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Agri-energy funders & investors

Insights from mapping the ecosystem of current and potential investors

August 2021

Catalysing Agriculture by Scaling Energy Ecosystems (CASEE)



Access to productive-use energy can enable smallholder farmers to enhance agricultural output and profitability with reduced environmental costs and increased climate change resilience

Globally, an estimated **2 billion people** live in smallholder households.

In Asia and sub-Saharan Africa, smallholder farmers are at the centre of the food system and produce up to **80% of the food consumed**. As a group, however, they are among some of the most disadvantaged and vulnerable in the world, **struggling with food security, energy availability, market access, training and climate change**.

The **Catalysing Agriculture by Scaling Energy Ecosystems (CASEE)** programme is a £30 million partnership between Shell Foundation and the UK Government. It **delivers access to energy for smallholder farmers in sub-Saharan Africa and South Asia by supporting agriculture-focused businesses** to test new models and technology with the potential to reach commercial viability.

CASEE aims to:



STRENGTHEN agriculture and food systems, by scaling innovative businesses



IMPROVE more than a million lives



MOBILISE £110 million of additional investment into the agriculture ecosystem



GENERATE robust evidence on the role of patient capital and pathways to scale

Mapping potential agri-energy funders & investors | Objectives & research focus

Context

Agriculture and energy are high on the development agenda. They are critical in driving the achievement of the sustainable development goals (SDGs) by supporting food security, enabling value addition and reducing poverty. Agriculture and energy are also closely linked to climate change and part of the solution.

For instance, **the African agribusiness sector could reach US\$1 trillion by 2030**,¹ creating jobs and wealth. Yet, this is predicated on accessing those essential energy services that enable farmers to grow, irrigate, harvest, refrigerate, process, and transport crops. **Enterprises at the intersection of agriculture and energy present an exciting opportunity for investors across the spectrum of capital**, with significant potential for impact among the most underserved populations.

There is already a range of funders and investors active in this nexus. Yet, others are sitting across silos. As a result, the potential for investments in agri-energy solutions and collaborations across aligned clusters is missed.

Objective and research focus

As part of CASEE's goal to help scale a range of enterprises and promote resource mobilization in the agri-energy ecosystem, this research aims to **identify current and potential investors and share insights aimed at stimulating new partnerships.**

Accordingly, it is built around three main elements:



A **structured funders and investors map** (database). This includes funders and investors that are already active in the agri-energy space and others who could potentially become interested based on their key impact drivers.



Key insights (upcoming report, to be published separately). Data-driven analysis identifies trends around volumes and investment instruments, as well as insights on **collaboration opportunities** with investors across aligned clusters.



Focused profiles of selected investors aimed at stimulating the creation of new partnerships. These will be published separately.

Defining the universe of potential agri-energy funders & investors | Methodology

The mapping exercise followed a **multistage process** to generate insights, with the aim to:



Systematize the knowledge on funders and investors that are well known to have an interest in the core agri-energy space across clearly defined parameters.

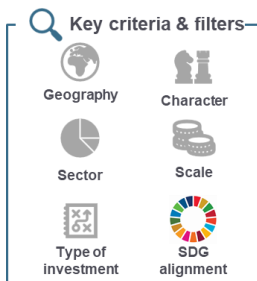


Identify other 'high potential funders and investors', acknowledging that while some of them self-identify as agri-energy funders, others do not.



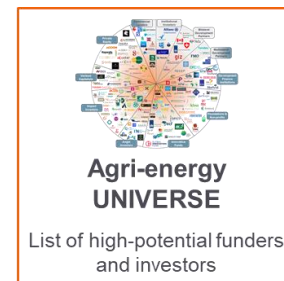
Identification of funders & investors

We reviewed a wide selection of funders and investors who are active or have the potential to be active in the agri-energy space, building on proprietary (notably Shell Foundation) and public databases and professional networks



Characterisation of the universe

Using public information and our professional insight, we characterised funders and investors against key criteria and lenses to identify their preferred funding modalities and pathways through which they do (or could) invest



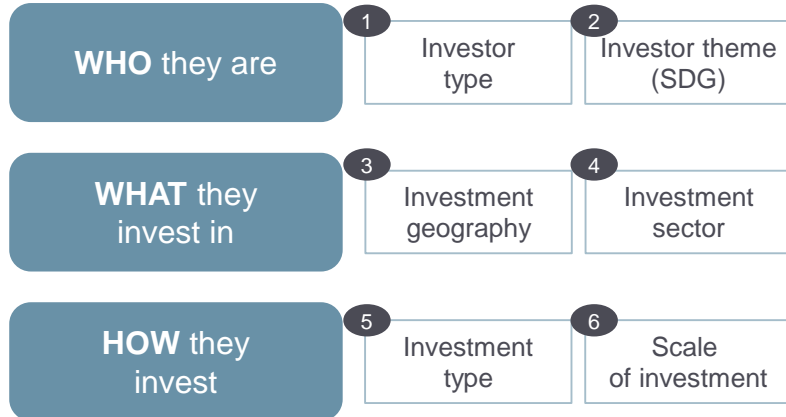
Consolidation and validation

We consolidated a list of 211 high-potential funders and investors, mapped against key criteria. Prior to publication, the universe was compared with external datasets and peer reviewed by experts, including CASA, to validate the findings

This section describes the typology and criteria selected to characterize funders and investors with demonstrable potential in agri-energy and aligned areas

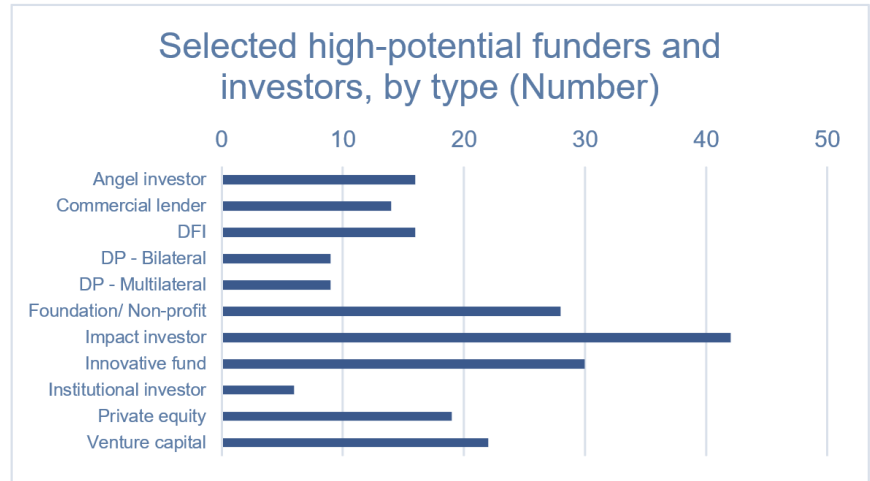
We have conducted desk-based research to identify a range of potential sources of capital and support using internal and external databases, as well as consultations with our network.

A crisp typology and selected key criteria were identified to capture information and segment funders and investors. This has allowed us to develop perspectives on their individual and shared characteristics, including preferred investment size, the stage at which they typically invest, their preferred investment mechanism(s) and their investment thesis.



211

Funders and investors with demonstrable potential in agri-energy and aligned areas have been included in our **reference universe**.





Investor type | A simple typology of eleven categories has been used to segment the funders and investors with demonstrable potential

Investment mandates and objectives determine the type of investments funders and investors are prepared to support. To better explore how they could situate themselves across the agri-energy value chain, we have classified each of them in one of eleven categories.

In creating the reference universe, a higher priority was given to investors active in post-pilot phases.

- 1. Angel investor** (also known as a private investor or seed investor): High-net-worth individual who provides financial backing for small startups or entrepreneurs, typically in exchange for ownership equity in the company. Some angel investors invest through crowdfunding platforms online or build angel investor networks to pool capital together.¹
- 2. Bilateral development partner:** Government organisation that gives direct assistance to a recipient country for development purposes.
- 3. Development finance institution (DFI):** Specialised national and international development bank or subsidiary set up to support the development of the private sector in developing nations. DFIs are usually majority-owned by national governments and source their capital from national or international development funds or benefit from government guarantees.²
- 4. Commercial lender:** Financial institution, such as a bank, that provides debt-based funding (such as lines of credit, unsecured loans or term loans) to businesses. Many commercial loans require collateral.
- 5. Foundation:** Non-profit organisation or charitable trust usually endowed by a central source (e.g. a single family or business) that donates funds to support other organizations or charitable purposes.

¹ See Investopedia definition. ² See OECD definition.

Investor type (Cont.)

6. **Impact investor:** Investor who focuses on investments that have the intent of generating social and/or environmental impact in addition to financial returns. Impact investors target financial returns that range from below market (concessionary) to risk-adjusted market rate, and can be made across asset classes, including but not limited to fixed income, venture capital, and private equity.¹
7. **Specialised/ Innovative fund:** Special purpose fund (or programme) that provides organizations with financial backing to tackle policy problems.
8. **Institutional investor:** An organisation or entity that pools money from investors and invests on their behalf. Mutual funds, pensions, and insurance companies are examples of institutional investors.
9. **Multilateral development partner:** An international institution with governmental membership that conducts all or a significant part of its activities in favour of development, and aid-recipient countries. This category includes United Nations agencies and certain regional groupings.
10. **Private equity investor (PE):** Individuals or firms which provide private equity funds to an entity (mostly mature companies) that is not publicly listed or traded.
11. **Venture capitalist (VC):** Private equity investor that provides capital to companies exhibiting high growth potential in exchange for an equity stake. These could be startups, early-stage, and emerging companies that have been deemed to have high growth potential or which have demonstrated high growth.²

NB: Family offices, i.e., privately-held wealth and investment management advisory firms that serve ultra-high-net-worth (UHNW) investors have not been included in the typology for simplicity. Recognizing that these investors can have different interests and modalities of investment, they have been identified as foundation/ non-profit, impact investors or innovative funds depending on the category that best matches their interest and expertise.

³ See GIIN definition. ² See Investopedia definition.



Investor theme | SDGs were used as a lens to identify funders and investors who do not self-identify as agri-energy funders but have aligned interests

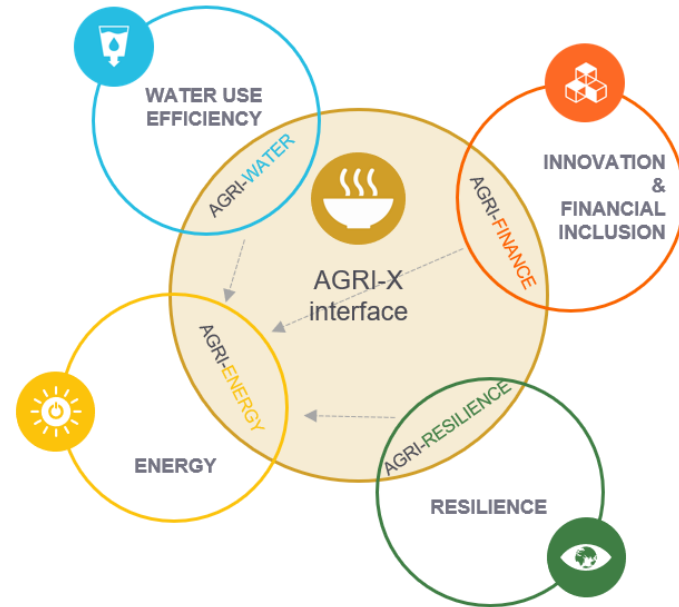
Selected SDGs were used to move beyond the core agri-energy space and guide the identification of a broader set of funders and investors with aligned interests.

These SDGs **provided helpful lenses to consider how commitments by investors relate** to supporting agriculture-focused activities and improving the lives of small-holders through better access to energy, **even if their investment theses focus on different impact pathways.**

SDG 2, with a focus on Targets 2.3, 2.4 and 2.5 and 2.A, was used as a **proxy to identify a core interest in investments linked to increasing agricultural productivity and incomes of small-scale food producers.**

Seven other SDGs (1, 2, 5, 7, 9, 12 and 13) were selected to **identify possible interfaces** between other investment themes and agri-energy. A primary and secondary tag was assigned to each funder and investor included in the universe based on their own reporting or inference. When no clear evidence of affiliation to a specific SDG could be identified, the investor theme was tagged as 'unspecified'.

The SDGs were used to identify potential interfaces between agri-energy and other investment themes (*illustrative*)





Investor theme | Together with SDG 2, seven other SDGs were selected as lenses to identify potential interfaces with agri-energy



SDG 1 No poverty | Targets 1.1 and 1.4 emphasise poverty eradication and equal rights and access to economic and natural resources, technologies and financial services. This SDG was used to identify commitments by investors to sustainable growth, with benefits for low-income groups such as small-holders.



SDG 5 Gender equality | Women play a critical and potentially transformative role in agricultural value chains. Yet, they are often held back. Commitments by investors to support empowerment and equal rights to resources (Targets 5.A, 5.B, 5.C) were considered in exploring possible impact pathways linking them to agri-energy.



SDG 6 Clean water | Target 6.4 was used to explore how commitments by investors related to increasing water-use efficiency and addressing water scarcity, through for instance improved irrigation, could be link to agri-energy investments (e.g. deploying solar water pumps to enable precision irrigation that reduces water use).



SDG 7 Clean energy | Targets 7.1 and 7.2 with their focus on access to affordable, reliable, sustainable and modern energy, including notably renewables provide immediate proxies for investment theses in the agri-energy space.



SDG 9 Industry & innovation | Commitments by investors to increase the access of small-scale enterprises to financial services and their integration into value chains (Target 9.3) can indicate an interest in tech solutions effective in the agri-energy space (e.g. Fin-tech and solar partnerships that provide alternative credit-score for SHFs).



Responsible consumption and production | Targets 12.3 and 12.5 focusing on reducing food losses along production and supply chains as well as waste generation were used to identify potential interest in technologies and innovations boosting resource efficiency (e.g. use of biogas digesters to convert farm waste into energy for powering machinery).



SDG 13 Climate action | Target 13.1 was used to explore how commitments by investors related to strengthening resilience and adaptive capacity to climate-related hazards and natural disasters can be linked to adaptive agri-energy solutions (e.g. Solar panels used to reduce the use of biomass (Waste-energy nexus); Energy efficient pre-cooling and cold storage facilities for SHFs to reduce GHG emissions).



Investment geography | Funders and investors with a mandate of supporting initiatives in Africa and CASEE-focus countries were prioritised

The opportunities sitting at the intersection of agriculture and energy are compelling, especially in Africa where economies are still largely agrarian and energy services remain insufficient. Yet, they are often difficult to access and realise, with factors including limited understanding of the unmet needs, lack of scale and capacity resulting in under-investment, especially in sub-Saharan Africa.¹

Mindful of these gap, the mapping exercise prioritised funders and investors who have a track record, or at least a mandate, of supporting initiatives in sub-Saharan Africa.

Based on their mandate and track-record, funders and investors were segmented along a primary and a secondary regional geographic focus, identified as global, sub-Saharan Africa, Central Africa, East Africa, Southern Africa and/or West Africa.

Funders and investors with a mandate to operate in sub-Saharan Africa were prioritised in developing the universe, with a focus on CASEE priorities countries² in Africa.



¹ For a more detailed overview of these factors, see Factor[e] Ventures. 2020. “The Opportunity at the Nexus of Energy and Agriculture”.

² CASEE priority countries include: Ghana, India, Kenya, Nigeria, Tanzania, Uganda and Zambia.



Investment sector | Nine sectors closely linked to agri-energy value chains were selected to gain a stronger understanding of investment mandate

1

Agriculture

2

Agri-tech

3

Energy

4

Insur-tech

5

Irrigation & WRM

6

Financial services & Fin-tech

7

Women & Gender equality

8

SME growth

9

Waste



Investment type | Four primary categories were considered to gain a deeper understanding of investors' preferred instruments & stages of investment

- 1. Grant:** Transfers made in cash, goods or services for which no repayment is required. Grantmakers usually provide funds to achieve specific social, environmental and other development objectives.
- 2. Debt:** Money owed, which the borrower must repay at a later stage together with interests. **Concessional debt** is extended on terms substantially more generous than the market. The concessionality is achieved either through interest rates below those available on the market or by grace periods, or a combination of these. **Commercial debt** is owned by a private-sector creditor, usually a commercial bank. It can come in the form of short-term, intermediate-term and long-term.
- 3. Equity:** Funds given in return for partial ownership of a company. Also defined as the amount of money that would be returned to a company's shareholders if all of the assets were liquidated and all of the company's debt was paid off in the case of liquidation.
- 4. Others:** Broad-brush category to identify other mechanisms that can be deployed, including but not limited to:
 - *Guarantee:* Contract by a third party (guarantor) to back the debt of a second party (the creditor) for its payments to the ultimate debtholder (investor).
 - *Securitisation:* The sale of account receivables from customers (loan repayments) to a third party, normally a development finance institution or an impact investment vehicle (at a discount) to free up working capital and reduce the cashflow cycle.
 - *Development impact bonds:* Performance-based/ pay-by-result investment instrument in which initial funding is provided by private investors, who are repaid by a third-party if impact objectives.
 - *Enterprise support:* Range of services that can include business, strategic, technical, financial and operational support to companies to expand and build local markets.



Scale of investment | Funders and investors were screened against a menu of preferred ticket sizes, including both minimum and maximum

The amount of money that goes into an investment transaction is known as **ticket size**. Different funders and investors typically have preferred sizes, which are influenced by their mandate and objectives, preferred instruments and stages of investment.

Seven potential ticket sizes were considered in screening our universe. The preferred minimum and maximum sizes were tagged to provide a higher level of understanding.

1 Lower than USD 500k

2 USD 500k

3 USD 1m

4 USD 3m

6 USD 5m

7 USD 10m

8 Higher than USD 10m