THE/NUDGE Prize

DCM SHRIRAM FOUNDATION

Making the AgriWater Sector More Investable is Critical to Solving India's Water Crisis

If India wants to avert a severe water crisis, making agricultural water use more efficient and sustainable is essential, given that the sector consumes 78% of the country's water resources. We also face the added challenge of dealing with a fragmented landscape dominated by smallholder farmers who own less than 2 hectares of land and struggle to make ends meet.

Many promising startups are building innovative solutions and services for these smallholder farmers, incubated by initiatives such as the DCM Shriram AgWater Challenge, run by The/Nudge Prize. However, Agricultural Water (AgWater) startups face significant challenges in securing timely investments.

Cost of Customer Acquisition

Agriculture has a smaller share of investment compared to sectors like e-commerce or technology, and within this, agricultural water accounts for an even tinier slice. The complexity of problems and solutions involved deter investors, but the biggest roadblock is the difficulty in customer acquisition, which tends to be slow and expensive. Whatever investments are made in this sector tend to go towards micro-irrigation, as the government subsidises around half the cost of installation of drip and sprinkler systems, making customer acquisition cheaper. However, this advantage is not extended to other innovative AgWater solutions.

Pathways to Solutions

Solving the problem requires a multi-dimensional approach. Startups need to look beyond the technology itself and create innovative business models that reduce risk for investors. For example, Irrigation as a Service (IaaS) is a model that is particularly attractive to investors, with the promise of recurring revenue and predictable monthly earnings, which make customer acquisition easier. Companies like AgriRain use this model, ensuring continuous cash flow and long-term customer relationships.

In contrast, other segments such as sensors and automation, represented by companies like Bharat Rohan and Intech Harness, have not received funding proportional to their potential. The initial investment required from farmers for these technologies is high, and the complexities involved in customer acquisition pose significant hurdles. Companies are trying to address this by shifting to a service-based model, but need more support to make that transition. Biologicals, like those developed by EF Polymer and the Centre for Environment Concerns (CEC), which improve soil water retention and reduce the number of irrigation cycles in a year, face hurdles but have potential due to their geographic scalability and ease of transportation and distribution.

However, the problem is too big and widespread to be solved solely by startups. To overcome these challenges, a shift in investment strategy is essential. Investors need to take a long-term view of the ecosystem impact rather than focusing solely on immediate returns. Traditional funders and impact investors must recognise the broader benefits of investing in AgWater solutions. This includes potential improvements in agricultural productivity, sustainable water use, and enhanced soil health.

Patient capital and philanthropic funding play crucial roles in this scenario. They provide the necessary runway for startups to develop and prove their solutions. As Kanishka Chatterjee from The/Nudge Prize explained, "Philanthropic capital acts as the bridge to ensure great tech-first ideas don't die out before they get the chance to prove their worth." Some investors such as Social Alpha, Villgro, Caspian & Acumen are already following this path.

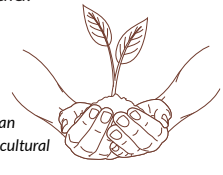
By supporting growth-stage AgWater startups, these initiatives help mitigate the high risks and long customer acquisition cycles that often deter traditional investors. This approach not only aids in the survival of these startups but also fosters innovation and resilience within the sector.

A Hopeful Outlook

While the challenges are significant, the commitment from organisations like DCM Shriram Foundation offers a beacon of hope with their efforts to provide gap funding. As more investors recognise the potential of AgWater solutions, we can expect to see increased funding and innovation, leading to more sustainable and efficient water management practices.

Failing to address these investment potential issues can severely hinder our progress in water conservation. Without adequate funding, more organisations may divert into broader agricultural technologies to attract funding, leaving the specific challenges of water management unaddressed. This stagnation can lead to a continued reliance on less efficient methods, exacerbating water scarcity and reducing agricultural productivity.

Startup investing is about improving returns while reducing risk, but the cost of inaction can be much higher for the entire economy and country. Investors who take a long-term view and focus on impact investing have a chance to feature in history books for transforming India.



"This article is one part of an 8-part series covering agricultural water utilisation in India."


Small Farms, Big Tech : How Drones and
IoT are transforming Indian Agriculture?
READ MORE

Small Farms, Big Tech : How Drones and IoT are transforming Indian Agriculture?

READ MORE