Water and Energy for Food (WE4F) Grand Challenge for Development

South and Southeast Asia Landscape Mapping

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Disclaimer

This document was prepared by a team from Intellecap comprising of Mukund Prasad, Neha Kumar, Ajaykumar C P, Anuja Kaushal, Shraddha Kothari, Ankur Seth and Jui Gangan under USAID INVEST, an initiative that works to unlock the power of private capital to drive inclusive growth in countries where USAID works.

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Most enterprises in the WE4F nexus have revenue under USD 500k but anticipate strong revenue growth over the next 1-2 years.

From an internal perspective, enterprises face challenges in raising finance and lack robust business processes to support growth.

From a market perspective, overcoming skepticism of customers to adopt new interventions, lack of customer financing and lack of stable government policy are the key challenges.

In addition to capital, enterprises need support in building market linkages and improving internal governance/compliance processes.

The aggregate funding demand sought by enterprises is USD 375 mn to largely fulfil working capital or growth needs. 2/3 of this funding need is required within the next year with a preference for equity or blended instruments.

59 enterprises have demonstrated scale potential in terms of customers reached.

13 enterprises have a unit cost of less than USD 100 and customer base of more than 5,000 while 38 enterprises have a unit cost of more than USD 100 and customers more than 1,000. Eight enterprises are on a fast-paced growth path to attain the target customer base.

Enterprises co-founded by women have shown growth rates similar to men founded enterprises; however, on average enterprises co-founded by women have greater revenues than wholly men founded enterprises.

70% profiled enterprises are across India, Indonesia, Myanmar, Thailand and Vietnam. Enterprises exhibit a diversity of business models across geographies in line with local challenges, regulatory policies and market opportunities.

66 enterprises plan to expand within south and southeast Asia. 26 enterprises plan to expand to other regions with Africa featuring prominently as a target geography, potentially due to similar technology and socio-economic landscape.
36 Investors
Ticket size range USD 1 - 5 mn

- Most investors prefer having a local presence in the regions they seek to invest in and have multiple fund vehicles either differentiated by geography or type of capital
- Availability of early-stage, small ticket size capital is limited
  - 2/3 of equity investors manage a fund size of USD 5mn-150 mn
  - Access to commercial debt is limited by need for collateral, need for track record and pricing
- Grant capital can play a catalytic role in accelerating risk capital flow
  - Key mechanisms include blended finance, risk reduction tools such as first loss cushions / credit guarantees, foreign exchange risk management and deepening pool of early stage investors
  - Investors also mentioned that grant capital can increase investibility of enterprises by reducing pre-investment costs (due-diligence costs, bespoke pre-investment capacity building)
- Investors do not have an explicit gender lens investing (GLI) focus. For most investors, the objective is limited to either not discriminate on the basis of gender or to have a more gender balanced investment team

29 Business Service Providers
~ 60% BSPs provide technical assistance

- Services offered by Business Service Providers (BSPs) include capacity building, finance and compliance, branding and marketing, investment readiness, business advisory etc.
- BSPs face sustainability challenges as most enterprises are not able to pay service related fees. In models where revenue is linked to success, BSPs are impacted by lumpy nature of cash flows
  - Intermediaries, such as the Hub, can play a critical role in aligning enterprise support needs with BSP sustainability considerations by controlling the scope and depth of interventions
  - Innovative service delivery mechanisms combining grant support with pay for performance mechanisms can be leveraged to address the sustainability challenge
- From an investment support perspective, BSPs highlight that most entrepreneurs lack the ability to articulate their investment need
- From an enterprise growth perspective, enterprises lack organizational bandwidth to absorb capital and grow, have ineffective governance structures to meet external investor needs and capability to track and report ESG impact metrics
Executive Summary – Recommendations

**Investor needs**
- Pipeline of investment ready enterprises
- Reliable information about enterprises
- Reduce due diligence costs
- Financial structures to reduce cost of capital

**Enterprise needs**
- Access to capital
- Scale-up and expansion support
- Support for market expansion
- Better talent for scale-up of operations

**BSP needs**
- Sourcing enterprises and identifying their support needs
- Sustainable revenue model
- Expectation alignment between BSP and enterprises

**Regional Innovation Hub**

**Brokering unit**

**Increase flow of risk capital**
- Support blended finance mechanisms to catalyze long term capital flow
- Deepen pool of investors at early stage
- Institute mechanisms to manage foreign exchange risk
- Incentivize banks to channel local debt

**Increase investibility of enterprises**
- Bespoke TA to address gaps identified by investors
- Mechanism to share due diligence findings

**Technical assistance unit**

**Facilitate ecosystem building**
- Lay groundwork for gender inclusive ecosystem
- Leverage technology to break down information barriers
- Advocate stable government policies

**Facilitate enterprise building**
- Design TA services with strong outcome linkages
- Design TA programs that encourage entrepreneurs to co-pay for services received
- Enhance governance and financial compliance processes in enterprises
- Support scaling up of entrepreneurs by designing interventions customized for local ecosystems
Objective, methodology, and nexus
Project objective (South / South East Asia landscape analysis)
Intellecap was mandated to aid in the rapid operationalization of the proposed Asia Regional Innovation Hub by identifying potential WE4F enterprises, aligned investors and BSPs in South / South East Asia

The Water and Energy for Food (WE4F) Grand Challenge for Development (GCD) will scale innovations that impact the nexus of food, water & energy primarily through the private sector to increase the sustainability of agricultural food value chains in developing countries and emerging markets – with a particular focus on the poor, youth and women.

### Intellecap mandate

- Identify and profile minimum 80 enterprises that operate at WE4F nexus in the focus countries
- Identify and profile minimum 30 investors interested in investing in enterprises at the nexus
- Identify and profile business service providers (BSP) supporting enterprises at the nexus
- Map enterprises to investors and business service providers

### Focus countries

- Bangladesh
- Bhutan
- Brunei
- Cambodia
- Indonesia
- India
- Myanmar
- Nepal
- Philippines
- Singapore
- Sri Lanka
- Thailand
- Laos
- Malaysia
- Timor Leste
- Vietnam
Sourcing methodology (1/2)
Intellecap used a three-phased approach to identify, shortlist and collect information on WE4F enterprises in South / South East Asia

Defining the landscape
- The project team carried out detailed secondary research to create a better understanding of WE4F nexus
- The research was combined with perspectives of USAID and INVEST team to define WE4F nexus as comprising of Water for Food, Water, Energy for Food, Energy for Food and Food for Energy intersections
- The intersections were broken down into six themes and 14 sub-themes to define the scope of inclusion and also identified specific exclusion criteria in conjunction with USAID

Development of a comprehensive list of enterprises using Intellecap's previous engagements and leveraging partner recommendations
- Our team carried out a detailed review of Intellecap’s database of entrepreneurs in Asia to create a list of enterprises that may be potentially relevant to the WE4F nexus
- We leveraged the strength of our partner network (investors, BSPs, ecosystem coordinators etc.) across the region to source WE4F enterprises
- The team also utilized the secondary research (papers, articles, websites etc.) carried out to define the landscape to identify entrepreneurs who may be relevant to the nexus
- We also created a dedicated microsite that provided information about the program and encouraged enterprises to directly respond to an online questionnaire to assess WE4F fit

Analysis and validation of relevant enterprises
- Basic enterprise profiles were received through microsite, e-mail and partner recommendations
- The team reviewed the information received to assess relevance to nexus definition (Filter level 1)
- For all enterprises that were relevant, we conducted detailed interviews to obtain a better understanding of their business models, financial status, capital needs and business support needs (Filter level 2)
- A numerical break down of the sourcing process is provided in the next slide
Sourcing methodology (2/2)
The two-level filtering approach narrowed the enterprise pipeline from a long list of 448 enterprises to 100 relevant enterprises; we also carried out detailed interviews with 36 investors and 29 BSPs.

**Enterprise Sourcing**

| 169 | Intellecap research |
| 198 | Partner networks |
| 81  | Microsite responses |

Filtered enterprises aligning with the WE4F nexus (Filter level 1)

| 303 | Enterprises aligned to WE4F nexus that were encouraged to provide more information about their business model, financial status, capital needs and growth plans |

| 151 | Number of enterprise responses received |
| 152 | Non responsive enterprises |

Each enterprise sourced was interviewed to gather additional information / clarification and filtered based on its relevance to the nexus (Filter level 2)

| 100 | Nexus relevant enterprises profiled for the hub |
| 51  | Non relevant enterprises¹ |

| 59  | Relevant enterprises with potential to scale |
| 41  | Relevant enterprises not meeting size criteria |

¹ e.g. not a for profit enterprise, enterprise in pilot stage of operations, clean cook-stove enterprises, water purification enterprises, enterprises having no linkage to food etc.

**Investor and BSP Sourcing**

Interviews were conducted with investors and BSPs to gain insights on:
- types of investment products / services available and ticket sizes
- type of support provided
- geographical distribution and capabilities to support the enterprises
- engagement terms (duration of support / investment horizon etc.)

| 36 | Investors interviewed |
| 29 | BSPs interviewed |

Number of enterprise responses received: 151
Non relevant enterprises: 51
Relevant enterprises with potential to scale: 59
Relevant enterprises not meeting size criteria: 41
## Breaking down the nexus (1/2)

Intellecap identified 6 themes and 14 sub-themes under 4 nexus intersections that capture the gamut of entrepreneurial innovations at the WE4F nexus:

### Water for Food (WF)

**THEME 1: Innovations in food production to reduce water usage**

- **Sub-theme 1:** Technology for efficient use of water in food production
  - Precision agriculture / IoT / Remote sensing / Weather Forecast / Drones / AI / ML
  - Hydroponics / Aquaponics / Aeroponics / Vertical Farming

- **Sub-theme 2:** Sustainable / efficient food production
  - Aquaculture
  - Algae / spirulina production
  - Marine fisheries

### Water, Energy for Food (WEF)

**THEME 2: Efficient use of water resources for food production**

- **Sub-theme 1:** Irrigation technology (including micro-irrigation)

- **Sub-theme 2:** Waste-water re-use

- **Sub-theme 3:** Water storage / harvesting

- **Sub-theme 4:** Water desalination

**THEME 3: Sustainable use of energy and water on farm**
Intellecap identified 6 themes and 14 sub-themes under 4 nexus intersections that capture the gamut of entrepreneurial innovations at the WE4F nexus.

**Energy for Food (EF)**

**THEME 4: Energy innovations for food processing & logistics**
- **Sub-theme 1:** Solar mini/micro grid-linked food processing applications
  - Solar-drying
- **Sub-theme 2:** Energy efficient logistics for food preservation
  - Cold chains
- **Sub-theme 3:** Storage and warehousing

**THEME 5: Food production with efficient energy use**
- **Sub-theme 1:** Solar cropping
- **Sub-theme 2:** Clean cooking

**THEME 6: Leveraging food waste for energy**
- **Sub-theme 1:** Biogas production
- **Sub-theme 2:** Pellet production
- **Sub-theme 3:** Compost from waste

**Food for Energy (FE)**
Enterprise analysis
Snapshot of enterprises

100 enterprises operating at the WE4F nexus are profiled. Most enterprises in the WE4F nexus have revenue under USD 500,000. To facilitate capacity building and scale-up for the enterprises, support is needed in establishing market linkages, accessing new markets, raising stage appropriate capital and in navigating the business environment.

- **India** has the highest concentration of profiled enterprises followed by **Indonesia, Myanmar, Thailand and Vietnam** together making for 70% of the profiled enterprises.

- ~75 enterprises generate **up to USD 500k** in annual revenue; over half of these enterprises are likely to double their revenue in one to two years. Enterprises with a revenue under USD 100k and over USD 1mn expect to double their customer base within the next 1-2 years.

- From an **internal perspective**, enterprises face challenges in raising finance and lack robust business processes to support growth. From a **market perspective**, adoption of new modes of doing business by customers, customer financing and lack of stable government policy are the key challenges.

- 66 enterprises plan to **expand within south and south-east Asia**. There are 26 enterprises that plan to **expand globally** with Africa featuring prominently as a target geography, potentially due to similar technology and socio-economic landscape.

- The aggregate funding demand sought by enterprises is **USD 375 mn to largely fulfil working capital or growth needs**. 2/3 of this funding need is required within the next year with a preference for equity or blended instruments.

- 13 enterprises have a unit cost of **less than USD 100** and customer base of more than 5,000 while **38 enterprises** have a unit cost of **more than USD 100** and customers more than 1,000. **Eight enterprises** are on a fast-paced growth path to attain the target customer base.

- **Water for Food nexus is the dominant nexus** in terms of number of enterprises profiled. This nexus also has the most number of smaller size, tech-oriented ventures with revenues under USD 100k that are growing rapidly (>40%). Enterprises in this nexus provide innovative solutions to enable farmers to enhance yields, reduce costs and increase resilience.
Enterprise operations

We4F enterprises in the region deploy a range of business models across the 4 nexus intersections. These models include a good mix of cutting edge technology and deployment of tested solutions.

- Over 50% of enterprises are in the WF nexus. Enterprises in the WEF nexus account for about 20%. The remaining enterprises are evenly split between EF and FE nexus.
- The most common business models include IoT based smart farming solutions, solar irrigation pumps, solar cold storage, solar dryers, and biogas digesters to produce bio fertilizers.
- Only 1/4 of the enterprises operate beyond the country of origin.
- While most enterprises are currently focused on expanding within their country of origin, enterprises are also cognizant of the opportunity to expand to other countries.

* - Investment demand in Bangladesh is skewed by one enterprise that seeks to raise USD 64 mn.
Enterprises that meet size criteria

Analysis of the enterprises on the basis of their unit cost and customers reached indicate that 59 have the potential to scale in size and across countries.

**Enterprises that have shown scale potential** – these enterprises have a unit product cost of <USD 100 and have reached >5,000 customers; or they have a unit product cost of >USD 100 and have reached >1,000 customers.

**Enterprises that are on fast growth path** have unit cost of <USD 100 and customers reached >=2,500; or enterprises that have a unit cost >USD 100 and customers reached >=500.
Enterprise snapshot

2/3 of the 100 enterprises generate less than USD500k in annual revenue; over half of these enterprises are likely to double their revenue in one to two years

Most enterprises are small in size and about half of the enterprises are growing at more than 40%

Most of the aggregate funding demand is required by enterprises in less than a year’s time

- About 45% of the enterprises have raised funds through a combination of equity, debt and grant. The enterprises that have raised funds through only equity or only debt are about 25% each and the remaining enterprises have raised capital through grants.
- Equity is the most sought instrument by the enterprises under USD 500k revenue, which is in contrast to those in the USD 1 mn+ revenue segment, where blended finance is the preferred instrument.
- Only larger enterprises (> USD 1 mn in revenue) are able to estimate some ESG parameters. These relate to improvement in economic outcomes of stakeholders, empowerment of women and environmental impact such as savings in water and reduction in CO₂ emissions.

Note 1: 5 enterprises did not respond, 3 enterprises operated less than a year; n=91
Note 2: 1 enterprise did not specify funding needs

Note: All subsequent analysis excludes Agrocrops as it has a revenue of USD 3bn
Enterprise funding demand

The aggregate funding demand for 100 enterprises is USD 375 mn; in addition to the ~USD 173 mn capital deployed till date

End-use of funds is towards funding growth and meeting working capital needs

- **Utilization of funding**
  - Capex: 25%
  - Growth capital: 34%
  - R&D: 12%
  - Working Capital: 29%

- **Capital need by funding type**
  - Blended: 41%
  - Equity: 35%
  - Debt: 8%
  - Grant: 16%

- **Median ticket size (USD mn)**
  - Blended: 1.25
  - Equity: 1.00
  - Debt: 0.75
  - Grant: 2.00

- **Enterprises seek blended financing to reduce their overall cost of capital**

- **Note**: 4 enterprises did not specify type of funding needed and use

- **Enterprises intend to raise equity to prepare for growth** – most enterprises indicated deployment of equity to fund capital expenditure requirements and also to invest in enhancing sales and distribution capacity

- **Lower cost blended capital** financing is sought by enterprises to meet growth oriented working capital needs and for supporting R&D

- **Grant capital** is sought largely for working capital needs, followed by an equal need for capital expenditure and growth capital. Interestingly, grant is sought by at least 10% of the enterprises across all revenue segments but no more than 25% of the enterprises need it in each segment

- **Enterprise stated demand for debt is the lowest** – this is reflective of the lack of availability of collateral free debt
Enterprise expansion plans
Most enterprises perceive an opportunity in expanding to other developing countries with a similar socio-economic and technology ecosystem, especially in South/South East Asia and Africa

<table>
<thead>
<tr>
<th></th>
<th>Water for Food</th>
<th>Water, Energy for Food</th>
<th>Energy for Food</th>
<th>Food for energy</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue (USD) -&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-100k</td>
<td>17</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>27</td>
</tr>
<tr>
<td>100-500k</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>500-1.5mn</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Over 1.5mn</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

- **Technology solutions** such as farm sensors, solar dryers, and hydroponics/aquaponics have the **highest potential for replication**
- The **biggest barriers** to enterprise expansion plans are **limited access to funding**, difficulty in **building market linkages** in new markets and **customizing solutions** that address needs of different geographies

"We will utilize the next round of funding to scale-up to new markets, and reach target customers in the international markets” - Indian enterprise in WF nexus

"The enterprise plans to expand its operations in Africa. It is already working opportunistically with clients in Mali, Nigeria, Ethiopia and Rwanda” – Indian enterprise in EF nexus

"We aim to utilize 40% for regional expansion, 30% for development of smart-farm integrated system(new product), 30% for operation” – Myanmar enterprise in WF nexus

"We will use the next round of capital funding to plan for expansion to regional markets and developing new businesses” – Vietnam enterprise in WEF nexus
Geographical diversity in enterprise operations
Enterprises exhibit a diversity of business models across geographies in line with local challenges, regulatory policies and market opportunities

- Enterprises leveraging technology for **efficient consumption of water** are highest in number and are located across all the 12 countries indicating a growing trend towards **technology adoption**

- Enterprises that engage in **limiting water and energy consumption** for sustainable agricultural practices are concentrated in India, Bangladesh, Thailand and Vietnam. These enterprises deploy solar irrigation pumps and climate controlled systems such as greenhouses. Limited conventional resources and conducive regulatory policies play a key role in this

- Enterprises that offer **energy efficient solutions** for processing agricultural produce are based mainly in Indonesia, and India. These enterprises provide solar dryers and cold-storages. The lack of cold chain and processing infrastructure in these two countries along with the volume of agriculture produce are enabling factors for such enterprises

- Enterprises that make optimum use of food and agricultural waste to reduce energy consumption in **Food for Energy** are mainly located in India and Myanmar

- Enterprises in **South Asia are relatively bigger** in size. 70% of the total enterprises with revenues over $1.5 mn are in South Asia. All of these enterprises plan to grow by investing in R&D to expand their product basket

- Nearly 80% of enterprises in South East Asia have revenues lower than USD 500k. These enterprises plan to grow by providing financing options such as **lease-to-own models and MFI financing** to their customers
Geographical diversity in enterprise operations
A key barrier to scale is the absence of adequate financing options for enterprises and their customers

- Enterprises located in large countries such as India and Indonesia consider market penetration as their main challenge. Enterprises in these countries cite two drivers for investments
  - Need to invest in supply chain management due to inadequate infrastructure
  - Need to invest in differentiated models of customer outreach and marketing strategies to cater to the diversity in customer demographics
- Enterprises in emerging economies such as Bangladesh and Sri Lanka consider financing to be their biggest challenge. These enterprises not only find it difficult to raise adequate investment, but are also constrained by lack of customer financing alternatives
- Enterprises in frontier markets such as Nepal and Myanmar cite regulatory and other ecosystem challenges such as lack of technology support providers as their key barriers to scale

<table>
<thead>
<tr>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprises located in large countries such as India and Indonesia consider market penetration as their main challenge. Enterprises in these countries cite two drivers for investments</td>
</tr>
<tr>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Funding requirement</th>
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</thead>
<tbody>
<tr>
<td>• For enterprises in South Asia, the median funding requirement is USD 1.5 mn. These Enterprises mainly seek equity financing</td>
</tr>
<tr>
<td>• For enterprises in South East Asia, the median requirement is USD 1 mn. These enterprises seek a mix of equity, debt and grant</td>
</tr>
</tbody>
</table>
Enterprise challenges

Enterprises need support establishing market linkages, accessing new markets, raising stage appropriate capital and navigating the business environment

<table>
<thead>
<tr>
<th>Customer related challenges</th>
<th>Financing challenges</th>
<th>Ecosystem challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Customers, especially farmers, are skeptical of adopting proposed interventions due to upfront investment needs and the time lag between purchase of product and accrual of benefits to the farmers</td>
<td>- Difficulty in identifying investors that share their vision is a key challenge faced by a number of enterprises especially those that need to drive behavior change of customers</td>
<td>- Infrastructure gaps in last mile logistics increases capital intensity of business</td>
</tr>
<tr>
<td>- Need for increased investment in a direct sales force to build confidence in the reliability of product / service puts additional financial pressure on the enterprises</td>
<td>- Absence of collateral with asset light enterprises in WEF and WF nexus intersections limits the availability of debt for such enterprises</td>
<td>- Limited availability of customer financing solutions restricts uptake</td>
</tr>
<tr>
<td>- Government subsidies and regulatory barriers to entry distort market behavior by limiting willingness of customers to engage with private players even if they offer better quality service</td>
<td>- Lack of adequate financial data records is a major deterrent for most early stage enterprises</td>
<td>- In addition, traditional intermediaries provide farmers with timely financial and non-financial support that enterprises find difficult to replicate</td>
</tr>
<tr>
<td>- Early stage debt capital, if available, has a very high interest rate</td>
<td>- Early stage debt capital, if available, has a very high interest rate</td>
<td>- Lack of stable government policy to support technology based solutions restricts national expansion</td>
</tr>
</tbody>
</table>
Enterprise gender analysis

Enterprises co-founded by women have shown growth rates similar to men founded enterprises; however on average enterprises co-founded by women have higher revenues than wholly men founded enterprises.

- Over 50% of enterprises co-founded by women recorded a revenue growth of more than 30% in the previous financial year. This compares favorably to enterprises founded by men - 55% of enterprises founded by men grew at more than 30%
- Average revenue of women founded enterprises is USD 1 mn while for men founded enterprises average revenue is USD 730,000
- Most number of women co-founders or in leadership positions are in Malaysia, Vietnam, India, Indonesia, Myanmar and Nepal
- The women participation in employment among enterprises profiled is about 40%
- Nexus related insight: Over 80% of Food for Energy and Water, Energy for Food enterprises have women in leadership positions. Over 60% of Energy for Food enterprises a women co-founder
Enterprise analysis – Insights from the nexus
WF and WEF enterprises provide solutions to increase yield while enhancing water/energy efficiency; EF and FE enterprises provide solutions to enhance shelf life and convert food waste to energy/bio-fertilizer.

<table>
<thead>
<tr>
<th>Description of nexus</th>
<th>Water for Food (WF)</th>
<th>Water, Energy for Food (WEF)</th>
<th>Energy for Food (EF)</th>
<th>Food for Energy (FE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reduce the need for water or enable efficient use of water during the pre-harvest and harvest phases</td>
<td>Enable sustainable use of energy and water on farm during pre-harvest and harvest phases</td>
<td>Reduce energy consumption in carrying out food processing activities in the post-harvest phase</td>
<td>Reduce energy consumption and improve soil fertility in pre-harvest and harvest phases</td>
</tr>
<tr>
<td>Business Models</td>
<td>Business models include</td>
<td>Business models include</td>
<td>Business models include</td>
<td>Business models include</td>
</tr>
<tr>
<td></td>
<td>• drip irrigation systems</td>
<td>• solar irrigation pumps</td>
<td>• solar dryers</td>
<td>• processing food waste to produce bio fertilizers</td>
</tr>
<tr>
<td></td>
<td>• rainwater harvesting</td>
<td>• smart farms</td>
<td>• solar cookers</td>
<td>• processing of food using energy produced by burning agricultural waste at point of generation</td>
</tr>
<tr>
<td></td>
<td>• hydroponics</td>
<td>• climate controlled food production systems such as greenhouses</td>
<td>• solar cold storage</td>
<td>• generating feed from agricultural waste for aquaculture</td>
</tr>
<tr>
<td></td>
<td>• aquaponics</td>
<td>• solar net-metering solutions</td>
<td>• environment monitoring systems (temperature, humidity) for better food storage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• IoT based soil and crop monitoring</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Indicative Examples</td>
<td>• Aeroroots, Nepal</td>
<td>• Solargao, Bangladesh</td>
<td>• Natural Farm Fresh, Myanmar</td>
<td>• PADCO, Vietnam</td>
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<td></td>
<td>• Mitra Sejahtera Membangun Bangsa, Indonesia</td>
<td>• Gham Power, Nepal</td>
<td>• TESSOL, India</td>
<td>• Husk Power, India</td>
</tr>
</tbody>
</table>
Enterprises are at various stages of growth with significant variation in minimum and maximum revenue; average revenue is comparable across all 4 nexus.

**WF**
- Revenue range: USD 150k to 7 mn
- Average revenue: USD 737k
- Loss-making, 31%
- Profitable, 30%
- Break-even, 39%
  - n = 53

**WEF**
- Revenue range: USD 10k to 15 mn
- Average revenue: USD 1.2 mn
- Loss-making, 22%
- Profitable, 30%
- Break-even, 48%
  - n = 21

**EF**
- Revenue range: USD 5.2k to 5.5 mn
- Average revenue: USD 690k
- Loss-making, 23%
- Profitable, 31%
- Break-even, 46%
  - n = 13

**FE**
- Revenue range: USD 20k to 7.2 mn
- Average revenue: USD 1 mn
- Loss-making, 15%
- Profitable, 54%
- Break-even, 31%
  - n = 13

**Enterprises country of origin**
- India
- Indonesia
- Sri Lanka
- Myanmar
- Thailand
- Bangladesh
- Vietnam
- Philippines
- Thailand
- Myanmar
- Nepal
- Cambodia

**Profitability status**
- Profitable, 30%
- Profitable, 31%
- Profitable, 30%
- Profitable, 31%
- Profitable, 54%
## Challenges faced

Enterprises across all nexus highlight customer behaviour change as the main challenge. As a result, they invest heavily in on-ground business development activities.

<table>
<thead>
<tr>
<th>Customer acquisition</th>
<th>Enterprise financing</th>
<th>Customer financing</th>
<th>Regulatory</th>
<th>Technology development</th>
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</table>

- Access to finance, customer behaviour change and regulatory challenges are common across the nexus. **In addition**
  - WF enterprises cite **R&D investments and challenges in achieving success thereof** as a key business challenge
  - FE enterprises face **supply chain challenges in sourcing and maintaining a stock of waste** to be converted in energy / bio-fertilizer
  - EF enterprises cite **supply chain challenges in optimizing manufacturing cost of product** as a key challenge (especially in the context of competition from China)
  - WEF Enterprises highlight **talent related challenges** and also **lack of robust pay as you go mechanisms** as a barrier to increasing customer adoption

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- "The enterprise needs to invest heavily in marketing expenses including print publicity, demonstration units, farmer meetings.” – Indian enterprise in FE nexus
- "Farmers, though interested, are unable to afford solar irrigation kit because of the high initial investment.” – Bangladesh enterprise in WEF nexus
- "Access to low cost capital is a key challenge.” – Indian enterprise in EF nexus
- "The biggest challenge is volatile government policies for agriculture sector, which involves 50-60% population, and accounts for 5-10% of GDP.” – Thailand enterprise in WEF nexus
Support requirements
Enterprises prioritize business advisory and technical assistance; however awareness about need for investment readiness / brokering support seems to be lacking

<table>
<thead>
<tr>
<th>Business / technical assistance</th>
<th>WF</th>
<th>WEF</th>
<th>EF</th>
<th>FE</th>
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<tbody>
<tr>
<td>Legal and tax</td>
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<tr>
<td>Investment readiness support</td>
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<tr>
<td>Technology support</td>
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</table>

- Business and technical assistance support
  - WF, EF and FE enterprises seek technical assistance support on technology validation & cost optimization
  - WEF enterprises seek assistance in identifying the right customer segments, marketing & branding support
  - WE4F enterprises identify regulatory compliance as a key challenge and actively seek support for the same

- To scale business operations, enterprises need financing support at two levels
  - First is internal working capital financing to manufacture / procure products, create distribution infrastructure, invest in manpower and behaviour change initiatives
  - Second is financing to fund product acquisition by consumers

“There is need to convince investors that impact sectors can also bring stellar returns.” – Indian enterprise in FE nexus

“It is difficult to find the right venture capital provider who can collaborate with the enterprise to empower women and local community.” – Indonesian enterprise in EF nexus

“Amongst high political risk, high currency risk, and high payment risks, it is difficult to prove the robustness and resilience of the business model.” – Myanmar enterprise in WF nexus

“The enterprise needs to improve its data reporting before the next fund raise.” – Indonesian enterprise in WEF nexus
Investment requirements

Enterprises in WF and WEF nexus prefer equity, while those in EF and FE prefer low cost blended finance and grants.

- **WF**
  - Preferred source of funding: Equity
  - Investment range: **USD 150k to 10 mn**
  - Median: **USD 1 mn**

- **WEF**
  - Preferred source of funding: Blended
  - Investment range: **USD 500k to 10 mn**
  - Median: **USD 2 mn**

- **EF**
  - Preferred source of funding: Blended
  - Investment range: **USD 100k to 4 mn**
  - Median: **USD 1 mn**

- **FE**
  - Preferred source of funding: Blended
  - Investment range: **USD 70k to 8 mn**
  - Median: **USD 1 mn**

- **80% of WE4F enterprises have articulated an investment need in the range of USD 100k to 10 mn**

- **Equity is the preferred source of funding for enterprises in WF and WEF nexus.** Most of these are technology based/ asset light companies with higher working capital requirement as compared to investments in fixed assets. Consequently, these enterprises do not have collateral to access debt.

- **Blended finance is the preferred source of funding for enterprises in EF and FE nexus.** Most of these enterprises want to access low cost capital for increasing production capacity and rapid scale-up.
Investor analysis
Investors support a variety of innovative business models by providing them with growth capital. They are cognizant of gender lens investing (GLI) but do not have an explicit GLI focus. They recognize the role that can be played by blended finance, guarantee mechanisms and grant capital in deepening capital flow to early stage enterprises

- Investors have **multiple fund vehicles** either differentiated by **geography** of operations or **type of capital** (grant or debt or equity) to comply with local regulations

- Majority of the investors offer equity investments in the **ticket size ranging between USD 1 to 5 mn**. This indicates that availability of small ticket early stage capital is limited. Access to early stage debt capital is even more limited with **most traditional debt providers insisting on collateral**

- Most investors prefer having a **local presence in regions of operations** – to better manage deal sourcing and also optimize costs in post-investment monitoring. Investors with a multi-country mandate but with no local presence tend to follow **lead of local investors**. Such investors are more willing to **collaborate on due diligence and sharing information**

- **Delays in investment** take place due to several challenges at **enterprise level** (such as lack of governance, inadequate maintenance of financial information) and **ecosystem level** (such as lack of bespoke TA services to address gaps identified by investors, time required for due diligence and lack of trusted information sources)

- Most investors **do not follow gender lens investing**. Exceptions are Patamar Capital, SEAF Women’s Opportunity Fund, C4D and MEDA. Other investors plan to be gender friendly by investing in **women owned enterprises**, or by having **women in leadership** roles in their teams

- To **accelerate risk capital flow**, investors identified **blended finance**, risk reduction tools such as **first loss cushions / credit guarantees**, management of **foreign exchange risk** and deepening the **pool of early stage investors** as key mechanisms. To increase the **investibility** of enterprises investors supported grant funded bespoke TA to address investment gaps and mechanisms to **share due diligence findings**

- Investors and ecosystem players should **help enterprises in their growth journey (growth hacking)** and not just focus on governance
Distribution of types of investors, investment instruments and nexus preference

Equity and structured debt are common investment instruments as many early stage enterprises do not have collateral for debt financing; several debt funds offer mezzanine products that link returns to growth.

Investors have multiple fund vehicles either differentiated by geography of operations or type of capital (debt or equity) to comply with local regulations in different countries. About 72% of the funds offer equity capital, 23% offer debt and 5% offer grant capital.

Nexus preference of investors

NOTE: ‘n’ is >36 because several investors invest in more than one nexus.
Geographical focus of investors

Presence of innovative business models, sound entrepreneurial culture, conducive and stable regulatory environment and robust support ecosystem influence investor decision to set-up base

Investor presence is concentrated in a few geographies
- India, Indonesia, Singapore, Myanmar and Philippines are investor hot-spots of investor presence in South and South East Asia
- Limited investor presence and/or activity in Timor Leste, Brunei and Bhutan

Investors with global mandate focus on a few countries in South and South East Asia
- FMO focuses on India and Philippines
- AquaSpark has made investments in Indonesia
- AddVentures is present in Thailand

"Focus on low income segment (earning < USD 10/ day) is one of the primary considerations while considering an enterprise for investment." – Leading impact investor from India

"We need support in sourcing enterprises from remote locations." – Investor from Myanmar

"The entrepreneurial ecosystem in Thailand is not as great as in US or Israel." – Angel investor from Thailand
Fund size, sourcing and enterprise assessment

Fund economics dictate that smaller fund sizes are more difficult for fund managers to sustainably manage; the corollary of bigger funds managed is an increase in investment ticket size.

Investors acknowledge that availability of early stage capital is limited. Investors rely on three broad strategies to gain access to high quality entrepreneurs.

- Investors prefer **having local teams on the ground**
  - This enables them to be connected with high potential entrepreneurs at an early stage and also optimize costs in post-investment monitoring
  - Investors with a multi-country mandate (no local presence) tend to **follow lead of local investors**, and collaborate on due diligence

- Investors place **a premium on proprietary sourcing mechanisms** to optimize their time and resources on upfront due diligence
  - In its debt portfolio, an **investor with global mandate** leverages customer base of financial institutions and for equity, a network of financial advisors inform about prospective enterprises that it can invest in
  - An **investor from Indonesia** runs its own **incubator / accelerator programs**
  - A **Netherlands based investor investing in Nepal and Myanmar** has its own ‘Impact Program’, which helps build a pipeline

- Investors rely on trusted intermediaries including **auditors, financial firms** to act as gate keepers and pass on only those entrepreneurs who meet basic requirements
  - >75% investors **assess ESG parameters** during investment
  - Lack of governance mechanisms and financial record keeping processes in enterprises is the biggest challenge for investors during assessment

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**Total fund size of investors**

<table>
<thead>
<tr>
<th>Fund Size</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Upto 5 mn</td>
<td>14%</td>
</tr>
<tr>
<td>5 to 50 mn</td>
<td>31%</td>
</tr>
<tr>
<td>50 mn to 150 mn</td>
<td>28%</td>
</tr>
<tr>
<td>More than 150 mn</td>
<td>5%</td>
</tr>
<tr>
<td>Did not disclose</td>
<td>22%</td>
</tr>
</tbody>
</table>

**Sourcing methodology of investors**

<table>
<thead>
<tr>
<th>Sourcing Methodology</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network / Referrals</td>
<td>60%</td>
</tr>
<tr>
<td>Internal Deal Sourcing</td>
<td>27%</td>
</tr>
<tr>
<td>Conference / Events, 13%</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** ‘n’ is >36 because several investors use more than one channel for sourcing
Regional Insights - Investors

Investors profiled showed diversity across capital instruments, challenges faced and service needs

**Capital Instruments**
- Investors in South Asia largely deploy equity. Regulatory barriers imposed by the Indian central bank on the flow of debt capital is a major reason for the same
- Investors in South East Asia deploy provide both debt and equity

**Capital Deployment**
- Investors have deployed capital evenly deployed across South Asia and South East Asia. Highest share of funds deployed is in India (25%), Indonesia (19%) and Vietnam (17%)

**Challenges faced**
- Global investors highlighted language barriers and lack of local presence as key challenges
- Investors in South East Asia highlighted the lack of awareness of equity as an instrument among entrepreneurs and corporate governance as key challenges
- Investors in South Asia observed that enterprises were not well versed with preparing financial documents and preparing pitches

**Service needs**
- Investors felt that policy advocacy is important in South Asia as governments are major demand creators and distort the market with subsidies
- Investors in South East Asia felt the need for support systems to help source enterprises and make them investible
## Bottlenecks that impede flow of capital

Insufficient incubation and investment facilitation support at early stages, poor governance mechanisms and inadequate operational processes limit investors ability to deploy capital.

### Enterprise level challenges

1. Immature state of development of internal business operations and lack of understanding of capital needs.
2. Inadequacy in maintaining financial records in a standard format which can be assessed directly by the investors during due diligence process.
3. Inability to get the right talent and limited capabilities to scale-up business operations.

### Ecosystem level challenges

1. Lack of centralized information hub tracking standardized metrics to provide trust-worthy information about investible enterprises, their investment needs, ESG impact and scale potential.
2. Lack of focused incubation and investment readiness support to enterprises, that also aligns with investor expectations.
3. Lack of off-the-shelf blended finance products and regulatory barriers to structured product design.

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- "There is a large scope for TA services in the nexus as the sector is still relatively young.” – Indian investment firm
- "The Nepali FDI law is clear on exits and even offers a favorable tax scheme. However, there are bureaucratic hurdles to overcome for both entry and repatriation." – Nepal based investment firm
- "There is a need for Investment vehicles that have the ability to deploy stage and time appropriate capital (such as debt, mezzanine).” – An investor with global mandate
- "There should be a very clear carrot at the end of the program if pre-investment TA is to be successful.” – A global fund investing in India

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- Investors identified the following barriers to investing in smaller ticket sizes and / or the WE4F sector
- Delay in scaling-up
- Inability to approach appropriate capital source
- Longer time taken to close investments

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"There is a need for Investment vehicles that have the ability to deploy stage and time appropriate capital (such as debt, mezzanine).” – An investor with global mandate
### Initiatives to improve flow of capital

To enhance capital availability, investors recommend adoption of blended finance and guarantees to make enterprises more investible, investors recommend bespoke TA and better governance.

<table>
<thead>
<tr>
<th>Catalyze availability of more risk capital</th>
<th>Mechanism to manage foreign exchange risk</th>
<th>Blended finance mechanisms to channel long term capital</th>
<th>Deepen pool of investors at early stage</th>
<th>Incentivize banks to channel local debt</th>
</tr>
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<td>PATAMAR</td>
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<td>Emerging Markets Entrepreneurs</td>
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<td>True North Associates</td>
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<thead>
<tr>
<th>Make enterprises more investible</th>
<th>Mechanism to share due diligence findings</th>
<th>TA to address specific enterprise gaps identified by investors</th>
<th>Advocate sector friendly and stable government policies</th>
<th>Enhance governance &amp; financial compliance in enterprises</th>
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38
Gender lens investing
While many investors have adopted various gender related initiatives, only a very small percentage of fund managers have a gender lens investing mandate

- DFAT promoted “Investing in Women (IW)” is the key initiative promoting GLI in the region and has supported 3 fund managers profiled
  - Capital 4 Development Partners (C4D Partners)
    - Plans to invest at least 30% in women led SMEs
    - Assesses gender workforce, benefits and inclusion in portfolio companies
  - Patamar Capital
    - Believes GLI will help them make better investment and portfolio management decisions
    - Patamar has a USD 2 mn women-SME focused fund to make 6-8 direct investments of between $200,000 and $300,000 in women-led businesses
    - Focuses on promoting gender equity in its portfolio firms
  - SEAF Women’s Opportunity Fund
    - Has women in leadership positions including Senior Managing Director and Vice President
    - Has developed a proprietary assessment approach to make investments in women-led businesses

- MEDA has developed gender toolkit called GEM to enable enterprises leverage their internal data and become more sensitive to gender issues

- Other investors have adopted a range of initiatives to be more gender friendly
  - Woman in founding team of fund / women in leadership – Anthem Asia, AquaSpark, Bangkok Venture Club, FMO, Grassroots Business Fund, responsAbility
  - Track record of investing in women owned enterprises - Bio Invest, One to Watch, Villgro
  - Follow general ESG standards – Delta Capital

Investors do not have an explicit gender lens investing (GLI) focus. Even among investors who are aware of GLI, the objective is limited to either not discriminate on the basis of gender or to have a more gender balanced investment team

Gender focus of investors
n = 36

- Yes 33%
- No 67%
BSP analysis
## Snapshot of Business Service Providers (BSPs)

BSPs support enterprises to comprehend and articulate investment needs, improve governance and build capacity for growth. The support providers however struggle in managing their own financial sustainability.

- **Majority of** the BSPs provide **Technical Assistance (TA) services** including branding and marketing, finance and compliance, capacity building and impact assessment. The remaining provide either **only investment support** (including enterprise - investor interaction facilitation and curation of pipeline for investors), or **both TA and investment support**.

- BSPs highlight that most **entrepreneurs lack the skill** to articulate their **investment need** and then **match it** to the relevant capital providers. They often have **ineffective governance structures, human and financial resource management processes**. In several cases, enterprises also find it **difficult to record and communicate impact created**.

- **BSPs collaborate** with different **local stakeholders** such as government authorities, universities, research laboratories and subject matter experts to provide relevant support to enterprises.

- BSPs face **sustainability challenges** as most enterprises are **not able to pay service related fees**. BSPs are **dependent** on external support such as **grant funding**. Even when they seek success fee mandates for fund raising, BSPs are impacted by the **lumpy nature of cash flows**.

- A hybrid model with a fixed grant supported upfront fee and a flexible fee linked to performance can provide a pathway to both sustainability and manage cash flow issues. Such a model also has the potential to enhance the catalytic effect of grant funding.

- Similar to capital providers, BSPs **do not have a specific focus** on facilitating **gender lens investing**. However, nearly **24%** have **gender focused initiatives** as part of their offering and another **21%** engage in **gender related advocacy and awareness**.
## Services provided by BSPs

Most of the BSPs provide a range of technical assistance services; the rest are equally split between providing investment support only and providing both investment & technical assistance services.

<table>
<thead>
<tr>
<th>Technical assistance</th>
<th>Technical assistance and Investment support</th>
<th>Investment support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Finance and compliance</strong></td>
<td><strong>Branding and Marketing</strong></td>
<td><strong>Network facilitation</strong></td>
</tr>
<tr>
<td>- Financial modelling</td>
<td>- Product development</td>
<td>- Stakeholder connections</td>
</tr>
<tr>
<td>- Budgeting and business controlling</td>
<td>- Strategic marketing</td>
<td>- Investor – enterprise connections</td>
</tr>
<tr>
<td>- Legal assistance</td>
<td>- Brand development</td>
<td></td>
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<tr>
<td>- Taxation assistance</td>
<td>- Market linkage support</td>
<td></td>
</tr>
<tr>
<td><strong>Impact showcase</strong></td>
<td><strong>Capacity Building</strong></td>
<td><strong>Services for Investors</strong></td>
</tr>
<tr>
<td>- Establishing impact matrix</td>
<td>- Workforce development</td>
<td>- Curating pipeline</td>
</tr>
<tr>
<td>- Impact assessment and reporting</td>
<td>- Training and development</td>
<td>- Gender lens investing</td>
</tr>
<tr>
<td>- Monitoring and evaluation framework</td>
<td>- Skill building</td>
<td>- Conferences and event support</td>
</tr>
<tr>
<td><strong>Technology support</strong></td>
<td><strong>Business Advisory</strong></td>
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<tr>
<td>- Software development</td>
<td>- Strategy/Management consulting</td>
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</tr>
<tr>
<td><strong>Branding and Marketing</strong></td>
<td><strong>Investment readiness support</strong></td>
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<tr>
<td>- Product development</td>
<td>- Incubation</td>
<td></td>
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<tr>
<td>- Strategic marketing</td>
<td>- Acceleration</td>
<td></td>
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<tr>
<td>- Brand development</td>
<td>- Investor pitch, valuation and teaser preparation</td>
<td></td>
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<tr>
<td>- Market linkage support</td>
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<tr>
<td><strong>Capacity Building</strong></td>
<td><strong>Mentorship</strong></td>
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</tr>
<tr>
<td>- Workforce development</td>
<td>- Entrepreneurship development</td>
<td></td>
</tr>
<tr>
<td>- Training and development</td>
<td>- Budgeting and capitalization advice</td>
<td></td>
</tr>
<tr>
<td>- Skill building</td>
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<td></td>
</tr>
<tr>
<td><strong>Finance and compliance</strong></td>
<td><strong>Legal assistance</strong></td>
<td></td>
</tr>
<tr>
<td>- Access to markets and finance</td>
<td></td>
<td></td>
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<tr>
<td>- Deal structuring and investment facilitation</td>
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<tr>
<td><strong>Business Advisory</strong></td>
<td><strong>Technology support</strong></td>
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*Image credits: [Dalberg](https://www.dalberggroup.com), [Thomson Reuters Foundation](https://www.thomsonreutersfoundation.org), [SATTVA](https://sattva.in), [phildev](https://phildev.org), [PACT](https://pactworld.org), [Impact Hub](https://impacthub.org), [Better Stories](https://betterstories.org), [Enviu](https://www.enviu.com), [Xpdite](https://xpdite.com), [swisscontact](https://www.swisscontact.org), [Kois](https://www.kois.com), [Caring Finance](https://caringfinance.org), [Jupiter Capital Partners](https://www.jupitercapitalpartners.com), [AVPN](https://avpn.net), [MAIN.PH](https://www.mainph.org), [TBN](https://www.axonlimited.com)*
BSP operations

BSPs profiled are fairly evenly distributed across the region; BSPs rely on other players in the ecosystem to provide specific support to the enterprises.

Collaborative approach to support enterprises

- BSPs recognize that the needs of early stage enterprises are highly varied and their capacity to pay is very limited. They rely on intermediaries (accelerators / TA managers etc.) to define scope and associated service charges in an efficient manner.
- Most BSPs collaborate with other firms to provide subject matter specific expertise such as legal advisory, compliance & regulatory advisory, taxation services, and internal control compliance.
- BSPs collaborate with universities to seek out domain specific expertise for validation of technology and products developed.
- BSPs partner with international development agencies to disseminate learnings.

* Others refer to Africa and Middle East
### Challenges faced by enterprises – BSP perspective

Sequenced and incremental acceleration support where innovators experience meaningful short-term results can build momentum for success and help innovators meet milestones at an accelerated pace.

<table>
<thead>
<tr>
<th>Enterprise challenges</th>
<th>Lack of robust business processes hinders investment</th>
<th>Access to appropriate sources of finance is difficult</th>
<th>Limited capital absorption ability creates need for post investment TA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Enterprises do not have adequate internal controls and governance mechanisms</td>
<td>Most enterprises are not able to articulate their investment need and match it to appropriate investor and type of capital</td>
<td>Enterprises lack capacity to deploy capital invested to attain scale and contextualize impact created</td>
</tr>
<tr>
<td><strong>Key gap areas</strong></td>
<td>- Weak governance</td>
<td>- Information asymmetry between investors and enterprises</td>
<td>- Post investment TA to boost enterprise growth</td>
</tr>
<tr>
<td></td>
<td>- Inadequate financial management and control</td>
<td>- Inability to articulate financial needs in terms of tenor, type of capital required</td>
<td>- Capacity to build and manage team</td>
</tr>
<tr>
<td></td>
<td>- Customer acquisition and servicing</td>
<td></td>
<td>- Creation of structural enablers to support growth</td>
</tr>
<tr>
<td><strong>BSP services</strong></td>
<td>- Preparation of standard operating procedures</td>
<td>- Alignment of enterprise needs with investor offerings</td>
<td>- Business advisory services to efficiently structure business units for growth</td>
</tr>
<tr>
<td></td>
<td>- Preparation of tools for financial management</td>
<td>- Business modeling, business projections and valuation</td>
<td>- Support market linkages</td>
</tr>
<tr>
<td></td>
<td>- Supply chain optimization services</td>
<td>- Preparation of pitch documents</td>
<td>- Legal aid including JV agreements, taxation and compliance</td>
</tr>
<tr>
<td></td>
<td>- Capacity building in marketing/sales</td>
<td>- Legal, financial and taxation advisory for transaction structuring</td>
<td>- Talent recruitment, mentoring and management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Preparation of due-diligence document to bridge information asymmetry</td>
<td>- Development of impact and ESG reporting matrix</td>
</tr>
</tbody>
</table>
Challenges faced by BSPs

Milestone-based funding, paired with bespoke support services, has the potential to deliver greater program and individual innovator impact than non-recourse developmental funding

### Challenges faced by BSPs

- **Business Barriers**
  - Sourcing enterprises and identifying their support needs is time and resource intensive
  - BSPs rely on donor support as enterprises rarely have capacity to pay
  - Expectation mismatch between BSP and enterprises in terms of fees and project timelines
  - Data for market assessment and feasibility is often inadequate, making it difficult for BSPs to build effective solutions
  - Regulatory uncertainty especially for big data, AI and IoT make it difficult for technology based enterprises to expand
  - Most enterprises do not capture any gender, ESG and impact related data

- **Enterprise support barriers**
  - Scouting enterprises is time and resource intensive
  - BSPs rely on donor support as enterprises rarely have capacity to pay
  - Expectation mismatch between BSP and enterprises in terms of fees and project timelines
  - Data for market assessment and feasibility is often inadequate, making it difficult for BSPs to build effective solutions

- **Ecosystem barriers**
  - Provide match making services and align scope of work to optimize sourcing costs and execution time
  - Get enterprise skin in the game: A hybrid model with a fixed grant supported upfront fee and a flexible fee linked to performance can enhance the catalytic effect of grant funding
  - Support BSPs with specialized skills (growth / supply chain integration / angel networks / talent management) to enable enterprise to scale especially post investment
  - Engage in policy advocacy with government bodies to adopt progressive policies
  - Provide gender sensitization programs linked to achieving business growth

### Possible interventions

- **Customizing curriculum for training**
  - 11%
- **Navigating regulations**
  - 12%
- **Inadequate ecosystem support**
  - 8%
- **Building own sustainable revenue model (non-grant)**
  - 31%
- **Scouting enterprises**
  - 38%

Individual interview responses were collected from 29 BSPs.
BSP operations are similar across the region

**Services provided**
- BSPs in South Asia either provide TA services or both TA and investment support services
- BSPs in South East Asia additionally also provide bespoke investment support services

**Challenges faced**
- BSPs across the region find it challenging to get an investment ready enterprise pipeline, the challenges is further augmented by the lack of standardization in data availability
- **BSPs in South-East Asia** additionally face challenges due to the diversity of policy across countries and in sustaining partnerships

**Gender focus**
- BSPs in South-East Asia have a significantly larger focus on women focused initiatives/programmes as compared to BSPs in South Asia

**Nexus alignment**
- ~60% of BSPs in South-East Asia are sector agnostic, whereas most of BSPs in South Asia tend to align their service offerings with a particular nexus
Gender focus of BSPs

Most BSPs either have no focus on gender inclusion or only participate in generating awareness or advocacy. Only 17% BSPs provide a specific gender lens service or initiative focused on gender inclusion.

- **Value for women** is a specialized advisory firm that helps organizations advance gender inclusion.
- **SHE Investments** delivers a gender-focused accelerator program for women. The initiative focuses on scaling business of 1,000 women in Cambodia in the next five years.
- **Instellar** runs **GRIA**, a program to equip women entrepreneurs with key business skills like negotiation skills and provides incubation support.
- **Manila**: Global initiative with Adidas to empower women through entrepreneurship called **She Breaks Barriers**.
- **Myanmar**: Training program with the Ministry of Industry and SME department and UNDP focused on supporting women-led businesses to grow.
- **Solidaridad** manages a program in Bangladesh, with support from USAID, to link women dairy farmers to formal supply chains.
‘Value for Women’ – BSP focused on gender inclusion

Value for Women is a specialized advisory firm that helps organizations advance gender inclusion

Value for Women (V4W) helps enterprises and investors to adopt more gender inclusive policies

**V4W works with**

- Enterprises to
  - Reach more women and women-led businesses
  - Mainstream gender across its strategy and decision-making
  - Identify steps to improve women’s participation and leadership
- Investors to
  - Create a gender lens investment strategy and framework
  - Identify and address the barriers faced by women entrepreneurs
  - Solve investees’ business challenges by applying a gender lens

**Services provided**

- **Gender advisory services**
  - Craft gender action plans for enterprises to integrate gender lens across operations
  - Help investors carry out gender focused due diligence

- **Technical assistance**
  - Develop gender-inclusive sales strategies for enterprises to enhance sales to women consumers
  - Prepare gender-inclusive evaluation process for investors

- **Landscape and market research**
  - Landscape Report: Impact Investing with a Gender Lens in Latin America
  - Women-focused market research, market segmentation and value proposition

**Gender trainings**

- Gender lens investing training

**Sector of focus**

- Clean energy and climate change
- Agriculture and infrastructure
- Gender-lens investing
- SGBs and entrepreneurship
Recommendations
Regional innovation hub’s support structure
The Hub can support WE4F enterprises by providing bespoke investment linked support through a brokering unit and curating TA support linked to enterprise growth outcomes through a technical unit

<table>
<thead>
<tr>
<th>Brokering Unit</th>
<th>Technical Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Undertake initiatives to catalyze flow of additional risk capital and enhance deal pipe-line</strong></td>
<td><strong>Provide support capacity building for enterprises and build their prevailing ecosystem</strong></td>
</tr>
</tbody>
</table>

### Increase flow of risk capital
- Channel long term capital through innovative blended instruments
- Deepen the pool of investors at the early stage (Pre-series A)
- Facilitate development of innovative mechanisms to manage foreign exchange risk
- Incentivize banks to channel local debt through credit guarantee / First Loss Default Guarantee mechanism

### Increase investability of enterprises
- Bespoke TA to address specific enterprise gaps identified by investors
- Mechanism to share due diligence findings

### Facilitate enterprise building
- Design TA services with strong linkages to outcomes achieved
- Design TA programs that encourage entrepreneurs to co-pay for services received
- Enhance governance and financial compliance
- Support entrepreneurs in their efforts to scale by designing interventions customized for local ecosystems

### Facilitate ecosystem building
- Lay the ground work for a gender inclusive ecosystem
- Leverage technology to bridge information gaps
- Advocate sector friendly and stable government policies

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**Network facilitation**

**Finance and compliance support**

**Investment readiness**

**Business Advisory**

**Branding and marketing**

**Capacity building**
## Hubs role in promoting enterprise – investor interactions

Hub can augment flow of investments by establishing trusted mechanisms to disseminate critical information, augment enterprise capacity and establish mechanisms to create a supportive ecosystem.

<table>
<thead>
<tr>
<th>Increase flow of risk capital</th>
<th>Increase investability of enterprises</th>
<th>Facilitate enterprise building</th>
<th>Facilitate ecosystem building</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enterprise-Investor</strong></td>
<td></td>
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<tr>
<td><strong>Interventions by Hub</strong></td>
<td>Source high potential WE4F enterprises</td>
<td>Bridge information asymmetry – investor’s understanding of enterprise’s business and enterprise understanding of investor requirements</td>
<td>Support enterprises in preparing for growth and scale – by providing market linkage support, supply chain optimization, value chain integration etc.</td>
</tr>
<tr>
<td></td>
<td>Disseminate accurate enterprise information</td>
<td>Provide enterprise support linked to investor feedback</td>
<td>Explore market expansion opportunities for enterprises across hubs in different regions</td>
</tr>
<tr>
<td></td>
<td>Reduce due diligence costs</td>
<td>Provide structural support – updated enterprise information, M&amp;E</td>
<td>Support enterprises in preparing for growth and scale – by providing market linkage support, supply chain optimization, value chain integration etc.</td>
</tr>
<tr>
<td></td>
<td>Create pool of early stage investors</td>
<td></td>
<td>Explore market expansion opportunities for enterprises across hubs in different regions</td>
</tr>
<tr>
<td></td>
<td>Design structures to blend pools of capital and mitigate foreign exchange risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Potential outcome</strong></td>
<td>Accurate enterprise database</td>
<td>Enterprises with investability gaps addressed</td>
<td>Enterprises that are able to absorb capital and achieve growth in line with investor expectations</td>
</tr>
<tr>
<td></td>
<td>Availability of stage relevant capital</td>
<td>Strengthened processes and internal controls in enterprises seeking to raise capital</td>
<td>Reduced uncertainty in expansion efforts to new markets</td>
</tr>
<tr>
<td></td>
<td>Increased comfort to local debt providers (credit guarantee/FLDG / foreign exchange management)</td>
<td>Robust end use monitoring of funds and impact reporting</td>
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<tr>
<td></td>
<td>Blended finance mechanisms to channel long term capital</td>
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</tr>
</tbody>
</table>

**Note:** WE4F stands for Water, Energy, Environment, Food.
## Hubs role in creating stakeholder partnerships

Hub can act as a responsible broker to align enterprise support programs with BSP sustainability needs and also build capacity of ecosystem players to support WE4F entrepreneurs

<table>
<thead>
<tr>
<th>Interventions by Hub</th>
<th>Potential outcome</th>
<th>WE4F Ecosystem</th>
</tr>
</thead>
</table>
| **Increase flow of risk capital** | ▪ Pre- due diligence standardization of enterprise information to reduce transaction costs  
▪ List of trusted BSPs across the region to support transactions | ▪ Reduced enterprise need assessment cost for BSPs  
▪ Better match making between enterprise need and BSP capabilities | ▪ Knowledge sharing for building better investor understanding across WE4F geographies  
▪ Facilitating impact contextualization and showcase across region |
| **Increase investability of enterprises** | ▪ Align enterprise - BSP expectations regarding scope of support and remuneration guidelines  
▪ Pilot hybrid fee models such as minimum fixed upfront fee and flexible fee linked to performance | ▪ Efficient and sustainable delivery of services by BSPs  
▪ Better match making between enterprise need and BSP capabilities | ▪ Replication of success models from other WE4F hubs regionally  
▪ Engaging with start-up / sector initiatives of policy makers |
| **Facilitate enterprise building** | ▪ Post investment capacity building (talent management, market expansion, go-to market strategy etc.)  
▪ International expansion support  
▪ ESG impact assessment support | ▪ Accelerated growth prospects  
▪ Better assessment of impact | ▪ Replication of success models from other WE4F hubs regionally  
▪ Advocacy in promoting market mechanisms among policy makers |
| **Facilitate ecosystem building** | ▪ Setting standards for the collection of gender disaggregated data  
▪ Setting standard documentation and process guidelines for transaction support | ▪ Gender balance in enterprises  
▪ Standardization of BSP investment support activities | ▪ Engaging with start-up / sector initiatives of policy makers  
▪ Advocacy in promoting market mechanisms among policy makers |

### Interventions needed

- **Enterprise-BSP**
  - Pre- due diligence standardization of enterprise information to reduce transaction costs
  - List of trusted BSPs across the region to support transactions
  - Align enterprise - BSP expectations regarding scope of support and remuneration guidelines
  - Pilot hybrid fee models such as minimum fixed upfront fee and flexible fee linked to performance
  - Post investment capacity building (talent management, market expansion, go-to market strategy etc.)
  - International expansion support
  - ESG impact assessment support
  - Align enterprise-BSP expectations regarding scope of support and remuneration guidelines
  - Pilot hybrid fee models such as minimum fixed upfront fee and flexible fee linked to performance
  - Setting standards for the collection of gender disaggregated data
  - Setting standard documentation and process guidelines for transaction support

- **Potential outcome**
  - Reduced enterprise need assessment cost for BSPs
  - Better match making between enterprise need and BSP capabilities
  - Efficient and sustainable delivery of services by BSPs
  - Better assessment of impact

- **WE4F Ecosystem**
  - Knowledge sharing for building better investor understanding across WE4F geographies
  - Facilitating impact contextualization and showcase across region
  - Replication of success models from other WE4F hubs regionally
  - Engaging with start-up / sector initiatives of policy makers
  - Advocacy in promoting market mechanisms among policy makers