




CoSAI
Commission on
Sustainable
Agriculture
Intensification

Case Study: United States Agency for International Development (USAID) investment in innovation for sustainable agricultural intensification



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About this Case Study

USAID has played a crucial role in shaping global shifts in agriculture and sustainable agricultural intensification (SAI) through the decades. The agency has constantly fostered agricultural innovation - from the Green Revolution in the 1960s to the market-economy transition in the 1990s¹. USAID's more recent work has followed the priorities of the Feed the Future (FTF) initiative, the US government's flagship global hunger and food security initiative. Furthermore, the FTF innovation laboratories have played a key role in setting up definitions and furthering the global discourse on SAI.

This case study explores the investments made by USAID in agriculture innovation overall as well as SAI innovation over the last decade.

This case study accompanies the report: *Funding Agricultural Innovation for the Global South: Does it Promote Sustainable Agricultural Intensification?* The full report can be found on the CoSAI website: <https://wle.cgiar.org/cosai/innovation-investment-study>

¹ USAID's Legacy in Agricultural Development – 50 Years of Progress, 2013.

1. Summary

Based on OECD data, **USAID invests more than USD 1 billion annually in agriculture, an estimated 60% of which goes towards innovation (>USD 600 million annually); of this, more than 15% (~USD 100 million on average annually) is estimated to be towards SAI².** The share of SAI is larger for USAID than other OECD development partners on average (who spend less than 10% typically). Interviews with experts imply that innovation and SAI funding numbers for USAID could be higher than those reported here.

Funding for agricultural innovation². More than one-third of USAID's annual agricultural innovation funding goes to the private sector (~USD 200 million in 2018), a higher share compared to other bilateral funders, and this share is increasing. Further, compared to OECD development partners, USAID invests a higher share of the innovation pool into NGOs/NPOs (~35%) and research agencies (~10%). Geographically, all the innovation funding goes to the Global South Sub-Saharan Africa stands out with 30-40% of the funding. 50% of the innovation funding goes to Least Developed Countries (LDCs). **FTF focus countries are key recipients, of which five countries stand out with their share (>3%) and average growth (>25%).** These are Ethiopia, Ghana, Kenya, Tanzania, and Bangladesh. Afghanistan is an outlier, with the highest share of innovation funding (13%).

Funding for SAI³ innovation. A higher share of SAI compared to other development partners is not surprising, given USAID's legacy. **Most of the SAI funding goes into research and knowledge systems (~USD 70 million annual average), followed by governance systems & policy support (~USD 30 million annual average).** The Sustainable Intensification Innovation Lab (SIIL) is an example of investments into research systems. Further, USAID's SAI investments are distinctive in that, the **"human condition"** stands out more compared to development partners in general – likely a result of the focus on nutrition. ~50% of innovation investments get tagged with the "human condition" intention. **Overall, the USAID strategy is distinctive, and balances focus on the private sector with deep R&D networks.**

2. Overall

The US is the largest bilateral OECD investor for agriculture, funding over USD 1 billion per year; most of this comes through USAID and its relative share is rising. However, overall US contributions have been stagnant or falling (up to 2018), compared to countries such as Germany.

The Feed the Future (FTF) program alone accounts for about 70% of USAID's funding in agriculture⁴. The program has three goals that go beyond basic definitions of food security: Inclusive, Sustainable, Agriculture-led Economic Growth; Strengthened Resilience among people and systems; and a Well-Nourished Population, especially women and children.

² Dalberg analysis of the OECD. Stat database from 2010 to 2018, combined with interviews.

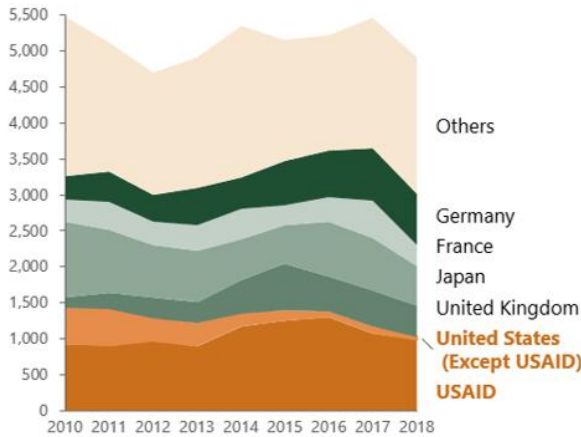
³ Based on tagging of individual investments using a word crawl algorithm. The strict definition of SAI was used: investments that are aimed at productivity and environmental gains, in addition to one of social or human-condition related gains.

⁴ https://www.usaid.gov/sites/default/files/documents/1867/Crosscut_Report_-_Global_Food_Security_FINAL.pdf

USAID is the largest bilateral OECD investor, spending over 1 B USD per year; most of this comes from USAID and its share is rising...

...but the US's contribution has been stagnant and recently decreasing; counterparts like Germany have increased their investment in the same period

OECD aid to agriculture over time
2010-2018, Million USD, constant 2019 prices



Evolution of Ag investment of OECD countries
Yearly spending indexed to 2010 values

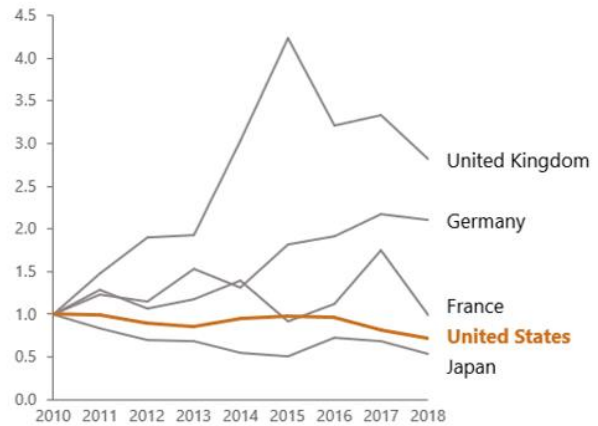


Figure 1. OECD Bilateral funding towards agriculture for the decade.

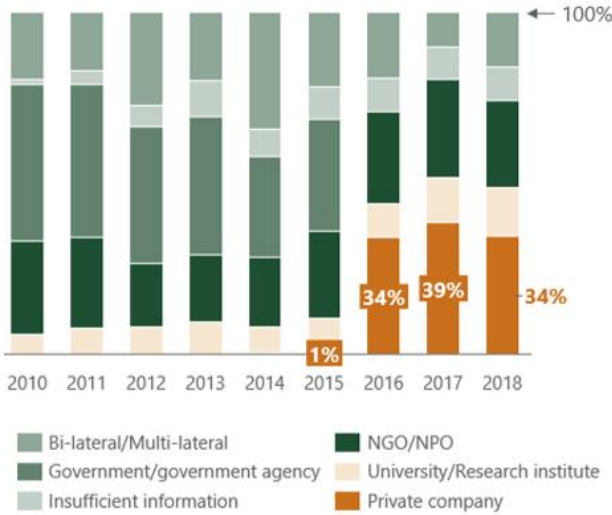
3. Agricultural Innovation Funding

USAID invests ~USD 600 million annually on agricultural innovation, ~USD 200 million of which is channeled into the private sector (2018) – under the overarching focus on economic growth. While in 2015, less than 5% of USAID's agricultural innovation pool went to the private sector; in 2018, the number went up to ~35%. This share is much higher than that of other development partners: from 2010 to 2018, more than 15% of USAID's innovation pool went to the private sector compared to ~5% for all multilateral and OECD bilateral donors. ~90% of this investment into the private sector is through the “private sector in the provider country”, i.e., the USA, as opposed to PPPs or “private sector in the recipient country”⁵.

⁵ Definition in the OECD stat database.

USAID's share of private sector investments has grown recently to occupy more than 1/3 of its innovation portfolio...

Share of USAID's innovation spending by sector
% of total innovation spending



...the decadal share of innovation funding going into the private sector is more than 2 times the international OECD average

Share of innovation investments, USAID vs others
2010-18, % of total taggable innovation spending

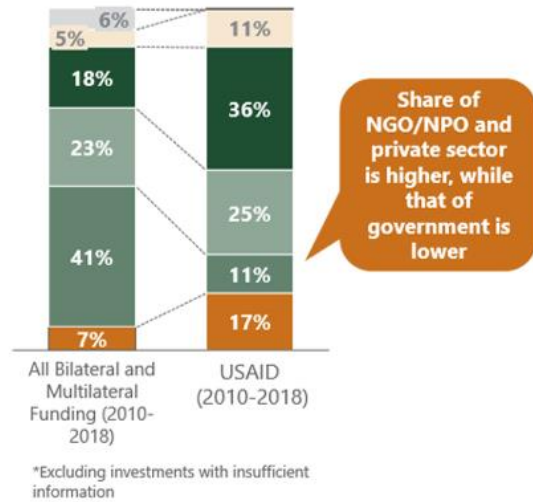


Figure 2. Share of innovation investments among recipient types.

Another ~USD 200 million is allocated to NGOs/NPOs followed by ~USD 60M for research institutions universities; as a share of the overall funding by USAID, these are both larger shares compared to other multilateral and OECD bilateral donors. Within research organizations, investment into CGIAR is significant. From 2010 to 2018, USAID funded more than USD 900 million on CGIAR representing around 10% of USAID's total innovation investment (~USD 6 billion). This data is likely lower than the actual number.

Geographically, almost all the grants and hence innovation funds are directed towards the Global South with ~50% going towards Least Developed Countries (LDCs), even though some of this is routed through research universities. Sub Saharan Africa stands with above-average growth in investments. Among countries, expectedly most of USAID's funding goes to the FTF focus countries. Within these, 5 countries stand out for their relatively larger share and annual growth: Ethiopia, Kenya, Ghana, Tanzania, and Bangladesh. Additionally, Afghanistan stands out: despite being outside the FTF system, the country receives the highest share of innovation funding (~13%).

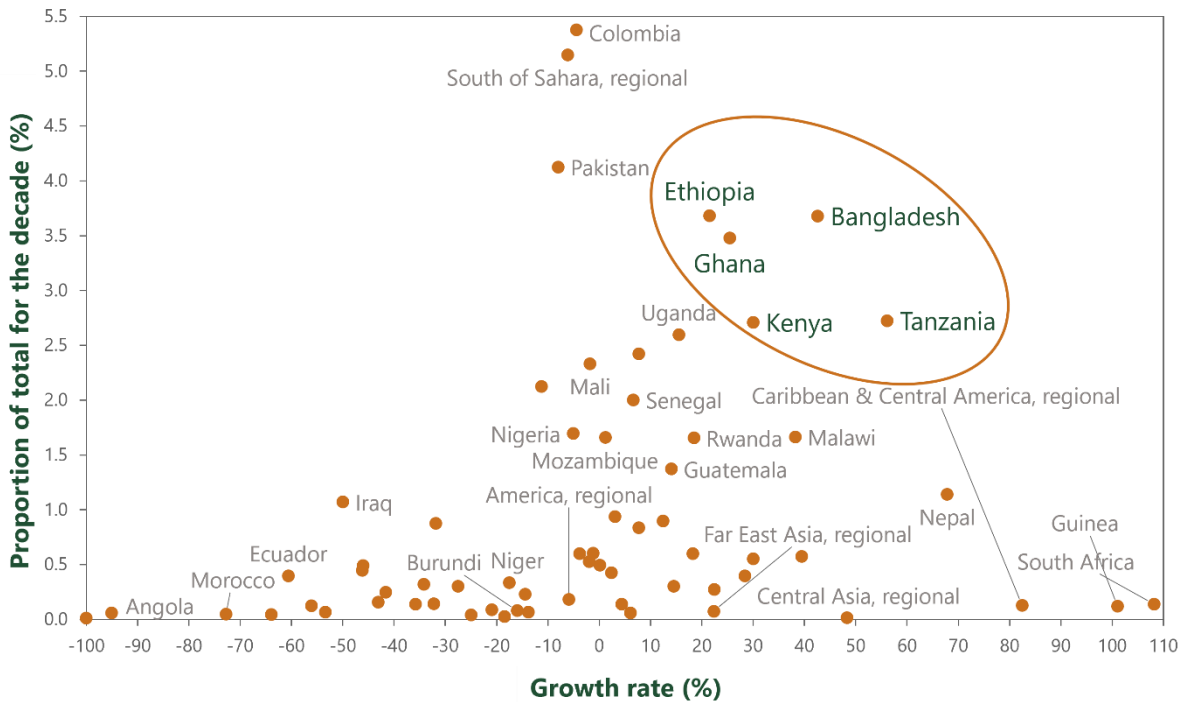


Figure 3. Countries receiving USAID funding – growth rate and share of total innovation funding.

4. SAI

USAID invests more than 15% of its agricultural innovation budget on SAI - an estimated USD 100 million annually, of which USD 70 million supports research, knowledge, and education systems. Investments in macro systems (Figure 4) form most of USAID’s SAI investments. Specifically, research, knowledge, and education systems, followed by governance systems and policy support, stand out. Examples of relevant research investments are the Cereal Systems Initiative for South Asia (CSISA) within the CGIAR system and Africa Research in Sustainable Intensification for the Next Generation (Africa RISING). The second major category of SAI is agricultural production systems - most of the funding in this layer goes into the production part of the value chain.

USAID investments emphasize the “economic” and “human conditions” dimensions of sustainability. Contrast this with data for all multilaterals and OECD bilaterals, where “environmental” intention almost always outweighs “human condition”. The greater emphasis on “human condition” is expectedly due to USAID’s focus on nutrition. In fact, investments tagged with “human condition” (and “productivity”) intention(s) have gone up. Conversely, over the last decade, investments tagged with the “social” intention have come down. Further, within macro-systems, agricultural policy support is backed by “human” and “environmental” intentions, while research is backed by both these and in addition the “economic” and “productivity” intentions.

| Area of Focus | Sub-Area of Innovation | Average annual Innovation Spending in million USD | Average annual SAI in million USD (strict definition) | % of total innovation spending | Level of focus |
|--|---|---|---|--------------------------------|----------------|
| Level 1: Macro Systems | Agriculture governance systems & policy support | 168 | 32 | 19% | High |
| | Research, knowledge & education systems | 196 | 71 | 36% | High |
| | Agriculture financing systems | 99 | 13 | 13% | Medium |
| | Collaboration & trade systems | 48 | 10 | 19% | Low |
| Level 2: Production systems layer | Inputs | 47 | 5 | 10% | Low |
| | Production | 174 | 18 | 10% | Medium |
| | Post-production | 0.4 | 0 | | |
| | Core-processing | 0.7 | 0 | | |
| | Farm-level cross cutting systems | 7 | 0 | | |
| Level 3: Production factors & NRM | Water & Soil Management | 29 | 9 | 31% | Low |
| | Forestry & biodiversity Management | 14 | 5 | 40% | Low |
| | Land use, and rights management | 0.7 | 0 | | |
| | N/A | 181 | 8 | 4% | |

Figure 4. Focus of USAID’s SAI investments across areas.

Note: totals in the figure add up to more than 100% because the same investment gets tagged to more than one category.

The Feed the Future Innovation Labs (FFIL) form a key component of USAID’s investments in research; the Sustainable Intensification Innovation Lab (SIIL) stands out. USAID supports 21 Innovation Labs, supported by over 40 American universities along with partners from local and overseas research institutions. The Sustainable Intensification Innovation Lab (SIIL) is an FFIL that has advanced the discourse on sustainable intensification globally. Led by the Kansas State University, SIIL has developed the sustainable intensification assessment framework⁶. The framework can assist policymakers and researchers with indicators and metrics to measure trade-offs across different interventions. The Framework is now employed by various SIIL programs and referenced by Africa RISING and Cereal Systems Initiative for South Asia (CSISA) and is used throughout [this study](#).

In conclusion, the USAID has been a key player in furthering agricultural innovation broadly as well as specifically in SAI, through concrete programs and investments in the Global South. Research and learning programs on SAI funded by USAID can play a catalytic role going forward.

⁶ Musumba, Mark, Philip Grabowski, Cheryl Palm, and Snapp Sieglinde. 2017. “Guide for the Sustainable Intensification Assessment Framework.” USAID, Kansas State University.



The Commission on Sustainable Agriculture Intensification (CoSAI) brings together 21 Commissioners to influence public and private support to innovation in order to rapidly scale up sustainable agricultural intensification (SAI) in the Global South.

For CoSAI, innovation means the development and uptake of new ways of doing things – in policy, social institutions and finance, as well as in science and technology.

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