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Clinton Development Initiative's community-agribusiness approach: Strengthening smallholder farmers' position in value chains

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For more than a decade, the Clinton Development Initiative (CDI) has been working with farming communities in Malawi to address challenges such as limited access to finance, input and output markets, as well as low use of-high quality seeds, fertiliser and other agro-inputs. In 2017, building on more than a decade of experience and substantive feedback from farmers on key bottlenecks they faced in the agriculture sector in Malawi, CDI began working with communities and implementing the Community Agribusiness (CAB) approach. In 2020, WUR investigated the contribution of the CAB programme in Malawi, utilising internal and external stakeholder interviews and reviewing previous studies and articles. This document presents the findings of that study.

Qualitatively assessing Clinton Development Initiative's contribution to and plausibility of achieving increased production, prices, and sales

CAB aims to bring together smallholder farming communities, train those communities on good farming practices, and link them with local and international buyers, input suppliers, financial and government organisations to improve their incomes. Figure S.1 below summarises the impact pathway of the programme and describes the assessment results, constructed through the review of project documents and related studies, discussions with the CDI management, internal and external stakeholders. (Please see Appendices 1 and 2 for information on the methodology and the list of studies reviewed.) The programme brought together smallholder farming communities predominantly engaged in soybean production and trained them on best-fit agricultural practices and financial and agri-business management. The programme works with those communities to create small- and medium-sized cooperatives and business incubation hubs. These hubs aggregate raw commodities, save and lend together, and use demonstration plots to train other farmers on best-fit and climate-smart agricultural practices. CDI also brokers with local and international commodity buyers, input providers (e.g., certified soybean seeds, rhizobium), financial institutions (i.e. input and early grain loans), and government representatives (e.g., common agricultural training, registration of the cooperative). This brokering is planned to integrate farming communities into new local and international markets for high-quality products offering premium prices. Project documents showed that, since its implementation in 2017 in Malawi, the CAB programme formed more than 2,000 farmer groups with 15 officially recognised cooperatives supporting over 30,000 farmers.

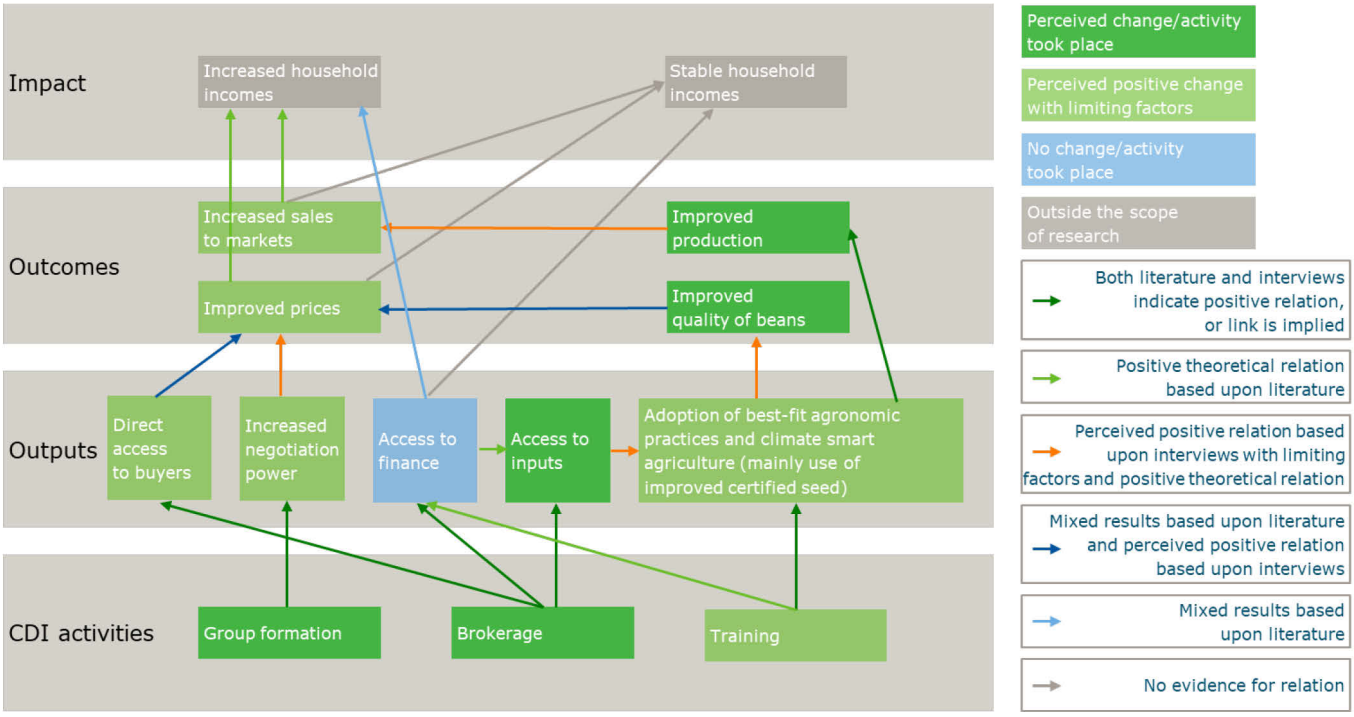

Figure S.1 *Theory of Change of the CAB programme applied by CDI in Malawi*
The colours of the arrows describe the assessment results. The box colours indicate whether perceived change took place or not, based upon the interviews.

The CAB programme is perceived to improve production, soybean quality and support sales increase; the literature corroborates its theoretical plausibility

Based on our interviews with stakeholders and related literature, we find that agricultural training in the programme is positively associated with the improved production of soybean. Input providers, cooperative leaders, CDI-brokered buyers and the extension officer, including CDI staff all perceived that farm management practices, soybean production, and sales improved, thanks to the training organised by the CAB programme, as well as farmers' access to inputs. Cooperative leaders also mention that some farmers benefited from direct sales to new international and local buyers. Selling directly to the premium buyer means that local traders, who usually capture a portion of the profit margin, are not involved in the transaction. This strengthens the farmers' position in the supply chain. The literature review generally supports the evidence from the stakeholder interviews as can be seen in Figure S.1 below.

By brokering with new buyers and supporting farmers to form groups, CDI's efforts contribute to the higher prices farmers receive for their high-quality soybeans. Stakeholders indicated a positive link between improved access to buyers and farm-gate prices. According to project documents, last year, about 20% of the 32,000 farmers that CDI works with sold their soybean to an international buyer sourcing premium quality soybeans.[1] Cooperative leaders, CDI staff and the interviewed buyer stated that those farmers received a farm-gate price that is 26% higher than local traders' farm-gate prices.[2] All respondents attributed this difference to production output aggregation through farmer groups and selling directly to the buyer. This stresses the importance of brokerage and group formation facilitated by CDI within the CAB programme. It also indicates the significance of product differentiation (e.g., producing specific-

[1] These 32,000 farmers include farmers that have been in the programme for about a year and are ready to provide high-quality products for export markets and farmers that choose to sell their products to local markets.

[2] Based upon the average difference in informal trader prices and premium prices received by farmers between 2016 and 2020.

sized soybeans of a single variety) in improving market prices. Reviewed studies point out that in the absence of product differentiation, direct access to buyers does not guarantee higher farm-gate prices when there is high competition among farmers, which is the case for soybean farmers in Malawi.

Input providers and the buyer observe that CDI's training on best-fit agricultural practices, along with access to high-quality seeds and other inputs, has led to larger and higher-quality harvest. Hub-farmers who were trained by the CAB programme introduced and demonstrated best-fit agricultural practices to neighbouring farmers. Those best-fit practices include the use of certified seeds, an efficient use of agricultural inputs (e.g. rhizobium) as well as the implementation of climate-smart agricultural practices. The programme also distributed certified seeds and other inputs (e.g. rhizobium) to farmers via in-kind loans. Input providers and the buyer in their interviews emphasised the importance of access to certified seeds. According to them, when combined with agronomy training, access to those seeds (of a buyer-required variety) resulted in a significant yield increase enabling farmers to access new markets and buyers offering premium prices.[3] This was also confirmed by the literature review.

Farmers, buyers, and other stakeholders perceive the CAB program to contribute positively to soybean production, quality and sales. CDI's role in the CAB programme was seen as indispensable in connecting farmers to sellers of improved seed and facilitating the aggregation of soybeans for international buyers offering premium prices. All respondents involved in the production and buying of soybeans, input provision and training perceived the CAB programme activities as conducive to higher soybean quality, production and sales.

Access to finance, improving resilience and the negotiation power of farmer groups are key attention points.

We recommend that CDI carefully continues working towards direct and sustainable relations between farmer groups, buyers and input suppliers. Currently, communication is often facilitated by CDI. CDI, however, works on building the management and business capacity of farmer cooperative members and other farmer groups to stimulate direct communication between farmer groups and buyers or input suppliers. Direct communication among those actors will sustain positive change and the autonomy of farmer cooperatives. In this process, CDI must consider the differences among various cooperatives' performances to ensure that all cooperatives have sufficient capacities to engage in direct communication. The cooperative evaluations by CDI at the end of this year aim to detect those differences in capacities.

Diversification in farmers' activities and buyers will improve the resilience of farmers to market shocks. CDI currently introduces new crops, livestock (e.g., chicken), and other business activities (e.g., sales of processed farm produce for chicken and fish feed). This will improve the resilience of farmers to market fluctuations. Providing direct access to new buyers offering higher prices and connecting a larger share of farmers to those new buyers can improve the sustainability of the programme results in the medium-term. The stability of demand from premium buyers has been one of the main worries expressed by the cooperative group leaders, further aggravated by the onset of the Covid-19 pandemic. The international buyer of soybean also confirmed that their demand in the medium term[4] might change depending on market conditions.

The implementation of the best-fit and climate-smart agricultural practices will guarantee the resilience of farmers to market and climate shocks. While the training and access to inputs lead to improvements in agricultural practices, input suppliers and cooperative leaders indicated there is a share of farmers not fully adopting the practices promoted through the CAB programme. This was attributed to two main reasons. First, the highly labour-intensive nature

[3] This statement also assumes that farmers are aggregating their output to access buyers offering premium price.

[4] In the short term there is already a contract between CDI and their main buyer, guaranteeing to purchase up to 3,000 MT from Malawi next season.

of those practices was indicated as a main reason, due to which some existing farmers might switch to old practices. Second, if the existing farmers are not consistently 'exposed' to farming as a business attitude promoted by the CAB programme, there is a risk of them not adopting more entrepreneurial mindset and gradually reverse to pre-programme production patterns. Motivating all farmers to implement the best-fit practices may therefore be important in the long run to maintain higher yields and thus provide all farmers' access to markets with premium buyers. To motivate farmers to adopt best-fit practices and decrease labour costs, CDI can show the financial costs and benefits of those practices to the farmers and consider promotion of investing in machinery and other tools.

The use of mobile technologies, index insurance, and receipts from certified storages can improve access to bank loans by farmers. CDI currently brokers with financial institutes to help farmers gain access to financial services for investing in farming. We recommend the continuation of those partnerships as well as the introduction of new financial products. For instance, CDI can facilitate the introduction of storage facilities for smallholder farmers, together with the government and cooperatives.[5] When storage is governed by trusted institutions, farmers can use their stored grains as collateral in their credit applications. We also suggest introducing index insurance to the farmers, which can be coupled with farmers' credit applications to reduce the risks for banks. Moreover, input suppliers, farmers and their buyers can be encouraged to use mobile payment systems for the transactions among each other. Farmer cooperatives can declare those records to the banks to provide their financial viability and obtain access to credit from financial institutions.

Farm-level data collection is required to obtain evidence on the impact of the CAB programme on household incomes and income stability

Future studies collecting farm-level data can conclude on the contribution of the CAB programme to the profitability of farmers and their incomes or on the contribution of financial and business management training. This assessment does not collect quantitative data on sales and costs of farmers producing premium quality soybean (and other crops) and adopting the agricultural practices introduced by CDI, and does not compare such information with other farmers. We cannot identify the minimum farm-gate prices necessary to keep farmers profitable, and also do not know the characteristics (e.g. land size) of farmers with the highest profitability or income. Rigorous farm-level data collection can provide evidence on profitability and income when combined with financial cost-benefit analysis for the farming practices introduced through the CAB programme. With that analysis, it will be possible to present the contribution of the CAB project on the incomes of supported farmers, including the changes and stability of smallholder farmers' incomes. Such an analysis can be extended with a food system analysis investigating the long-term sustainability of the programme outcomes. We also note that this study could not assess the contribution of the financial management and business management training of cooperative leaders. This is because the training had started too recently before this study was conducted.

[5] This is already happening on a smaller scale now. Some cooperatives set up their own warehouses, CDI encourages those cooperatives, but they are not directly involved in setting up the warehouses.

Appendix 1: Methodology

The theory of change (ToC) of the CAB programme provides theoretical and qualitative evidence on the programme's contributions to the farming communities in Malawi. We developed the ToC and based our conclusions on programme documents, interviews with key stakeholders (i.e., CDI staff, cooperative leaders, international buyers, and financial service, seed and agrochemical providers), and informed outsiders. In the interviews, we ask the stakeholders their perception about the programme beneficiaries' situation when compared to other farmers that did not participate in the programme and to the farmers' situation before the programme started. The information collected through interviews allowed us to conclude on the farm-level programme results, such as improvements in agricultural practices, increased production, prices, and sales, as perceived by the respondents. Additionally, we conducted a literature review to assess the plausibility that the interventions in the CAB programme lead to the intended programme outcomes and impacts (Please see Appendices 1 and 2 for more information on the methodology and the list of studies that are reviewed.)

This study mixed information collected through four methods to identify the impact and strengths of the project (see Table S.1). We reviewed 13 project documents, collected primary data through 11 interviews with key experts and informed outsiders, and held two rounds of interviews with leaders from various cooperatives. Stakeholders were selected given their ability to reflect on the programme Theory of Change and include key CDI contact persons from one financial institution, an input provider, a government officer, and a major international buyer that CDI partners with. We also conducted interviews with CDI programme staff and management in Malawi and informed outsiders familiar but not directly involved in the current CAB programme. Finally, to strengthen the qualitative evidence from the interviews, we reviewed academic studies. These studies provide evidence on whether project activities similar to the CAB programme activities lead to the expected outcomes and impact of the CAB programme.

Table S.1 *Mixing methods to assess the theoretical plausibility and perceived contribution of the CAB programme*

	Interviews with CDI management	Project doc. Review (13 doc.)	Stakeholder interviews 9 interviews	Interviews with informed two outsiders	Literature review 29 studies.
How has CDI implemented the CAB programme in its programme in Malawi?	✓	✓			
Does the evidence support the programme's contribution to the outcomes of the programme?		✓	✓	✓	✓
Is there evidence for improved project results?		✓	✓		
Did the literature review support that the results can be improved through the mechanism suggested by the ToC?					✓
Did stakeholders of the project perceive that CDI activities contributed to the results through the mechanism suggested by the ToC?			✓	✓	
What are the major evidence gaps, and how can those evidence gaps be addressed?			✓	✓	✓

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