



THE CASH COALITION WORKS TO MAKE REGENERATIVE AGRICULTURE AND CLIMATE ACTION PROFITABLE FOR SMALLHOLDER FARMERS.

**ANNUAL
REPORT 2023**

THE CASH COALITION IS ONE YEAR OLD

The CASH Coalition is one year old. We work to make regenerative agriculture and climate action profitable for smallholder farmers in the Global South. Since our launch at the Skoll World Forum in 2023, we have embarked on a process of learning and doing to realize this mission.

We are pleased to present an overview of key activities in this document. Do not hesitate to contact us to discuss our work further

Coalition members



Coalition partners



NEW YORK
inception



JANUARY
2023

INCEPTION AT THE SKOLL WORLD FORUM IN 2023

LONDON
member meeting

CLIMATE WEEK
NEW YORK

FARMER VOICE REPORT

AFRICA CLIMATE
SUMMIT NAIROBI

P6

CATALYZING CREDIT WHERE CREDIT IS DUE

DISTILLING OUR CARBON
MARKETS WORK

P8

COP28
DUBAI

JANUARY
2024

NEW YORK
member meeting

TARRYTOWN
NEW YORK

PORTFOLIO OF SMALLHOLDER CLIMATE PROJECTS

PRE-FEASIBILITY STUDIES

AGROFORESTRY AND FINANCE

UNIT COST MODELLING

REGENERATIVE AGRICULTURE FOR GENERATIVE AI

P10

P19

P22

We work to make regenerative agriculture and climate action profitable for smallholder farmers and local communities in the Global South. The Coalition works to accelerate the smallholder transition to regenerative agriculture and sustainable land management to enhance resilience and livelihoods while advancing local ecosystem restoration and climate change mitigation. We focus on creating enabling conditions that are challenging for individual organizations to address in isolation and impossible for farmers to shift. We support innovative and trusted organizations that serve farmers across diverse contexts and who work to create value for people (families), nature (local ecosystems, soil, biodiversity), and climate (carbon removal, emissions reduction).

We implement our work aligned with four pillars:

- 1. CASH identifies and shares knowledge and best practices** regarding existing technologies, practices, financing arrangements, incentive structures, behavior change and adoption, costs and benefits, and scaling strategies to accelerate a smallholder regenerative transition. We are actively developing a repository of regenerative content focused on smallholder agriculture to i) accelerate awareness and uptake across the Coalition; ii) support members, the Coalition, and eventually the field-at-large to leverage generative artificial intelligence (AI) tools as a strategy to scale smallholder farmer access to quality, locally relevant, regenerative advice. The Coalition encourages and facilitates peer-to-peer learning through monthly sessions in which members share insights from practical experience and research.
- 2. We provide technical assistance, information, and education** to our members and local partners to amplify the voices of smallholder farmers and increase their ability to derive benefits from climate finance and Payments for Ecosystem Services (PES).
- 3. We expand existing avenues for participation, create new entry points to climate financing arrangements, and transform climate finance** by advocating for reforms to existing carbon markets, standards, and relevant regulatory instruments to ensure that markets and instruments work for smallholders and recognize and value smallholder nature-based solutions and ecosystem services. We identify ways for smallholders to tap into non-carbon climate finance. We are developing a portfolio of projects to advance these objectives, identify and overcome practical barriers inhibiting smallholder projects from accessing carbon and other climate finance, and inform learning and advocacy to promote systems change.
- 4. We catalyze the development and execution of ground-up research to build business models and use cases demonstrating the viability of smallholder regenerative and climate actions. We leverage this learning to inform advocacy, project development, and further research.**

Peer-to-peer learning sessions

2023 May: Ecosystem Marketplace, **Forest Trends**
 June: Land Rights, **Landesa**
 July: The Role of Biological Inputs in Regenerative Agriculture, **Proximity Designs**
 October: Net Zero and Insetting, **Root Capital**
 October: Addressing Sustainability Due Diligence, **SEKEM**

November: Latest Research on Regenerative Agriculture, **One Acre Fund**
2024 March: AI for Regenerative Agriculture, **Digital Green**
 April: Exploring Carbon Readiness for Africa's Restoration Champions. **World Resources Institute**

We have welcomed new members and strategic partners to the broader coalition throughout the year. Foundational discussions were held between Forest Trends, Root Capital, One Acre Fund, Landesa, Proximity Designs, Babban Gona, MyAgro, and COMACO in the months before the 2023 Skoll World Forum. By the time we formally launched in Oxford, we had been joined by CAP-A, Acceso, and Mafisa. Following our launch, we added Encourage Capital as a strategic partner. Encourage Capital has enriched our understanding of carbon markets and climate finance, brokered new conversations, and helped us move ideas into practice. At our in-person meeting in London last June 2023, we added Precision Development (PxD) as an additional strategic partner, bolstering our research capabilities and reach in Asia. We also welcomed Digital Green and SEKEM, who bring new perspectives, rich experience, and tools to assist smallholders navigate the polycrisis.

At the same time, due to capacity constraints given their massive scale-up, MyAgro decided to temporarily step back from active collaboration with CASH.

We are now a coalition of [thirteen members and two strategic partners](#). As we refine our strategy and consolidate our programming, we are not actively looking to expand our membership. However, we may add a limited number of strong organizations that complement the current membership. We may also consider an affiliate model.

In biannual in-person member meetings, we determine priority actions and pursue them through working groups. Our working groups comprise member representatives augmented by third-party experts and supported by a small central staff.



GIVING FARMERS VOICE

When representatives of CASH member organizations met in person in June 2023, there was common concern about a widely held perception of farmers as passive victims of the North's development to be pushed further into poverty by climate change. In this worldview, smallholders and local communities lack the agency and resources to take action, except as climate refugees. We believe this narrative is inaccurate and disempowering, perpetuating a worldview in which smallholder farmers and forest communities are grateful beneficiaries of Northern actions.

Working with farmers at the frontline of climate change, our members experienced a different reality: despite often trying conditions, farmers have significant local knowledge and agency. Smallholders know how they are being impacted by climate change and want to act to arrest its impacts.

To find out what farmers thought, we spoke to over 1,600 farmers in ten countries where our members work. [Farmer Voice Report](#).

KEY FINDINGS:

- Almost nine in ten farmers (87%) surveyed reported concern about environmental changes, and more than half (56%) reported significant concern.
- Among farmers surveyed, 83% reported experiencing at least one extreme weather event on their farm in the last five years and two-thirds in the past year.
- Farmers recognize changes in the quality of their resource endowment: 54% reported diminishing soil quality, and 57% reported observing fewer beneficial insects and earthworms.
- Over seven in ten farmers (72%) surveyed think they have an important role to play in solving climate change and addressing its impacts.
- Eighty-four percent of farmers surveyed answered affirmatively they were aware of regenerative practices, and of these, 87% indicated already activating this knowledge; 98% indicated their willingness to use additional practices to contribute to mitigation efforts.



The findings of our Farmer Voice Report center smallholder farmers in the Global South as active partners in efforts to address the impacts of a changing climate.

The report highlights four areas where support to communities can catalyze climate solutions:

- Enhanced knowledge and training to improve soil preservation and crop resilience.
- Farmers recognize that addressing climate change individually is less effective, favoring communal practices for better results and shared resource preservation.
- Farmers recognize the importance of their agency for addressing climate change but stress the need for external support to finance critical infrastructure like irrigation and storage systems.
- Improved market access and pricing are crucial for investing in climate-resilient inputs and technologies, increasing farmer income, and enabling investments in training, technology, and labor by farmers and communities.

Limiting global warming requires urgent action, and it is achievable. To roll back the impacts of anthropogenic climate change and sustainably address poverty, we cannot afford to forego the agency, voice, and actions of millions of farming families whose livelihoods depend on ecosystems and the environment. For climate solutions to work, we must partner with and benefit smallholder communities in the Global South.

Our Farmer Voice Report supports a new message and reinforces the value of the mission of the CASH Coalition:

Smallholder farmers and forest communities are intimately connected to their lands. They are primary caretakers of the earth's precious soil, water, and forest resources. Smallholder farmers are concerned about climate change and are willing and ready to take action.

These communities must play a vital role in mitigating climate change and should be rewarded for their actions. We work to make regenerative agriculture and climate action profitable for smallholder farmers and local communities in the Global South.



DISTILLING OUR CARBON MARKETS WORK

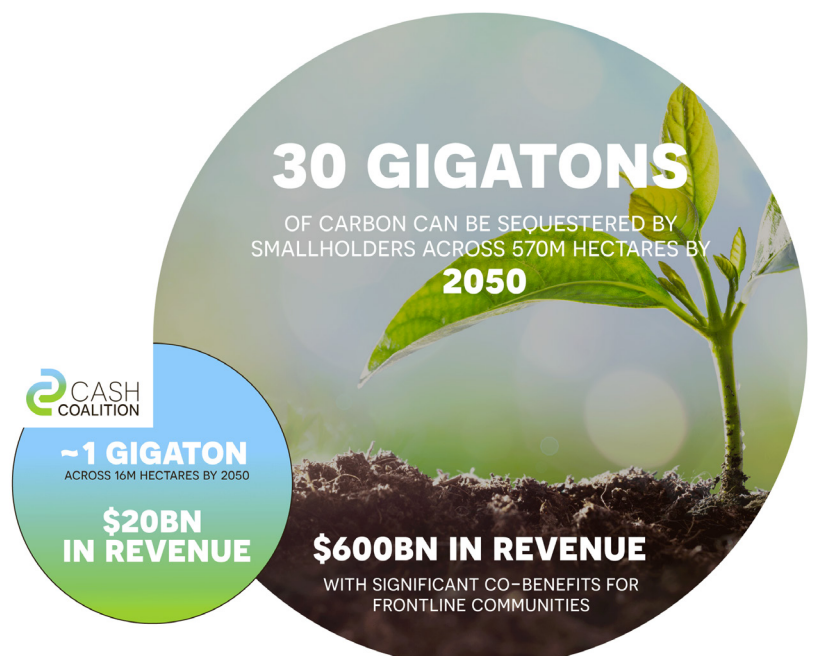
To inform the development of our [Carbon Concept Note](#), we conservatively modeled the total realizable market associated with smallholder regenerative agriculture: If one assumes that each of the world's 570 million smallholder farms is one hectare in size, smallholder farmers applying agroforestry and regenerative agriculture could sequester 30 gigatons of carbon across 570 million hectares of land by 2050. At a conservative carbon price of \$20 per credit, this will generate as much as \$600bn in revenue.

The thirteen members of The CASH Coalition work directly with 9 million land managers in smallholder, indigenous, and local communities who steward 16 million hectares of land in the Global South. Even if our growth is frozen, implicit in the Coalition's current reach of 16m ha, we believe that, with some help, we can catalyze one gigaton of carbon removal by 2050. Assuming a modest price of \$20 per credit, this will generate \$20bn in revenue, of which a significant share can be directed to frontline communities.

In the second half of 2023, we audited members' programming to identify shovel-ready and near-ready projects we could bundle into a portfolio to take to the voluntary carbon market (VCM). The audit did not identify any shovel-ready initiatives we could

immediately activate through carbon finance but did uncover a number of promising interventions and ideas we can invest in and develop to activate a portfolio.

The audit also seeded a recognition that many smallholder carbon projects and other ecosystem services, while delivering value for the climate and farmers, will need support from a blend of carbon and non-carbon-related finance to scale and deliver livelihood-enhancing benefits for farmers. We now have a portfolio of smallholder regenerative projects in development that we believe are suitable for carbon finance through the voluntary carbon markets. We will also pursue regenerative and climate action projects that don't fit a pure carbon finance model and require blended financing mechanisms or purely non-carbon financing to benefit smallholders and their communities.



ADDRESSING BARRIERS TO MARKET ENTRY FOR SMALLHOLDERS AS A COALITION

Financial systems and finance must value the co-benefits and ecosystem services smallholder farmers provide if we are to make carbon finance more accessible for smallholder farmers and local communities and effectively leverage the voluntary carbon market as a source of farmer income that bolsters resiliency, incentivizes the regenerative transition, and rewards smallholder climate action.

To advance this work, we needed to resolve how CASH is best placed to act in the carbon market in the interests of smallholders. Should the Coalition assume a commercial role in the marketplace – acting on behalf of our members to broker and secure deals – or do we advance our mission more effectively by developing the market through advocacy, providing advisory services, and convening learning opportunities that enable members to make more informed decisions?

We identified three potential options for CASH:

- **Full commercial:** CASH creates a for-profit entity to handle carbon transactions for all members under the CASH umbrella. This entity would provide exclusive services for project development, finance, and sales. While it offers collective bargaining power and the potential for better terms, it brings challenges such as significant upfront budget, staffing, and risks associated with a lack of experience.

- **Market development and advocacy:** CASH provides guidance and support to members on all aspects of project development, including selecting third-party service providers for project development, finance, and sales. This approach offers flexibility and cost-effectiveness but may result in giving up more revenue to intermediaries and could potentially exclude smaller projects.
- **Combination:** CASH partners with service providers while housing all CASH projects within a specialist vehicle owned and operated by CASH. This could lead to better terms and allow smaller, riskier projects to be bundled into a full portfolio, but it also introduces complexities regarding ownership.

At our in-person meeting in New York at the beginning of 2024, we decided to pursue Option 2 for the next year. In the short term, we will advise and advance individual projects while convening learning opportunities and enabling a more robust engagement with the carbon market. Currently, nobody acts in this role without a corporate commercial interest that takes a stake in equity. We believe there is a significant opportunity accruing to our members' longstanding relationships with smallholder communities, our scale as a community of practice, and our role as an honest broker seeking to advance smallholder livelihoods and climate action.

CREATING A PORTFOLIO OF SMALLHOLDER CLIMATE PROJECTS

Having resolved to assist our members in a hybrid market development and commercial role, we solicited a first round of applications from our members for pre-feasibility project proposals and projects where CASH could help a member overcome a barrier to scale.

A committee of external experts and members who had not submitted proposals for consideration assessed each of the five applications received. Subject to funding and the creation of operational capacity to make direct or indirect grant payments, project proposals from Digital Green, Forest Trends and Proximity Designs, will each be supported with grants of \$50,000 plus

technical assistance to complete pre-feasibility assessments. A fourth project proposed by SEKEM is already generating revenue through carbon credits. An award of \$30,000 will support SEKEM to support actions to address specific bottlenecks undermining farmer onboarding and measurement, reporting, and verification (MRV). The grant to SEKEM will also support the development of a case study about the development and roll-out of SEKEM's EOL Standard to communicate insights about the process of developing a smallholder standard and taking a project to market for the benefit of CASH's learning agenda and the field more broadly.



Subjecting these projects to pre-feasibility assessments is not a box-checking exercise in which we identify 'winners' to progress toward project registration. It is more about identifying and developing projects that reveal existing barriers and frictions to smallholder participation in climate finance and project development and new pathways that enable more smallholders – and smallholder-serving organizations – to access climate finance. We expect to learn a great deal from projects that pass easily through the assessment phase as well as those that struggle and do not advance in the existing structure of carbon markets and its enabling environment.

Pre-feasibility, feasibility, and project development activities and assessments will be leveraged for learning to inform future project development and advocacy work. As a coalition, we will use this learning for problem-solving, to push markets to be more responsive to smallholder needs, to create transformations in existing markets to expand access to climate finance streams and to initiate new sources of income supportive of smallholder climate action and ecosystem services.

We are excited to commence the development of a smallholder carbon portfolio. As detailed in the descriptions below, the four projects we intend to support represent a diverse set of entry points to carbon work across various contexts, value chains, and ecosystem services. Three of the four grants will support the actions of smallholder-serving organizations that have not yet developed carbon projects.

We recognize how arduous the carbon journey is and the many obstacles inhibiting smallholder participation. We will be extremely pleased if these projects make it through pre-feasibility, feasibility, project development, and execution, but know this is unlikely. At an aggregate level, if implemented, these projects will impact 45k farmers and regenerate 377k hectares of land, remove over 560k tons of carbon, and avoid over 5.3 million tons of carbon emissions over thirty years. Over the same implementation horizon, assuming a carbon price of \$25 per ton for removal and \$12 for avoidance, the portfolio will generate \$77.6 million in revenue.

Project Name: Advancing Conservation, Agriculture, and Livelihoods in Oromia (ACAL)

Member: Digital Green Foundation

Location: Belete Gera Forest (Gera, Gomma, and Shebe Sombo Woredas), Jimma Zone, Oromia Region, Ethiopia.

Size: 3,336 hectares of agroforestry

Type of intervention: Agroforestry

Digital Green

The Advancing Conservation, Agriculture and Livelihoods (ACAL) project aims to bring about visible and lasting changes to the environment and lives of community members in the Belete Gera Forest Landscape in Jimma. The project will advance Digital Green's ambition of incorporating carbon mitigation and sequestration into its programs and product portfolio by leveraging Farmer.Chat, Digital Green's AI chatbot to deliver tailored assistance to extension workers and small-scale farmers. Digital Green is seeing increasing demand for Farmer.Chat among partners in the region to build and track farm-level profiles to support MRV. Pre-feasibility funding will 1) support Digital Green in deepening the community and ecosystem impact of ACAL and 2) test the feasibility of using Farmer.Chat to support carbon workflows through the provision of advisory services and data collection, informing the ability to scale this workflow across Ethiopia.

The Belete Gera Forest is one of the few remaining tracts of the "Eastern Afromontane biodiversity hotspot." It is characterized by rich fauna and flora with many endemic species. The region has experienced rapid economic development, with fast-growing expansion of settlements and plantations of exotic timber, coffee, and tea. The remnant forest, home to several critically endangered and vulnerable species, is under increasing pressure from logging and disturbance.



photo credit Digital Green

The project area includes privately owned farmlands adjacent to the forest (owned by smallholder farmers) and communal forest lands managed by Forest Management Associations and Cooperatives. Communities in the project area are characterized by widespread poverty and vulnerable smallholder livelihoods.

This project goes beyond typical conservation efforts by integrating community livelihood improvement with environmental conservation. It addresses urgent needs for sustainable land use and biodiversity protection, filling a gap in current climate change combat efforts. By promoting sustainable agriculture (planting & managing perennial crops including fruit crops and shade-based coffee as well as promoting enhanced use organic fertilizers (vermi-compost/regular compost)) and conservation practices (physical and biological soil and water conservation activities), targeting vulnerable groups like women and youth for empowerment, the project strengthens Participatory Forest Management approaches through community institutions, expands conservation and sustainable agriculture, and enhances leadership and entrepreneurship skills. This includes strengthening and establishing forest management cooperatives, promoting sustainable forest management practices and restoration of degraded lands, promoting sustainable agricultural practices, expanding livelihood options, and enhancing access to markets and financial services.

The project's impact on the region will be significant. It will promote agroforestry practices on over 3,000 hectares of communal and farmland and plant 2.7 million forest tree seedlings produced by government and community groups. So far, this work has benefitted over 40K small-scale producers, including more than 13K women and 7K youth, and aims to reach another 50K by 2025.

Project Name: The Zoró REDD+ & Reforestation Project: carbon mitigation and strengthening of seed bank for supporting indigenous livelihoods, biodiversity conservation and climate stewardship in the Brazilian Amazon

Member: Forest Trends

Location: Zoró Indigenous Territory, Northwest of Mato Grosso state, Brazil

Size: The total size of Zoró Indigenous Territory is over 355,000.00 hectares. The project focus area is 2,000 hectares, where the generation of carbon credits and restoration co-benefits will be assessed.

Type of intervention: REDD



The pre-feasibility assessment for a potential carbon project in the Zoró Indigenous Territory, will build on and expand the Forest Trends' Communities and Territorial Governance Initiative (FT-CTGI) partnership with the Zoró community, which commenced in 2019. The analysis will be conducted for cost and effectiveness evaluation of activities, as well as social-cultural governance viability, of the potential carbon and restoration project, concentrating on the scaling up of current interventions, including:

A LEARNING PORTFOLIO OF ACTIONS

DISTILLING OUR CARBON MARKETS WORK

1. Conserving over 355,000 hectares of forest through improved fire control, territorial management, and governance.
2. Reforesting 2,000 hectares with native species, restoring degraded grasslands to forest cover, and establishing 100 productive mixed-species agroforestry gardens.
3. Diversifying and increasing incomes from forests and agroforestry systems will lay the economic foundation for sustainable management, benefiting approximately 711 Zoró individuals. This will be achieved through increased production and sales of Brazil nuts, native tree seeds, artisanal goods, açai, cacao, and other tree crops, as well as the development of local seed banks and nurseries.

The Zoró community confronts significant challenges due to deforestation, land degradation, illegal logging, and mining. They urgently require assistance to strengthen territorial governance, restore and protect their territory and environment, and generate and diversify their income. The community relies on labor-intensive wild harvesting of Brazil nuts from the forest for income, supplemented by sales of artisanal crafts. Their vulnerability is exacerbated by climate change, intensified deforestation and mining, and the legacy of the COVID-19 pandemic.



The Zoró Indigenous Territory, integral to the Tupi-Mondé Ethnoenvironmental Corridor, includes the last remnants of the Amazon forest that once covered approximately 50% of the state's territory. Surveys demonstrate rich biodiversity, with 318 plant species identified across 136 genera and 56 families. Many of these species possess timber potential, driving illegal logging activities. The territory similarly hosts a diverse array of fauna, including vulnerable species.

By safeguarding over 355,000 hectares of land through advanced fire control and improved governance measures, the carbon and restoration project, to be assessed for its feasibility, is expected to prevent the equivalent of 5.3 million metric tons of CO₂ emissions. Reforestation efforts spanning 2,000 hectares could sequester more than 340,000 metric tons of CO₂ over twenty years. The establishment of 'forest islands' will further stimulate natural regeneration, contributing to supplementary carbon sequestration. Income diversification initiatives will enhance economic resilience for Zoró families. By enhancing the Zoro's ability to sequester carbon and protect their land and ecosystem, this project will concurrently strengthen territorial governance and generate alternative and diversified sources of income that reward indigenous forest stewards.

Project Name: Determine if it is feasible to measure and verify the carbon emission mitigation levels on fields of no-burn rice farming practice adopters in Myanmar.

Member: Proximity Designs

Project Location: Delta agro-ecological region in Lower Myanmar

Size: 2,500 farmers who own and manage more than 5,000 hectares of rice-growing land

Type of intervention: Sustainable agriculture; rice cultivation



photo credit Proximity Designs

Proximity Design has developed a no-burn straw farming crop residue management solution that meets the needs of farmers to quickly deal with rice crop residues, negating the need to deploy traditional burning methods and promoting soil health and other benefits associated with regenerative practices. The project will assess the feasibility of quantifying and verifying the reduction in CO₂ emissions resulting from rice farmers' transition to no-burn rice straw farming. This constitutes a crucial aspect of establishing

an MRV system necessary to demonstrate the viability of this regenerative farming approach and to promote its eligibility for carbon market financing.

Over the course of six months, Proximity will conduct a feasibility study to assess the viability and associated costs of measuring and verifying reductions in CO₂ emissions from the adoption of the no-burn rice straw practice by smallholder farmers in Myanmar.

Key pre-feasibility activities will include:

1. Mapping GPS coordinates of the plots where farmers have adopted the no-burn practice.
2. Developing data models to estimate the boundaries of farmers' plots.
3. Accessing historical and real-time satellite imagery of farmers' plots.
4. Developing models to estimate the emissions avoided and subsequently reduced through adopting the no-burn practice.
5. Consulting with experts in carbon emission verification to determine the data and evidence requirements.
6. Conducting a thorough analysis of the costs and manpower needed to carry out the activities on a per-farmer basis.

In Lower Myanmar, over 300,000 rice farmers rely on double-cropping rice-rice or pulses-rice crop rotations to sustain their livelihoods. Supporting an average household size of five individuals, smallholder farms typically generate approximately USD 1,600 of income per year. Between May and November, farmers burn crop residue in open fields to clear the land for the subsequent growing season.

Agricultural burning is a regional challenge across South and South East Asia. Burning seasons result in lockdowns and increased respiratory hospitalizations due to severe pollution. At an aggregate level, rice cultivation accounts for 10% of agricultural GHG emissions and a third of all black carbon emissions. For smallholders, this method of crop residue management is the most prevalent and convenient and is often their sole option for quickly preparing their land for the next cropping cycle.

This practice, releases an estimated 7 million tonnes of CO₂ into the atmosphere each year in tandem with dangerous levels of PM 2.5 particles which pose serious health risks to communities. Open burning is also detrimental to farmers' natural endowment over time. Repeated seasonal

burning degrades organic matter in the soil, undermining the stimulation of microbial growth integral for maintaining soil fertility. In time, this contributes to declining crop yields and increased dependence on expensive chemical fertilizers.

The overarching aim of proliferating Proximity's no-burn rice practice is to enhance the incomes of low-income smallholder farmers. Proximity's practice has demonstrated its capacity to improve farm profitability. It is expected that improved soil health will contribute further to enhancing agricultural productivity and offsetting dependence on fertilizers, in the medium term.

Proximity anticipates that adopters of no-burn rice farming will constitute 20% of its customer base by 2026, with significant potential for replication beyond Myanmar. Developing and demonstrating the practice's carbon potential

and the utility of using Proximity's microbial solution formulation as a substitute for residue burning is a priority.

Pre-feasibility will contribute to Proximity's aims over three years to:

1. Transition 150,000 Myanmar rice farmers to regenerative no-burn practices.
2. Enhance the soil health of approximately 2 million hectares of farmland.
3. Avoid over 2 million tonnes of agricultural CO2 emissions.
4. Establish a comprehensive soil health database documenting Myanmar's most intensively cultivated arable land.
5. Pilot innovative financial instruments to incentivize farmers to adopt regenerative agricultural practices.



Project Name: Economy of Love

Member: SEKEM (aka Egyptian Biodynamic Association),

Location: Egypt

Size: 12,000 ha

Type of intervention: Sustainable agriculture (soil carbon)

The logo for SEKEM, featuring the word "SEKEM" in a bold, red, sans-serif font.

The Economy of Love (EoL) Carbon Credit program, developed and owned by the Egyptian Biodynamic Association (EBDA) and inspired by SEKEM, has been further developed from a certification standard to a carbon credit initiative focussed on rewarding smallholder farmers for their environmental service.

The EoL Carbon Credit program was launched at COP 27 under the auspices of the Egyptian Ministry of Environment, with support from UNDP Egypt. By implementing the EoL standard, farmers actively contribute to carbon sequestration through afforestation projects and soil carbon enhancement. Additionally, farmers can mitigate methane and CO₂ emissions by engaging in compost production and adopting renewable energy practices. Participating smallholder farmers receive an additional income stream from EoL carbon credits.

In the year and a half since its launch, EoL has scaled the intervention to 5,000, aiming for 40,000 participating farmers in 2025. In rolling out the standard, EoL has observed that some farmers struggle with process and opportunity costs related to time-intensive MRV. A grant from CASH will support efforts to identify mechanisms for streamlining measurement and reporting by farmers, and data collection by EoL to support a streamlining process. The grant will also support the development of a case study documenting EoL's experience and lessons learned through establishing and implementing a standard and carbon project.

Informed by the CASH workshop convened in New York (January 2024), the following workstreams are being developed by working groups comprised of our members and strategic partners and complemented by technical assistance from consultant experts.

AGROFORESTRY AND FINANCE

Agroforestry is a leading practice for advancing climate mitigation and adaptation and broader regenerative benefits and ecosystem services such as protecting and promoting soil and water health and biodiversity. In the context of the coalition's work and objectives, agroforestry offers value through its applicability across various contexts and agricultural supply chains and its ability to realize livelihoods and nature-related co-benefits.

Despite its ability to realize social and environmental value, insufficient funding flows to agroforestry, with even fewer resources supporting [smallholder agricultural systems](#). Existing funding tends to focus on mitigation rather than communities' adaptation and

resilience needs; too large, designed for large-scale operations rather than the SMEs and smallholders underpinning global supply chains; and too expensive, with unrealistic risk mitigation requirements and/or return expectations. We believe that this mismatch and associated under-funding largely stems from suboptimal information on the part of climate funders and potential project developers on what climate finance looks like on the ground, lack of understanding of community priorities, and actual project costs. Subsequent financing assessment efforts will expand into smallholder agricultural activities beyond agroforestry, but agroforestry is the initial focus.

THE PRO-FORMA AGROFORESTRY MODEL

CASH aims to produce a coordinated solution to this problem via the collection of CASH member information and the production of a pro-forma agroforestry model that closely models archetypal smallholder operations as they are on the ground. The Coalition aims to elucidate the characteristics of smallholder agroforestry projects, estimate their potential costs, assess the feasibility of investments for potential investors, and determine the required funding and financing options necessary for their execution. This includes exploring avenues such as philanthropy, carbon credits, and other prospective revenue streams. This analysis aims to generate insights and identify strategic leverage to address information gaps and activate resourcing.

CASH coalition members represent a diverse set of farmer communities and great heterogeneity in crop type, ecosystem, and intervention approach. However, we believe that projects can be usefully grouped into archetypes to facilitate the identification and development of common and scaled tools to be used despite the inherent complexity of the space. CASH is working with members to build a pro-forma agroforestry (AF) model or set of models. Developing a set of pro-forma AF models will allow us to systematically understand financial needs and potential sources of revenue associated with the development, bundling, and scaling of projects. CASH has decided to focus on agroforestry as a beachhead because of its social and environmental potential and the expertise of members in this area.

Through the development of archetypal models, we will be able to carry out sensitivity analyses, determine costs and benefits, model scaling and bundling of projects, assess the impact of different financing streams, understand points leverage for finance, and model fair revenue splits between stakeholders. In turn, this will allow us to understand what it takes to transition farming systems into more productive states (restoration), how to maximize impact per dollar, and model the monetary benefits of scale and cooperative action. Importantly, this exercise should also assist us in identifying crucial leverage points in the process – areas where interventions yield the greatest impact on farmer revenues or investor/philanthropy returns.

A clear picture of archetypal projects and financial needs necessitates the following next steps:

- Develop the first cohort of investible projects/portfolio of projects: Understanding common agroforestry project types across the CASH farmer base will allow us to choose a particular type of project to focus on for the first portfolio of projects (eg. focusing on high-density agroforestry in Africa).
- Develop a smallholder-centric “ideal” financial product: Understand the financial products needed to best serve smallholder farmers. In other words, name and address common financial challenges, bottlenecks, and areas of leverage that affect CASH members and their work to then develop a financial product around these needs
- Transition into the fundraising stage: CASH can confidently raise and efficiently allocate finance for transformation, understanding how much is needed, where, for what, why, and when, facilitating advance project development.

VISION / GOALS

Develop a financial product that can finance smallholder farmer agroforestry at scale, offered on the market and accessible by CASH membership to enable smallholder farmers and local communities to transition to regenerative practices that provide ecological services, income generation, and livelihood co-benefits. The goal of the financial product is to enable smallholder farmers/communities to transition to sustainable and ideally regenerative land management practices that ensure the provision of ecological services and production of agricultural goods for sustenance and income generation

THE MODEL WILL ENABLE:

- Granular understanding of financing needs for smallholder agroforestry projects
- CASH members can access working archetypes and financial models that closely resemble on-the-ground realities and can be iterated to local conditions or to improve the model
- The value of carbon and non-carbon benefits is measured and remunerated
- Pathways identified (or blockers identified) to compensate farmers for the value created through carbon and non-carbon benefits. This will inform advocacy and lobbying to create those compensation mechanisms where they are lacking and increase demand where mechanisms are functioning (carbon).
- An investable portfolio of projects is developed and ready for marketing.
- Resource needs and a fundraising ask are clearly articulated.

To execute this vision, we have identified several potential workstreams.

POTENTIAL WORKSTREAMS

AREA 1: RESEARCH

Agroforestry Archetypes Analysis – Survey agroforestry practices across CASH's network of farmers. Develop a taxonomy of farmers, farm models and farming types, practices, and knowledge, among other factors, to understand the work of CASH members. Analyze the effectiveness of practices and produce learnings. Analyze transferability and wider applicability of practices and outcomes to new projects and demonstrate confidence in outcomes).

Project Pro Forma Analysis – Develop a unit economics-based analysis for each archetypical CASH member project to more systematically understand financial needs and potential sources of revenue. The research will initially focus on an agroforestry archetype (potentially with multiple

archetypes/models within agroforestry) and then expand by prioritizing archetypes that by volume, are the most common across CASH members. The pro forma model will assess all potential revenue options (carbon and non-carbon), including agricultural products, non-timber forest products, and ecosystem services compensation such as carbon, including but not limited to water conservation and biodiversity credits.

AREA 2: FINANCIAL PRODUCT DEVELOPMENT

Additionally, the pro forma model will enable us to consider possible funding mechanisms for these projects, including the creation of funds, lending facilities, and guarantee structures.

Project Development and Learning – The Coalition Global Team will assist CASH members in advancing individual carbon projects by accessing financial and advisory support. This process will concurrently enable members to actively learn and share knowledge on carbon development and financing processes.

Advanced Market Commitment (build demand) – Scope the optimal positioning and partners for a smallholder/community-focused carbon credit Advanced Market Commitment (AMC) to stimulate demand for carbon and the many benefits that smallholder farmers bring. Understand how to differentiate this type of credit/project from other credits/projects on the market and stimulate increased demand.

REGENERATIVE AGRICULTURE AND ARTIFICIAL INTELLIGENCE

A founding ambition of the Coalition is to aggregate knowledge and resources about regenerative practices from across our membership, targeting smallholder systems. This interest coincides with the rise of generative artificial intelligence (AI). Several early adopters in the CASH Coalition are already leveraging AI to advance and scale agricultural advisory.

Access to validated, practical knowledge can improve productivity for smallholder farmers. There is a growing consensus that generative AI can be a powerful tool for scaling access to information to smallholders at a relatively low cost. Digital Green, Proximity Design, and Acceso began piloting AI programming in 2023. Given the variety of crops and unique agro-ecologies these organizations work in, it has become clear that the volume of quality, locally relevant content is a constraining gap in standing up smallholder-friendly AI-supported 'Agricultural Assistants' (AgBots) that can truly deliver valid knowledge that is actionable at a local level. Smallholder advisory content that meets a regenerative standard is even more difficult to source. CASH Coalition members believe

that smallholder advisory information is not proprietary and should be made widely available to smallholder farmers as a public good.

Private firms motivated by profit rather than farmer welfare and livelihoods are actively exploring AI applications in agriculture, including smallholder agriculture. This further motivates CASH to engage with this rapidly developing application to act in the best interests of farmers and nature.

Given our perception that AI will grow in importance and curiosity about leveraging AI in individual and collective activities, there is a desire to make tangible progress on an AI-advisory work plan this year. Aggregating and developing collective knowledge is low-hanging fruit that the Coalition can immediately benefit from, laying the groundwork for the Coalition to play a progressive and proactive role in shaping this emerging technology in a way that delivers value to smallholder farmers and nature.

VISION

The Coalition will develop a repository of regenerative content focused on smallholder agriculture accessible to members and others, as agreed by members with specific goals in mind: 1) accelerating awareness and uptake of regenerative practices across the network to improve outcomes in existing work; 2) create a foundational repository of content that can support individual members and the wider group – and eventually the field at-large – to leverage generative AI for smallholder advisory as a strategy to significantly scale-up farmer access to quality, locally relevant, regenerative advice.

This AI-supported agricultural advisory effort by the CASH Coalitions has many possible use cases, some of which include:

- 1. Developing a Virtual Ag Assistant that delivers hyper-local farm advisory services with real-time data, empowering our coalition members to deliver game-changing value to farmers:** As generative AI technology becomes more prevalent, organizations can create chatbots, IVR interfaces, or SMS bots to deliver advisory services customized to local conditions. Effective implementation requires high-quality content. As a coalition, we have a large quantity of pre-vetted content across various forms and media: training manuals, fact sheets, videos, audio clips, posters, etc. Generative AI allows for the incorporation of additional dynamic external sources of data like market prices, agro dealer locations, stocks, and weather information that enhance value for farmers.
- 2. Leveraging the combined content of the Coalition, enabling governments to deliver tailored agricultural services to smallholders across diverse regions:** Multiple members may have useful content for particular geographies. By leveraging Digital Green's open-source architecture, we can develop a unified Bot that can be shared across organizations to benefit various frontline agents (lead farmers, Coop leadership, extension agents, NGO staff, etc...). This collaborative approach positions the Coalition to influence national policies on agricultural advisory services, providing governments with quality content and strategies to improve smallholder access to advice. The

value proposition of collaboration will be richer if participating CASH Coalition members integrate activities and services beyond advisory, such as finance or market coordination. Alternatively, if existing CASH members already have farmer-facing apps or other service channels, AI enablement can be integrated with existing solutions.

- 3. Collaborating on open-source tools to build digital public goods that increase smallholder access to quality advisory:** Digital Green has made significant progress in developing an open-source architecture for a virtual agricultural assistant. However, there is room for improvement in user experience and quality assurance. Through peer engagement and co-design, we can refine these processes and enhance the effectiveness of AI-driven advisory services. These include things like query orchestration and decomposition (the process of breaking down questions that require additional embedded questions and localization to get to a useful response), collective work to improve AI comprehension of local language models, comparing functionality and scalability of different LLM options and reviewing Q&A pairs collectively to calibrate and benchmark for quality around regenerative and gender-responsive content.
- 4. Exchange of best practices and facilitating early adoption of AI-supported advisory to benefit smallholders:** As more organizations adopt AI-supported advisory technology, new practical challenges and opportunities will arise. The Coalition's broad objective to be a learning community that facilitates knowledge-sharing, collaboration, and collective progress will speed the identification of problems as they arise and promote collaborative problem-solving.

STANDARDS

There is consensus among CASH members that proliferating standards do not serve the interests of advancing regenerative smallholder agriculture and climate actions. We are aware of several actors engaged in developing new standards ostensibly to facilitate access to climate finance for smallholder communities.

Two groups within the coalition are actively involved in developing standards and guidelines. An additional organization is researching the application of existing standards in real-world smallholder contexts. In the coming months, CASH will coordinate learning opportunities within the coalition and facilitate conversations with external actors advancing new smallholder-focused standards.

As a community of practitioners and innovators with longstanding ties and a record of delivering value to smallholder communities, we believe that CASH can play a convening role in facilitating knowledge exchange and coordinating joint actions to better influence entry points for smallholders under existing standards and potential new standards.

CHALLENGES

Some challenges are relatively common among all startup and early-stage not-for-profit organizations, and others are unique to coalitions. CASH continues to learn as we develop as an organization and a coalition.

Sequencing the development and hiring cadence of the global team, fundraising and coalition programming has been challenging, but we continue to make progress on all fronts. A limited full-time staff inhibited timely action in the initial months of the coalition. Hiring a full-time Operations and Communications Director in March 2024 has helped relieve some pressures on the Executive Director and free their hands for more focused work. At the same time, additional communications capacity has led to a more regular cadence of internal communications (monthly member newsletters, Peer-to-Peer meetings, and nascent working groups' communications), and an augmented development function.

CASH has been approached by several organizations who would like to join the Coalition. Our ambitions include augmenting and bolstering the livelihoods of millions of smallholders through climate finance and PES, and scaling the climate actions of millions of smallholder farmers. Limiting membership to the current thirteen organizations that comprise the Coalition will limit impact. Having taken advice from like-minded field-catalyst coalitions (CHIC), expert organizations who study and advise field catalysts (Bridgespan), and drawing on the experiences of existing members who have been active in other, sub-optimal joint actions/coalitions, we believe it is critical for us to resolve key strategic and governance questions as we transition into an independent 501c3 organization before admitting additional members. Without a clear strategy and agreement on governance and membership questions (e.g, how to demonstrate compliance to CASH principles, how much sweat equity is required by whom and when), new members will not be clear about what exactly they are joining or why, leading to a lack of focus, a diluted organizational culture, and - ultimately - increasing the likelihood of not achieving our aims. We will consider creating an affiliate model (on top of membership) and find more ways to make knowledge, tools and resources available to more organizations operating in the SHF regen ag support space.

We will remain disproportionately dependent on philanthropic funding as we build out our portfolio pipeline by adding additional projects to pre-feasibility, feasibility, and development and elaborate the business cases for different categories of smallholder carbon sequestration. Significant modeling and unit cost analyses are necessary to make this work viable for private investors, concessional finance, and other forms of capital capable of scaling smallholder climate actions and reshaping the market. Demonstrating progress and momentum will be critical to this endeavor.

The CASH Coalition is registered as a 501(c)(3) not-for-profit organization in the United States.

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MAKING REGENERATIVE AGRICULTURE AND CLIMATE ACTION PROFITABLE FOR SMALLHOLDER FARMERS



Digital Green

