



ASPEN NETWORK  
OF DEVELOPMENT  
ENTREPRENEURS

INDIA

ENTREPRENEURIAL ECOSYSTEM SNAPSHOT

# Green Entrepreneurship in India



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# Authors and Acknowledgements

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## About ANDE

The **Aspen Network of Development Entrepreneurs (ANDE)** is a global network of organisations that propel entrepreneurship in developing economies. ANDE members provide critical financial, educational, and business support services to small and growing businesses (SGBs) based on the conviction that SGBs create jobs, stimulate long-term economic growth, and produce environmental and social benefits.

As the leading global voice of the SGB sector, ANDE believes that SGBs are a powerful yet underleveraged tool in addressing social and environmental challenges. Since 2009, we have grown into a trusted network of more than 250 collaborative members that operate in nearly every developing economy. ANDE grows the body of knowledge, mobilizes resources, and connects the institutions that support the small business entrepreneurs who build inclusive prosperity in the developing world. ANDE is part of the Aspen Institute, a global nonprofit organisation committed to realising a free, just, and equitable society.

ANDE's India chapter, headquartered in Chennai, India, was established in 2012 to create a thriving entrepreneurial ecosystem in the region. Chapter activities aim to strengthen the local network, encourage collaboration, and co-develop programmes and services for and with members and the sector at large.

## About the IKEA Foundation

This snapshot report was produced with support from the **IKEA Foundation**. The IKEA Foundation is a strategic philanthropy that focuses its grant making efforts on tackling the two biggest threats to children's futures: poverty and climate change. It currently grants more than €200 million per year to help improve family incomes and quality of life while protecting the planet from climate change. Since 2009, the IKEA Foundation has granted more than €1.5 billion to create a better future for children and their families.

In 2021 the Board of the IKEA Foundation decided to make an additional €1 billion available over the next five years to accelerate the reduction of Greenhouse Gas emissions.

Learn more at: [www.ikeafoundation.org](http://www.ikeafoundation.org) or by following them on [LinkedIn](#) or [Twitter](#).



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# About this Snapshot

ANDE's Entrepreneurial Ecosystem Snapshots are designed to collect basic information about the support available for small and growing businesses (SGBs) in a specific city, region, or country.<sup>1</sup> This information acts as a census of the local actors and represents a specific moment in time. The information is collected through both a survey and desk research, led primarily by local teams who engage practitioners throughout the process.

More detail on the methodology can be found at <https://ecosystems.andeglobal.org/about>

For readers interested in the green entrepreneurial ecosystem in India, this snapshot can be used to:

- 1/ Identify gaps in the support available to green entrepreneurs in the ecosystem;**
- 2/ Connect other actors in the ecosystem that have similar goals/missions; and**
- 3/ Initiate informed conversations and collaborations with other players in the ecosystem.**

In addition to the specific analyses in this snapshot report, users can extract their own insights using the information publicly available on the snapshot website at <https://www.india-ecosystem.tech>. The intent is for this snapshot to serve as both a marker of the ecosystem at this particular time as well as a starting point for ecosystem actors to work together using a common knowledge base.

**This snapshot report is part of a larger effort to study the green entrepreneurial ecosystem in India with support from the IKEA Foundation. To learn more, please visit:**

- ▶ India Green Entrepreneurial Ecosystem Snapshot Website**  
Contains a filterable directory of all 140 organisations identified in this snapshot report, as well as interactive visualisations.
- ▶ Building the Green Economy: Trends and Opportunities for Green Entrepreneurship in India**  
The primary research study developed from this partnership which details trends in green entrepreneurship in India, case studies of successful ventures, market opportunity projections, and deep dives into specific green sectors.

<sup>1</sup> Small and growing businesses (SGBs) are defined by ANDE as commercially viable businesses with five to 250 employees that have significant potential and ambition for growth. Typically, SGBs seek growth capital from USD \$20,000 to \$2 million. SGBs differ from the more traditional characterisation of small and medium enterprises (SMEs) in two fundamental ways. First, SGBs are different from livelihood-sustaining small businesses, which start small and are designed to stay that way. Second, unlike many medium-sized companies, SGBs often lack access to the financial and knowledge resources required for growth. Learn more at <https://andeglobal.org/why-sgbs>.

# Green Entrepreneurship in India

The damaging effects of climate change in India are all-encompassing, threatening agriculture and food supplies, energy security, water security, and public health. Climate-related natural disasters, such as extreme heat, changing rainfall patterns, droughts, melting glaciers, and rising sea levels are only some of the threats which have far-reaching implications such as migration and conflict.<sup>2</sup> The extreme heat in March 2022 resulted in forest fires, destroyed farms and yields, and at minimum led to 90 deaths across India and Pakistan.<sup>3</sup> Due to rising temperatures, India has been experiencing more days with extremely heavy rains and longer dry spells in between over the last century.<sup>4</sup> The damage to the country's economy is also substantial given that nearly 50% of Indians engage in agriculture and other climate sensitive sectors.<sup>5</sup>

To ameliorate climate and environmental challenges, India has committed to a green economic transition through various government policies and initiatives, lending for instance a big boost for renewable energy and building markets for the green economy.<sup>6</sup> India has the the world's third largest entrepreneurial ecosystem after the United States and China,<sup>7</sup> and an increasing number of sustainability-oriented startups, investors, incubators, and accelerators in India is shaping a vibrant green ecosystem.<sup>8</sup> India attracted US \$1 billion in venture capital funding for climate technology investment from 2016 to 2021 and came in ninth place for climate technology investment worldwide.<sup>9</sup>

Green entrepreneurship in this snapshot borrows the International Labour Organization (ILO)'s definition. According to the definition, green enterprises combat climate change and/or adopt environmental values by offering green products or services in a green sector (e.g., waste management) or engaging in the value chain (e.g., clean technologies); green entrepreneurs often operate in both of the mentioned aspects, create decent jobs via eco-friendly processes, and make positive environmental impacts.<sup>10</sup>

This report examines the ecosystem of support for green entrepreneurs in India. Although green entrepreneurship can be a new engine of the economy, it is still in its early stages in the country.<sup>11</sup> Using data collected via surveys and desk research, this snapshot report uncovers important challenges and opportunities for green entrepreneurship to inform stakeholders of how to better support the development of India's green economy.

2 "India: Climate Change Impacts." 2013. *The World Bank*.

3 "How the Climate Crisis is Impacting India." 2022. *The Climate Reality Project*.

4 R. Krishnan, J. Sanjay, C. Gnanaseelan, M. Mujumdar, A. Kulkarni, & S. Chakraborty, (Eds.). 2020. *Assessment of Climate Change over the Indian Region: A Report of the Ministry of Earth Sciences* (MoES), Government of India. Springer Singapore; "How the Climate Crisis is Impacting India." 2022. *The Climate Reality Project*.

5 R. Chand, and J. Singh, J. 2022. *Workforce Changes and Employment: Some Findings from PLFS Data Series* [NITI Aayog Discussion Paper]. NITI Aayog, Government of India; M. Mani, S. Bandyopadhyay, S. Chonabayashi, A. Markandya, & T. Mosier. 2018. *South Asia's Hotspots: The Impact of Temperature and Precipitation Changes on Living Standards*. International Bank for Reconstruction and Development. *The World Bank*.

6 T. Mittal. "India's Transition to Green Economy Can Create More Jobs." 2022. *DownToEarth*; J. Pyper. 2021. "A Vibrant Cleantech Startup Ecosystem Takes Root in India." *Greentech Media*.

7 D. David, S. Gopalan, and S. Ramachandra. 2020. "The Startup Environment and Funding Activity in India." *Asian Development Bank Institute*.

8 J. Pyper. 2021. "A Vibrant Cleantech Startup Ecosystem Takes Root in India." *Greentech Media*.

9 "India ranks among the world's top 10 countries for climate tech investment." 2021. *The News Minute*.

10 *Green entrepreneurship: Creating green jobs through sustainable enterprise development*. International Labour Organization (ILO).

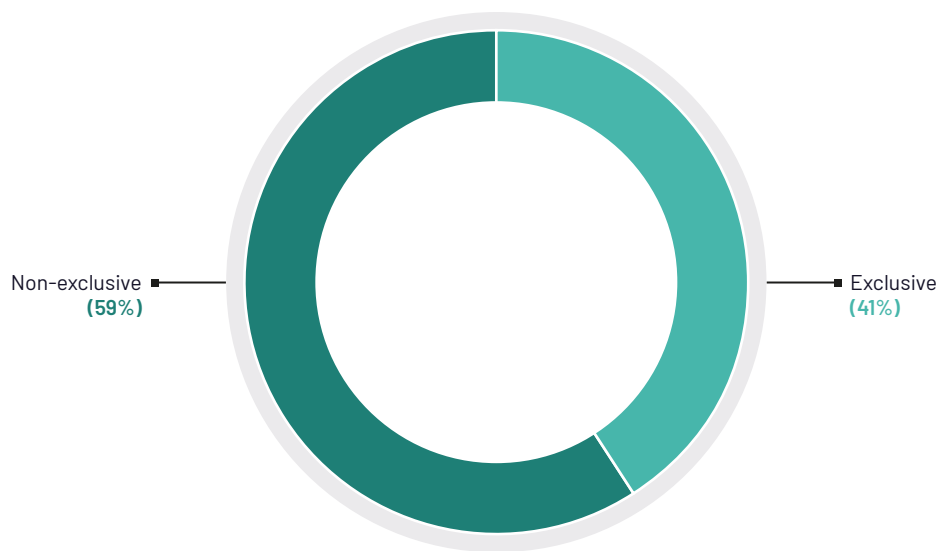
11 J. Pyper. 2021. "A Vibrant Cleantech Startup Ecosystem Takes Root in India." *Greentech Media*.

# Ecosystem Data

## Characterisation of Support Organisations

ANDE identified 140 organisations that lend support to green entrepreneurs in India by offering programmes, initiatives, research, or investment targeted to green entrepreneurship. Just over 40% of the organisations exclusively support green entrepreneurship. [Climate Collective Foundation](#) is an example of a capacity development provider whose entire mission is aligned with supporting green ventures via acceleration programmes, funding platforms, impact metrics, research, and community activities. The remaining 59% do not limit their support solely to green startups, and most of them recently brought support for green entrepreneurship to their priority list. An example of a generalist support organisation is [Acumen](#), a venture capitalist that recently launched a three-year Green Growth Initiative for early-stage green entrepreneurs.

**Figure 1: Percent of organisations that support green entrepreneurship exclusively or as part of a broader scope**

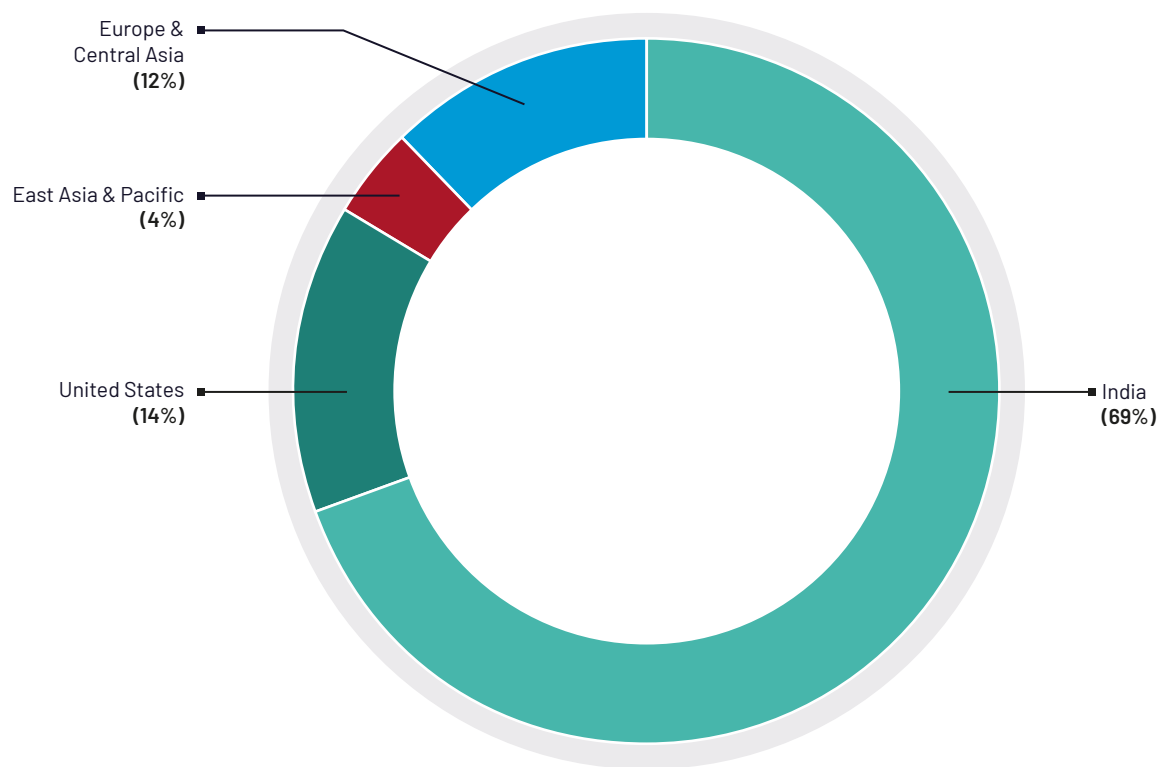


**N (number of observations) = 140 organisations**

# Ecosystem Data

The entrepreneurship support ecosystem in India is mostly dominated by local players, with about 70% of the support organisations having their headquarters within the country. A smaller number of organisations (30%) are based outside of India, most of which are located in Europe & Central Asia or the United States. A high share of local players might be an indication of a healthy ecosystem for two reasons. First, a high percentage of local players indicates a higher potential for organic ecosystem growth without substantial external intervention. Moreover, local organisations with relevant contextual knowledge might be better equipped to develop and implement climate solutions for the Indian economy. Research by Endeavor Insight supports this notion, attributing Bengaluru's burgeoning ecosystem to the central role that successful local entrepreneurs play in driving ecosystem development.<sup>12</sup>

**Figure 2: Headquarters of support organisations**



**N = 137 organisations**

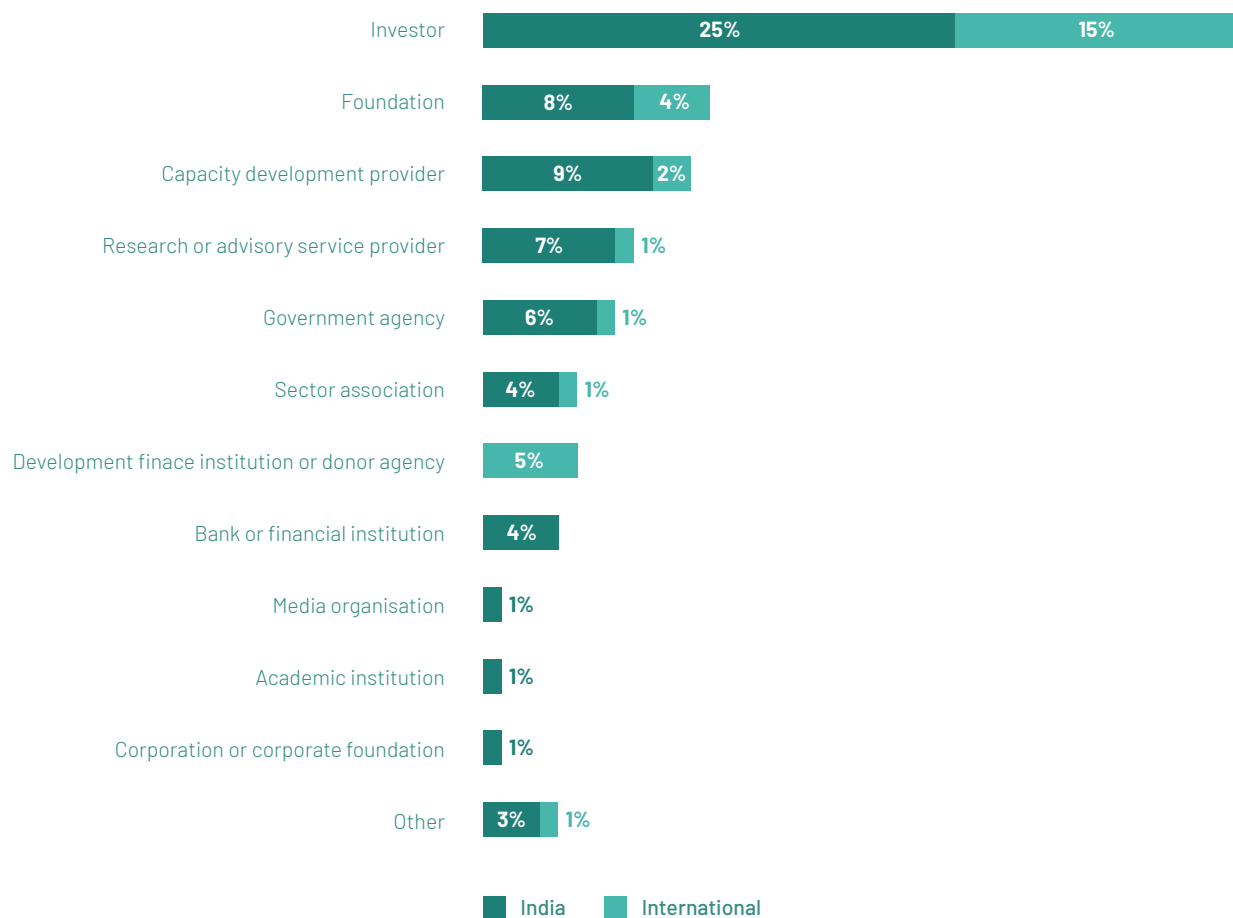
The green entrepreneurial ecosystem in India is relatively young. Most support organisations (75%) started focusing on the green economy in the last ten years, with only a quarter of organisations having served the green economy for more than a decade. The recent development of the ecosystem is largely attributable to the increasing number of investors, capacity development providers, and foundations, and their focus shifting toward green entrepreneurship. Despite the positive growth trend, only a few organisations that recently joined the green ecosystem offer debt financing to entrepreneurs, highlighting a gap in the funding landscape.

<sup>12</sup> Morris, R. and Török, L. 2018. *Fostering Productive Entrepreneurship Communities*. Endeavor Insight.

# Ecosystem Data

Investors make up the largest portion of support organisations identified in the study (41%), followed by foundations (12%), capacity development providers (12%), and research and advisory service providers (8%). Government agencies, banks or financial institutions, and development finance institutions (DFIs) or donor agencies rank relatively low in their presence in the ecosystem. This finding aligns with the takeaway from ANDE's stakeholder meetings in India about the weak support for green entrepreneurs in the early stages, especially from the government, foundations, and donors who provide grants.<sup>13</sup>

**Figure 3: Organisation type by headquarters location**



**N = 137 organisations**

<sup>13</sup> ANDE hosted three separate stakeholder meetings in September 2022 with two virtual sessions with key stakeholders across India and one in-person session in Guwahati in the state of Assam, focusing on ecosystem actors in the Northeast region.

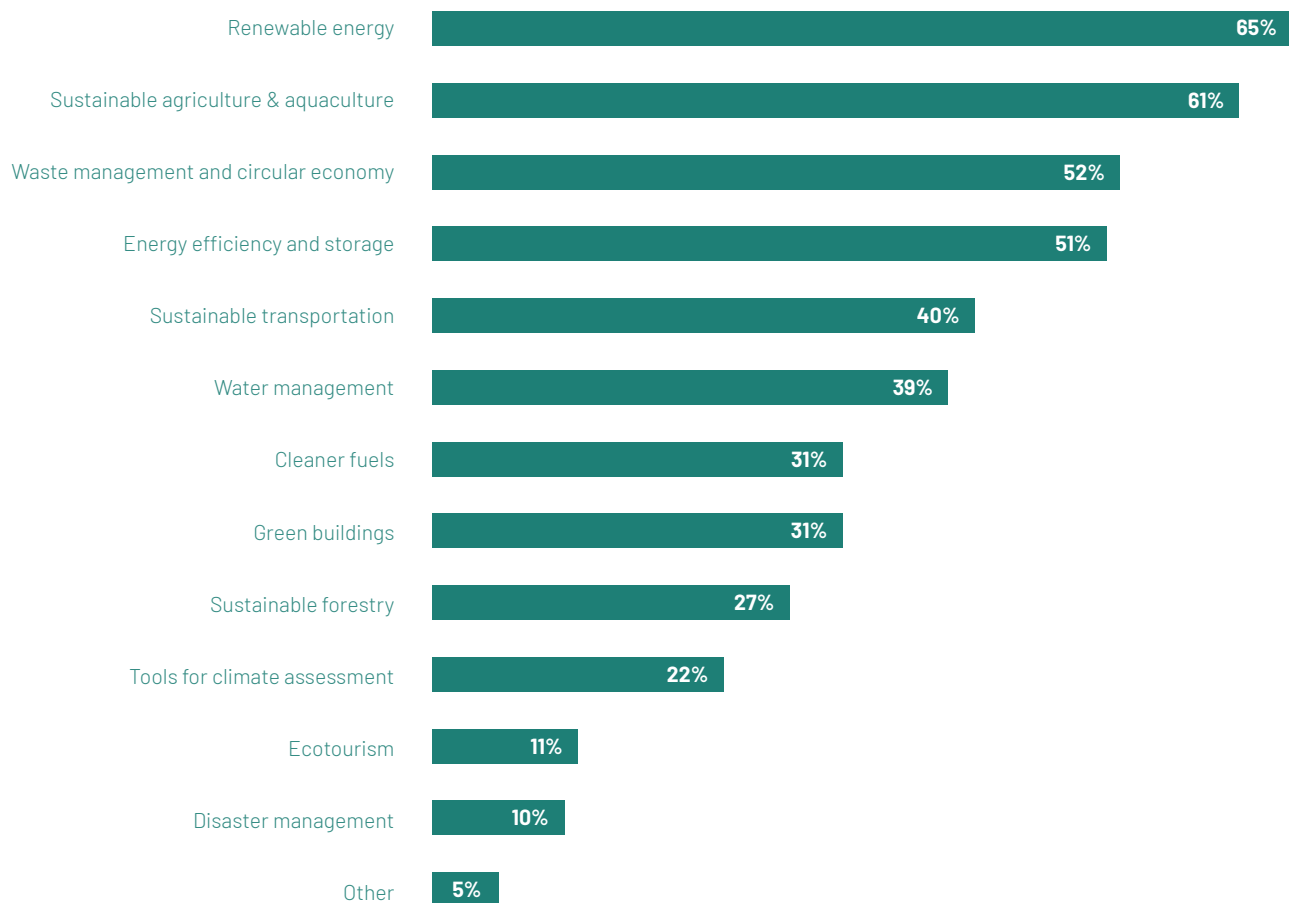


# Ecosystem Data

## Sector and Stage Focus

More than half of identified organisations focus their support on two or more green sectors. Renewable energy (65%) and sustainable agriculture and aquaculture (61%) are the most common sectors of focus, followed closely by waste management and the circular economy and energy efficiency and storage. Ecotourism and disaster management receive the least support from support organisations. Ecotourism is in its nascent stages in the economy, with limited entrepreneurial activities. On the other hand, the government takes the lead in disaster management, as the sector requires large-scale projects with nationwide or statewide interventions.<sup>14</sup>

**Figure 4: Percent of organisations by target green sectors**



**N = 134 organisations (respondents could select more than one)**

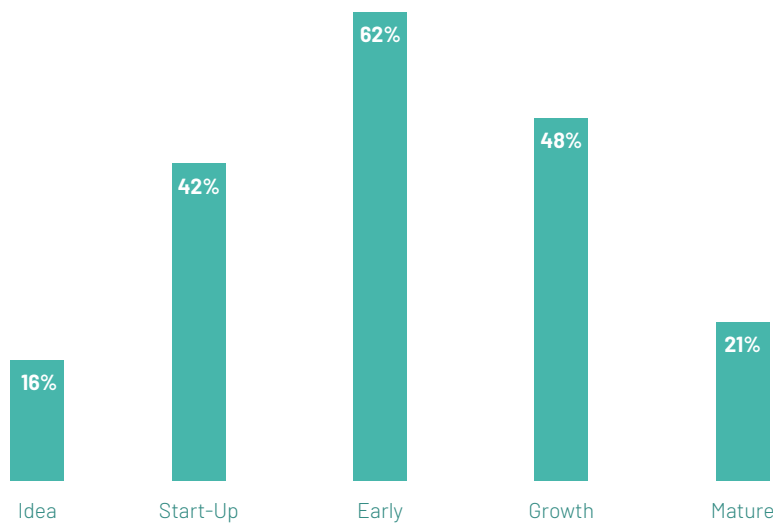
Support organisations most commonly focus on entrepreneurs in the early stage (62%), followed by the growth (48%) and start-up stages (42%). The relatively high proportion of organisations supporting growth stage

<sup>14</sup> Kim, S. et al. 2023. [Building the Green Economy: Opportunities and Trends for Green Entrepreneurship in India](#). Aspen Network of Development Entrepreneurs.

# Ecosystem Data

ventures indicates that support organisations assist ventures to gain traction and scale up. In contrast, support for entrepreneurs at the idea stage continues to be limited. Climate solutions require higher capital investment to test and validate a product-market fit, and a gap in accessing that type of capital early on translates into fewer solutions moving from idea to early stage.<sup>15</sup>

**Figure 5: Percent of organisations by target stage**



N = 126 organisations (respondents could select more than one)

**Table 1: Stages of enterprises**

STAGE	DESCRIPTION
<b>1</b> Idea	Entrepreneurs have little more than an unproven idea, so the focus is on testing the idea and identifying a product-market fit
<b>2</b> Start-up	Company is in the process of being set up
<b>3</b> Early	May have initial market traction but require further funding and will likely not yet be generating profits
<b>4</b> Growth	Demonstrate steady growth or scaling, and likely profitability
<b>5</b> Mature	Company has likely reached stable profits; growth may have slowed

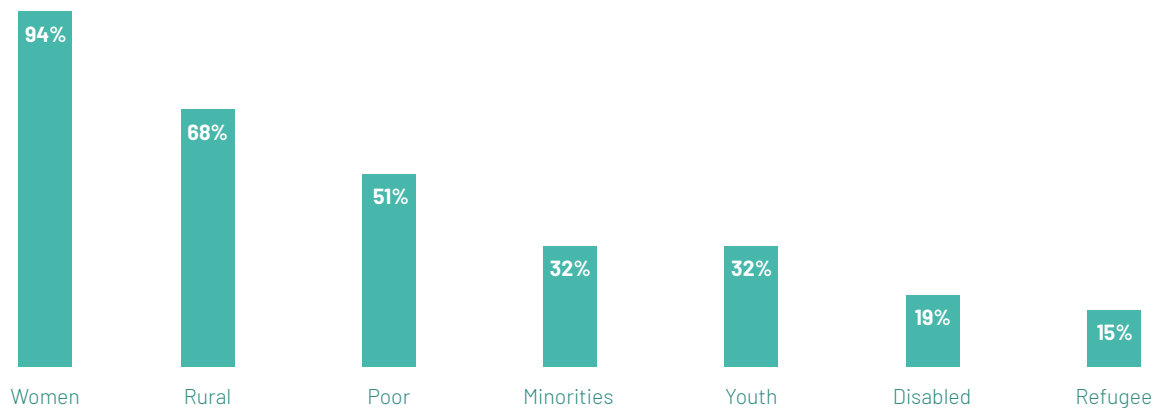
<sup>15</sup> Based on stakeholder feedback collected through interviews.

# Ecosystem Data

## Target Population

About 65% of identified support organisations do not specifically or intentionally target any underrepresented population in the green entrepreneurial ecosystem. For the organisations that do consciously target and recruit entrepreneurs from underrepresented backgrounds, women entrepreneurs are prioritised most often (94%), followed by entrepreneurs in rural/periphery areas (68%) and those living below the poverty line (51%).

Figure 6: Percent of organisations that target entrepreneurs from underrepresented backgrounds



N = 47 organisations (respondents could select more than one)

## Services Offered

In the green entrepreneurial ecosystem, the share of support organisations that provide non-financial support (78%) exceeds those that provide financial support (68%) by ten percent. The gap between financial and non-financial support is less pronounced than in other ecosystems,<sup>16</sup> as most organisations offer both nonfinancial and financial support services.

Figure 7: Percent of organisations that offer financial support vs. non-financial support



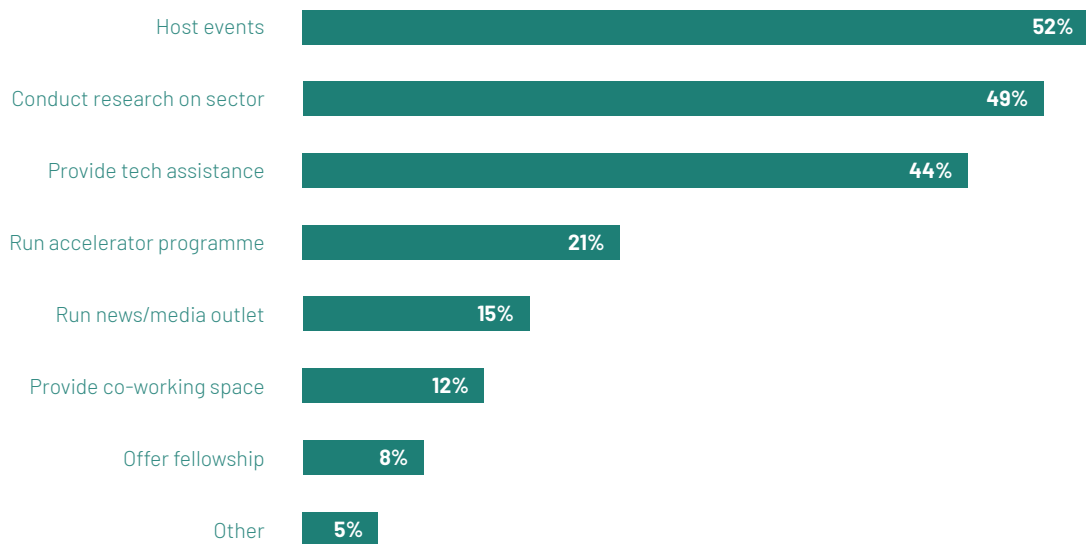
<sup>16</sup> Please see ANDE's snapshots in different countries and regions at <https://ecosystems.andeglobal.org>.

# Ecosystem Data

## Non-financial Support Services

Non-financial support is most commonly delivered in the form of event hosting (52%), research on the sector (49%), and providing technical assistance (44%). Other non-financial support services, such as running news/media outlets, managing an incubator or providing a co-working space, running accelerator programmes, and offering fellowships, are far less available in the ecosystem.

**Figure 8: Percent of organisations by non-financial support type**

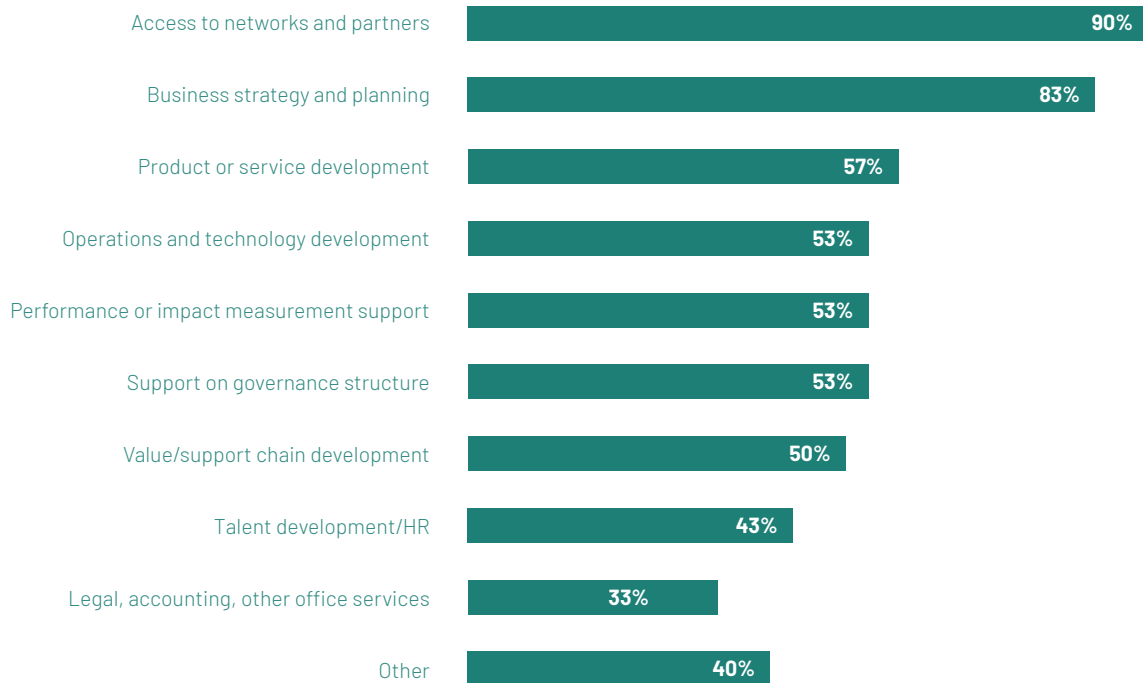


**N = 131 organisations (respondents could select more than one)**

Looking specifically at the types of capacity development support services, most organisations focus on access to networks (90%) and business strategy and planning (83%). Services like talent development/HR, which is critical to attracting and retaining relevant capable staff in SGBs, and provision of legal, accounting, and other office services are the least available to entrepreneurs.

# Ecosystem Data

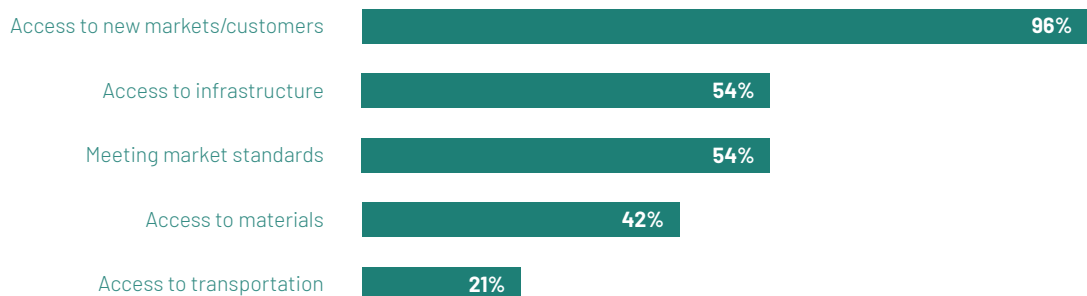
**Figure 9: Percent of organisations by capacity development support type**



**N = 30 organisations (respondents could select more than one)**

Almost all organisations that provide market linkage support focus on helping entrepreneurs access new markets and customers (96%). Roughly half help entrepreneurs access infrastructure and/or assist them in ensuring products meet market standards (54%).

**Figure 10: Percent of organisations by market linkage support offered**

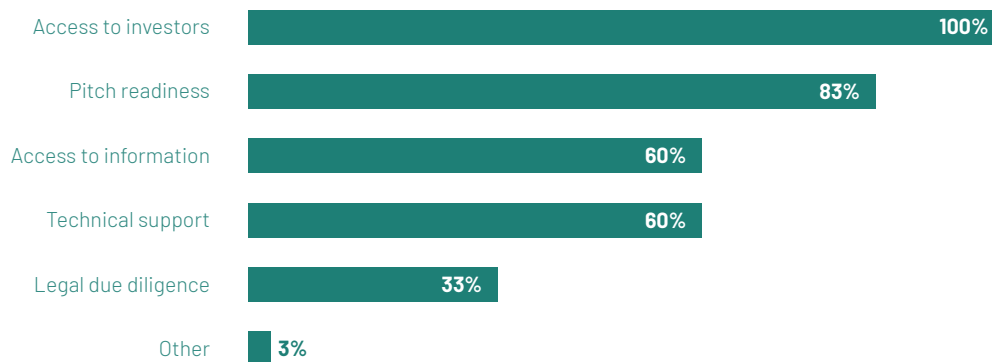


**N = 24 organisations (respondents could select more than one)**

# Ecosystem Data

Access to investors bears significant importance for entrepreneurs, especially for SGBs. SGBs' capital needs change depending on the stage of venture, and having access to a diverse network of investors who offer different investment instruments and ticket sizes can ensure the continuous growth of a business. In this context, it is encouraging that 100% of support organisations that reported providing investor linkage services offer direct access to investors. Coming in second, over 80% assist entrepreneurs in accessing investment by helping them with their pitch.

**Figure 11: Percent of organisations by investment linkage support offered**

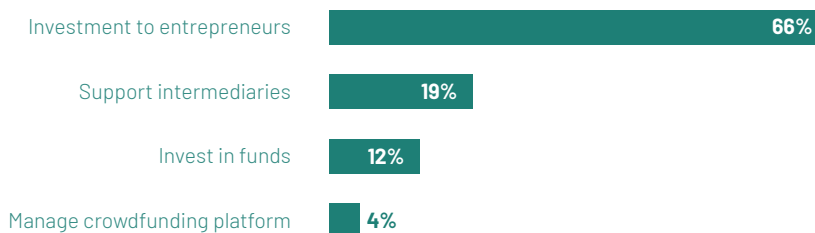


N = 30 organisations (respondents could select more than one)

## Financial Support Services

Nearly 70% of organisations identified in this study lend financial support to the green entrepreneurial ecosystem. Two-thirds make direct investments in entrepreneurs, while the remainder fund other support organisations, invest in funds, or manage a crowdfunding platform, in that order.

**Figure 12: Percent of organisations by target recipient of financial support**

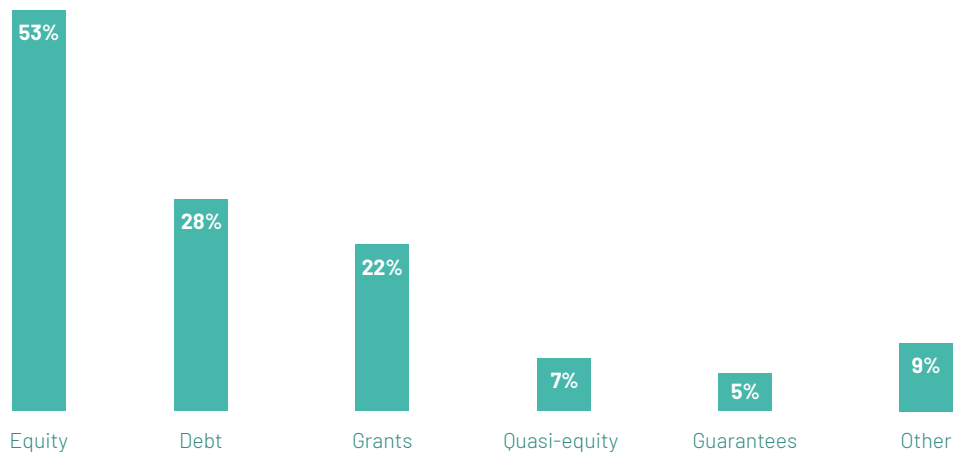


N = 137 organisations (respondents could select more than one)

# Ecosystem Data

Equity is the predominant investment instrument in the green entrepreneurial ecosystem in India (offered by 53% of organisations that provide financial support), followed by debt (28%) and grants (22%). While equity and debt play an important role in growing businesses due to their potential for large ticket sizes, grants – despite their small ticket size – function as an extremely valuable resource for early-stage companies that do not have a proven record of profitability.

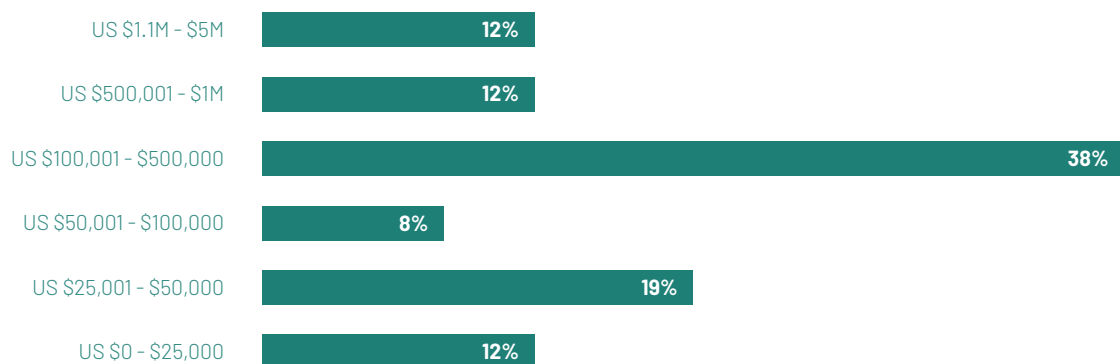
**Figure 13: Percent of organisations by financial instrument offered**



**N = 132 organisations (respondents could select more than one)**

Reflective of the prevalence of commercial capital, ticket sizes provided by financial support providers in India run on the larger side, from US \$100,001 to \$500,000. This illuminates the gap in financial support for idea and start-up-stage companies, critical stages when SGBs need to validate a market-product fit.

**Figure 14: Percent of organisations by ticket size offered**



**N = 26 organisations**

# Ecosystem Data

## Development Goals and Impact Measurement

About 80% of support organisations reported explicitly and intentionally aligning their programmes or activities with at least one of the United Nations Sustainable Development Goals (SDGs). Among those organisations that align with the SDGs, most focus on climate action (58%) and clean energy (53%).

Figure 15: Top five SDGs with which organisations align



N = 38 organisations (respondents could select more than one)

In terms of impact measurement and management (IMM), most support organisations (69%) reported that they track the climate/environmental impact of supported entrepreneurs, with 18% monitoring the impacts of every entrepreneur that they support and 51% tracking only a subset of supported entrepreneurs. About half of support organisations that measure enterprises' climate/environment impacts rely solely on entrepreneurs' self-reported data (52%). Twenty-seven percent of support organisations receive impact data from the entrepreneurs but occasionally audit the data, and the remaining 21% conduct impact measurement themselves.

When it comes to paying for IMM expenses, 76% of organisations pull finances from more than one source. Most reported that they fully or partially rely on their own resources (41%), and a smaller proportion draw resources from entrepreneurs (35%) or donors and funders (32%). The most common challenges for support organisations in conducting IMM include a lack of organisational capacity to perform such work (69%) and their lack of expertise on best practices for IMM (66%). A substantial portion (38%) indicated the cost of IMM as an inhibiting factor as well.

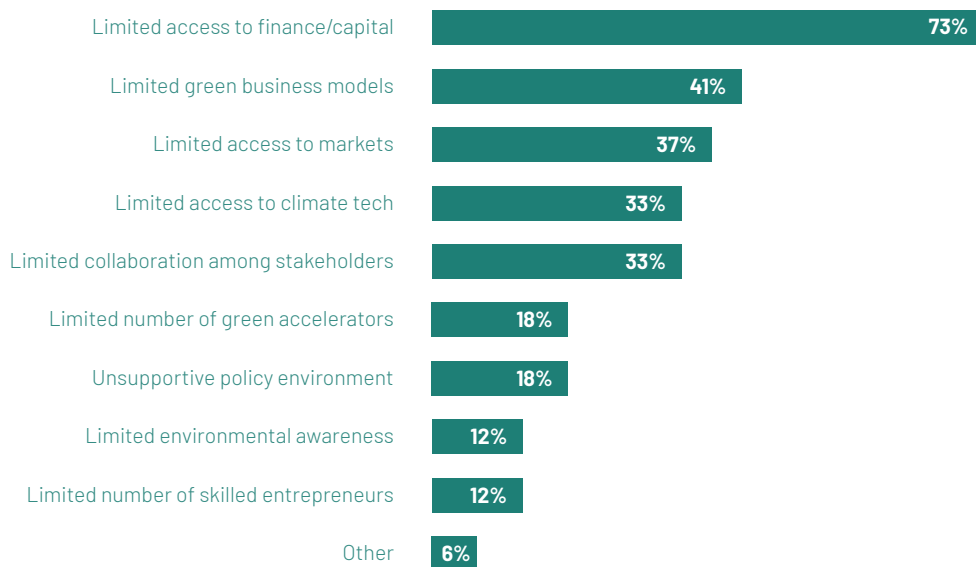


# Ecosystem Data

## Challenges, Opportunities, and Areas for Collaboration

More than 70% of support organisations ranked limited access to financing or growth capital as the number one challenge green entrepreneurs in India are facing. The issue in the Indian green entrepreneurial ecosystem is not the lack of financial support providers, as a large proportion of them (about 70%) provide financial support. Instead, the problem lies with the mismatch between the financing needs of green entrepreneurs and the types of investment instruments and ticket sizes made available by support organisations, an insight that was reiterated in the multiple stakeholder convenings. Other challenges referenced by support organisations include a limited number of effective green business models, difficulty accessing markets, limited collaboration among stakeholders, and limited access to climate technology. However, each was ranked significantly lower than access to finance.

**Figure 16: Top challenges faced by green entrepreneurs in India**



**N = 49 organisations (respondents could select more than one)**

Support organisations referred to improved environmental awareness most frequently when asked about the areas with significant improvement in the last three years (59%). Interestingly, access to financing and growth capital was mentioned as the second most improved area (39%). As India's green entrepreneurial ecosystem has grown fast in the last decade, this is likely reflective of the sheer increase in the number of support organisations that offer financial support.

# Ecosystem Data

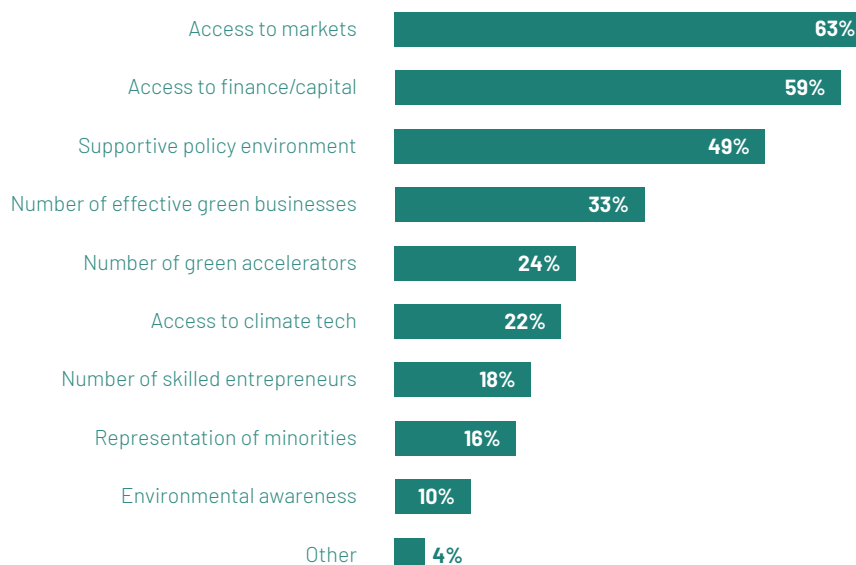
**Figure 17: Most significant improvements in the green entrepreneurial ecosystem in the past three years**



**N = 49 organisations (respondents could select more than one)**

When asked about the areas in need of collaborative action, surveyed support organisations listed improving access to markets (63%), expanding access to finance and growth capital (59%), and creating enabling policy environments (49%). Access to markets covers multiple SGB needs, including initial testing and adoption of solutions as well as forming connections to markets for sale and distribution of goods and services.

**Figure 18: Areas for collaboration**



**N = 49 organisations (respondents could select more than one)**

# Insights and Implications

Based on the data presented in this report and from stakeholder conversations, several key areas emerge for further investigation and collaborative action:



**Insight 1: Access to finance remains a challenge despite recent improvements, and available investment instruments and ticket sizes need to be tailored to entrepreneurs' needs.** The most commonly reported challenge within the ecosystem centres around green entrepreneurs' limited access to finance. Although access to finance in the Indian green entrepreneurial ecosystem has shown a significant improvement in recent years, ventures in their earliest stages still struggle to secure funds. Support organisations need to direct more attention to entrepreneurs in the idea and startup stages and tailor their financial offerings to those seeking small ticket sizes (funding size of US \$20,000 - 50,000), as they constitute a large proportion of green SGBs in India.<sup>17</sup> Stakeholders also noted that investors are more comfortable investing in tech-based business models than others, indicating that more service-oriented SGBs have a particularly hard time securing funding.



**Insight 2: Collaboration between stakeholders is required to improve the enabling policy environment and create a repository of information and knowledge.** Stakeholders pointed out that existing policies for green businesses do not properly address the challenges that ventures in their early stages are facing, leaving a blind spot in the ecosystem. Large corporations and small entrepreneurs face different challenges; hiring and retaining the right talent and paying levies to comply with government regulations can be more burdensome to early-stage ventures than to businesses at scale. In order to elicit government support that lessens the burdens for early-stage SGBs, stakeholders should voice collectively and collaborate with the government in creating an enabling policy environment.



**Insight 3: Financiers and policymakers are often not well-versed in green business models.** Many stakeholders in the ecosystem exhibit a limited understanding of green enterprises and their business models.<sup>18</sup> This lack of knowledge among those in decision-making positions, such as financing and policy-making, hinders the ease of conducting business for green ventures. For instance, unlocking finances from commercial banks is especially hard for early-stage enterprises because loan officers in traditional banks are unfamiliar with green business models. Therefore, stakeholders in the ecosystem need to work together to bridge the knowledge gap, especially for financiers and policymakers.



**Insight 4: Support organisations need assistance for impact measurement and management.** Tracking climate indicators is becoming more and more important as financiers - donors, foundations, and private capital - move towards more investments for which positive social and environmental outcomes can be measured. However, entrepreneurs often lack the know-how to conduct IMM, and the data analysed in this report reveal that many support organisations also do not have in-house human resources and expertise to adequately support entrepreneurs in building out IMM systems. Thus, stakeholders in India need training that would equip them with relevant resources, frameworks, and methodologies. As a starting point, ANDE and the Climate Collective Foundation prepared a [guide on available tools and frameworks for measuring SGBs' climate impact](#).

<sup>17</sup> Based on stakeholder feedback collected through interviews.

<sup>18</sup> Based on stakeholder feedback collected through interviews.



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