Developing Metrics for Climate Smart 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 and copied to the GACSA Facilitation Unit.

June 2016

Introduction

To address the challenges of climate change, development, and food security, we will need increased public and private investments to help transform the agriculture sector into:

- A thriving and successful sector that creates jobs and economic and livelihood benefits, contributing to food security for all.
- A resilient sector that can successfully manage the risks of today’s and tomorrow’s climate.
- A sustainable sector where the environmental impacts, especially the GHG emissions, of agriculture are reduced or avoided.

These investments will need to follow good practice and existing guidelines, including Voluntary Guidelines on Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) and Principles of Responsible Agriculture Investment. They will need to be socially and environmentally responsible, having a positive impact on the livelihoods and welfare of those involved in and impacted by the investments. These investments will also need to be inclusive and gender sensitive, generating benefits for diverse groups and contributing to the economic empowerment of women as well as men.

Increasing and improving the flow of climate-smart investments into the agriculture sector will not only require additional sources of public and private capital but also effective metrics, both to track the amount of finance flowing into climate-smart agriculture (inputs), to estimate the finance gap and to monitor and measure the outcomes of these climate-smart investments (outputs/outcomes).

- The total amount of climate finance allocated to agriculture, forestry, and land-use is small (6-8 USD billion) relative to the total amount of climate finance mobilized globally (391 USD billion) (CPI 2015).
- International agreement on adequate metrics to track the total amount of capital flowing into climate-smart investments in the agriculture sector is lacking. This has hampered the ability of key stakeholders (governments, multi and bilateral donors, development agencies, impact investors and private sector among others) to calculate accurately the total amount of finance flowing into agricultural investments that aim to achieve positive climate outcomes (inputs). Moreover, the lack of such figures also limits the ability of key actors to estimate accurately both the current financial gap and the actual amount of liquidity needed, constraining the mobilization of the necessary additional resources.
- The availability of smart, relevant, and easy-to-use metrics also has the potential to allow key stakeholders (governments, multi and bilateral donors, development agencies and private sector among others) to identify and assess the readiness, suitability and potential effectiveness and efficiency of a given investment based on the expected impact that such investment could achieve, therefore helping investors to make investment decisions.
- Moreover, metrics can allow investors to identify the level of risk of or a certain investment, helping them to conduct an adequate risk assessment to evaluate the overall exposure to risk, its consequences to financial performance as well as provide the basis to develop adequate mitigation measures.

---

1 David Howlett and Richard Muyungi
• Relevant metrics can also allow us to monitor and measure accurately the outcomes (socio-economic, financial and environmental) of such investments (outputs), and how these outcomes are distributed across society.

Good metrics are thus critical for encouraging further climate-smart investments into the agriculture sector.

This paper sets out to enable experience sharing across multiple partners’ efforts around CSA metrics. Hence, it aims to provide a learning resource by collating and presenting the most relevant work that key actors are developing on metrics that will allow measurement of CSA investments. Further it will be important to link any thinking on metrics to the Global Goals for Sustainable Development.

We propose a very simple, tiered framework to help us develop CSA metrics along two dimensions:

• High level (policies, institutional readiness, enabling environment) and program/project level.
• Readiness, Inputs (tracking the amount of finance flowing into climate-smart agriculture) and Outputs/Outcomes (monitoring and measuring impact).

1. **High level: Measuring readiness of a climate-smart investment**

With regard to assessing the suitability of a certain climate-smart investment, several institutions/organizations have already carried out work that could help investors determine the climate readiness\(^2\) of an investment. The GACSA session is an interesting opportunity to build upon this work and further develop these metrics with a focus on the broader concept of climate-smart investment in the agriculture sector.

For example:

• CCAFS has published a framework for developing climate readiness indicators for agriculture that considers governance and stakeholder engagement, knowledge and information services, climate-smart agricultural strategy and implementation frameworks, national and subnational capabilities, and national information and accounting systems (CCAFS 2015).
• The World Bank has developed an Index to measure the enabling environment (including many of the CCAFS indicators) for operationalizing CSA at the national level (WB 2016 Draft Indicators “CSA-Pol”).

2. **Program/Project Level: Tracking Inputs**

A group of Multilateral Development Banks (MDBs)\(^3\) has successfully developed a joint harmonized approach to tracking climate finance for adaptation and mitigation across a number of sectors, including agriculture (finance inputs).

• For a project to be considered to have adaptation co-benefits according to the joint MDB approach, it must "set out the climate vulnerability context of the project, make an explicit statement of intent to address climate vulnerability as part of the project, and articulate a clear and direct link between the climate vulnerability context and the specific project activities" (elaborated in ADB et al. 2014 p. 26-32).
• For a project to be considered to have mitigation co-benefits according to the joint MDB approach, it must have mitigation co-benefits as listed under a typology of mitigation activities (elaborated in ADB et al. 2014 p. 33-40, see AG p. 36, also see this Typology currently on WB.

---

\(^2\) CCAFS 2015 defines climate readiness as the condition of having the capacity to manage plan, implement and monitor climate finance and activities related to climate change.

\(^3\) African Development Bank (AfDB), the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), the Inter-American Development Bank (IDB), and the International Finance Corporation (IFC) and the World Bank (WB) from the World Bank Group (WBG).
OPCS site that may be outdated). This mitigation tracking methodology is closely aligned with the 2015 Common Principles for Climate Mitigation Finance Tracking.

- To avoid double counting sources of climate finance, the joint approach separates the MDBs’ own resources from the external resources that are channeled through them. Moreover, to avoid double counting “dual benefit figures,” some MDBs determine the proportions of the total finance that are counted toward adaptation and toward mitigation and count them as such. Others report projects or project components with both mitigation and adaptation co-benefits in a separate category. In 2014 for example, ADB, EBRD, IDB and IFC tracked dual benefit figures separately, and the remaining MDBs split the total finance between mitigation and adaptation.

This approach could be further developed, including extending and scaling beyond the group of MDBs to other investors in the agriculture space. Further work is needed to incorporate agricultural productivity into the approach and to extend it beyond the MDBs.

- The MDB approach represents an interesting opportunity to explore the possibility of expanding this climate finance accounting approach further by inviting other public actors (OECD countries, bilateral donors, government budgets, etc.) to join and adopt such approach. This would allow climate financiers to increase the harmonization of the different climate finance accounting approaches, offer a more coherent and comprehensive picture of climate finance flows and ultimately increase the accuracy of the estimations of total climate finance currently available.

- Incorporating agricultural productivity (in terms of production inputs) into the harmonized approach to climate finance tracking in MDBs would make it more suitable as a CSA metric. The productivity component would be included in the climate finance tracking as long as it contributes to adaptation and/or mitigation outcomes.

- Furthermore, additional work is needed to devise a harmonized approach to effectively solve the potential inaccuracies derived from double counting, as there is no clear methodology yet and not all MDBs are following the same approach.

3. **Program/Project Level: Measuring Outputs/Outcomes**

Moreover, there is an opportunity to further explore and build upon the work already developed by several key actors in the sector to develop a set of climate-smart metrics that are specific, relevant, and easy-to-use for the agriculture sector. These metrics can help key actors identify attractive climate-smart investments in the agriculture sector and measure its potential outcomes. They include:

- FAO Sourcebook includes brief guidance on developing “CSA options” using a screening and/or cost-benefit analysis (FAO 2013 Module 18).

- The FAO Sourcebook and The World Bank have developed monitoring, evaluation, and assessment methodologies for CSA (FAO 2013 Module 18; WB 2016 Draft CSA Indicators “CSA-Res”). Note that these examples focus on productivity and climate, not on financial return.

- CCAFS has created a database of over 378 CSA-related indicators gathered from several international development agencies (FAO, DFID, GIZ, IFAD-ASAP, World Bank, USAID) to develop a public access CSA Programming and indicator Tool (Quinney et al.2016) to contribute instruments for CSA programming and metrics for tracking outcomes and impacts. The Tool proposes a shared framework for agricultural programs to: i) examine to what extent current or planned intervention(s) address each CSA pillar, ii) compare the scope and CSA intentionality among different project designs to make future programming more climate-smart, and iii) support the identification and selection of an appropriate set of indicators to measure and track CSA-related outcomes. The tool can be accessed at https://ccafs.cgiar.org/blog/new-csa-programming-and-indicator-tool-3-steps-increasing-programming-effectiveness-and-outcome#.V1huV_krJhE

- CARE has developed a comprehensive set of milestones and indicators for Community-Based Adaptation, presented in the Climate Vulnerability and Capacity Analysis (CVCA) Handbook. These measure progress on
four “enabling factors” at national and local levels: Promotion of climate-resilient livelihoods strategies; Disaster risk reduction strategies to reduce the impact of hazards on vulnerable households; Capacity development for local civil society and governmental institutions; and Advocacy and social mobilization to address the underlying causes of vulnerability. The approach understands adaptation as a process rather than a set of fixed outcomes.

- IFAD’s Adaptation in Smallholder Agriculture Program measures its success through ten indicators under five program objectives. Recognizing that project interventions most valuable in resilience-building will differ among locations, the ASP indicators allow for different definitions of what confers resilience in different locations (e.g. farm diversification, or agro-forestry, or water management depending on the climate challenges at that site).

- The Adaptation Fund uses a “results tracker” to make decisions on disbursing tranches of funding, based on five core indicators: number of beneficiaries (direct and indirect); number of Early Warning Systems; assets produced, developed, improved, or strengthened; increased income, or avoided decrease in income; increased ecosystem resilience in response to climate change-induced stresses; natural assets protected or rehabilitated.

- The WBCSD Climate-Smart Agriculture Initiative will measure progress against its targets to raise availability of nutritious food by 50%, reduce food system emissions by 30% and raise the resilience of millions of farmers by 2030. The Action Plan can be found at http://www.wbcsd.org/agri-business-leaders-get-climate-smart-at-cop21.aspx

- The Global Impact Investment Network (GIIN) has developed IRIS as a free public good to support transparency, credibility, and accountability in impact measurement practices across the impact investment industry. IRIS is a catalogue of generally accepted performance metrics that are designed to measure social, environmental and financial performance of an investment, applying also to the agriculture sector.

- The GIIRS (Global Impact Investing Rating System) assess social and environmental impact of companies and funds from developed and emerging market in a transparent and comprehensive way. It uses ratings and analytics approach similar to Morningstar investment rankings and Capital IQ financial analytics. It focuses on the impact performance of private companies, using a cross-industry and cross-geographic methodology, and providing transparent, independent, and verified data. GIIRS is a hybrid private/public good in that it charges for its services in order to become sustainable, it is a non-profit entity that publishes data for public use and educates/advocates about impact investing and impact metrics, and it maintains transparent standards and an assessment tool that can be used by anyone for internal use for free.

- The Cambridge Institute for Sustainable Leadership has developed under its business action –sustainable finance- area of work, an investment leaders group that is focused on advancing the practice of responsible investment and that provide guidance to investors on sustainable and long-term value creation by helping them assess the financial, social and environmental impact of their investments.

- Several governmental donor agencies have developed sets of project and program indicators to measure performance on climate change adaptation and on sustainable reductions in food insecurity, poverty, environmental degradation and exposure to climatic risks. Published examples are available, for example, from SIDA, DFID and the USAID Feed the Future Program.