like incubation programmes. Mentorships and access to networks can be gained through equity partnerships". Similar to Impact Drivers, Necessity-driven Enterprises who are unable to secure equity or loan funding in further development stages need to resort to revenues as their major resource for reinvestments into their businesses. As a result, both Impact Drivers and Necessity-driven Enterprises have been hit hardest by the COVID pandemic. While Impact Drivers were able to circumvent these issues better as they were able to quickly tap into larger online markets, Necessity-driven Enterprises usually struggle with this step as their products do not have the same online demand.



Figure 7: Finance Characteristics of Eco-Inclusive SMEs



Source: own illustration

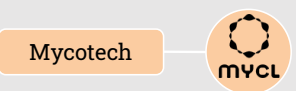


Mycotech, Indonesia





## Disruptor



**Mycotech's** strong social media presence and tireless efforts in entrepreneurial competitions and innovation programmes enabled the enterprise to secure a series of grants early on. This allowed to focus on the heavy R&D required for the development of their mushroom leather during the riskiest phase of their startup journey. Angel and venture capital investments followed in 2018 after MYCL was able to showcase its working MVP, business model and initial revenue. 2018 also marked a shift from financial bootstrapping to aggressively pushing for scale. Although not yet being profitable, they finalised a 2.5m USD material purchase commitment from a Japanese buyer in April 2021.

**Finance needs**

- Large-scale early investments into R&D
- Shift to diverse non-grant instruments to account for CAPEX and OPEX needs
- Investments to fund own research facility

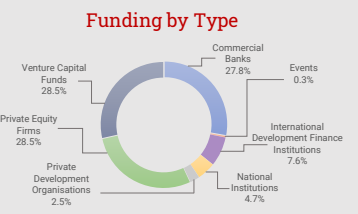
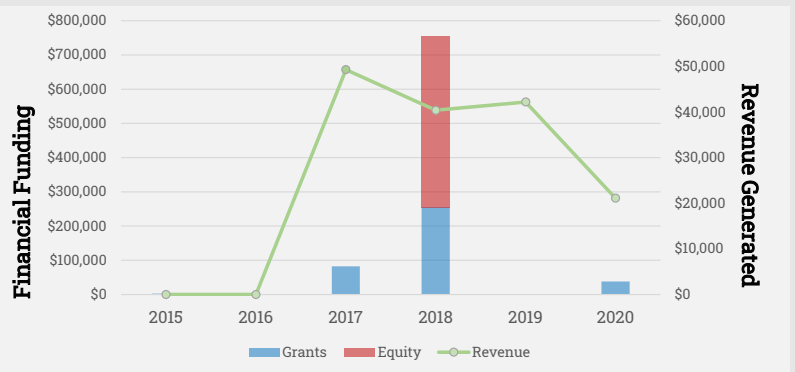
**Finance challenges**

- Pressure to turn profitable
- Revenues dropped due to pandemic

**Finance achievements**

- Secured over 900,000 USD in external funding since 2015
- 2.5m USD material purchasing commitment by Japanese buyer in April 2021

## Enterprise Finance Trajectory



**Notes**  
The Enterprise Finance Trajectory shows grant & debt financing based on data provided by Mycotech. Only funding exceeding 1,000 USD is shown. The disaggregation of funds by type was done based on SEED's own assessment.

## Steady Grower



**Green Bio Energy** has started its operations using funds from family and friends. Over the years, the enterprise has funded its operations and expansion through a mix of grants, equity, and debt financing. The debt financing is currently being repaid. Green Bio Energy achieved cash positivity in the first quarter of 2020, with a plan to break even. Financial goals include cost cutting to increase the margin of briquettes, as market prices are competitive and substitution barriers low. Green Bio Energy plans to continue to focus on expanding production from 70 to 80 tonnes per month while maintaining cost cutting measures.

**Finance needs**

- Investments into R&D and testing
- Investments into equipment and facilities
- Exploration of a franchising model to scale production

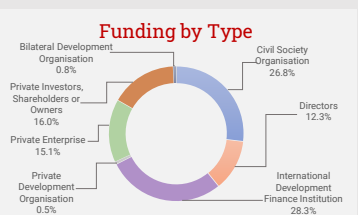
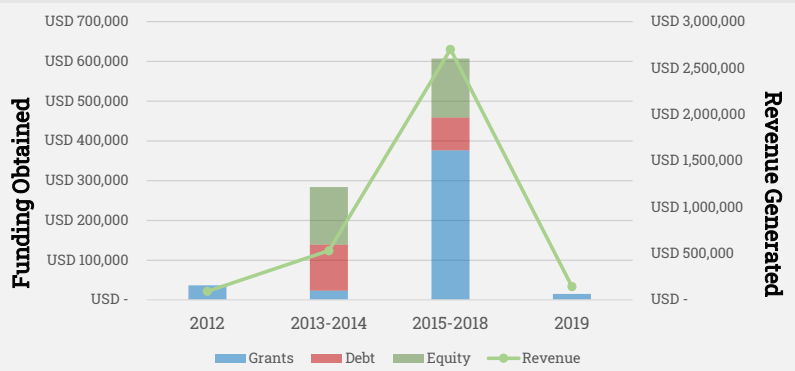
**Finance challenges**

- Short timeframes for reporting in the context of grant financing
- Finding suitable partners for equity financing

**Finance achievements**

- The enterprise turned cash positive in the first quarter of 2020, with a plan to break even
- Recognised by SEED in 2014, received major grants and loans starting from 2015
- Result-based financing contract with UNCDF

## Enterprise Finance Trajectory



**Notes**  
The Enterprise Finance Trajectory shows grant, debt and equity financing based on data provided by Green Bio Energy. Only funding exceeding 1,000 USD is shown. Years were subsumed in some cases as funding was injected in multiple stages. As outlined in GBE's Growth Spotlight, the revenue decrease after the FY 2018 is due to the selling of their ecostove business. The disaggregation of funds by type was done based on SEED's assessment.

## 4. OUTLOOK INTO THE NEXT COMPARATIVE CASE STUDY REPORT

The ways in which eco-Inclusive SMEs move from enterprise founding to maturity are under researched within academia, business support and development cooperation spheres. Given the significant positive socioeconomic and environmental effects that these enterprises have within their communities and potentially on a global scale, this report set out to contribute to understanding eco-inclusive SMEs by outlining the first of its kind enterprise typology. To do this, we employed a multidimensional time-sensitive analytical framework that adequately captures the differences between how eco-inclusive enterprise types grow, innovate, create impact, navigate within ecosystems and finance their operations through time. Despite this being an idealised typology based on anecdotal evidence with future iterations to validate our claims, it is a starting point for a hopefully expanding body of literature and increasing interest into the works and needs of eco-Inclusive enterprises.

This first contribution opens the opportunity to re-assess current and tailor future eco-inclusive SME support programmes to better cater for the diverse needs that eco-inclusive SMEs' diverse journeys to scale necessitate. As mentioned in the introduction, however, this study is only the first of a series of reports revolving around understanding eco-inclusive SMEs. After having provided a first layer of conceptual basis by developing our four archetypical eco-inclusive enterprise types, our next report will seek to:

1. **Validate our typology** with further in-depth enterprise interviews in the subsequent Journey to Scale report, as current low numbers of interviews clearly limit the typology's expressiveness
2. **Collect, evaluate and categorise self-assessment-based enterprise data** to support or falsify our findings as well as to identify specific policy action and needs areas
3. **Shift focus to needs of eco-inclusive SMEs and recommendations** for actors in the field of (development and climate) finance, business development support and economic development, to maximise the positive contribution of these reports to effective and tailor-made eco-inclusive SME support.



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## Interviewed Enterprises

Enterprise	Country	Interviewed individuals	Website
<b>AET AFRICA</b>	South Africa	Sandiswa Qayi	<a href="https://www.aetafrica.co.za/">https://www.aetafrica.co.za/</a>
<b>AgriCentric</b>	Ghana	Gideon Nyamesen	<a href="https://agricentricventures.com/">https://agricentricventures.com/</a>
<b>Daily Dump</b>	India	Poonam Bir Kasturi Kiran Ayathan Amarpreet Singh	<a href="https://www.dailydump.org/">https://www.dailydump.org/</a>
<b>Green Bio Energy</b>	Uganda	Ziwa Hillington Nakitende Druscilla	<a href="https://greenbioenergy.org/">https://greenbioenergy.org/</a>
<b>Last Forest</b>	India	Mathew John Aritra Bose Nandan HS	<a href="https://lastforest.in/">https://lastforest.in/</a>
<b>Mycotech</b>	Indonesia	Adi Reza Nugroho Annisa Wibi Ismarlanti Ronaldiaz Hartantyo M. Arkha Bentangan	<a href="https://mycl.bio/">https://mycl.bio/</a>
<b>ONergy Solar</b>	India	Piyush Jaju Antara Dey Bhowmik Shweta Jaju	<a href="https://www.onergy.in/">https://www.onergy.in/</a>
<b>Rahsa Nusantara</b>	Indonesia	Mirna Astari Magetsari Citra Triana	<a href="https://rahsa.id/">https://rahsa.id/</a>
<b>SiyaBuddy</b>	South Africa	Nomuntu Ndhlovu Siyabonga Tshabalala	<a href="https://www.siyabuddy.co.za/">https://www.siyabuddy.co.za/</a>



# Methodology

## Interview Design

SEED conducted 36 qualitative case study interviews with executive members of nine eco-inclusive enterprises between June 2020 and June 2021, with each enterprise being interviewed four times to unravel their different enterprise journeys. As the primary mode of data collection, we chose semi-structured interviews, as they combine the advantages of 1) unearthing complex relationships between variables and 2) allow for exploring new aspects of enterprise trajectories previously unknown or hidden for the interviewer(s). While no interview questions were prepared, we conducted interviews based on different dimension-related themes. These themes were:

- Growth: stages of enterprise, organisational development, business/revenue model, Impact, development of the value chain, changing customer segments, product development
- Innovation: drive/motivation to implement product/service, steps in product development, innovation partners, Innovativeness of product/service, changes in market share, competitors
- Impact: social – environmental - economic impact performance indicators, gender, roles of beneficiaries, roles of national/international frameworks
- Ecosystem: market pushes, roles of enterprise within market, roles of partners for the enterprise, roles of community actors, regulations/policy instruments, role of government actors, roles of support programmes, role of SEED and SEED support
- Finance: financial health of enterprise, characteristics of financing instruments used, revenues

Interview participants were chosen by selecting previous finalists or winners of the SEED Low Carbon Awards that took place between 2013 and 2019. Of a total of 55 enterprises, the nine enterprises that are featured in this report were selected since they were known to operate in geographies that 1) allowed for supplementary case study short films to be shot, 2) were recently in contact with SEED, 3) were still active and 4) agreed to be interviewed and featured in this report. As previously mentioned, this is the first of a series of reports, thus more enterprises will be featured in future iterations. To reduce the risk of drawing conclusions that relate to geographical or political characteristics, we selected enterprises from multiple countries and two continents.

## Data Collection & Analysis

Initial enterprise profiles were created based on collating experiences from numerous senior-level SEED employees with rich experience in business development support in both Africa and Asia. Case Study interviews were conducted via online conference calls on Zoom to comply with COVID travel regulations and to leave a minimum ecological footprint. To collect data, we utilized the online collaboration tool Mural, in which both participants, interviewers and facilitator supporters were able to write down, view and discuss insights and notes. Templates for the interviews were crafted prior to conducting interviews. Interviews were furthermore recorded for future data access and ensuring complete capture of data input. Quantitative indicators that were derived through such interviews were transferred to Excel spreadsheets to generate descriptive statistics and visualisations. Qualitative and quantitative insights were screened and categorised into different topics and enterprise profiles.

## Limitations

The gathered information was not verified by third parties due to the impossibility of testing the majority of statements or the inappropriate resource burden this obligation to provide independent checks would have meant for interviewed enterprises. We therefore rely on the truthfulness of the shared information.

A further limitation of this report is selection bias: since only enterprises who were able to be shortlisted (or won) our SEED Low Carbon Awards, we only provided insights into eco-inclusive SME “champions”, potentially losing valuable insights for more struggling enterprises. Similarly, we only interviewed enterprises who have not discontinued their operations – investigating reasons for eco-inclusive business failure is a road we did not take, but which might be fruitful for future scholars or entities invested in eco-inclusive SME support.

Response bias is a third potential limitation to this report. Given that SEED has previously engaged in enterprise support or grant disbursements with the interviewed, interviewees may have felt the need to provide and emphasise success stories relative to failures or challenges.



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