Dorcas

Building reliable value chains

Lessons from Dorcas' multi-country experience

Dorcas

Reading guide

This report is written for four different audiences. Use the guide below to find the sections most relevant to you.

- NGO practitioners: design lessons, failure analysis, inclusion design, and operational models: **pages 7–8, 13–19, 24–26**
- Investors and corporate social responsibility (CSR) partners: commercial viability, scalability, and post-programme sustainability: **pages 20–23, 27, 28–29**
- Institutional donors: evidence quality, sustainability, reliability, and measurement: **pages 10–11, 13–19**
- Inclusion specialists: governance, access, benefit capture, and inclusion by design: **pages 13–15, 24–26**

Contents

Publishing information

Building reliable value chains
Lessons from Dorcas' multi-country experience
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Executive summary

This report describes lessons learned from a robust evaluation of five value chains in Eastern Africa detailed in table 1. An independent consultancy firm carried out the evaluation in 2025 and published two detailed internal reports for Dorcas. All data and claims in this report are drawn from these internal documents.

Table 1: The five value chains evaluated

Value chain	Country	Area
Honey	Tanzania	Chemba
Honey	Kenya	Kitui
Pasture and milk	Kenya	Makueni
Camel milk	Ethiopia	Moyale
Chicken	Kenya	Siaya

Why Dorcas works on value chains

Dorcas supports people who experience barriers to economic participation, such as women, young people, people with disabilities, and households in fragile or remote contexts. Through value chains they can engage in markets reliably and with dignity. Value chains are not simply economic arrangements. Where they function well, they create stable income, reduce vulnerability to shocks, and shift the balance of power within communities. Where they fail, they can entrench inequality and dependency.

The core lesson

Sustainable value chains depend more on reliability than training. Where payments arrived on time, quality systems were enforced consistently, governance was trusted, and buyers were secured before production was scaled. The outcome was producers who thrived. Where any of these systems faltered, even briefly, any gains made eroded quickly.

What worked

Reliable market linkages, especially through cooperatives and collection centres with clear rules and predictable transactions, were the single strongest driver of positive outcomes. In Moyale, 91.5 per cent of producers sold through the cooperative and 77.4 per cent received same-day payment. This level of transactional reliability directly drove supply discipline and buyer confidence. In Kitui, there was 98.6 per cent brand awareness for Kamaki Honey and 95.7 per cent of producers reported profitable harvests. This reflects what a functioning quality system and certified market linkage can achieve. Value chains improved regular household income. In Siaya, 63.1 per cent of respondents cited more regular income as the most significant change. Producer organisations became more disciplined and self-sustaining with functional governance and the consistent application of rules. Women gained ground in income, decision-making, and leadership, where cooperative structures created formal economic roles and payment systems linked to women's own accounts. Figure 1 shows the overall impact of the value chains and figure 2 some specific successes.

Figure 1: How each value chain scores for five key outcome indictors

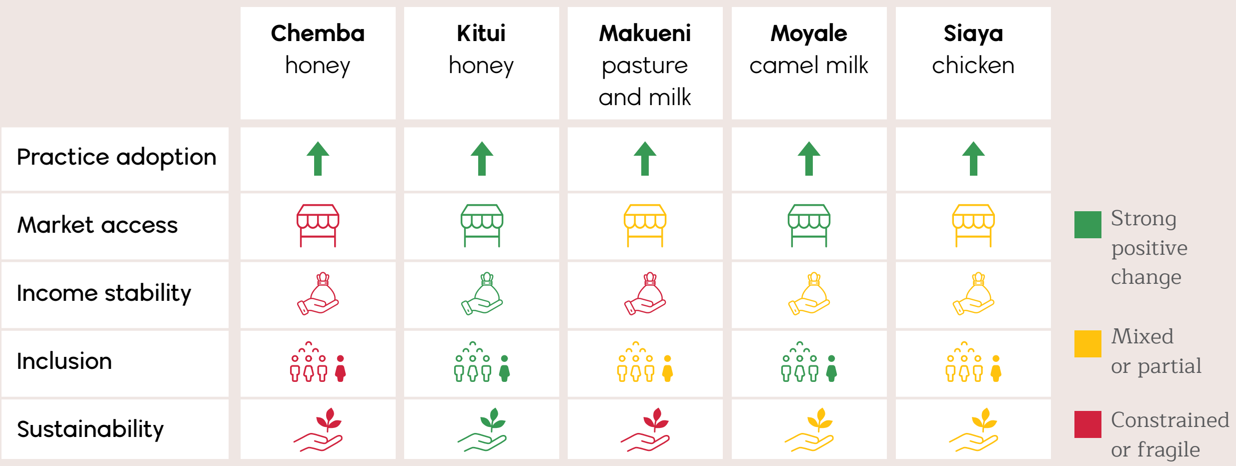


Figure 2: Some key successes in the value chains

- **91.5 per cent** of Moyale producers sold through the cooperative.
- **95.7 per cent** of Kitui honey producers reported profitable harvests.
- **77.4 per cent** same-day payment.
- **69.6 per cent** of Siaya households reported joint decision-making on income.
- **63 per cent** of Siaya households cited more regular income as their most significant change.
- **98.6 per cent** brand awareness for Kamaki honey in Kitui

What proved difficult

First, value chains designed from the production end rather than the market end often increased output without securing sufficient buyers. Second, payment delays and infrastructure failures eroded trust and pushed producers toward informal channels even when the formal channel offered better prices. Third, baseline data were absent or insufficient in most value chains and so it was not possible to fully quantify the impact of the value chains. For example, no data about the percentage increase in women's income is available. Fourth, benefits were often unevenly distributed. In the Kitui honey value chain, male median honey income was 13,500 Kenyan shillings, whereas the female median was only 4,250 Kenyan shillings. That is about 91 euro compared to 29 euro.

What surprised us

- Demand was almost never the problem. Supply reliability was.
- Governance quality shaped outcomes more than technical training.
- Women advanced faster than youth in most contexts because cooperative structures created formal roles and payment systems that worked in their favour.
- Some chains became dependent on NGO-created demand. When support withdrew, the commercial logic collapsed.

What Dorcas is still learning

- How the approach performs in middle-income, tourism-linked, urban, and non-agricultural contexts. Early pilots in Albania and Egypt suggest that institutional reliability, local ownership, and market coordination may transfer more readily than commodity-specific production models, but stronger evidence is still needed.
- How to increase the engagement of young people in value chains and ensure they tangibly benefit in terms of decision-making, owning assets or accessing higher-value opportunities.
- How to close the gap between widespread practice adoption and concentrated commercial benefit capture.
- How to ensure a realistic timeframe for value chain enterprises to become self-sustaining.
- How to integrate climate adaptation and resilience planning into value chain design from the outset, so that drought and ecological shocks are treated as design variables rather than implementation risks.
- How to ensure the increase in income and other benefits for women and girls in value chains are accurately measured.

What this means

NGO practitioners: Design from the market backwards, build baselines from day one, and treat payment reliability as a non-negotiable.

Institutional donors: Check the value chain is market-first, the governance functional, and the chain will be sustainable after NGO support ends.

Investors and CSR partners: A multi-cycle investment pathway is realistic; expecting self-sufficiency within a single grant cycle is not.

Inclusion specialists: Inclusion by design outperforms inclusion by intent. Payment architecture, adaptation of roles, and governance rules determine who benefits.

Introduction

Why value chains matter for people and communities

For a household living on the margins of a market economy, the difference between selling alone and selling through a trusted system is the difference between an income that absorbs a school fee, a medical bill, or a drought, and one that does not. Well-designed value chains are not simply economic arrangements. They are systems of trust, routine, and mutual obligation that allow people who have historically been excluded from markets to participate in them on fair, predictable, and dignified terms. Dorcas chose to work through value chains because they offer more than income. Where they function well, they create the stable, predictable economic roles that allow people to build lasting livelihoods and develop increase resilience to shocks.

Dorcas has worked on value chain development for over a decade across Eastern Africa, with additional pilots in Eastern Europe and the Middle East. This report draws on a rigorous evaluation of five value chains as described on page 9.

This report is written for NGO practitioners, institutional donors, corporate social responsibility (CSR) partners, social impact investors, and inclusion specialists. It shares not only what worked but what did not, what Dorcas would do differently, and what remains genuinely uncertain.

Come and learn with us

This report is a conversation starter, not a conclusion. Dorcas has learned a great deal from the communities, cooperatives, and partners who made this work possible. And we know there is more to learn.

If you are working on similar value chain challenges, we would welcome the opportunity to connect, share experiences, and explore possibilities to work together.
You can reach us at learning@dorcas.nl

How the Dorcas value chain model works

Value chains as systems of people, routines, and trust

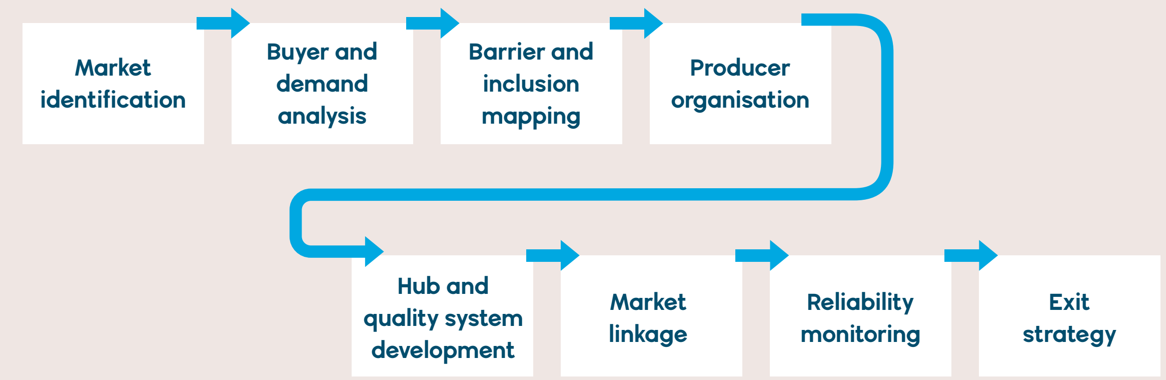
Value chains are often pictured as processes. But what makes them work or fail is the daily behaviour of the people involved. Dorcas defines a value chain as a living system of people, routines, rules, and trusted relationships that allows producers who experience barriers to social and economic inclusion to overcome those and participate in markets reliably and with dignity.

Three things follow from this definition. First, training alone is not enough: a producer who has been trained but has no functioning hub to sell through, no reliable payment to expect, and no support when things go wrong will not sustain changed behaviour. Second, reliability is the commercial strategy, not a nice-to-have: buyers switch quickly when quality or supply becomes unpredictable, and producers switch channels quickly when payments are delayed. Third, the system must be designed to work for the most marginalised from the start, not retrofitted for them later.

Dorcas value chain development model

Value chain development at Dorcas follows a structured sequence shown in figure 3. It begins with identifying who will buy, at what quality standard, through what payment system, and whether the value chain can sustain itself once external support ends. Those questions are answered before the work of building producer capacity and cooperative structures begins. This model has evolved through implementation and continues to evolve. Each value chain has tested and refined the approach, and the lessons in this report reflect that accumulated learning.

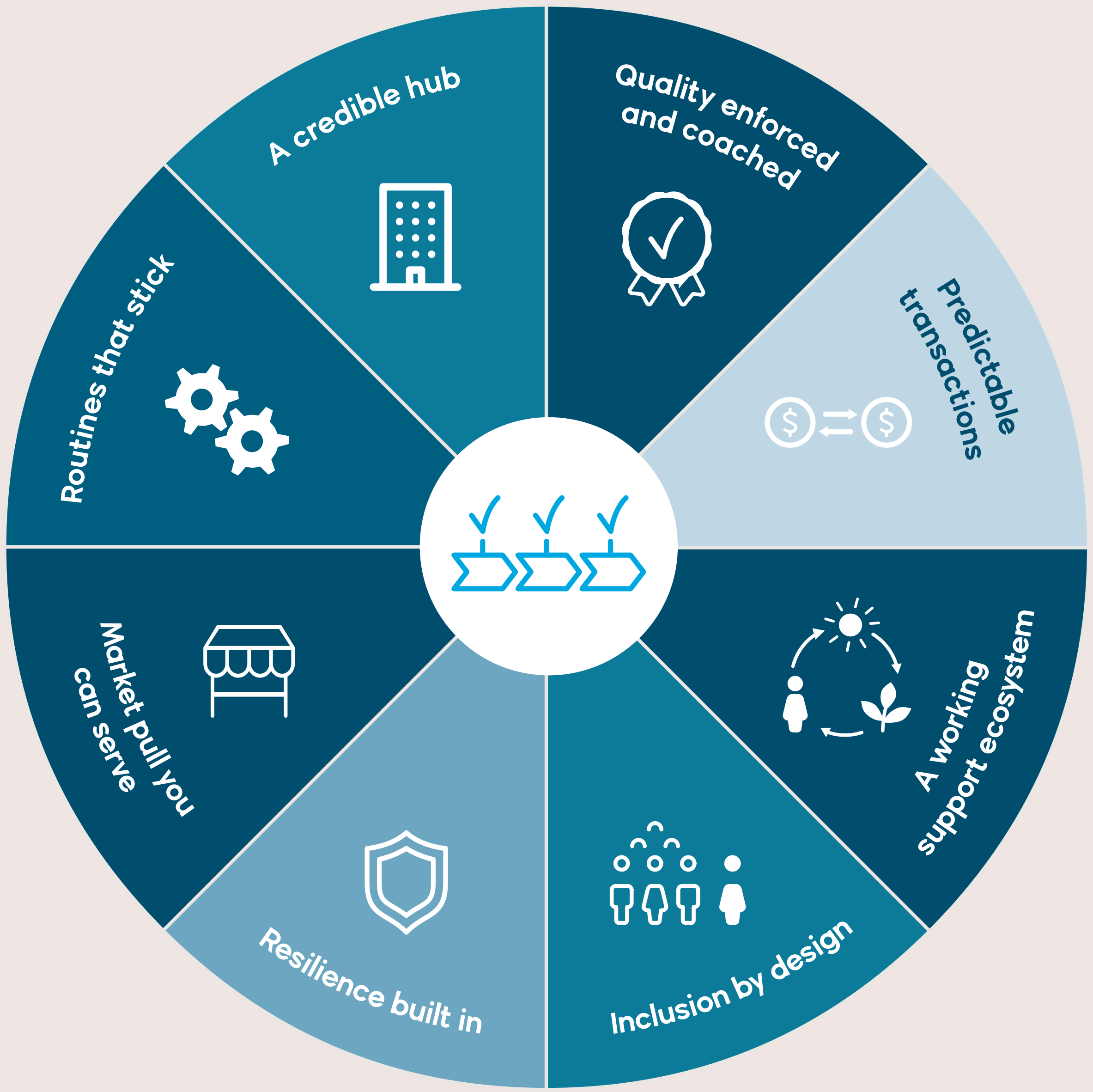
Figure 3: Dorcas value chain model



Eight vital elements for successful value chains

Across five value chains in three countries, the evaluation identified eight non-negotiable elements illustrated in figure 4. The absence of any one of them led to consistently weaker results. These are not a one-off checklist. They are ongoing design requirements that must be maintained throughout the life of a programme.

Figure 4: The eight vital elements of successful value chains



Where we worked in the evaluation context

Five value chains in Eastern Africa

Between 2019 and 2024, Dorcas supported value chain development across five distinct agricultural systems in Eastern Africa. Three were in Kenya: honey production in Kitui South Sub-County, pasture and milk production in Makueni, and indigenous chicken in Siaya in the west of the country. One was in Ethiopia in Moyale, where camel milk cooperatives operate across both sides of the Kenya-Ethiopia border. One was in Tanzania where people kept bees as part of an integrated farm plan in Chemba, Dodoma Region. Alongside these five chains, Dorcas piloted value chain approaches in Albania and Egypt. These are early tests of transferability rather than fully evaluated programmes. Figure 5 shows the locations of the value chains.

These value chains were designed and implemented over multiple years, with structured monitoring from the start. They offer sufficient depth of data to distinguish between what changed, what drove those changes, and what constrained progress. Conclusions in this report are based on these value chains. The Albania and Egypt pilots offer early indications of how the approach performs beyond its original context.

A value chain connects multiple producers, businesses, and customers, many of whom may not know each other, and most of whom operate beyond what any single programme can see or count. Table 2 on page 10 gives a sense of the business reality across the five chains: how many households were actively selling, what share of household income the value chain represented, and how reliably producers were paid. What those numbers cannot fully capture is what more regular and predictable income meant in practice for participating families. The evaluation is clear on this: the most significant change participants described was not a larger income but a more reliable one — reduced anxiety, better planning, and fewer crises. That shift in lived experience is documented in the qualitative evidence from all five chains.

Figure 5: Locations of the value chains

Pilot value chains in Albania and Egypt

Dorcas is actively testing whether the reliability-first model transfers beyond pastoral and agricultural systems. In Albania, early pilots are exploring local branding, agro-processing, tourism-linked markets, and social enterprise development. In Egypt, the focus is on women-led enterprises, quality-focused horticulture, savings groups, and aggregation strategies in markets with many intermediaries.

These pilots cannot yet be evaluated through the same household survey methodology as the Eastern African value chains. They should therefore not be treated as equivalent evidence. They are our active learning frontier, and we are looking for partners to explore these questions with us.

Contact us at partnerships@dorcas.org

Table 2: Active selling, household income and payment reliability across the five value chains

Value chain	Households actively selling (reference period)	Most significant income change reported	Payment reliability
Chemba – honey	88.0 per cent harvested; 86.8 per cent sold individually to local traders.	Beekeeping secondary income for 78.3 per cent; median seasonal revenue approximately 77 USD.	No data available.
Kitui – honey	Majority selling through cooperative channel.	Top 10 per cent captured 82.3 per cent of income; bottom 50 per cent captured 2.3 per cent.	54.6 per cent paid within one week; 36.7 per cent cited payment timing as top constraint.
Makueni – pasture and milk	45.0 per cent had ever sold hay; dairy constrained by infrastructure.	Income gains strongest in fodder and hay commercialisation.	No data available.
Moyale – camel milk	91.5 per cent selling through cooperative or milk collection centre.	55.7 per cent derived 25 to 49 per cent of their household cash income from milk.	77.4 per cent received same-day payment.
Siaya – chicken	36.4 per cent sold birds; 19.8 per cent sold eggs.	63.1 per cent cited more regular income as the biggest change.	88.9 per cent of sellers received cash the same day.

How the evaluation was done

A rigorous look at what worked and why

This report is based on an evaluation of Dorcas value chain programmes in multiple countries, carried out in 2025 by an independent consultancy firm. The evaluation was designed to answer this question: Under what conditions does the Dorcas value chain approach produce results, and what factors hinder that?

Five sources of evidence were used.

Household surveys were completed with 933 producers across the five Eastern African value chains: 210 in Kitui, 212 in Moyale, 217 in Siaya, 211 in Makueni, and 83 in Chemba. Surveys covered income, market participation, practice adoption, inclusion and resilience.

Focus group discussions were held with 29 producer, cooperative member, and community actor groups to explore what had changed in their experiences and why.

Key informant interviews were conducted with 57 individuals, including cooperative leaders, extension staff, buyers, implementing partners, and Dorcas country office staff.

Programme monitoring data from each value chain was reviewed alongside the evaluation findings to identify patterns over time.

A portfolio synthesis brought together findings from all five chains to identify what was consistent across contexts and what was specific to each one.

The evaluation assessed how and to what extent support from Dorcas contributed to the changes and which other factors played a role.

Strength of the evidence

The report uses a simple four-level hierarchy of evidence: measured findings, observed patterns, emerging lessons and open questions. This is shown in figure 6.

Figure 6: The strength of evidence hierarchy

Measured findings
Supported by quantitative survey data across multiple value chains.

Observed patterns
Consistent qualitative evidence from focus groups and interviews.

Emerging lessons
Found in some value chains, not yet confirmed across all.

Open questions
Areas where evidence is insufficient to draw conclusions.

Four key limitations

1. **Absence of baseline data** in most value chains. Pre-programme measurements were either not conducted or insufficient to allow precise before-and-after comparisons. Dorcas has made this a design requirement for all future value chain work: baselines must be built in from the start and aligned with programme objectives.
2. **Uneven data quality across value chains.** The Kitui and Moyale value chains have the strongest evidence base, reflecting longer implementation periods and more consistent monitoring. The Chemba value chain has a smaller sample and a shorter track record.
3. **How to separate the Dorcas contribution from other factors** such as drought, conflict, market conditions, and government policy. Where these factors played a significant role, they are noted.
4. **Programme-level commercial data was not systematically collected.** Dorcas will address this gap in future programming.

These limitations do not undermine the findings. They honestly frame these common challenges in the field.

A day in the value chain

In my household, everything used to depend on my husband. I had no income of my own, no say in how money was spent, and no way to plan for the future. When the drought came, or when an animal died, we simply had less. There was nothing to fall back on. That changed when I joined the Hilkas Milk Cooperative. At first, I was just a member. I brought my camel milk, followed the rules and received my payment. But gradually, I began to see how the cooperative worked. For example, how the collection schedules kept things predictable, how the quality checks protected the price, and how the weekly savings meetings gave members a buffer when things were difficult.

When conflict came to our area and destroyed the cooperative's equipment, I thought it was all over. Everything we had built up was gone in one night. But we did not give up. Dorcas supported us in rebuilding, and I was sent for training. I learned about cooperative governance, financial management, and how to lead a group through difficulty. I returned as chairlady of a cooperative with 35 members and 10 milk collection centres.

> 'Before Dorcas, I waited for life to happen to me. Now I lead my life and others follow.'
>
> Momina Dharar Abdi, Moyale, Ethiopia

Now I know what it means to run a system rather than just work inside one. I know what a payment schedule means to a mother who needs to buy medicine. What a quality rejection means to a producer with no other buyers. And how important it is for a young woman to see another woman leading.

Before Dorcas, I waited for life to happen to me. Now I lead my life, and others follow.

Momina Dharar Abdi is chairlady of the Hilkas Milk Cooperative in Moyale, Ethiopia, where she coordinates ten milk collection centres serving 35 members.

What changed for producers

How producers overcame barriers to participation

Most producers joining a Dorcas value chain programme experienced a specific kind of economic isolation. Their skills and assets that could not be converted into reliable income because the surrounding system – market access, quality standards, payment infrastructure, collective organisation – was absent or too fragile to depend on.

The evaluation found strong, consistent evidence that participation in Dorcas value chains helped producers overcome these barriers. Practice adoption was high across all five chains. For example, 87.6 per cent of Kitui beekeepers were trained, 84.8 per cent of Siaya chicken producers adopted vaccination, and 79.8 per cent of Moyale camel milk producers always followed improved handling procedures. Where follow-up support existed, and cooperatives reinforced routines through their own quality rules, practice change persisted well beyond the active programme period.

Where market systems functioned consistently, producers experienced better yields. In Moyale, 78.8 per cent of households reported that their average daily milk sales had increased compared to 12 months earlier. Resilience to shocks also improved. For instance, in Siaya, better brooding and hygiene routines specifically reduced chick mortality during weather extremes, and in Kitui, wax processing and cooperative service roles acted as income buffers during low-honey seasons. However, the change producers valued most was knowing that next month's income would arrive as a fair payment they could plan around.

> 'It is not that we are rich, but we no longer panic when something happens.'
>
> Female producer, Makueni, Kenya

Income was primarily used for school fees, medical costs, food and savings, which created financial buffers. Shocks which producers became better able to manage fell into three categories:

1. **Climate events** managed through product switching, pasture storage, and flexible marketing.
2. **Payment disruptions** buffered through cooperative reserves.
3. **Production losses** reduced through preventive animal health routines and improved harvesting practices.

> 'It is like a bank in the trees. If you take good care of the bees, the bees will take care of you and your family.'
>
> Kavinya wa Mutisya, beekeeper, Kitui, Kenya

How groups and cooperatives became more organised

The producer organisation was one of the most significant drivers of commercial outcomes. Where cooperatives and collection hubs developed clear rules, reliable coordination, and consistent governance, market access improved, and income gains were more evenly distributed. Where they remained informal or poorly governed, gains were fragile and concentrated among the better-connected. Figure 7 gives six reasons why producers stay in cooperatives.

Figure 7: Why producers stay in cooperatives

- ✓ Reliable payment
- ✓ Predictable buyer
- ✓ Fair quality grading
- ✓ Access to training
- ✓ Better prices
- ✓ Social support

Strong functional governance was the key to cooperative success. If committees met regularly, rules were applied consistently, records were transparent, and the leadership was trusted, then producers described the cooperative as theirs, not the programme's, and committed to it accordingly. One of the Moyale value chain participants said, "When it is our rules and our money, people take it seriously. If it were still the programme, we would wait to be told what to do."

Externally introduced support – training, infrastructure, facilitation – enables the self-organising capacity already present within communities to develop further. However, the transition to genuine cooperative self-management takes time and is not easy. This is because cooperatives must simultaneously master financial management, payment discipline, quality enforcement, and leadership accountability, while also breaking dependency on donor funding, capabilities the evaluation found were unevenly consolidated even after years of project support.

Inclusion: where it worked and where it remained uneven

The value chain programme was designed with inclusion as an explicit goal. Women, in particular, made meaningful gains, but there were persistent gaps for youth and people with disabilities.

Women's participation strengthened across all five value chains, but the depth of that participation varied considerably. Across the five value chains, the percentage of households reporting joint decision-making on value chain income ranged from 52.7 to 69.6, while 18.9 to 32.1 per cent reported women as primary decision-makers over income earned. The cooperative structure was a key driver: formal roles, transparent payments, and direct mobile money transfers gave women the economic standing that informal sales arrangements did not.

Youth participation was more fragile. Young people tended to participate through service, labour, or support roles, such as transport, fabrication, or operational tasks, rather than as asset owners, decision-makers, or primary participants of higher-value opportunities. Structural barriers, especially land ownership and control norms, constrained their ability to acquire productive assets and sustain engagement as independent economic actors. Where youth participation depended on access to land, capital, or equipment, their inclusion was more limited and less sustainable.

People with disabilities constituted four to ten per cent of producers across chains. Participation worked where roles were deliberately adapted. Where adaptations were not systematically built in, people with disabilities remained marginal regardless of programme intent.

Four design requirements have been identified for future programmes:

1. Map exclusion barriers before design begins.
2. Create multiple entry points and roles within the chain.
3. Budget for physical and logistical accommodations.
4. Monitor inclusion as benefit capture, not only attendance.

For social impact investors, inclusion done well is a commercial signal. Inclusive chains tend to be more stable, enjoy greater trust within communities, and exhibit greater resilience in the face of shocks.

> 'We now use modern techniques to keep bees and that means we can earn a better income.'
>
> Andrea Kosmas, beekeeper, Chemba, Tanzania

Three patterns we saw across countries

The three patterns shown in figure 8 consistently held across products, contexts, and chain designs. They are presented here as the analytical foundation for the sections that follow.

Figure 8: Three patterns observed across countries

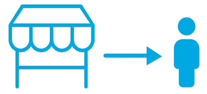
1

Reliability predicts sustainability

Gains were strongest where the surrounding system functioned consistently: payments arrived on time, quality rules applied to every member, collection schedules were kept. Where any of these failed – even briefly – trust eroded and producers moved to informal alternatives.

2

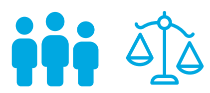
Market-first chains performed better



Chains that began by identifying buyers, verifying demand, and confirming payment systems before scaling production consistently outperformed those that started from the production end. Where production was scaled without a secured market route, the result was increased output without additional income.

3

Governance quality shapes who benefits



Governance quality shapes who benefits. Where rules were transparent, leadership accountable, and payment records open, women and less-connected producers captured a fairer share of benefits. Direct mobile payments to women's own accounts and published payment schedules replaced discretionary authority with shared standards.

These three patterns underpin the analysis on pages 17 to 24.

Why some value chains work better than others

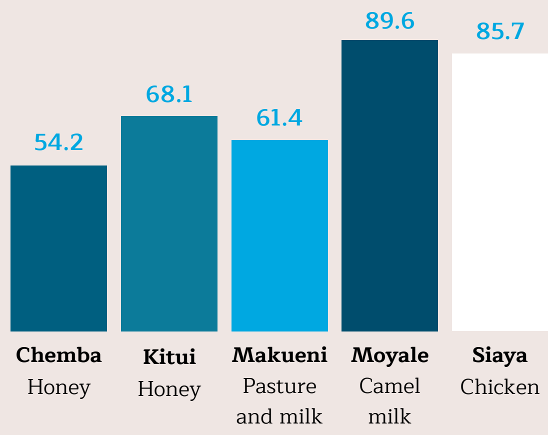
Why stronger chains worked

Three drivers consistently explained strong performance. First, practical training with regular follow-up that converted into daily or seasonal routines. Second, quality systems that translated standards into enforceable rules at the point of collection or sale, paired with coaching when producers fell short, rather than simple rejection. Third, a functioning service hub – a cooperative, milk collection centre, or structured producer group – that coordinated delivery, managed buyer relationships, and gave producers predictable terms to commit to.

The cooperative channel-use data shown in figure 9 tell the same story across chains. Where structured channels dominated, outcomes were stronger. Where informal channels remained the main route to market, gains were real at the producer level but fragile at the system level.

In Moyale, 89.6 per cent of households sold through the milk collection centre or cooperative. This was because the formal channel offered better terms than informal routes: same-day payment, reliable pricing, and no need to negotiate individually with buyers. The channel earned its loyalty. For honey, cooperative use was lower: in Kitui it was 68.1 per cent, and in

Figure 9: Percentage of households selling through a cooperative or collective channel

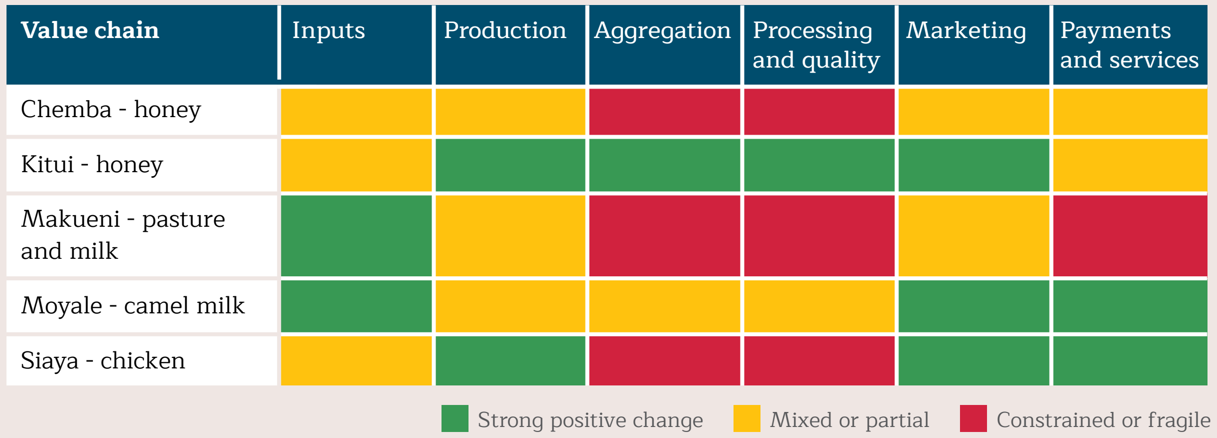


Chemba, it was 54.2 per cent. This is not primarily a failure of the cooperative organisation. Honey can be stored, and brokers come to the farms offering more attractive prices than the cooperative and even purchase dirty honey. So, the short-term gain for producers is attractive, and therefore many sell to both the cooperative and the brokers, even though brokers provide less long-term reliability.

Where value chains struggled and why

Value chains struggled when there was a mismatch between programme design and context, or when production was scaled before verifying market routes, leading to increased output but no additional income. The strengths and weaknesses of each value chain are shown in figure 10.

Figure 10: Where value chains performed well and where they struggled



Makueni is the clearest example. Pasture performed well: households adopted improved practices, expanded acreage, and commercialised pasture through baling and sales. The dairy component performed poorly. Power failures disrupted cold-chain operations for an average of 2.4 days per month, governance weaknesses undermined collective marketing, and drought constrained supply. A processing-heavy model was wrong for this context. What Makueni needed was a simpler aggregation and cooling model that could operate without depending on equipment continuity.

Siaya showed strong household gains, but also a critical commercial weakness. The day-old chick hatchery achieved only 55 per cent conversion, below the industry standard of 80 per cent. Feed cost inflation, cited by 87.6 per cent of households as a profitability threat, continuously squeezed margins. An early payment failure by an external off-taker damaged trust in formal channels and took years to repair.

Both cases illustrate the same underlying error. Where chains started from production rather than the market, the programme sometimes became the buyer of last resort. This created artificial demand that evaporated when support ended. Starting with production rather than the market is the most consistent and most avoidable design error in the portfolio, as figure 11 shows.

A broader portfolio lesson was that production support often received greater attention and

Figure 11: Production-first versus market-first chains

Production-first chain	Market-first chain
Training ↓	Buyer identified ↓
Production increase ↓	Standards agreed ↓
No buyer ↓	Payment system established ↓
Oversupply ↓	Production expansion ↓
Price collapse ↓	Growth
Exit	

investment than market-systems development. While many interventions improved production capacity, commercial outcomes depended equally on sustained investment in market intelligence, buyer relationships, branding, quality assurance, and market coordination. Future programmes should seek a more balanced investment across both sides of the value chain.

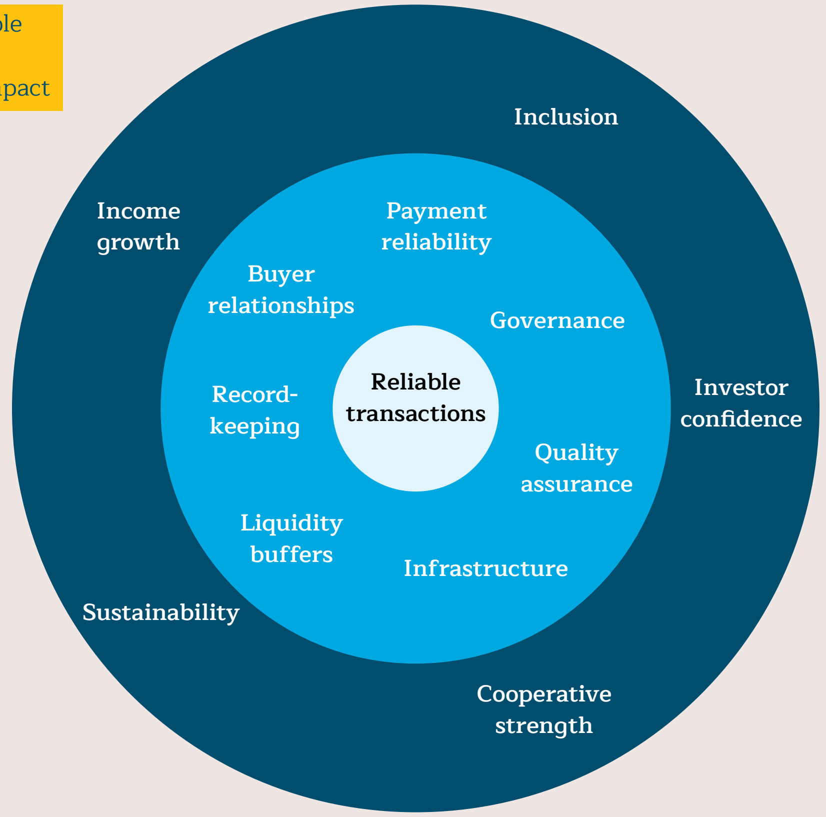
> ‘The brokers come and offer more per kilogram. Sometimes they offer 300 Kenyan shillings, sometimes 400. The cooperative offers 275. But the brokers accept dirty honey. They do not care about moisture. They do not care about containers. And when the market turns, they disappear. I tell younger beekeepers that the cooperative price is not the highest price on the day you sell. It is the only price that is still there next season. If you are taught a skill, that training satisfies you more than a one-day payment ever could.’
>
> Douglas Ngayau, Trainer of Trainers and beekeeper, Kitui, Kenya

Reliable transactions as the engine of impact
The concentric circles diagram in figure 12 shows that income growth, inclusion, and cooperative sustainability do not emerge directly from training or production support. They depend on a transaction system that works. Payment reliability, governance, quality assurance, infrastructure, liquidity, recordkeeping, and buyer relationships form the conditions that make transactions predictable. When these conditions hold, the outer outcomes follow. When any breaks down, gains stall regardless of how well producers have adopted improved practices.

Governance and trust

Quality of governance shapes outcomes more consistently than any single technical intervention. Where committees met regularly, applied rules equally to all members, maintained transparent records, and resolved disputes predictably, producers committed

Figure 12: Reliable transactions are the engine of impact



to the formal channel and stayed committed, even through difficult periods. Where governance was weak – or where stronger community members captured committee positions – benefits concentrated, side-selling increased, and women and less-connected producers fell back toward informal arrangements. These patterns confirm what the inclusion literature has long argued: governance is an inclusion mechanism, not merely an operational one. Who controls the rules determines who benefits from the system.

> In Moyale, rule-based cooperative governance had a directly measurable commercial effect. One member described the shift: now we follow the rules, not who shouts the loudest. Payment records were open. Quality decisions were applied consistently. In Moyale, women represented 87.3 per cent of respondents. They valued the cooperative specifically for its safety, payment reliability, and predictability. Moreover, in the strongest cooperatives, women held most key committee positions.

Sustainability and NGO exit

A sustainable value chain has a business case that holds after external support ends, including the cost of replacing equipment and infrastructure donated during the programme.

Applying this standard, the picture across the portfolio is mixed. Kitui honey value chain is the most advanced case: the cooperative is self-managing, has a functioning revolving fund, services its own quality system, and has demonstrated the ability to maintain operations between programme funding cycles. At the other end of the scale, Makueni dairy is the most fragile: the business model can only become more viable if better solutions are found for the energy, governance, and transport constraints.

Investors and donors should realise that value chain enterprises do not usually become financially viable within a single programme cycle. The time needed to build cooperative systems, stabilise market channels, develop buyer trust, and reach break-even is longer than most grant periods allow. A phased, multi-cycle approach – with clear milestones for reducing NGO involvement at each stage – is more realistic.

The business side of value chains

The economics behind sustainability

Commercial viability must consider the cost structure of the entire system: inputs, equipment replacement, transport and aggregation. The margin remaining after these costs must be sufficient to sustain the value chain without ongoing external subsidy.

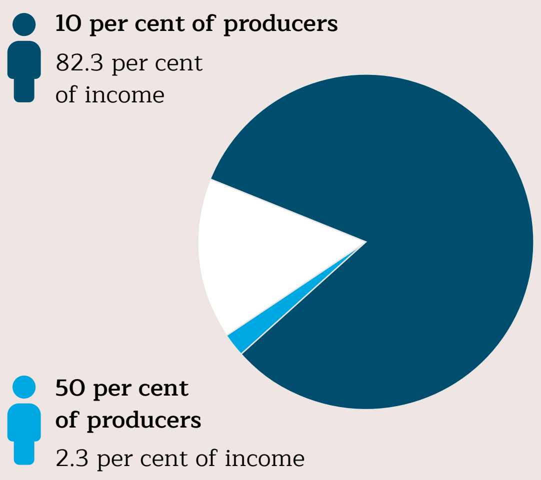
The evaluation constructed a business case for each category of actor in the portfolio: small-scale producers, small-scale processors, and the cooperative or aggregation hub through which both connect to buyers. These three categories have different cost structures and buyers, and sometimes competing interests. A price that works for the cooperative may not work for the remote producer who must pay transport costs before reaching the collection point. A quality standard that protects the buyer relationship may exclude the producer who cannot afford the required equipment. The business case must account for all three levels, not just the most commercially promising one.

Across the portfolio, the evaluation found genuine commercial potential that is unevenly realised. The most important cross-cutting finding is that the viability gap in the portfolio is less about demand and more about operational reliability, cost management, and financial access. In every value chain, when systems worked, commercial outcomes followed. Therefore, for each value chain, the strategic priority is identifying the one or two nodes where investment in reliability would unlock the strongest commercial returns.

The income distribution data from Kitui shown in figure 13 illustrates how uneven benefit capture can be even within a well-performing value chain. The top ten per cent of Kitui honey earners captured 82.3 per cent of total honey income in the evaluation period, while the bottom fifty per cent captured only 2.3 per cent.

This finding is presented not as a failure but as a design lesson. Benefit capture follows asset position. If a programme improves practice without addressing the asset and access barriers that determine who can convert practice into income, gains will concentrate among those already better positioned.

Figure 13: Income inequality among Kitui honey producers



Why market-first design matters

Production growth without buyers is not a value chain. It is an inventory problem. Market-first design means starting every programme with four questions that need verified answers:

1. Who will buy?
2. At what quality standard?
3. Through what payment system?
4. And at what volume does the value chain become viable without subsidy?

These questions must be answered before training begins, cooperatives are built, and equipment is procured. That can be done with the help of a three-phase model.

Phase 1: 0 to 3 months. Validate the market route, choose the hub model, define the practice package, and lock in cash-cycle and inclusion assumptions.
Phase 2: 4 to 18 months. Operationalise the hub, make the quality system function daily, and confront business break points directly.
Phase 3: 18 months onward. Scale only what is repeatable and financially viable, institutionalise cost recovery, and hand over to local actors. Scaling before phase 2 is complete is one of the most damaging errors in value chain programming.

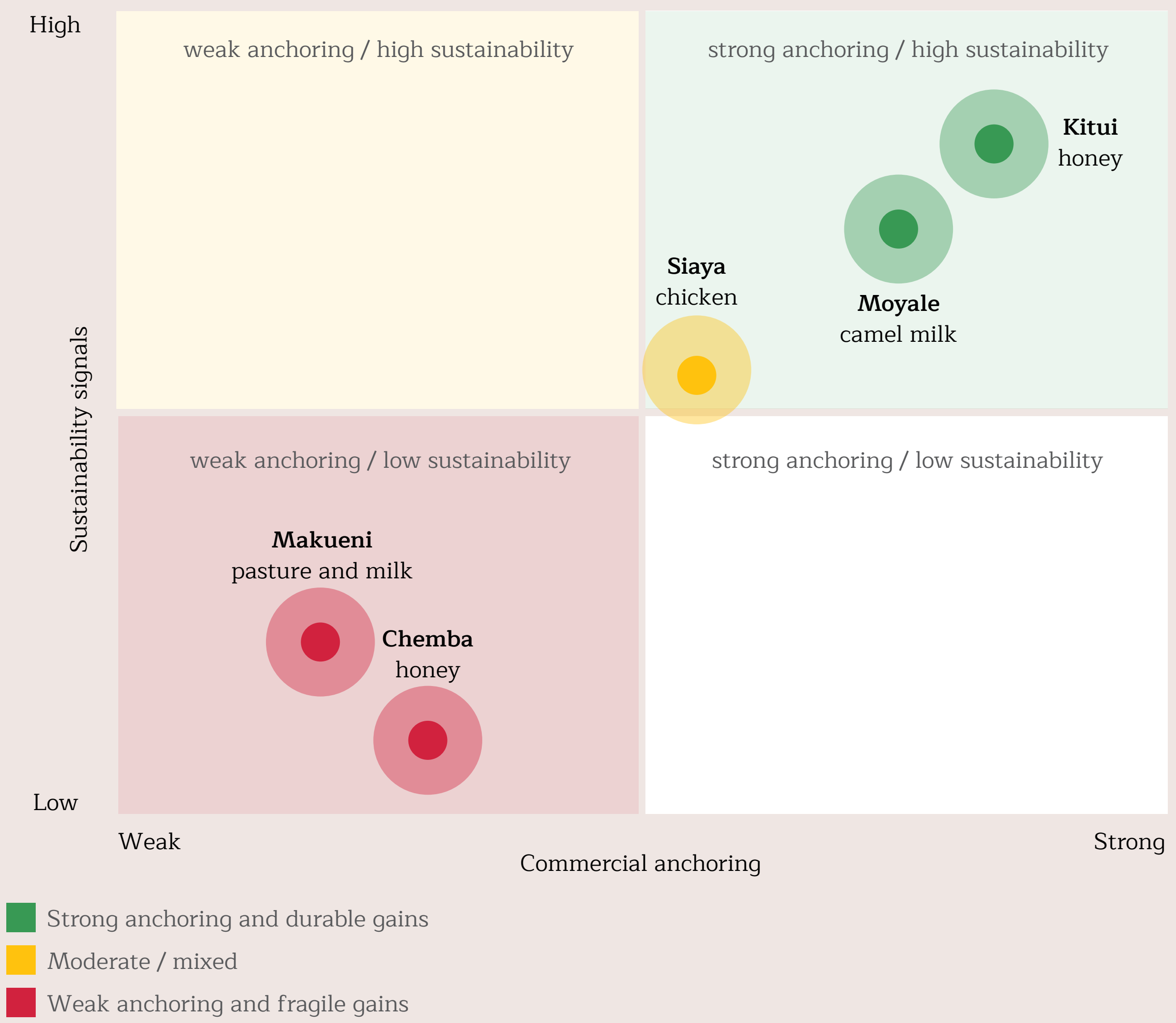
Commercial anchoring determines long-term sustainability

Across the five value chains, the strongest predictor of long-term sustainability of the benefits gained was not how well producers had been trained, but how securely the commercial route had been established from the start. Value chains that began by confirming buyers, payment systems, and viable volumes before scaling production consistently showed stronger sustainability signals. Value chains that built production capacity first struggled to convert practice change into durable income, regardless of adoption rates. Figure 14 shows where each value chain is on the commercial anchoring versus sustainability matrix.

The role of Dorcas in value chains

Dorcas does facilitate market analysis, cooperative governance development, quality system design, inclusion planning and needs based capacity building or training. We also identify value chain bottlenecks.
Dorcas does not create artificial demand by buying produce itself, run cooperatives on behalf of communities, or substitute for government services that should be available to producers as a right.
Dorcas phases out direct facilitation. It is reduced progressively as local actors demonstrate the capacity to manage the system independently.

Figure 14: Commercial anchoring is the single strongest predictor of system-level sustainability



When producers cannot repay yet: the role of sequenced support

Across the five evaluated value chains, producers, cooperatives, and processors accessed loans and input credit through a mix of sources: village savings and loan associations, savings and credit cooperative organisations, microfinance institutions, and in some cases cooperative revolving funds. These were used to finance inputs such as feed, vaccines, and containers, to cover working capital gaps between production and payment, and in some cases to purchase farm tools, equipment, and inputs. Repayment depended on the enterprise generating sufficient and timely returns. But the evaluation found that this condition was not always met. In Siaya, feed cost volatility and payment failures from off-takers left households with loan obligations they could not service. In Makueni, drought reduced harvests in years when credit had already been extended, forcing repayment renegotiations. In Chemba, where median seasonal honey revenue was approximately 77 USD, loan repayment was structurally difficult for the most marginalised households regardless of enterprise design. Where repayment failed, it was rarely because the loan source was wrong. It was because the household was not yet able to convert borrowed money into commercial returns.

Evidence, including BRAC's extensive experience across more than 40 countries, confirms that the deeper problem of loan repayment lies not in the source of the loan but in the borrower's starting conditions. Value chain participants that are households in extreme or chronic poverty often face daily expenses that exceed their income. Those expenses must be stabilised first before such households can realistically be expected to service a business loan. Otherwise, the loan will be consumed rather than deployed. The evaluation found this pattern most clearly among the most marginalised participants in Chemba and Makueni, and among chicken households in Siaya facing acute feed cost pressure. The same principle applies further up the chain: processors and traders carrying working capital debt are equally exposed when payment systems are slow, volumes are irregular, or buyers default.

The solution is not to withhold the funds and inputs that producers and processors need, but to sequence their provision correctly. In practice that means first stabilising consumption, second building savings habits and financial literacy, third providing productive assets and inputs, and fourth considering grants before loans for the most marginalised. This sequencing addresses the root cause the evaluation identifies: it is not unwillingness to repay but structural unreadiness to deploy borrowed capital productively that breaks the loan cycle.

The Dorcas Flourish approach, which draws on the BRAC Graduation Model, is designed around precisely this sequence. Neither approach is a guaranteed solution. But both provide a credible, evidence-grounded framework for reaching producers who are not yet in a position to convert a loan into commercial activity, and the evaluation's findings across five value chains give that framework concrete grounding in what happens when the sequence is skipped.

What donors and investors should look for

Foundations should look for consistent practice adoption, income gains reaching the most marginalised households, and a cooperative that is genuinely community-owned rather than project-managed. Institutional donors should look for market realism: was the chain designed from the buyer end, is the quality system functioning, are payment records transparent, and has sustainability been assessed against what the chain looks like once support ends? Private sector and social impact investors should look for chains where the business case holds without subsidy and where the product has a defensible market position through certification, branding, or quality differentiation. Kitui honey – with Kenya Bureau of Standards certification, the Kamaki brand, and a cooperative approaching the payment of dividend – is the strongest near-term case in this portfolio.

> 'Chicken farming is unstoppable on this farm. What we have learnt cannot be taken away from us — and that is what gives us confidence to keep moving forward.'
>
> Annastacia Nyaimbo, Siaya Chicken, Kenya

How to design inclusive value chains

What meaningful inclusion looks like

Inclusion in a value chain is about providing people with the support they need to perform a role that generates income, provides access to information, and ensures everyone can influence decisions about how benefits are distributed.

Value chains with the strongest inclusion outcomes share three characteristics:

1. Cooperative structures created formal economic roles that were accessible to women.
2. Payment systems linked directly to women's own mobile money accounts rather than household accounts.
3. Physical or logistical accommodations were made for producers who could not participate in standard ways.

Where these conditions were absent, inclusion remained nominal. Producers attended training, adopted practices, and even increased output, but the benefits were captured by household members who controlled marketing and payment decisions.

Where inclusion breaks down

Four types of barriers consistently limited who could participate and who could benefit:

1. High compliance costs turned quality standards into entry fees for producers with limited financial resources.
2. Inaccessible facilities placed the formal channel out of reach for remote or physically constrained producers.
3. Governance distrust reduced willingness to engage.
4. Payments made to household accounts controlled by men limited women's economic benefit and their influence in financial decisions.

Specific barriers faced by women, youth and disabled people are shown in figure 15.

Figure 15: Barriers faced by women, young and disabled producers

Woman producer	Young producer	Producer with disability
Barrier Restricted access to finance, mobility, and market participation.	**Barrier** Few productive assets and limited entry opportunities.	**Barrier** Physical exclusion and limited access to decision-making.
Design adaptation Digital payments + women's groups + leadership quotas.	**Design adaptation** Starter support + technical training + fast-return enterprises.	**Design adaptation** Role adaptation + accessible governance + targeted support.
Commercial role Cooperative member → collector → committee leader.	**Commercial role** Processor → trader → entrepreneur.	**Commercial role** Quality control → recordkeeping → cooperative leadership.
Outcome Greater income control and stronger market participation.	**Outcome** Earlier income generation and pathway to enterprise ownership.	**Outcome** Economic participation, income stability, and greater influence.

How to design for inclusion from the start

Four vital steps must be taken:

1. Conduct a barrier assessment before programme design begins to identify which groups are at risk of exclusion and why that is the case. Also, build design responses into the programme from the outset.
2. Create multiple entry points and roles within the chain so that people with different constraints have a viable pathway to participate and benefit.
3. Adjust payment systems so that income reaches the producers who earn it.
4. Budget for adapted equipment, accessible meeting locations and satellite collection points.

The Kitui cooperative provides the clearest evidence of what this looks like in practice. Modern hive stands replace traditional high-placed log hives, making apiary management accessible to women and people with disabilities. Payment through mobile money linked to individual accounts means women receive and control their own income. Quality control roles created at collection points provide skilled, site-based work for producers who cannot travel. The result is not just better inclusion but improved commercial performance: higher supply reliability, lower side-selling, and stronger buyer trust. Therefore, inclusion is a driver of this value chain's commercial success.

Signals that inclusion is working

Benefit capture is disaggregated. Women, youth, and people with disabilities are represented in income data, governance roles, and quality and processing functions.

Payment systems reach producers directly. Income from cooperative sales goes to the individual producer's account, not to a household account controlled by another person.

Compliance is affordable. The equipment and standards required to participate in the formal channel do not systematically exclude the lowest-asset producers.

Governance is trusted by all members. Marginalised producers raise concerns and disputes through cooperative channels rather than withdrawing silently.

Inclusion is self-sustaining. Inclusion practices continue between programme visits and after external support is reduced.

Why inclusion strengthens system performance

Evidence from this value chain portfolio challenges the assumption that inclusion and commercial performance trade off against each other. In this portfolio, stronger inclusion outcomes were consistently associated with stronger system performance.

In Moyale, cooperative structures accessible to women produced higher supply reliability, lower side-selling, and stronger buyer confidence than cooperatives dominated by a smaller group of better-connected producers. In Kitui, involving people with disabilities in wax processing created an additional revenue stream, reduced waste, and shifted community perceptions in ways that increased overall cooperative membership.

> 'This programme not only gives me income. It has given me pride, skills, and a future I can see clearly.'
>
> Shukriya Edin, milk quality controller, Moyale, Ethiopia

Can this approach work elsewhere?

What appears to be context-specific

Pastoral and agro-pastoral livelihoods, cross-border market systems, fragile infrastructure, recurring drought, and cooperative governance norms rooted in long-standing community structures are not universal. The specific products evaluated each have their own commercial logic, risk profiles, and seasonal patterns. Readers should therefore not assume that outcomes observed in Kitui or Moyale will transfer automatically to a different agricultural system or a different part of the world.

What appears to be transferable

Early pilot experience outside Eastern Africa suggests that the reliability-first logic may be more transferable than the specific value chains. In Albania, the approach is being tested through local branding, agro-processing, tourism linkages, municipal partnerships, and social enterprise development. In Egypt, it is being trialled through women-led enterprises, market studies, aggregation, savings groups, and quality-focused horticultural value chains. Despite these very different contexts, similar challenges have emerged: fragmented markets, coordination failures, liquidity constraints, weak producer market power, and the need for trusted institutions to organise reliable transactions.

Therefore, the transferable element is not the commodity model. It is building the reliable architecture required around markets, institutions, inclusion, and transactions. This is described in greater detail in figure 16.

Open questions

Emerging evidence from Albania raises questions about how value-chain approaches function when municipalities and social enterprises play a larger role than producer cooperatives. Early data from Egypt raises questions about how transactional demonstrations, market intelligence, and aggregation strategies can shift bargaining power in highly intermediary-driven markets. These remain areas for future learning rather than settled conclusions.
Other questions are:

- How does the reliability-first logic perform in middle-income or urban contexts where informal markets are large and well-functioning?
- Can the inclusion-by-design approach be applied to non-agricultural chains in manufacturing, services, or the digital economy?
- What happens to governance and trust within cooperatives when they scale beyond the community level?

Are you interested in exploring these open questions with us?
Contact us at learning@dorcas.nl

Figure 16: How transferable are value chain concepts?

Standardise everywhere:

- **Practice-based training cycle** built on demonstration, follow-up, and peer learning.
- **Simple quality protocol** with clear standards, objective checks, and corrective support after rejection.
- **Payment integrity** as a non-negotiable design requirement.
- **Basic governance safeguards** for groups and cooperatives.
- **Minimum inclusion checklist** that identifies who is at risk of exclusion before design begins.

Adapt to context:

- **Market model:** whether organised off-take through a cooperative is feasible, or whether buyer development is needed first.
- **Infrastructure package:** cold value chain for perishables, storage for storable products, transport aggregation for remote producers.
- **Climate resilience focus:** water and forage in arid settings, ecological governance in honey landscapes.
- **Scaling pathway:** stabilise supply before pushing formal off-take thresholds.

Moving forward together

Focus on building reliable systems

The most important lesson Dorcas has drawn from this portfolio is that value chains do not succeed just because producers are trained. They succeed because producers can rely on the system around them.

Training matters. Better production practices matter. But neither is enough on its own. Producers commit to a value chain when payments are delivered as promised, quality standards are consistently applied, governance is trusted, buyers remain engaged, and the rules of participation are predictable. Where these conditions are absent, even technically successful interventions struggle to generate lasting commercial outcomes.

This insight has changed how Dorcas thinks about value chain development. The focus shifts from delivering training to building systems reliable enough for producers, cooperatives, buyers, and investors to depend on.

This means:

- Programme design must start with the transaction – who pays whom, how much, when, and through what system – before it considers what skills to build or practices to promote.
- Governance is a first-order design requirement, not an implementation detail. Who controls the rules determines who benefits from the system.
- Value chain bottlenecks must be tracked as a core indicator from month one, not reviewed only at endline. Trust is built transaction by transaction.
- Quality systems, maintenance arrangements, recordkeeping, and other forms of operational discipline are not supporting activities. They are part of the commercial infrastructure of the value chain.
- The NGO exit pathway must be built into the design from the outset. A value chain is only sustainable if it can continue to function when external facilitation is reduced.

The key contribution of Dorcas to value-chain practice is the recognition that reliability – of payments, governance, quality systems, and market relationships – is not a supporting condition for success. It is the central design challenge. When reliability is built into the system, producers invest, buyers commit, and value chains become capable of sustaining themselves beyond the life of a programme.

What NGOs need to do differently

NGOs should validate the market route before mobilising producers. Build baselines from day one, aligned with the programme's intended outcomes. Design payment systems that reach the producers who earn the income. Treat governance development as a technical skill that requires as much investment as agronomic training. And accept that the transition from facilitation to enterprise thinking – from asking "what is the impact?" to asking "can this cover its costs?" – is difficult but necessary.

Figure 17: A realistic timeline for value chain development

Year 1	Year 2-3	Year 4-5	Year 5-7+
Pilot and validation	Operational stabilisation	Commercial maturity	Independent operation
Typical donor cycle = 3 years			

'Dorcas has shifted from facilitation to enterprise thinking. In programming, you think about impact. In business, you think about return on investment. We need to accept that failure is part of innovation.'

Mobisa Ronald Mose -
Value Chain Programmes Manager, Dorcas Kenya

Inclusion as a design principle

Inclusion is not a goal that sits alongside commercial viability. It is a precondition for it. Broader participation means a more stable supply, a greater trust in governance, and a stronger buyer relationship. Therefore, designing for inclusion from the start is an investment in system performance.

Resilience as a core requirement

Climate shocks, liquidity gaps, and infrastructure failures are not exceptional events in the contexts where Dorcas works. They are the operating environment. Value chains must be designed with buffers, contingency options, and continuity plans built in from the start to ensure enough resilience. In arid and semi-arid contexts, this means water and forage management integrated into the production system. For perishable products, it means backup energy and alternative marketing channels. For all chains, it means savings mechanisms that give producers the liquidity to absorb a bad season without exiting the formal channel entirely.

Across the portfolio, savings groups, cooperative reserves, and household reinvestment mechanisms were often just as important as technical support. Their value was not primarily capital accumulation. Rather, they allowed producers to remain active during droughts, price volatility, delayed payments, and household shocks, helping preserve participation in the formal value chain when conditions deteriorated.

What donors and investors should prioritise

Institutional donors should seek evidence that the chain was designed market-first, governance is functional, and the sustainability assessment accounts for what the chain looks like without external support. Baseline data, however imperfect, should be present. Realistic timelines should be accepted because value chain enterprises rarely become financially self-sustaining within a single grant cycle.

Private sector investors and corporate social responsibility partners should focus on chains where the business case holds without subsidy, supply reliability is demonstrated rather than projected, and the product has a defensible market position. A multi-cycle investment pathway as shown in figure 17 is realistic; expecting self-sufficiency within three years is not.

Where value chains are heading:

- Traceability systems that allow buyers to verify quality and origin without relying solely on trust.
- Blended finance structures that combine grant funding for the earliest stage of cooperative development with commercial capital for scaling once viability is demonstrated.
- Climate-resilient production systems built into value chain design from the start.
- Digital payment systems that reach women and remote producers directly.
- Youth pathways that create fast-return entry points alongside longer-horizon cooperative roles.

These are the directions in which value chain development is moving. Dorcas is moving with them. And we are looking for partners to move with us.

Key takeaways at a glance

For NGO practitioners

Design from the market backwards. Identify buyers, verify their requirements, and confirm the payment system before mobilising producers or building cooperative structures.

Build baselines from day one. Align these to the intended outcomes.

Treat payment reliability as a non-negotiable. Track it as a core indicator from month one. A single payment failure can undo months of trust-building.

Govern well. Make serious investments in cooperative governance. Who controls the rules determines who benefits.

Sequence support for the most marginalised. Consider grants before loans for households in extreme poverty that cannot yet service debt before meeting immediate needs.

Design for climate from the start. Build resilience buffers, contingency options, and production-base protections into value chain design before implementation begins.

For institutional donors

Seek evidence that the chain was designed market-first. Did buyer verification take place before production scaling?

Require baseline data. It need not be perfect, but it must be present and aligned to programme objectives.

Assess governance, not just outputs. A value chain with strong production figures but weak cooperative governance is commercially fragile.

Accept realistic timelines. Value chain enterprises rarely become self-sustaining within a single grant cycle. A phased, multi-cycle approach produces more durable results.

For investors and CSR partners

Assess post-NGO viability. Does the business case hold once donated equipment must be replaced commercially? Does the cooperative have cost-recovery mechanisms in place?

Expect a multi-cycle pathway. Invest with a five- to seven-year horizon.

For inclusion specialists

Inclusion by design outperforms inclusion by intent. Payment architecture, adapting roles, and governance rules determine who benefits. Build these into the programme design before implementation begins.

Final reflection for everyone

Value chains work when people can depend on them. So build that dependability into payments, quality systems, governance and market relationships.

Do you work on value chain challenges or invest in value chain impact? Then connect with us to share experiences and explore opportunities.

Reach us at learning@dorcas.nl or partnerships@dorcas.org

We take action in the face of poverty, exclusion and crises. We come alongside marginalised people and communities and jointly create opportunities for them to flourish. This is how we follow Jesus' example.

Dorcas