



4x4

Jonny Casey, climate-smart agriculture lead, CASA



This is a summary of CASA 4x4 Boxset 6, which continues to explore climate change as creating opportunities for investors that are able to contribute to the bottom line. It is driven by Jonny Casey, the climate-smart agriculture lead for CASA.

CASA is delivered by a consortium of organisations, including CABI. Jonny is climate change manager at CABI, which leads on the communications and management of the research programme within CASA.

Identify investment opportunities in climate-smart agriculture

CASA could see that investors needed to better understand the opportunities for investing in climate-smart agriculture. CASA talked directly to 28 innovators and investors across Africa and South Asia to understand these opportunities, but also the bottlenecks preventing growth. We looked specifically for emerging technologies and emerging trends.

Challenges emerged, including the problem of investors being unable to identify investable, scalable technologies, or to make accurate market assessments; and innovators not being able to absorb investment

The report sets out examples of 8 promising technologies including: cold chain storage in India, smart irrigation in South Africa, and biocontrol products in West Africa. It also identifies new business models that are diversifying income streams.

Addressing risk in climate change and investment in climate-smart agriculture

Investors are challenged by the need to understand slow-onset hazards from climate change – shifting seasons and rising temperatures – and climate shock such as extreme weather events. Investors need improved models and data at a more granular level to be able to profile risk and climate proof investments. Investors need to be able to identify what are the greatest potential for investments in climate-smart agriculture. Climate risk, coupled with the right technology, can be transformed into an opportunity for profitable investment.

CASA has been working with investors, and others, so it can address the knowledge needs relating to climate risk assessment, particularly for agricultural adaptation. Existing guidelines don't adequately support the agriculture sectors. This will result in new data tools, and approaches that utilize farmer-generated or remote sensor-driven data that build better risk profiles.

Moving from climate mitigations to adaption to the changing climate

Climate mitigation measures often address the bottom-line more directly and quickly than adaptation approaches, which typically support improvements in energy efficiency. In adaptation, there is a longer payback and a lower return on investment – in many cases – because they are designed to build long-term resilience.

More work is needed to understand the value of adaptation to the businesses, farmers and investors. But investment will be required by both the public and private sector to help improve understanding and to mobilize capital.

CASA and governments can support investors to identify nature-positive elements of investments – as consumer demand grows for eco-friendly production. This is driving investment in biocontrol products, biocoatings and other technologies that reduce pesticide use. However, it is currently hard to measure the environmental impact of these technologies for reporting or marketing purposes.

The role of governments and NGOs

Governments and donors can accelerate investment into climate-smart/nature-positive investments, by sharing examples of technologies and business models. Investors currently have a good knowledge of post-harvest technologies. However, there is a limited understanding of how on-farm technologies can impact on their businesses/value chains.

There are new business models which are creating different financing options. Supporting micro-finance helps farmers access new technologies, making investment in small-scale agriculture less risky. There is also a role for supporting and sharing climate risk assessment tools to help sectors make the required adjustments.

Public-private partnerships are beginning to catalyze investment, sometimes linked to public ownership of technologies such as biodigesters. CASA can support these moves by using its convening power to facilitate conversations.

Relevant links

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