



Access to Green Finance in Waste and Circularity

Investor Showcase

Minutes of the Session

16th April 2024

- Parag Vaidya, CFO, KOIS
- Nidhisha Philip, Partnership Lead, Acumen
- Deep Kothari, Vice President, Blue Ashva Capital
- Shivangi Bubna, Executive Vice President & Head Investments, Mumbai Angels
- Aakash Shah, Partner, Peak Sustainability Ventures
- Avishek Gupta, Managing Director & CEO, Caspian Debt
- Rachna Chandrashekhar, Manager - Accelerator Investments, Upaya Social Ventures
- Karthik Varada, Venture Capitalist, Beyond Next Ventures
- Shalini Chhabra, Managing Partner, 3i Partners (Impact India Investment Partners)
- Naveli Jain, VP Investments, Ankur Capital
- Simmi Sareen, Director, Unitus Capital

With the [investment criteria matrix](#) as background the following discussion ensued:

Simmi Sareen: Could you please provide a brief overview of your organizations, chosen segment in waste management & circular economy and the challenges you face.

Karthik Varada: We are an impact investing firm focusing on deep science & deep tech start ups. We undertake seed and early stage investing. Waste and circularity is a broad area of investing for us. Some sub areas of interest are - value addition of agricultural waste, wastewater treatment. For example, we have invested in EF Polymer. They have roots in Rajasthan but have expanded to the US and Japan as well. They convert waste to value. Their product is an eco-friendly super absorbent polymer made from waste that can regenerate land and agriculture. It began as a backward experiment by a farmer. Regarding challenges, it would be finding the right time to scale the business.

Naveli Jain: We are an early stage investing firm with a deep science & deep tech focus. Some sub themes we are interested in are - climate resilience, creating first generation infrastructure. We have invested in OffGrid Energy Labs that works on slow mobility space. We have also been an early stage investor in agri waste to material. We invested in Stringbio. What we have seen is that more

than technical capabilities, founders need business acumen and a techno commercial formula to succeed.

Deep Kothari: Our open mandate is to look for innovation (first) and then scalability. We are looking for hard core innovation. Deep tech especially in climate tech. We don't invest in Business to consumer (B2C) ventures. We have also helped scientists to incubate, providing knowledge, capital and infrastructure. Some of our portfolio companies have worked on alternate materials replacing single use plastic and biofuel. We have also invested in Match Log that works to decarbonise the cargo supply chain.

Nidhisha Philip: We operate in a patient capital mode. We look for innovative solutions that support the most unorganized and informal economy. We take risky bets. We look for vision aligned entrepreneurs with financially sustainable models that improve dignity of labor. We look at both climate and social impact.

Shalini Chhabra: Early stage investing. We look for both climate and social impact. Agriculture and health are two important themes. We are also interested in the water sector. We are equity based and undertake both pre seed and seed investing. What we look for: market fit, solutions that have a dual impact, technology component, scalability.

Challenges: businesses are still built by tech entrepreneurs and are often lacking in operations, scales. It is difficult to find the right team. There should also be a willingness to ask and learn.

Aakash Shah: We are an early stage climate fund focusing on energy and water. We have a thesis driven strategy. Waste is a key part of our investment rationale, but not a theme. We have invested in Polymateria who uses an enzyme to degrade plastic waste. We have also invested in Indra water, a wastewater treatment start up. We are looking for profit making ventures with large sustainability and climate impact.

Avishek Gupta: We invest from 50 lacs to 15 crore. We are looking for 1st generation entrepreneurs. We also give loans without a mortgage. We are okay with companies without a profit track record if they are backed by a VC or have assured future investments. We don't invest in municipal solid waste management companies. We do invest in waste into energy, plastic into textiles, e-waste refurbishing etc. we are also open to waste water treatment.

Challenges: do not find enough companies with ability to take debt. The minimum annual revenue should be 1-2 crore. It is also a challenge to find the right time to give debt. We provide debt during early stages but if we go too early, businesses will have less ability to provide us with data. So, now we are focusing on slightly larger companies. Another challenge is the NDA that comes with tech innovations. We would like to reduce the information sharing burden but due to NDA it is difficult at

times. We have a total portfolio of 200-250 companies. A fun fact is that, once we provide loans, other investors follow.

Rachna Chandrashekhar: We are an early stage impact investor. We invest in waste & circularity, food, agriculture & allied sectors, handicrafts, textiles and climate. In W&C, we have invested in Sahaas. Our focus is also on worker welfare. We are looking for waste collection & segregation, ventures that have grown in terms of scale and use technology to address some of the existing challenges. We have invested in WeVois that solve the data challenge so that everyone in the ecosystem gets benefited and creates value out of waste. We are very much interested in waste to value ventures that create dignified jobs and livelihoods. We also partner with other investors to bring in scale and growth and employ blended finance.

Parag Vaidya: We invest in healthcare, education and climate. Not just private funds but also work with philanthropic funds to make blended finance available. We are floating a new waste and circularity fund focusing on plastic, textiles and e-waste. The textile industry does contribute to 4% of global GHG after all and has complex problems right from sourcing to sorting to processing. Challenges: technical barrier, recycling facilities are made for one type of garment, material, color & number of threads. In plastic and textiles, there is a lack of collection & sorting. Also recycled yarn becomes more expensive than the market rate. Reducing this gap and generating long term profit is a challenge.

Shivangi Bubna: We invest from early stage to pre IPO. The ticket size ranges from 200K to 2-3 million USD. We have a portfolio of 240 companies. We also invest in D2C companies. 30% of the asset under management has some climate lens. We also co invest; we have partnered with Blue Ashva to invest in 2 companies that develop lithium ion alternatives. We look for pre revenue stage businesses that have a potentially large market. We are financial investors and look for scalability and growth.

Challenges: identify businesses that fit the sustainability criteria as the policies are still evolving for example in plastic alternatives etc. How does one then stay one step ahead of policy? Other questions that we face are - when am I actually going to get a return on it? We like to look at companies that have put their roadmap clearly and who can achieve scale.

Simmi: water, methane, waste water, textiles - these are sectors with no pipeline of investable ventures as per investors. However, according to ventures, they can't find investors. What can ESOs do in this context to make companies more investable.



Shalini: Water is a tough area. There is waste water; then there is regular water. Some innovations are happening. But it is difficult to establish how they compare with other solutions. Then there is the question of is India even a market. Waste water is of course easier as there are industrial applications. When it comes to the non-revenue water side, working towards smart cities is a good idea. Integration with large players would de-risk government engagement.

Karthik: ESOs can help by articulating changing dynamics of markets. Eg. find points of linkage when you deal with government/large players. But focus is changing. Government is focusing on privatizing and DFIs are looking into modernisation.

Naveli: What is the segment of market you are trying to cater to, what is the market size? Not everything is mainstream. Market may overall look smaller but could be an evolving market. Different industries face different problems. Bifurcate and understand nuances.

Aakash: B2B and SAAS are important. Early investors in water had technology but no ability to scale; as they used community entrepreneurs. By embedding tech, and not just software, can make ventures asset light. We also invest in hemp; replacing cotton with hemp makes textiles less resource intensive. Not just water reduction but also other resources. Everyone is looking to optimize.

Simmi: Deep, you are comfortable with asset heavy. What is your playbook?

Deep: we try to invest in capital efficient and high on return ventures with increase on material margin so they will be able to fund their future expansion. They need debt more than equity. There are also PSUs that can support ventures that develop good technologies in their fields. Our ventures don't have to go to customers as we invest in B2B. So there is no marketing investment.

Simmi: To debt investors, what is your experience like?

Avishek: Our experience is with businesses that sell to the government. CSR payment creates a semi pool for them. They should also look for commercial buyers. We don't have defaulters. Early stage companies pay back. As such, we do much better than commercial lenders like banks with their NPA. Our experience is that the government as a partner backing the solution is fine as long as they are not the ones paying. Start ups need to figure out a way - how can this be of commercial interest.



Nidhisha: B2G can replace G with export. What we have observed is that once a venture establishes itself, there is a FOMO within governments. Of course the payment cycle is long: 90-120 days when you work with the government. There is potential business as adoption at scale can be driven by the government.

Rachna: To solve waste management, we need to work with the government. Thus, we invest in founders who have figured out how to work with the government. Also tech can address the gaps. There is a huge problem with transparency.

Simmi: To Kois and Mumbai Angels: How does the pipeline look like to you? When do you think of exit?

Parag: Center for Innovation in Textiles helps to attract more capital as recycled yarn's quality is at par with virgin yarn. Now brands are coming. Exit is possible as long as the product is actually solving a problem. Exit is not a challenge.

Shivangi: Incubators do generate good solutions. For example, IIT (CREA). The quality of solutions has gone up.

Q & A

Audience Member: How do you measure impact?

Karthik: ESOs should focus on helping start ups identify 2-3 impacts that align with businesses. Help them identify a small set of KPIs.

Rachna: We do impact measurements. Identify environment & climate related impacts as well. We are looking for partners who can measure them. The start ups need help in identifying the impact matrix. We need to build an ecosystem as we can't put this burden on early stage startups.

Avishek: We measure outcome and output. We have an exclusion list as well. Not just avoid negative impact but also create positive impact. We look for financials and commercial performance. We go by the matrix that the company wants to report. We do have a social performance review where the company self reports social, environmental and material impacts.

Investor: We should aim for a joint impact model where we classify companies based on business model, assets, and develop indicators. Much work is needed in this sector. Startups should focus on building business & product.

Audience Member: we should bring in interoperability. As entrepreneurs, for different pitches, we need to show different matrices, which is tough.

Shalini: If the impact criteria is logically designed, investors won't disagree. The first five indicators would continue to remain useful even during subsequent fundraising stages. Standardising can be difficult; criteria should be customisable to enterprises, logical and should not impact ease of business. Different people have different beliefs. They are investing personal money. However, best investors defer to entrepreneurs. So pushback is valid.

Rachna: To measure impact, ESOs should help companies figure out their theory of change and a matrix that works for them. UN and Duke University have a good course on this

Audience member: I have a query for early stage investors in deep tech and deep science. Do you invest in single founders?

Shivangi: We invest; but as you grow, you should bring a co-founder. For example, one person to take care of tech and one person to take care of business.

Audience member: Newer and newer tech is coming up, and development finance institutions play a role in deploying tech faster. It is hard for a startup to sell B2C; to realize cost. No history; tech is new. Even government subsidies are limited. What is the reason?

Investor: The cost of acquiring tech is high. For early stage deep tech DFIs are not the answer. They operate only at large scale. Folks like Ankur are your answer. They provide risk money. And Avishek can do the debt to your supply chain. And some models you can explore are franchise and contract manufacturing. Create business models; may be revenues from royalty; money deployed by franchise; use external capital.

Naveli: apart from VC, other strategies to raise funds include customers or people along the value chain, whichever segment you are part of. Lots of corporations/ companies have startup arms.