Making Climate Finance Work in Agriculture

This note has been prepared by members of the Investment Action Group as background to the Climate Finance session of the Annual Forum of the Global Alliance for Climate Smart Agriculture in Rome. It is not a formal note or position of GACSA or any of its members. Comments are invited and should be sent to the co-conveners of the Investment Action Group[1] and copied to the GACSA Facilitation Unit.

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Introduction

A growing population and changing diets are driving up the demand for food. Production is struggling to keep up as crop yields level off in many parts of the world, ocean health declines and natural resources—including soils, water or biodiversity—are used unsustainably. 1 in 8 people suffers from chronic hunger and more than 1 billion people are undernourished. The food security challenge will only get more difficult, as the world will need to produce at least 50 percent more food by 2050 to feed 9 billion people. The rise of climate change adds to the significant challenges in the agriculture sector.

At the same time in developing countries agriculture offers a pathway to economic development and inclusive growth. Recently the Economist estimated that with the right policies and investments an additional US$2 trillion in rural growth could be unlocked by 2030. Much of this growth could benefit smallholder farmers in developing countries where agriculture, especially in Africa, will be the main source of people's livelihood for several decades to come. To realize the opportunities that agriculture has to offer, it is needed a transformation in the sector is needed, to deliver more sustainable agriculture, that enables smallholder farmers to access markets and become successful and profitable farmers, and delivers food and nutrition security. We need a vision of agriculture that delivers three outcomes:

- A thriving and successful agriculture sector creating jobs, economic and livelihood benefits.
- A resilient sector that can successfully manage the risks of today's and tomorrow's climate.
- A sustainable sector where the environmental impacts of agriculture are avoided.

Taking the right action on agriculture can help empower women and will have significant impacts as 70% of women work in agriculture in South Asia and 60% in Sub-Saharan Africa. This is significantly more important when the impact of climate change on women in agriculture is realized – as it may have a multiplier effect impacting more on women and men.

Climate change is critically interrelated with agriculture. On the one hand, agriculture is very vulnerable to climate change. In particular, the sensitivity of crops, livestock, and fisheries to temperature, water availability, and extreme weather events puts yields and farmers livelihoods at risk. Agriculture also contributes to climate change, accounting for 19-29% of total GHG emissions, while emitting the largest share of non-CO2 GHGs. Thus, farmers and actors across the agricultural value chain have a crucial role in achieving a global climate solution by increasing resilience and adaptive capacities and reducing agriculture GHG emissions.

Responding to the above risks, research has showed that agricultural adaptation and mitigation are technically and economically feasible. Similarly, the international community has been recognizing the need but also the

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opportunity for a global action on adaptation and mitigation in the agricultural sector. Agriculture is thus prominent and explicit in the Intended Nationally Determined Contributions (INDCs) presented at the COP 21 in Paris, and the Global Goals for sustainable development.

The outcomes of the COP21 last December lay a strong foundation for global action on adaptation and mitigation in agriculture. The majority of the INDCs include agriculture in their mitigation targets or reference agriculture as an adaptation priority. Those ambitions are also tightly linked to many of the SDGs, and particularly SDG 1, SDG 2 and SDG 13. Still, cost estimates and adequate financial mechanisms are often yet to be specified. Equally important, in order to achieve these adaptation and mitigation objectives, a significant increase in the amount of capital available for climate smart investments in agriculture, while overcoming some of the long-standing institutional barriers, will be critical.

The need for additional liquidity in agriculture is not new. Access to sufficient and adequate finance for the agricultural sector has been a challenge in developing countries for decades. Due to perceptions of low profitability of the agriculture sector, lack of collateral, savings or insurance, and high risks involved in terms of quality or quality of production, fluctuating prices, and weather shocks. These risks are expected to become more common as climate change impacts become more prominent. Financier's appetite is also limited by lack of collateral, savings, or insurance, as well as the high transaction costs of working in, monitoring and evaluating agricultural project outcomes in remote areas with dispersed actors. Financiers, therefore, in most countries limit their exposure, raise interest rates, tighten lending criteria, shorten terms, impose onerous lending conditionalities and moreover, often shy away from lending to agriculture, while seeking to make more stable returns from other sectors of the economy. Financing available to smallholders in particular therefore tends to be prohibitively expensive, largely available from informal sources such as traders and local money lenders, rather than financial institutions. This finance shortfall is significantly challenging for smallholder farmers and small and medium sized agribusinesses and particularly so for women, who experience the lowest access to finance.

Smallholders therefore often lack access to capital that would allow growth and enhanced resilience to climate change, while financial institutions lack appropriate tools to address climate risks in their portfolios e.g. credit-scoring systems, loan product designs and monitoring systems.

There are, among others, three key barriers that have traditionally limited the access of smallholder farmers, SMEs and agribusiness to sufficient and adequate finance, namely:

- ***Inadequate enabling environments;***
- ***Insufficient capacity to manage exposure to agriculture sector specific risks; and***
- ***High transaction costs.***

These have played a major role in hampering the access of farmers to working capital (short-term loans) and more importantly to investment capital (longer-term loans), limiting their ability to invest in the value-adding infrastructure that could dramatically raise their productivity and incomes and help them grow their businesses. Furthermore, these barriers have also contributed to limit the access of smallholder farmers and SMEs to a broader range of tailored and demand-driven financial services.

Estimates of agriculture investments, smallholder finance and climate finance

Lowder et al. (2015) provide indicative estimates of the relative size of annual investments in agriculture in selected low- and middle-income countries, showing public and private, international and national investment and spending runs to the order of several hundred billion USD each year. It is not clear what percentage of this finance is climate smart, except in the case of ODA where reporting mechanisms exist.

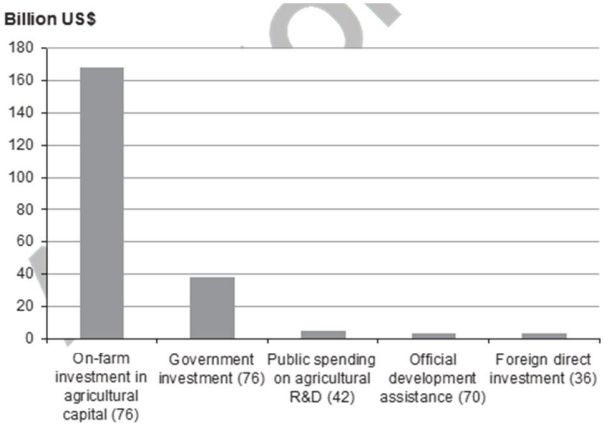

Figure 1: Average annual investment in agriculture in selected low- and middle-income countries, by source. Note: See Appendix B for country-level information. The number of countries covered is shown in parenthesis next to the relevant type of flow. All flows are reported in constant 2005 US dollars with the exception of FDI inflows, which are reported in current US dollars. Data are the average for the years 2005–2007 or for the most recent year(s) available before that period. There may be some overlap between data on ODA on the one hand and government investment in agriculture and/or expenditure on agricultural R&D on the other.
Source: On-farm investment in agricultural capital is calculated using data on agricultural capital stock from FAO (2014). Government investment is estimated as half of government spending on agriculture using data from IFPRI (2013a). Public spending on agricultural R&D is from IFPRI (2012). Official development assistance is estimated using data from OECD (2012). Foreign direct investment data are from UNCTAD (2011).

Source: Lowder et al. (2015)

According to the Initiative for Smallholder Finance, the global and largely unmet demand for smallholder agricultural finance is estimated at $450 billion per annum, and with 75% of the world's poorest people located in rural agricultural areas, such a gap severely hampers poverty reduction. More recently, it has been estimated that total supply of smallholder finance currently stands at more than USD 50 billion annually and with needs estimated at USD 200 billion (Dalberg 2016).

Despite the large financing gap and agriculture's vulnerability to climate change, the total amount of climate finance allocated to agriculture, forestry and land-use remains disproportionally small (6-8 USD billion) when compared to the total amount of climate finance mobilized globally (391 USD billion) in 2014 but data is limited outside of overseas development flows (Buchner et al., 2015). This is due to a number of factors, including the weak capacity to identify financial needs for adaptation and mitigation purposes in the agriculture sector, insufficient evidence base to identify the most suitable climate smart practices and technologies, lack of adequate metrics and tools to accurately measure the impact of climate smart interventions and a fragmentation of climate finance resources, with 93% of the climate finance available directed to mitigation given its greater capacity to demonstrate "quick-wins".

Against this background, additional public and private sources of climate finance will be needed to meet the objective of mobilizing USD 100 billion by 2020 and to ensure that sufficient capital flows into the agriculture sector. To this end, the existing multilateral climate funds will play an essential role in providing public climate finance and leveraging additional capital from the private sector. The recently capitalized Green Climate Fund

(USD 10 billion) will be catalytic in financing agriculture investments that achieve both adaptation and mitigation objectives, whilst also providing the technical assistance and capacity building needed to facilitate and encourage the transition towards a low-carbon, climate-resilient development path for developing countries around the world. More importantly, it will be essential in deploying public climate finance to leverage additional resources from the private sector, thus achieving a multiplier effect.

It is also essential to consider some of the fundamental governance issues that are necessary to ensure that climate and agriculture investments deliver inclusive and sustainable growth. Property rights and secure land tenure are essential building blocks for inclusive agriculture development. Investments need to be responsible, respect the rights of local people, and maximize the development impact from these investments. This means using the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests, and supporting responsible investments.

Opportunities

Climate finance can play a catalytic role in supporting the agriculture sector to become part of the climate solution and help transform the sector to deliver inclusive and sustainable growth. **There are at least three different promising avenues to use climate finance** to achieve this goal:

a) Designing innovative mechanisms to leverage additional sources of capital, from both public and private sources, that can be directed towards climate smart investments in the agriculture sector.

Some of the innovative mechanisms to leverage additional capital presented in this paper include:

- Developing public private partnerships to leverage the resources, expertise and capacities of stakeholders;
- Designing and piloting innovative investment vehicles that can help attract additional capital by diversifying and managing the risk return profile of each investor; and
- Bundling a wide range of financial instruments to increase effectiveness and provide more holistic and comprehensive solutions.

However, additional finance alone will not suffice and climate finance's entrance into agriculture will be hampered by the same old constraints unless it addresses some of these while also achieving positive climate outcomes. In order to increase the effectiveness of additional capital, it is essential to strengthen the links between financial institutions and farmers as currently the capital flowing to smallholder farmers and SMEs is often inadequate and insufficient. To that end, a second avenue to use climate finance will be critical:

b) Identifying entry points for directing climate finance into agriculture and for linking FIs to smallholders and agricultural SMEs

Climate finance can play a unique role in addressing some of the financial sector constraints in the agriculture sector by strengthening and increasing the effectiveness of the links between financial institutions on the one hand and smallholder farmers and SME agribusinesses on the other, thus significantly increasing the flows of capital to smallholder farmers and SMEs. For instance, climate finance could be used to:

- *Developing and/or improving the agricultural finance enabling environment:* these could include appropriate policy and regulatory frameworks that are key to mobilize and channel financial flows to farmers and development of the necessary structures to facilitate and accelerate climate smart investments among others;

- *Supporting financial institutions to further develop and strengthen their risk management mechanisms*: this could include the establishment of rural credit rating agencies, promotion of guarantees, insurance, value-chain finance, warehouse receipts, climate smart advisory services and big data and data science among others;
- *Supporting financial institutions to reduce transaction costs:* these could include the use of branchless banking and mobile financial services among others.

These interventions could significantly contribute to help financial institutions design adequate and tailored financial instruments and develop new delivery channels that better suit the needs of those smallholder farmers and SMEs involved in climate smart practices. Moreover, such financial and technical support could be contingent upon achieving specific climate smart outcomes, so that financial institutions specifically promote climate smart investments. In order to achieve this, it will be crucial to increase the capacity of both financial institutions and farmers. To that end:

c) Providing technical assistance to increase investments in agriculture

Climate finance could play a key role in helping strenghten the capacities of the main stakeholders involved in realizing climate smart investments, namely lenders and borrowers:

- *Lenders*:
    - Developing adequate institutional agricultural finance capacities
    - Developing the capacity of agricultural finance staff
    - Developing customized agricultural financial products and services

- *Borrowers*
    - Developing capacity and skills of farmers and SMEs with regards to:
        - On-farm climate smart practices and technologies
        - Risk Management
        - Accessing finance

Finally, for these avenues to efficiently promote and enhance additional climate smart investments in the agriculture sector, effective mechanisms that ensure a robust and sustainable pipeline of projects will need to be developed. To this end, different modalities like the role of facilitators and incubators could be further explored to ensure the linkage between investors and investees, and the effective aggregation of projects/programs where significant capital can be invested at scale.