

Public & Private Sector Engagement in Climate Finance

EU and US Climate Change Mitigation Course

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My journey to-date

Social enterprise

- Impact @ Business School

East Asian Development

- Grants

Good Governance Consortium

- Professor Murray -> University of Minnesota

Development Economics & Finance

- Fulbright -> Columbia University

From Start-Up Life @ i5invest to International Politics 101 @ UN Secretariat

- MDGs / COP15

Health Finance @ Global Fund

- Step up the Fight, EAI, Wambo

Silicon Valley @ Palantir

- Data, Growth & Execution

EdTech @ Goodwall

- Results & Talent Density

Impact Advisor @ AxBessImpact, Pula, IACA, Horizon, A100Years

- SDGs & Climate; Tech & Innovation
- Resource Mobilization Campaigns, 1M = 1B



Climate Finance

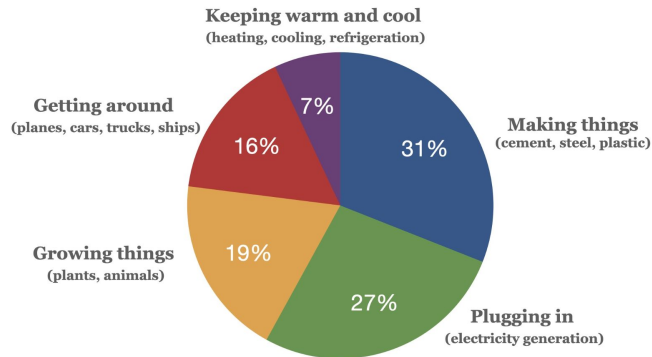
- **Climate Finance** = Financial resources and investments needed to address climate change
 - Reduce emissions, promote adaptation & build resilience
- **\$125 trillion of climate investment is needed by 2050 to meet net zero**
 - Around 800 Billion / year in 2020 (global fossil fuel subsidies = US\$450 billion; Covid recovery = 2.5 trillion)
 - Most on renewable energy and sustainable transport / agriculture, forestry and other land use only 15+ billion
- **At least \$2.5 trillion annual financing gap for achieving the SDGs**
- **Wicked Problem**
 - High level of uncertainty, multiple and conflicting objectives, and significant impacts on various stakeholders
- **Collective Action**
 - Stakeholders in various sectors need to come together, incl. governments, businesses and civil society
- **"Government and business will need to act together"** *McKinsey report on The net zero transition.*



Climate finance to reduce emissions

- **Governments:** Research and incentives including subsidies (EU Green Deal)
- **Philanthropic:** Catalytic financing (Breakthrough Energy, Bezos Earth Fund)
- **Venture:** Funding innovation (Climate Tech)
- **Project financing:** Growth stage, scaling proven technologies (Sustainable Finance, Impact Investments)

How much greenhouse gas is emitted by the things we do?





Public funding for mitigation and adaptation

COP15 Commitment: Developed countries to jointly mobilize US\$100 billion per year by 2020, from a variety of sources, to address the pressing mitigation and adaptation needs of developing countries (extended to 2025 in Paris) through

- Bilateral public climate finance provided bilateral aid agencies and development banks.
- Multilateral public climate finance by multilateral development banks and climate funds
- Climate-related officially supported export credits, and;
- Private finance mobilised by bilateral and multilateral public climate finance.

Green Climate Fund (GCF) is key delivery mechanism on the 100 Billion dollar commitment

- support developing countries to design and deliver ambitious climate action plans (NDCs);
- maintain an even balance between mitigation and adaptation;
- and to engage the private sector to mobilize private finance toward low-carbon, resilient investments.



Private sector climate finance

- **Companies** driving innovation and adopting sustainable business practices to meet net zero targets
- **Investors** decarbonizing their portfolios and investing in the global transition to a decarbonized economy by 2050.
 - **Sustainable finance**
 - Taking ESG considerations into account when making investment decisions
 - E=mitigation and adaptation, biodiversity protection, pollution prevention & circular economy
 - **Impact Investing**
 - Generate positive, measurable social and environmental impact alongside a financial return.
 - Investing in climate solutions
 - **Blended Finance**
 - Difficult for public finance to meet pressing climate financing needs, particularly in emerging markets
 - Mobilizing private capital on a large scale will be key to achieving their climate objectives
 - Combining public and private capital can reduce investment risk and attract greater funding
 - MDBs and IFIs create blended financing structures to alter the risk-return profile



Case Study: Climate Change Mitigation

- **Mitigation:** Stop adding greenhouse gases to the atmosphere in order to get to net zero emissions
- **Nature-based solutions:**
 - Avoided Deforestation -> causes about 10 % of global total emissions
 - Reforestations (replanting); afforestation (new growth); agroforestry (trees in farmland) -> Carbon removal
- **Financial Incentives**
 - Shift behaviour towards conservation and regeneration
 - Public funding: REDD+ (countries pay others to protect forests) -> funding gaps
 - Private funding: Voluntary Carbon Market
 - Corporations pay to protect forests
 - Counts as avoided emissions -> offsets
 - Purchased to help neutralize a company's carbon footprint



Carbon Markets and Offsets

- **Carbon credits** are a financial vehicle to fund direct, verifiable actions for mitigating the impact of the changing climate
- Regulated vs voluntary carbon markets
- **Challenges:** Standards, accounting, verification, additionality
- **Criticism:** Lack of transparency, accessibility, equitability and quality + Greenwashing
- **Offsets:**
 - Enable companies and individuals to pay for emission reduction or removal to negate their own emissions
 - Greenwashing: Absolve them from emitting in the first place
- **Avoid, Reduce, Offset**
 - Impact: Prone to overestimates and fraud ->
 - eg. finance solutions that would have been deployed anyway; or
 - protecting forests at much greater scale than deforestation would have taken place
- **Technology**
 - Growing demand for effective and high-quality carbon credits, apply emerging technologies

Case Study: Mitigation



AxessImpact

**LEVERAGING TECHNOLOGY
TO DELIVER CLIMATE SOLUTIONS**

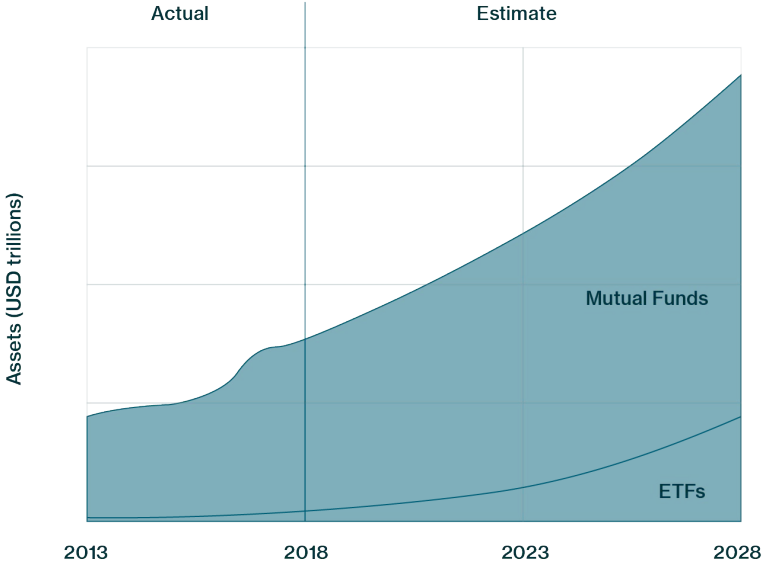
www.axessimpact.green

From forestry and biodiversity
to renewable energy,
we bring project developers,
investors and corporates
together in one platform,
helping to accelerate the shift
to an impact economy.



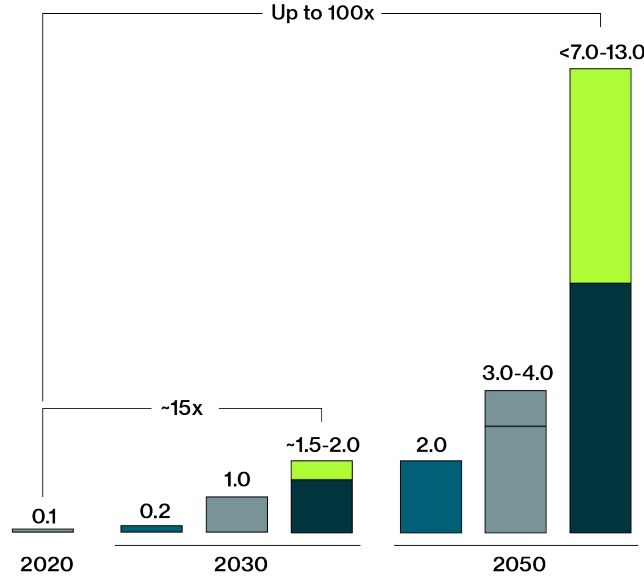
The fast-growing demand for sustainable investment and impact projects remains unmet

Growth of sustainable investing



Source: BlackRock, USD trillions

Global demand for voluntary carbon credits



Source: McKinsey, gigatons per year

The AxxessImpact 'Habitat' Platform enables



Developers

To certify and monetize their environmental & social impact



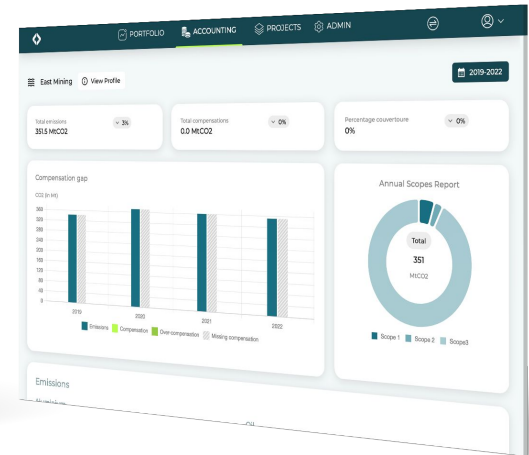
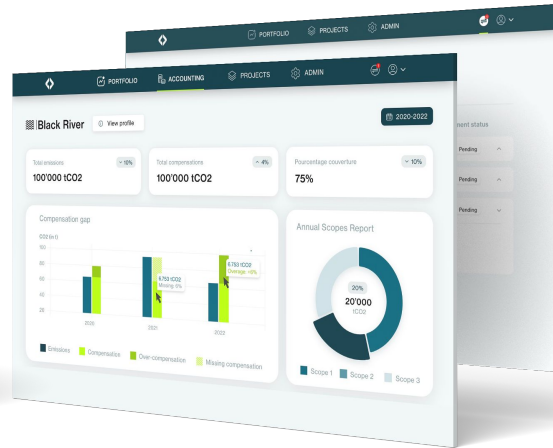
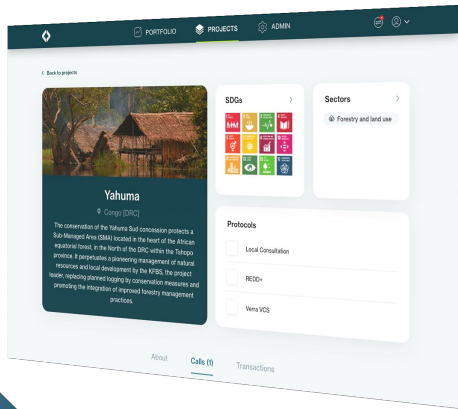
Investors

To finance climate projects and innovations



Corporates

To account for and in-/offset their impact



Case Study: Adaptation



Case Study: Climate Change Adaptation

- **Adaptation:** Minimize the impact of a changing climate on people who are already affected (while innovation takes place)
- Worst impact on the world's poorest people; and most of the world's poorest people are **farmers**
- **Adaptation & Agriculture:** drought and flood tolerant crops; risk management through insurance
- **Challenge** - You pay the costs of adaptation upfront but benefits only later
- **Unlocking funding for adaptation:** How public money can attract private investors to get behind adaptation projects
 - Public needs to both finance adaptation measures; and be a catalytic investor to attract private investments



Delivering **climate insurance** for farmers at scale





Farmers in Sub-Saharan African countries are increasingly exposed to adverse climate related events

- Agricultural productivity growth reduced more than in any other region due to climate change
- Rising temperatures, erratic and decreased rainfall, and diseases threaten crop yields
- Annual grain loss estimated at US\$4 billion
- Increased incidences of poverty in farming communities recorded
- **Agricultural insurance can be key to climate change adaptation**

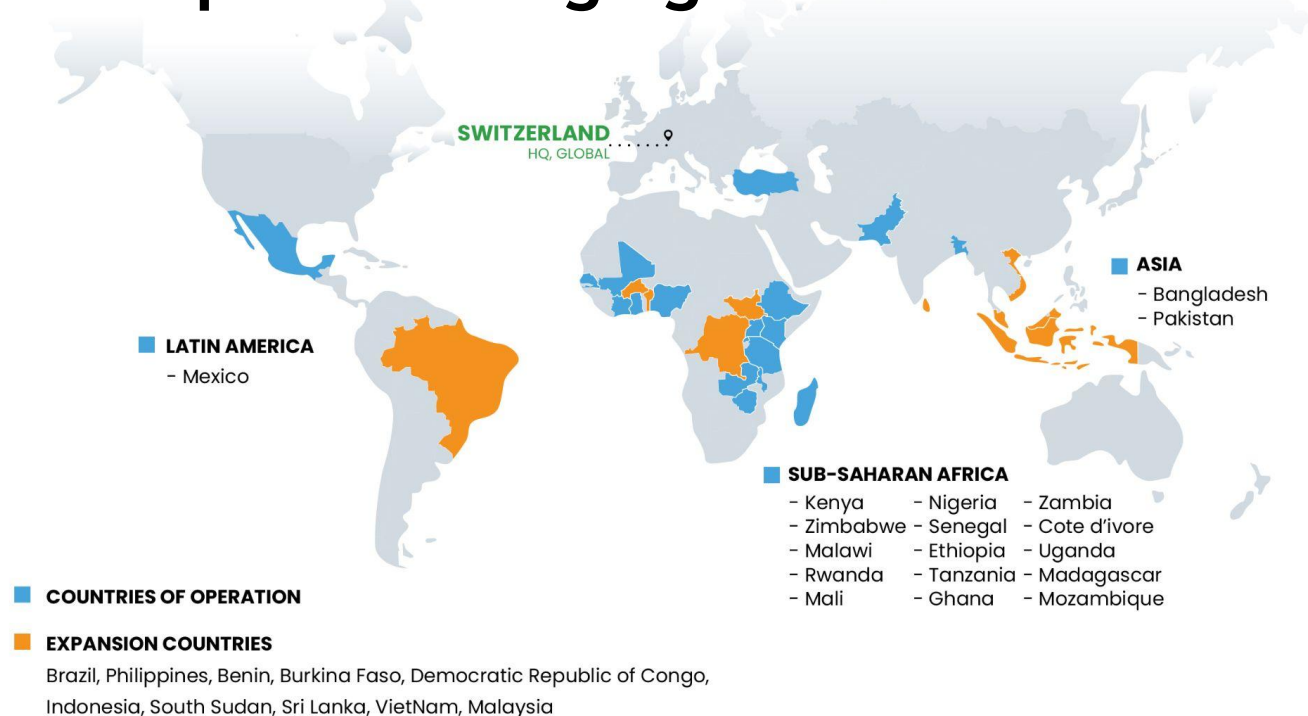
In spite of its benefits, insurance coverage against climate risks among farmers in Sub-Saharan Africa is 3%

- Compensates for yield losses due to drought, floods, etc.
- Protects agricultural investments & farmers' livelihoods
- **Builds farmer's resilience to climate-related shocks**
- Less uncertainty leads to higher investments
- Results in increased productivity & **greater food security**

To scale up insurance penetration, we need to address the supply- & demand-side gaps



We help farmers adapt to a changing climate



Pula designs and delivers insurance solutions to protect against climate risks and improve the livelihoods of smallholder farmers

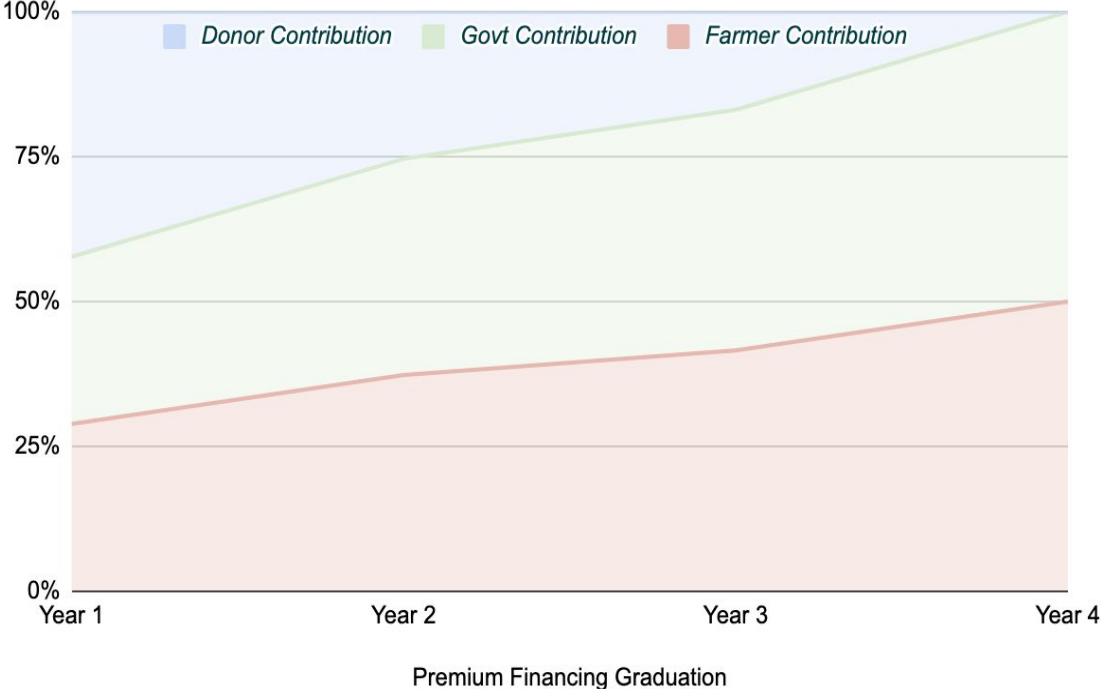
Working with partners we insured over 1.65 billion in agricultural investment

- 9 million farmers insured
- 100 full-time & 1500 field staff
- 150+ re-/insurance & distribution partners
- Parametric crop (area yield index) insurance covering all major crops against drought, flood, locusts, cyclones, diseases

Select partners



Gradual increase of government and farmer contributions towards sustainability after 3-years





Thank you