Global Labor Program – Inclusive Futures

Causal Loop Diagram report

Compiled by: LINC

Contents

List of acronyms

CCBA	Coca Cola Beverages Africa
COTU-K	Central Organization for Trade Unions (Kenya)
CLD	Causal Loop Diagram
EABL	East African Breweries Limited
GESI	Gender Equality and Social Inclusion
GLP-IF	Global Labor Program – Inclusive Futures
KEFEADO	Kenya Female Advisory Organization
NGO	Non-Governmental Organization
OPD	Organization of Persons with Disabilities
SFEA	Syngenta Foundation East Africa
UDPK	United Disabled Persons of Kenya
USAID	United States Agency for International Development

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Executive summary

Background and Methodology

A Causal Loop Diagram (CLD) is a diagram that aids in visualizing how different variables in a system are causally interrelated. The main rationale for including a CLD in the GLP-IF design was to identify the nonlinear nature of cause-and-effect relationships in complex value chain systems, and to understand how the program's proposed interventions may influence value chain dynamics. The overall objective of the CLD exercise was to develop a deep understanding of the system influencing the GLP-IF activity, to generate insights into the interactions and relationships within the value chains, and to identify potential areas of leverage.

LINC developed a structured facilitation tool and led a participatory workshop in September 2022 with representatives of value chain actors and program actors with expertise in gender, labor rights and disability inclusion. A validation workshop with value chain actors was subsequently held in June 2023 to review the CLD and refine themes. Systems analysis and visualization was conducted in an iterative process using Kumu, a platform for mapping complex systems. LINC reviewed and refined the core loops and drafted the visualization, which was comprised of several loops that were organized into 5 thematic areas. These themes are foundational to the GLP-IF value chains and the results of these causal factors and relationships are described thematically in the results section below.

Results

Theme 1: Discrimination, Unemployment and Exclusion of Women and Persons with Disabilities

Social discrimination leads to unemployment and exclusion of women and persons with disabilities, factors which contribute to a continuous cycle of social discrimination and exclusion of women and persons with disabilities in the labor market. In addition, the principles of social dialogue, including negotiation and consultation between actors such as workers and employers, are important for promoting employment opportunities and inclusive labor conditions particularly for women and persons with disabilities. If social and economic exclusion decreases, then the program will be more likely to realize its intended outcomes for women and persons with disabilities as envisioned in Domain 1.

Theme 2: Improved Market Terms

The key drivers of improved market terms focused on enhancing the organization of individual program participants and facilitating social dialogue and collective bargaining processes. As organized farmer and retailer groups increase, collective bargaining, and subsequently market terms, improve. As market terms improve, farmers and retailers' incomes also improve, resulting in a continuous process whereby organized groups

stimulate compound benefits for the program. Social dialogue around collective bargaining and organized farmer and retailer groups is also central to improving market terms. If collective bargaining increases, then the program is more likely to realize its intended outcomes of inclusive labor markets for all workers, including women and persons with disabilities.

Theme 3: Affordability of Inputs and Access to Markets

Affordability of inputs emerged as a key theme affecting farmers in both the EABL and CCBA value chains. In terms of cause and effect, as affordability of farm inputs (e.g. seeds, fertilizers) increases, so does farm revenue and income. Similarly, as affordability of retail inputs (e.g. stock, ice) increases, so do retail sales and income. The factors that directly contribute to improving farm revenue for farmers include farming skills, farm productivity and sorghum offtake price. The factors that directly contribute to improving sales for retailers include business skills, accessible market spaces, and the pricing of CCBA retail products. Each of these contributing factors represent GLP-IF's intervention areas for the two value chains, as detailed in Domain 1. Negotiation and consultation through social dialogue with value chain actors was noted to be essential for deliberations on prices and market conditions. While GLP-IF has recently partnered with the Women Enterprise Fund (WEF) to help women retailers secure financing to purchase CCBA start-up stock, access to finance for sorghum farmers has yet to be realized. Finally, an intervention that ensures that women with physical disabilities have fair accessibility in the marketplace was identified as an outstanding priority.

Theme 4: Development and Implementation of Inclusive Policies and Legislation

Inclusive public participation can improve advocacy, enforcement and implementation of inclusive policies, further reinforcing public participation. It is important that women and persons with disabilities are not only represented in policy development processes, but that these groups can benefit from full and equal participation. By incorporating social dialogue into public participation processes, workers can effectively participate in creating, reviewing and enacting inclusive labor policies. If inclusive public participation increases, then the program will be more likely to realize Domain 4's outcomes of improved implementation of anti-discrimination laws and policies.

Theme 5: Capacity Building on Labor Rights

Awareness of labor rights has a direct causal relationship with the ability to report on labor rights violations. As program participants' knowledge of labor rights and capacity to report on labor rights violations improves, their ability to advocate for inclusive labor policies will also improve. Currently, farmers and retailers are not aware of any formal channels to communicate grievances. Training farmers and retailers on their labor rights would directly increase their awareness, knowledge and understanding of labor issues, and subsequently increase their capacity to identify and report on any violations/grievances. Domain 2 specifically focuses on providing mechanisms to protect workers' rights and establish an

inclusive labor rights support system. If GLP-IF's labor rights interventions are effective, then the program will be more likely to realize its intended outcomes of protecting the rights of all workers (i.e farmers and retailers), including women and persons with disabilities.

Recommendations

The process of developing the CLD culminated in three key steps which were recommended to the program: 1) Find opportunities for leverage, 2) Evaluate the extent to which the leverage opportunities align with GLP-IF's values, capacities and priorities, and 3) Develop a strategy for acting on the high and medium level intervention areas based on CLD results and incorporate into Year 3 work planning. The priority factors focused on awareness of labor rights, collective bargaining, policy enforcement and improving market terms, and the program will determine how implementation can be leveraged in these areas to maximize outcomes.

Conclusion

A Causal Loop Diagram is a "snapshot of all relationships that matter." It is a visual representation of key variables (i.e., factors, issues, processes) and how they are interconnected. The CLD process included iteratively mapping out all the relationships and later validating and prioritizing them to determine which factors and dynamics present the greatest opportunities for GLP-IF. CLDs represent a tool for continued system analysis, and not the end product of the effort itself. As such, this analysis is intended to support the program as it continues to reflect on the various system dynamics affecting implementation. Finally, the CLD provides a framework for helping the coalition determine which system changes are most feasible and how leverage areas can be incorporated into Year 3 work planning.

Main report

Introduction

A Causal Loop Diagram (CLD) is a diagram that aids in visualizing how different variables in a system are causally interrelated. CLDs are used to display the behavior of cause and effect from a system's standpoint. They give practitioners insight into the interactions of factors, issues, process and other variables that make development problems difficult to resolve, and into potential high-leverage interventions to address underlying systemic constraints. They can also support the establishment of monitoring, evaluation and learning processes to measure progress and to adapt over time.

Objectives

The overall objective of the CLD exercise was to develop a deep understanding of the system influencing the GLP-IF activity and then build a map that captures the key forces and patterns driving the system's behavior. The CLD activity specifically sought to inform and refine GLP-IF's implementation approach and identify factors that the program can influence in line with the Theory of Change.

The CLD aimed to achieve the following:

- Analyze causes and effects and identify important negative and positive forces that impact how the system works (e.g. people, trends, events, norms, beliefs, phenomena, institutions, laws, policies, etc.).

- Generate insights into the interactions and relationships within the value chains to identify potential areas of leverage.

- Understand inter-related patterns and key themes in the system (e.g. labor rights, gender and social inclusion, disability inclusion) and how they either inhibit or enable program effectiveness.

- Provide a holistic and cohesive visualization of the system.

Rationale

CLDs are used to conceptually model dynamic systems in a holistic manner, mapping how variables (i.e., factors, issues, processes) influence one another. These diagrams are particularly useful for uncovering underlying relationships, and in identifying high and low leverage intervention points in a system.[1] In addition, CLDs represent the most important

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[1] (2019). What is a Causal Loop Diagram and What is it Good For?
https://www.marketlinks.org/resources/what-causal-loop-diagram-and-what-it-good

relationships within a given context, in this case, the EABL and CCBA value chains as defined in the GLP-IF Theory of Change.

The CLD process focused on understanding the most important factors, drivers and system dynamics that may affect program implementation, determine the causal relationships across factors, and establish how they relate to the Theory of Change. The CLD activity further explored the most promising opportunities for influencing the system, and identified factors that the program interventions can prioritize in the next year of implementation.

The main rationale for including a CLD in the GLP-IF design was to provide a visual characterization of a complex system. In addition, the CLD enables program actors to:

- Recognize the nonlinear nature of cause-and-effect relationships and characteristics in complex value chain systems.

- Understand the complex nature of the EABL and CCBA value chains and how the program's proposed interventions may influence value chain dynamics.

- Uncover unintended consequences of program interventions, both positive and negative.

- Identify common dynamics and leverage points for both the EABL and CCBA value chains.

Methodology

CLD Mapping Workshop

The CLD activities were designed to be purely purposive in nature and relied on a select number of program staff and program stakeholders embedded in the two GLP-IF value chains, as well as program actors with subject matter expertise across gender, disability, and labor rights. A participatory workshop was held over a 3-day period (20th September 2022 – 22nd September 2022) in Nairobi with a total of 20 participants across the following stakeholder groups:

- LINC
- Sightsavers
- Light for the World
- Syngenta Foundation East Africa (SFEA)
- KEFEADO
- COTU-K
- UDPK

- OPD Representative
- Network Managers
- Hub Owners
- Farmers
- CCBA
- CCBA Retailer
- EABL

Error! Reference source not found. presents an overview of the topics covered during the workshop. A structured tool was designed to facilitate the workshop (see Annex 1).

Table 1: CLD Workshop Overview	
Day 1	These sessions were held in plenary format. **Overview of the Causal Loop Diagramming Workshop** **Introduction to Systems Thinking** **Visioning Exercise:** Identify the near-term desired outcomes for our complex problem. **Draft our Problem Statement:** Describe the problem/situation that our consortium seeks to improve. **Explore Enablers and Inhibitors:** Understand the key factors that either drive or undermine our complex problem for both the CCBA and EABL value chain
Day 2	These sessions were held in breakout groups focusing on various themes/domains. **Analyze Causes and Effects:** Identify all possible causal relationships between the enablers and inhibitors. **Create Causal Loops:** Visualize all possible causal relationships between the enablers and inhibitors. **Build our Map(s):** Bring all our causal loops together into a cohesive visualization of the system. **Discover the Deep Structure**: Review our map(s) and identify the central driving forces in our system. **Craft our Narrative:** Create a cohesive narrative that helps tell the story of our system to others.
Day 3	These sessions were held in plenary format. **Update the Map(s):** Review and validate the map(s) as a team, discuss any gaps or uncertainties, and refine. **Find Opportunities for Leverage:** Analyze the map(s) and identify the most promising ways to potentially shift the system to a healthier state. **Evaluate Feasibility, Potential for Impact & Fit:** Assess the extent to which the leverage opportunities align with the program's values and capacities. **Construct Action Plan:** Develop a strategy for engaging the system based on what we have learned. **Review Next Steps**

Systems Analysis

Using insights from the maps, notes, and the workshop, a CLD was developed to reflect all of the factors and connections identified by workshop participants. Prior to beginning the analysis, the reader should become familiar with how to interpret a causal loop diagram.

1. **Factors:** Factors are represented as circles. They are the central driving forces identified in the value chain. These variables can either increase or decrease. In the map, they are also organized by the themes that emerged from the CLD workshop and validation meeting.

2. **Connections:** Connections are represented by arrows that connect the factor, and arrows represent the causal relationships between factors. Arrows signify that one variable affects the next one in some direction, all else being equal, and indicate the direction of causality.

3. **Causal Loops:** A causal loop is a series of cause-and-effect relationships that lead to an increase, decrease or balancing effect on the factors in the loop. Each thematic area may contain one or more loops highlighting how the factors drive the dynamic around each thematic area.

CLDs address the core principle of systems thinking: One cannot understand an issue or the sum of its parts (factors, actors, processes) in isolation. In a system, everything is related to everything else through interconnections. The relationships (and not the parts themselves) drive the outcomes and systems GLP-IF seeks to understand and to influence. It is important to note that the CLD represents a tool for continued system analysis, and not the end product of the effort itself. Ideally, developing a CLD that accurately portrays the system will yield insights that further the analysis and deepen the understanding of the relevant causes and effects.

The CLD activity generated several loops that are foundational to the GLP-IF value chains. Each causal loop was developed and defined in a participatory process whereby participants identified key causal relationships between a range of variables pertaining to the GLP Theory of Change. This was done using an iterative process with LINC's support. LINC thereafter reviewed and refined the core loops and drafted the visualization. A workshop to review the CLD and validate the core themes was held with program representatives and value chain actors in June 2023.

Results

Access Results via Kumu

The visualization of the causal loops was conducted using Kumu[2] software. Kumu is a visualization platform for mapping complex systems and understanding relationships. In Kumu, a map is a collection of elements, connections, and loops. The user-friendly platform

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[2] www.kumu.io

allows customizable filtering of all attributes, allowing even novice users to access the system map for more in-depth analysis. The platform allows for multiple layers of complicated information to be translated into a story, and for the audience of readers to extract valuable insights. The LINC analytical team utilize the Kumu platform to organize the factors generated during the CLD workshops into relationship maps. A link to the CLD of the GLP-IF network is **available here**. As part of the debriefing of this report to the Sightsavers team, an orientation to the Kumu system with the final diagram can be provided.

Thematic Results

Figure 1 below presents an overview of the CLD. The CLD contains a total of 34 factors with 42 connections between them. A total of five themes illustrating different factors that the program is seeking to influence were identified. Each of these themes is directly related to the overall program objective of promoting the labor rights of workers and protecting workers from exploitation. The following results section provides a narrative description of each of the core thematic areas within the context of GLP-IF and its interventions across the EABL and CCBA value chains.
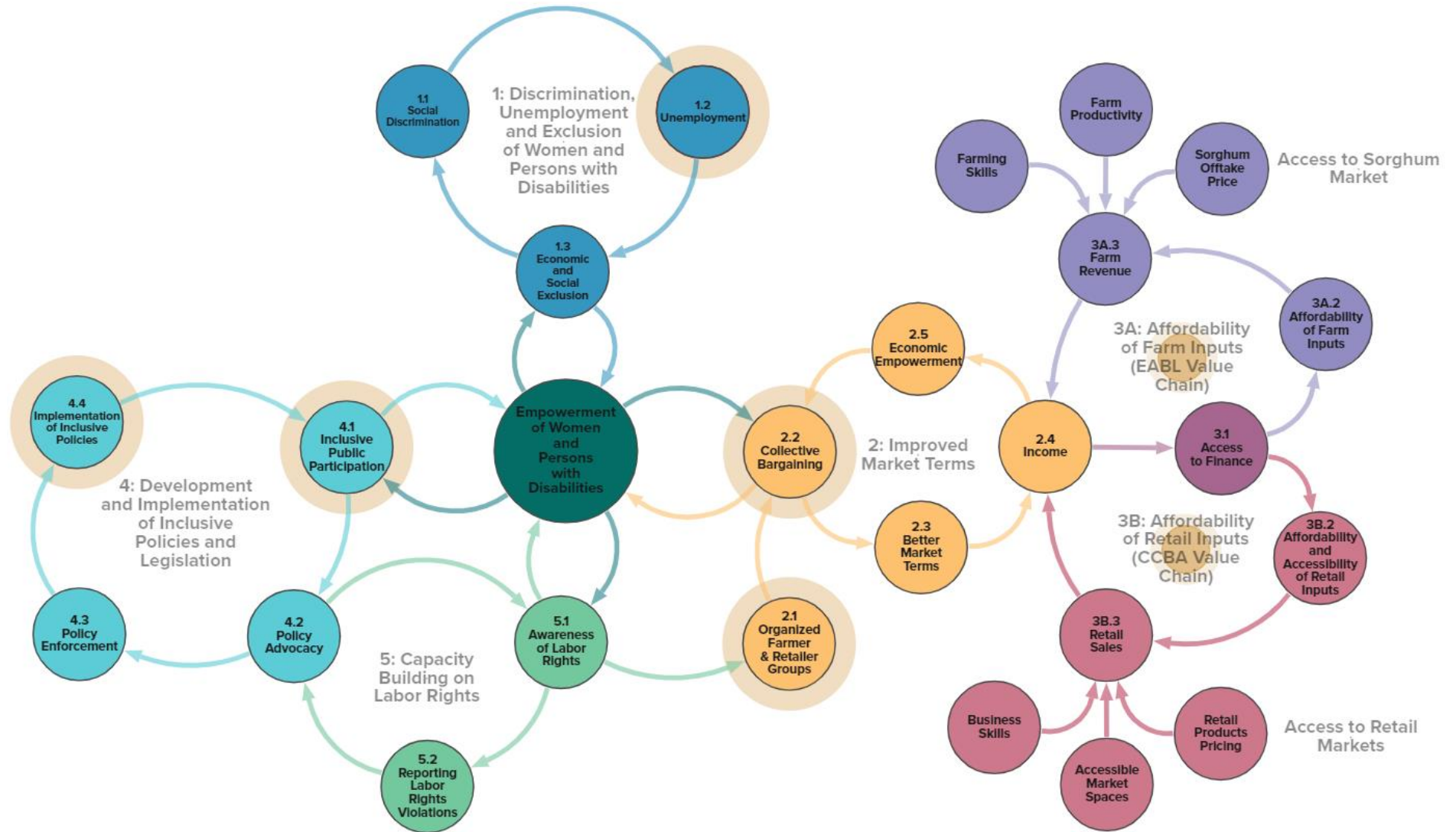
Figure 1: GLP-IF Causal Loop Diagram

Theme 1: Discrimination, Unemployment and Exclusion of Women and Persons with Disabilities

Social discrimination leads to unemployment and exclusion of women and persons with disabilities, factors which contribute to a continuous cycle of social discrimination and exclusion of women and persons with disabilities in the labor market. In addition, the principles of social dialogue, including negotiation and consultation between actors such as workers and employers, are important for promoting employment opportunities and inclusive labor conditions particularly for women and persons with disabilities. If social and economic exclusion decreases, then the program will be more likely to realize its intended outcomes for women and persons with disabilities as envisioned in Domain 1.
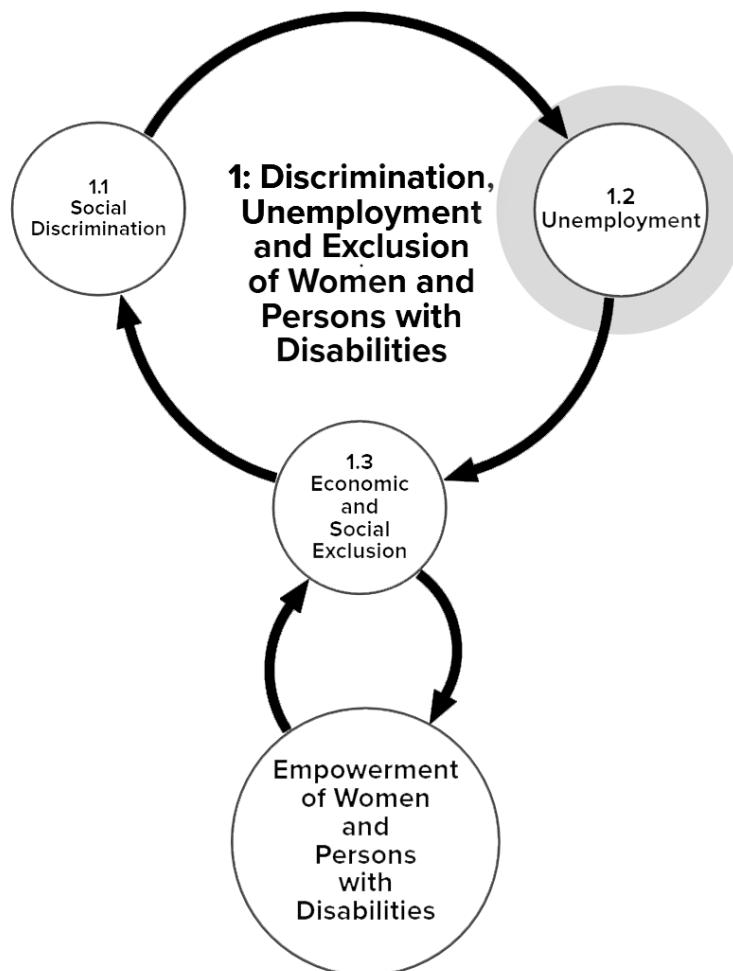

Figure 2: Theme 1 Discrimination, Unemployment and Exclusion of Women and Persons with Disabilities

Table 2: Theme 1 Factor Definitions	
Factor	**Definition**
1.1 Social Discrimination	The discrimination, stigma, unfair or prejudicial treatment faced by women and persons with disabilities including perceptions that they are less productive or not employable.
1.2 Unemployment	The lack of employment that women and persons with disabilities experience as a result of discrimination, exclusion and disempowerment.
1.3 Economic Social and Exclusion	Exclusion from social, economic and livelihood opportunities that women and persons with disabilities experience, preventing them from fully participating in social and economic activities.

Discrimination, unemployment and exclusion of women and persons with disabilities emerged as a prominent theme in the CLD analysis. The key drivers of unemployment of women and persons with disabilities in the context of the program were identified as social discrimination and social and economic exclusion, factors which perpetuate stigma and discrimination against women and persons with disabilities and contribute to their exclusion from the labor market.

In terms of cause and effect, social discrimination has a direct causal relationship with the exclusion of women and persons with disabilities. This causal loop illustrates that as social discrimination (Factor 1.1) increases, the likelihood of unemployment (Factor 1.2) among women and persons with disabilities also increases. Similarly, an increase in the unemployment (Factor 1.2) of women and persons with disabilities contributes to social and economic exclusion (Factor 1.3) for the same population. The connections between these factors contribute to a sequence of reciprocal causes and effects in which the factors intensify and aggravate each other, leading to a worsening of the situation. In addition, social and economic exclusion (Factor 1.3) has a strong relationship with the empowerment of women and persons with disabilities, an important outcome factor. Should social and economic exclusion increase, GLP-IF's goals of enhancing the participation of women and persons with disabilities in the labor market may not be achieved. However, if social and economic exclusion decreases, then the program will be more likely to realize its intended outcomes for women and persons with disabilities.

Within this causal loop, program participants identified a need for social dialogue around unemployment (Factor 1.1). The principles of social dialogue, including negotiation and consultation between actors such as workers and employers, were considered to be important for promoting employment opportunities and inclusive labor conditions particularly for women and persons with disabilities.

The factors identified under this thematic area are corroborated by findings from the Gender and Social Inclusion (GESI) assessment, which state that: "persons with disabilities face a combination of systematic, attitudinal, or environmental barriers which limit their participation in agricultural-based value chains and that this is driven by misconceptions of their ability to participate in formal employment, distrust from financial institutions, and self-exclusion due to internalized stigma."

GLP-IF's Theory of Change specifically seeks to influence factors relevant to this theme. The program seeks to promote more inclusive and non-discriminatory labor practices in specific value chains and contribute to more inclusive labor markets. Domain 1 of the program directly works to ensure more women and men with disabilities are included in the program's value chains and are equipped with the opportunities, skills and knowledge to participate confidently in labor markets. The program also engages Organizations of Persons with Disabilities (OPDs) to promote and support the participation of women and persons with disabilities in the labor sector.

Without these program interventions, the factors contributing to the unemployment of women and persons with disabilities will continue to manifest in a vicious cycle. However, if the program does not sufficiently address social discrimination and stigma against women and persons with disabilities, there is a risk that this aspect of the system will remain unchanged. If these factors remain unchecked, a continuous cycle of discrimination and unemployment of women and persons with disabilities is likely to persist. This may expose women and persons with disabilities to further social discrimination, and lead to long-term exclusion and unemployment.

Theme 2: Improved Market Terms

The key drivers of improved market terms focused on enhancing the organization of individual program participants into groups and facilitating social dialogue and collective bargaining processes. As organized farmer and retailer groups increase, collective bargaining, and subsequently market terms, improve. As market terms improve, farmers and retailers' incomes also improve, resulting in a continuous process whereby organized groups stimulate compound benefits for the program. Social dialogue around collective bargaining and organized farmer and retailer groups is also central to improving market terms. If collective bargaining increases, then the program is more likely to realize its intended outcomes of inclusive labor markets for all workers, including women and persons with disabilities.
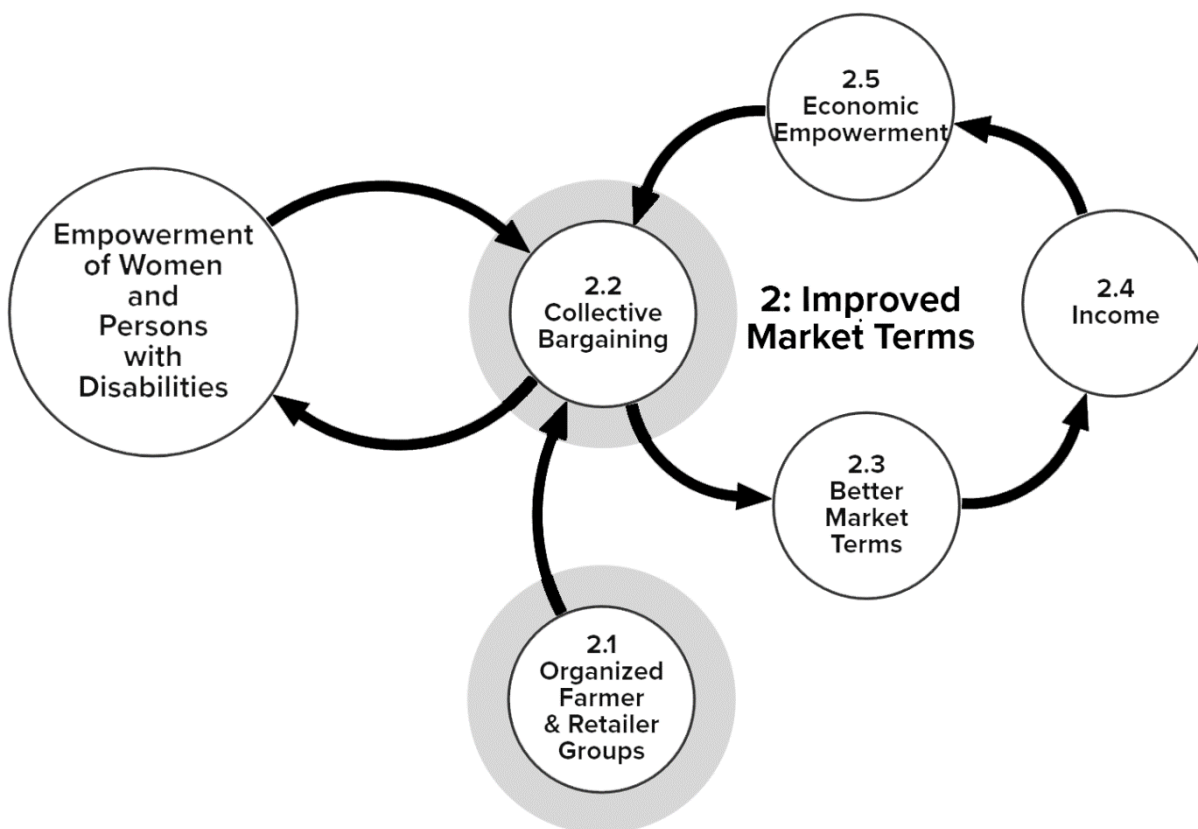
Figure 3: Theme 2 Improved Market Terms

Table 3: Theme 2 Factor Definitions	
Factor	**Definition**
2.1 Organized Farmer & Retailer Groups	The organization of farmers and retailers into small groups so that they can benefit from collective bargaining power.
2.2 Collective Bargaining	The process in which workers, through organized groups like labor unions, can negotiate for better market terms.
2.3 Better Market Terms	Making market conditions more favorable for sorghum farmers and/or retailers (e.g. improved offtake price, affordable inputs).
2.4 Income	Income earned from participation in the labor market (e.g. through the sale of sorghum or the sale of beverages).

2.5 Economic Empowerment	The empowerment of workers that results from their participation in the labor market and improved incomes.

The CLD analysis also identified improved market terms as a dominant theme. The key drivers of improved market terms focused on enhancing the organization of individual program participants and facilitating social dialogue and collective bargaining processes.

In terms of cause and effect, organizing farmers and retailers into groups has a direct causal relationship with improved market terms. This causal loop illustrates that as organized farmer and retailer groups (Factor 2.1) increase, collective bargaining increases (Factor 2.2). As collective bargaining increases, the state of market terms (Factor 2.3) also improves. As market terms improve, this can increase incomes (Factor 2.4) for farmers and retailers. Ultimately, as incomes improve, this contributes to an overall increase in the economic empowerment (Factor 2.5) of program participants. The connections between these factors contribute to a chain of events in which one desirable occurrence leads to another, resulting in a continuous process whereby organized groups stimulate compound benefits for the program.

Within this causal loop, program participants also identified a need for social dialogue around collective bargaining and organized farmer and retailer groups. The principles of social dialogue, including negotiation and consultation between program participants and value chain actors were considered to be essential for the protection of labor rights and improved market terms in the two value chains. In addition, collective bargaining (Factor 2.2) has a strong relationship with the empowerment of women and persons with disabilities, an important outcome factor. Should collective bargaining decrease, GLP-IF's goals of enhancing the participation of women and persons with disabilities in the labor market may not be achieved. However, if collective bargaining increases, then the program is more likely to realize its intended outcomes of inclusive labor markets for all workers, including women and persons with disabilities.

Organizing program participants into groups was identified as an important factor: if farmers are able to band together, they are more likely to collectively advocate for better market pricing, better market conditions such as improved infrastructure to support agricultural activities, stronger agricultural policy, better value chain opportunities, and better agronomic support. Similarly, if retailers are organized into groups, they are more capable of advocating for improved business development support, more accessible commercial market spaces, and wider enactment of reasonable accommodations for persons with disabilities. In addition, as farmers and retailers become organized into groups and entities, they are better positioned to engage in collective bargaining processes, benefit from collective labor rights training and support, and advocate for more favorable market terms. Organizing farmers and retailers into groups has a direct causal relationship with improving access to markets and enhancing livelihoods for program participants.

GLP-IF's Theory of Change specifically seeks to provide a ready market to sorghum farmers, facilitate access to market for CCBA retailers, and mobilize labor rights support for workers in both value chains, specifically through trade unions. If farmers and retailers are not systematically organized into groups, it may be difficult for the program to target participants individually across the intervention areas and maximize value chain opportunities. Program participants may also miss out on the opportunity to engage in the labor movement if they are not actively enrolled into groups and/or trade unions to strengthen their collective voices.

Theme 3: Affordability of Inputs and Access to Markets

Affordability of inputs emerged as a key theme affecting farmers in both the EABL and CCBA value chains. In terms of cause and effect, as affordability of farm inputs (e.g. seeds, fertilizers) increases, so does farm revenue and income. Similarly, as affordability of retail inputs (e.g. stock, ice cooling solutions) increases, so do retail sales and income. The factors that directly contribute to improving farm revenue for farmers include farming skills, farm productivity and sorghum offtake price. The factors that directly contribute to improving sales for retailers include business skills, accessible market spaces, and the pricing of CCBA retail products. Each of these contributing factors represent GLP-IF's intervention areas for the two value chains, as detailed in Domain 1. Negotiation and consultation through social dialogue with value chain actors was noted to be essential for deliberations on prices and market conditions. While GLP-IF has recently partnered with SMEP Microfinance Bank to help women retailers secure financing to purchase CCBA start-up stock, access to finance for sorghum farmers has yet to be realized. Finally, an intervention that ensures that women with physical disabilities have fair accessibility in the marketplace was identified as an outstanding priority.
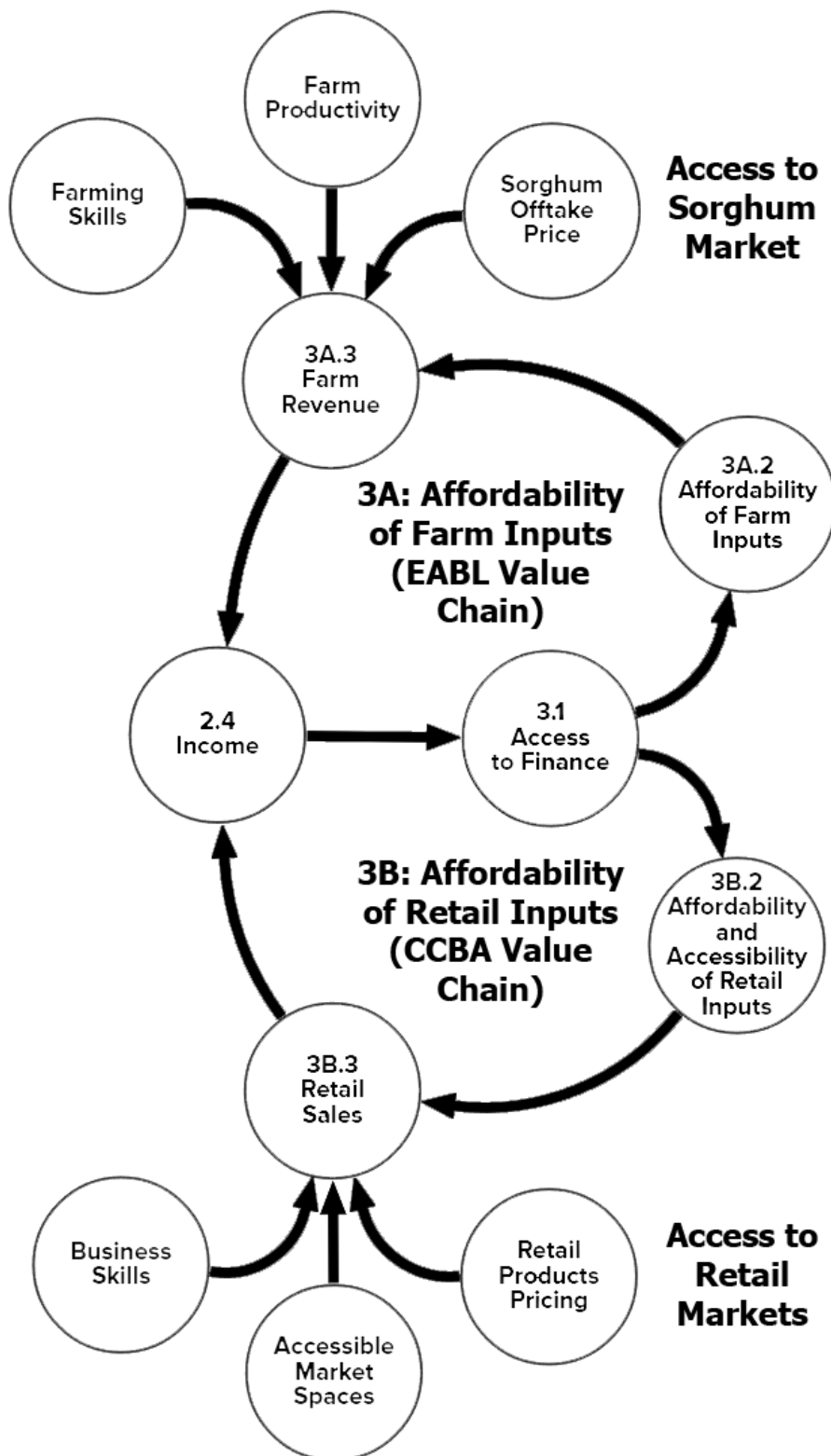
Figure 4: Theme 3 Affordability of Inputs and Access to Markets

Table 4: Theme 3 Factor Definitions		
Theme	**Factor**	**Definition**
3: Affordability of Inputs and Access to Markets	**3.1 Access to Finance**	The ability of farmers and workers to access financial services (e.g. banks, chamas, cooperatives) and products including access to credit/loans and working capital.
3A: Affordability of Farm Inputs (EABL Value Chain)	**3.A2 Affordability of Farm Inputs**	The cost of inputs (e.g. seeds, fertilizers, pesticides) that farmers require to produce sorghum.
	3.A2 Farm Revenue	The revenue that farmers derive from their sorghum farming activities.
	Farming Skills	The crop management skills that farmers require to effectively farm sorghum.
	Farm Productivity	The yields and harvests that farmers can expect based on the use of good agricultural practices and inputs.
	Sorghum Offtake Pricing	The price at which the main sorghum buyer, EABL, purchases sorghum from farmers.
3B: Affordability of Retail Inputs (CCBA Value Chain)	**3B.2 Affordability and Accessibility of Retail Inputs**	The cost of inputs (e.g. rent, stock, supplies) that retailers need to operate a CCBA retail business, and the extent to which these inputs are accessible to retailers with disabilities.
	3B.3 Retail Sales	The value of beverages sold by CCBA retailers.
	Business Skills	The entrepreneurial skills (e.g. financial recordkeeping, inventory management) that retailers need to successfully run a CCBA retail business.

	Accessible Market Spaces	Commercial market spaces are designed to be useful and marketable to people with diverse abilities and are built or modified with the needs of persons with disabilities in mind.
	Retail Products Pricing	The recommended retail price that retailers are able to charge for their CCBA beverages.

The third theme that the CLD process identified was related to the affordability of inputs and access to markets. Factors around affordability of inputs and access to market were explored for both value chains targeted by the program. This causal loop is therefore divided into two parts labeled in the diagram as follows: 3A) CCBA value chain and 3B) EABL value chain. Areas of divergence and convergence across the two causal loops will be explained.

3A: EABL Value Chain

Affordability of inputs emerged as a key theme affecting farmers in the EABL value chain, one that was directly related to access to finance and income. In terms of cause and effect, this causal loop illustrates that as access to finance (Factor 3.1) increases, affordability of farm inputs (Factor 3A.2) increases. As affordability of inputs increases, farm revenue (Factor 3A.3) increases. This contributes to increased income (Factor 2.4) for sorghum farmers. The factors that directly contribute to improving farm revenue for program participants include farming skills, farm productivity and sorghum offtake price. Each of these contributing factors represent GLP-IF's intervention areas, particularly through the hub model that supports sorghum production, as detailed in Domain 1. These three factors largely influence farmers' ability to generate revenue from their sorghum farming activities. The connections between the factors in this causal loop contribute to a chain of events in which one desirable occurrence leads to another which further promotes the first occurrence and so on, resulting in a continuous process of improvement, meaning that access to finance is likely to spur a series of desired outcomes for sorghum farmers. Within this causal loop, program participants identified a need for social dialogue around affordability of inputs. The principles of social dialogue, including negotiation and consultation between farmers and EABL, were considered to be critical for ensuring farmers' involvement in EABL's price-setting processes.

The key driver affecting access to inputs in the context of the program is access to finance. While inputs are available to farmers through the existing hub structure, affordability of inputs is a major challenge to small-scale farmers. Farmers struggle to purchase inputs such as pesticides and fertilizers, hire labor or tools to farm their entire acreage, or insure their crops against unexpected failure. In addition, farmers are required to pay for all their inputs and mechanization needs upfront, prior to harvesting any crop, which is a significant barrier for

small-scale farmers. Limited access to financial support directly affects farmers' ability to access inputs, which subsequently affects their ability to earn income from farming activities.

GLP-IF's Theory of Change specifically seeks to establish farmer hubs that provide farmers with high-quality inputs such as seeds, fertilizers, crop protection services, mechanization and financial services support, agronomic support and advisory services. While farmer hubs provide essential agronomic services and inputs to farmers, access to financial services has not yet been realized in the program. Without an intervention that helps farmers manage this aspect of production (i.e. making inputs more affordable, subsidizing inputs, and/or introducing customized financing options) for small-holder farmers, program participants will participate in the value chain, but not be able to fully thrive.

3B: CCBA Value Chain

Affordability of inputs also emerged as a key theme affecting retailers in the CCBA value chain, and one which related closely with access to finance and income. In terms of cause and effect, this causal loop illustrates that as access to finance (Factor 3.1) increases, affordability and accessibility of retail inputs (Factor 3B.2) increases. As affordability and accessibility of inputs increases, retail sales (Factor 3B.3) increases. This ultimately increases income (Factor 2.4) for CCBA retailers. The factors that directly contribute to improving retail sales for program participants include business skills, accessible market spaces, and the pricing of CCBA retail products. Each of these contributing factors represent GLP-IF's intervention areas, particularly through the business development support offered to CCBA entrepreneurs, as detailed in Domain 1. These three factors largely influence retailers' ability to generate revenue from their sales. The connections between the factors in this causal loop contribute to a chain of events in which one desirable occurrence leads to another which further promotes the first occurrence and so on, resulting in a continuous process of improvement, meaning that access to finance is likely to drive a series of desired outcomes for retailers. Within this causal loop, program participants identified a need for social dialogue. The principles of social dialogue, including negotiation and consultation with CCBA and other value chain actors including county government, were considered to be particularly important for ensuring that CCBA retailers have the appropriate spaces to set up their retail businesses, as well as the requisite supplies (e.g. ice cooling solutions, stock) and reasonable accommodations to help them thrive in their enterprises.

GLP-IF's Theory of Change specifically seeks to provide business development advisory services and support to women with disabilities enrolled as retailers in the CCBA value chain. One of the key drivers affecting access to inputs for CCBA retailers is access to finance, a challenge that was identified early in program implementation. GLP-IF has recently partnered with the Women Enterprise Fund (WEF) to help women retailers secure financing to purchase CCBA start-up stock. As retailers' access to financing increases and business advisory services are sustained, this will hopefully reduce financial barriers, provide access to working capital, and translate to increased sales and income for program participants. However, an outstanding challenge remains accessible commercial spaces for retailers. Without an intervention that ensures that women with disabilities, particularly

physical disabilities, have fair accessibility (e.g. ramp access) and reasonable accommodations in the marketplace, program participants will not be able to fully participate in the value chain or effectively run their enterprises.

Theme 4: Development and Implementation of Inclusive Policies and Legislation

Inclusive public participation can improve advocacy, enforcement and implementation of inclusive policies, further reinforcing public participation. It is important that women and persons with disabilities are not only represented in policy development processes, but that these groups can benefit from full and equal participation. By incorporating social dialogue into public participation processes, workers can effectively participate in creating, reviewing and enacting inclusive labor policies. If inclusive public participation increases, then the program will be more likely to realize Domain 4's outcomes of improved implementation of anti-discrimination laws and policies.
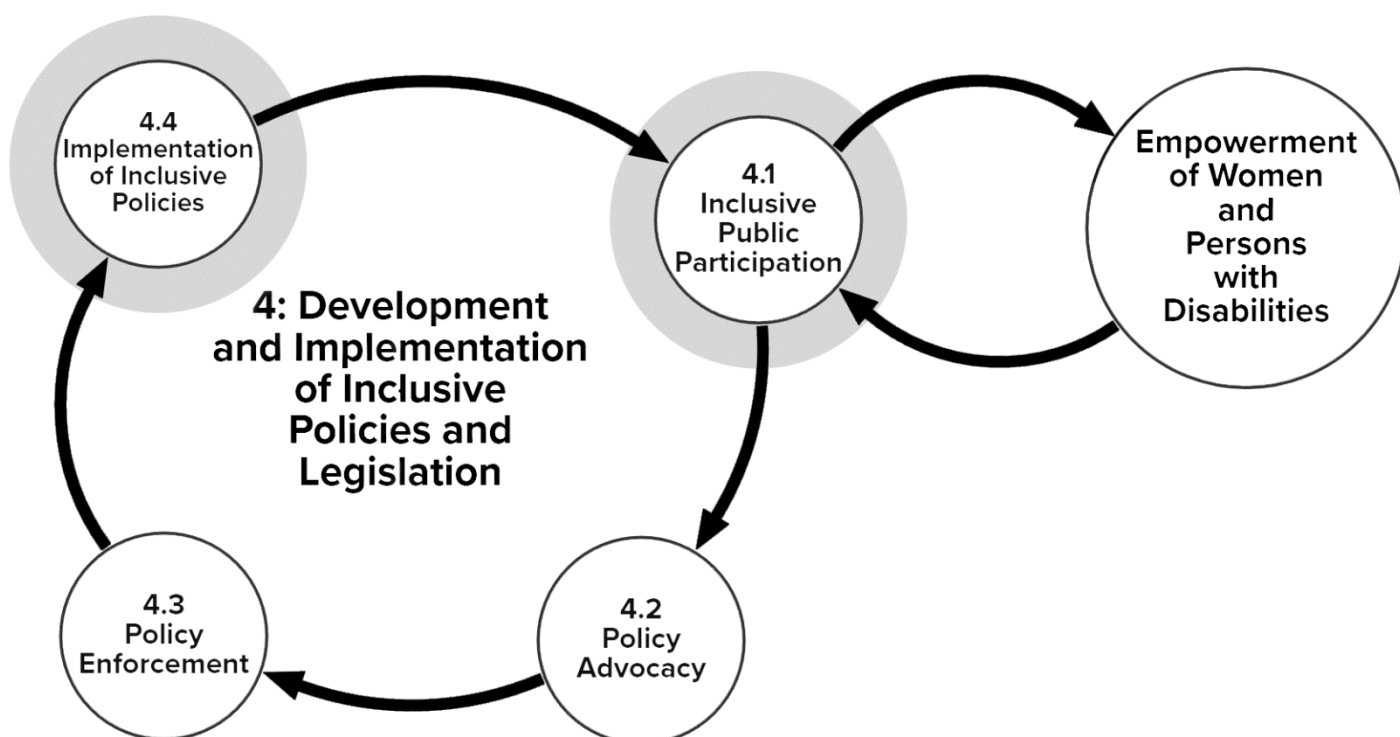

Figure 5: Theme 4 Development and Implementation of Inclusive Policies and Legislation

Table 5: Theme 4 Factor Definitions	
Factor	**Definition**
4.1 Inclusive Public Participation	The process of engaging men and women (particularly women and persons with disabilities) in decision-making processes related to the development and implementation of public policies focusing on inclusive labor practices.
4.2 Policy Advocacy	Policy advocacy refers to strategies or efforts to affect policies that support inclusive participation of all workers, including women and persons with disabilities in labor markets.
4.3 Policy Enforcement	The enforcement of policies that promote equal access to economic opportunities and labor rights for all workers, including women and persons with disabilities.
4.4 Implementation of Inclusive Policies	The development and implementation of inclusive policies that support the inclusion of women and persons with disabilities in economic opportunities and labor markets.

Inclusive public participation as it relates to policy development, enforcement and advocacy emerged as key factors in the CLD analysis, as captured in Figure 4. Program participants noted that the process of engaging men and women (particularly women and persons with disabilities) in decision-making processes related to the development and implementation of inclusive labor policies was critical. The involvement of women and persons with disabilities in policymaking and enactment would ensure that policies consider the needs and priorities of these groups. One of the key challenges that program participants identified is that while there are existing structures for women and persons with disabilities to participate in policy related processes, the engagements tend to be tokenistic in nature and frequently reinforce the status quo. As such, it is important that women and persons with disabilities are not only represented in these processes, but that these groups can benefit from full and equal participation.

In terms of cause and effect, inclusive public participation has a direct relationship with the implementation of inclusive policies. This causal loop illustrates that as inclusive public participation (Factor 4.1) increases, policy advocacy (Factor 4.2) increases. An increase in policy advocacy contributes to an increase in policy enforcement (Factor 4.3), which in turn contributes to an increase in the implementation of inclusive policies (Factor 4.4). Overall,

inclusive public participation contributes to one of GLP's outcomes of improving the livelihoods of women and persons with disabilities. The connections between these factors contribute to a sequence of reciprocal causes and effects in which the factors intensify and aggravate each other, leading to a worsening of the situation. In addition, inclusive public participation (Factor 4.1) has a strong relationship with the empowerment of women and persons with disabilities, an important outcome factor. Should inclusive public participation decrease, GLP-IF's goals of enhancing the participation of women and persons with disabilities in the labor market may not be achieved. However, if inclusive public participation increases, then the program will be more likely to realize its intended outcomes for women and persons with disabilities.

Within this causal loop, program participants identified a need for social dialogue around inclusive public participation (Factor 4.1) and implementation of inclusive policies (Factor 4.4). The principles of social dialogue, including negotiation and consultation between actors such as workers and employers, were considered to be important for ensuring that workers can effectively participate in the process of creating, reviewing and enacting inclusive labor policies.

As this theme illustrates, the key drivers affecting the development and implementation of inclusive policies and legislation are: 1) inclusive public participation, and 2) policy advocacy. As women and persons with disabilities become mainstreamed into public participation processes and are involved in meaningful ways, for example in governance and include decision-making, the quality of public participation in the process of developing policies and legislation will improve, as will the actual policies. This will contribute to the development of gender plans that are responsive to the needs of participants, and ones that have been developed with their input. As gender and disability-responsive plans increase, this will contribute to the development and implementation of gender and disability-responsive policies and increase the need for more inclusive public participation.

Domain 1 of GLP-IF's Theory of Change directly works to ensure more women and men with disabilities are included and can participate confidently in labor markets and be protected from exploitation. In addition, Domain 4 seeks to improve implementation of anti-discrimination laws and policies, and to ensure the effective implementation through public advocacy efforts, engaging civil society and other partners. Without these interventions, the factors contributing to exclusion of women and persons with disabilities in the processes of policy development and implementation will continue to persist. This may expose women and persons with disabilities to long-term exclusion and limit the legal and policy frameworks' ability to effectively address matters of inclusion.

Theme 5: Capacity Building on Labor Rights

Awareness of labor rights has a direct causal relationship with the ability to report on labor rights violations. As program participants' knowledge of labor rights and capacity to report on labor rights violations improves, their ability to advocate for inclusive labor policies will also improve. Currently, farmers and retailers are not aware of any formal channels to

communicate grievances. Training farmers and retailers on their labor rights would directly increase their awareness, knowledge and understanding of labor issues, and subsequently increase their capacity to identify and report on any violations/grievances. Domain 2 specifically focuses on providing mechanisms to protect workers' rights and establish an inclusive labor rights support system. If GLP-IF's labor rights interventions are effective, then the program will be more likely to realize its intended outcomes of protecting the rights of all workers (i.e. farmers and retailers), including women and persons with disabilities.
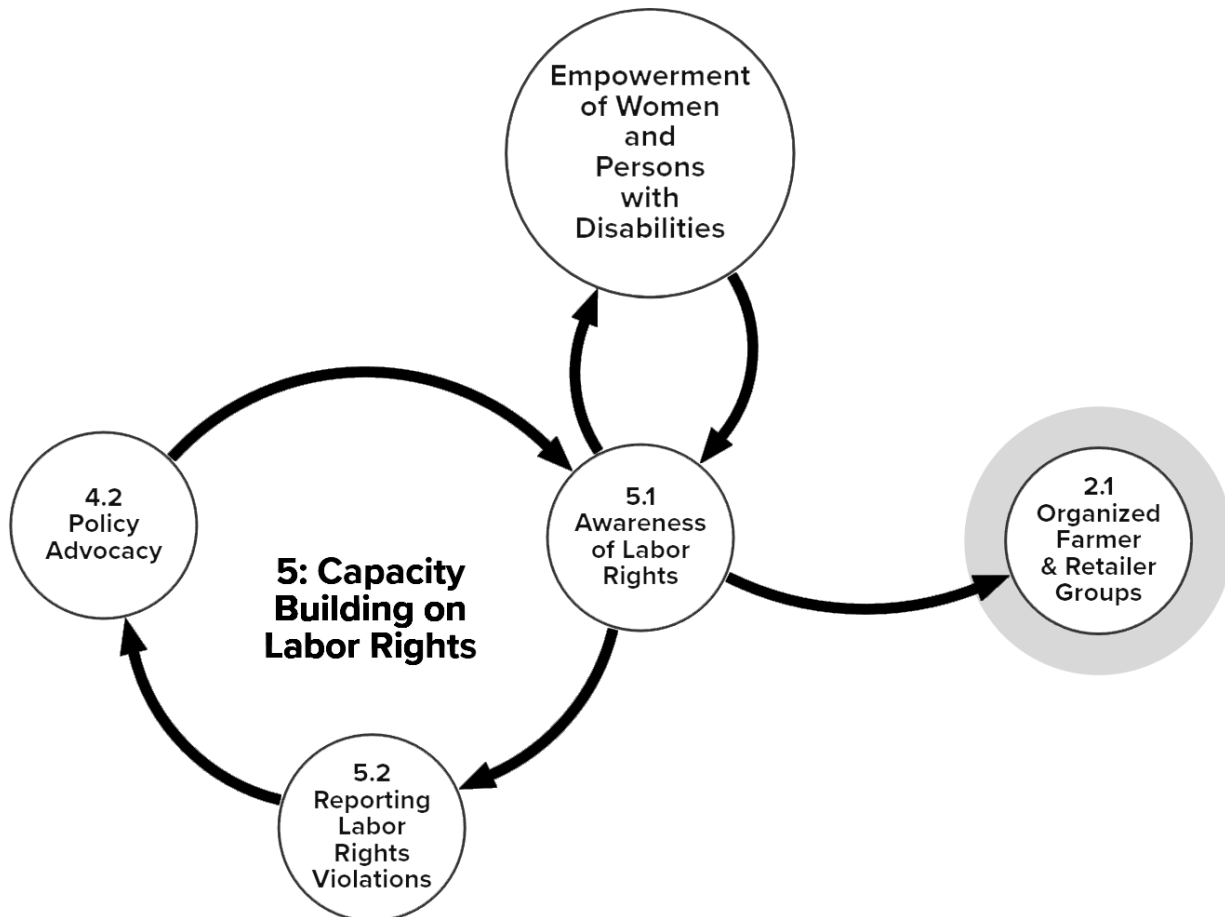

Figure 6: Theme 5 Capacity Building on Labor Rights

Table 6: Theme 5 Factor Definitions	
Factor	**Definition**
5.1 Awareness of Labor Rights	Individuals' awareness of their labor rights and the knowledge to exercise these rights including reporting grievances to the relevant authorities.
5.2 Reporting Labor Rights Violations	The ability of individuals to report violations of their labor rights and grievances.

Capacity building on labor rights was the final theme that the CLD analysis uncovered. Factors in this thematic area were closely related with two other themes, specifically development and implementation of inclusive policies and legislation and improved market terms, as awareness of labor rights affects policy but also contributes to better labor conditions for both farmers and retailers.

In terms of cause and effect, awareness of labor rights has a direct causal relationship with the ability to report on labor rights violations. This causal loop illustrates that if awareness of labor rights (Factor 5.1) increases among program participants (i.e. farmers and retailers), then reporting on labor rights violations (Factor 5.2) will increase. Similarly, increased reporting on labor rights affects policy advocacy (Factor 4.2). As program participants' knowledge of labor rights and capacity to report on labor rights violations improves, their ability to advocate for policies that support inclusive participation of all workers will also improve. The connections between these factors contribute to a chain of events in which one desirable occurrence leads to another which further promotes the first occurrence and so on, resulting in a continuous process of improvement. In addition, awareness of labor rights (Factor 5.1) has a strong relationship with the empowerment of women and persons with disabilities, an important outcome factor. Should awareness of labor rights decrease, GLP-IF's goals of enhancing the participation of women and persons with disabilities in the labor market may not be achieved. However, if awareness of labor rights increases, then the program will be more likely to realize its intended outcomes for all workers (i.e. farmers and retailers), including women and persons with disabilities. Finally, awareness of labor rights has a positive effect on organized farmer and retailer groups (Factor 2.1). As awareness of labor rights increases, so does the capacity of organized farmer and retailer groups to increase their collective voice and advocacy potential.

Currently, farmers and retailers are not aware of any formal channels to communicate grievances, nor do they have the knowledge to confidently identify and report any violations. Labor violations are typically managed informally and at an individual level, and it can be difficult to track and/or address individual grievances. Training farmers and retailers on their labor rights would directly increase their awareness, knowledge and understanding

of labor issues, and subsequently increase their capacity to identify and report on any violations/grievances. If awareness of labor rights increases, then the knowledge of how to identify and report on grievances increases. In addition, enrolling farmers and retailers into organized groups can provide the program with opportunities to jointly train participants on labor rights.

GLP-IF's Theory of Change specifically seeks to influence factors related to labor rights, with the ultimate objective of promoting and protecting the labor rights of all workers. Domain 2 specifically focuses on providing mechanisms to protect workers' rights and establish an inclusive labor rights support system. These interventions include building the capacity of trade unions and OPDs to influence labor rights. Without these interventions, workers may lack the knowledge and skills required to fully exercise their labor rights and may be exposed to discrimination and/or exploitation.

Recommendations

The process of developing the CLD culminated in three key steps which were recommended to the program:

- **Find Opportunities for Leverage:** Analyze the map and identify the most promising ways to potentially shift the system to a healthier state.

- **Evaluate Feasibility, Potential for Impact and Fit:** Assess the extent to which the leverage opportunities align with GLP-IF's values, capacities and priorities.

- **Construct Action Plan:** Develop a strategy for acting on the high and medium level intervention areas based on the CLD results and incorporate into Year 3 work planning.

Workshop participants deliberated on the factors that GLP-IF could effectively leverage in the short-term, and also determined which ones were most aligned with GLP-IF's values and priorities. The list of priority factors alongside the definition of the leverage categories is captured in Table 7 below. This list includes factors where further action is recommended.

Table 7: Understanding Leverage Points		
Status	Definition	Factors
Frozen **[LOW LEVERAGE]**	These are places where system behavior is deeply entrenched and unlikely to change in the near future.	• **1.1 Social Discrimination** • **1.3 Economic Social and Exclusion** • **4.3 Policy Enforcement**
Pent up Energy **for Change** **[MEDIUM LEVERAGE]**	These are places where energy is disrupting the status quo or trying to reorganize and cause new patterns to emerge.	• **2.1 Organized Farmer & Retailer Groups** • **4.4 Implementation of Inclusive Policies** • **3.1 Access to Finance** • **3.A2 Affordability of Farm Inputs** • **3B.2 Affordability and Accessibility of Retail Inputs**
Bright Spots **[HIGH LEVERAGE]**	These are areas where positive change is happening already.	• **2.5 Economic Empowerment** • **2.3 Better Market Terms**
Ripple Effects **[HIGH LEVERAGE]**	These are strong factors and dynamics which have the potential to affect many other factors or dynamics downstream.	• **4.2 Policy Advocacy** • **5.1 Awareness of Labor Rights** • **2.2 Collective Bargaining** • **1.2 Unemployment**

Frozen: Social discrimination, economic and social exclusion and policy enforcement were classified as areas where the system is deeply entrenched, and unlikely to change in the near future. While GLP-IF has the potential to influence these factors in the course of

implementation, these factors represent areas in the system with the most vicious dynamics and the lowest potential for leverage.

Pent Up Energy for Change: A number of factors around the organization of farmer and retailer groups, access to finance, affordability of inputs and implementation of inclusive polices were considered to be more promising for the program to influence in the short-term, and were identified as areas of medium leverage. These factors also represent areas where there is already a significant desire for change. The program has more potential to influence and shift dynamics around these factors in the next year of implementation.

Bright Spots: Economic empowerment and better market terms were considered to be key areas that the program is already influencing, and where noticeable outcomes are already occurring. These were marked as high leverage areas that the program should continue to prioritize.

Ripple Effects: Finally, factors around policy advocacy, awareness of labor rights, collective bargaining and unemployment were classified as the most promising areas for the program to change. These are factors that the program has the greatest opportunity to influence in the short-term, with potential ripple effects to other value chains beyond EABL and CCBA.

Conclusion

A causal loop diagram is a "snapshot of all relationships that matter." It is a visual representation of key variables (i.e., factors, issues, processes) and how they are interconnected. The CLD process included iteratively mapping out all the relationships and later validating and prioritizing them to determine which factors and dynamics present the greatest opportunities for GLP-IF. CLDs represent a tool for continued system analysis, and not the end product of the effort itself. As such, this analysis is intended to support the program as it continues to reflect on the various system dynamics affecting implementation. Finally, the CLD provides a framework for helping the coalition determine which system changes are most feasible and how leverage areas can be incorporated into Year 3 work planning.

Annex 1: CLD Facilitation Guide

Causal Loop Diagramming: Participatory Systems Workshops

Detailed Agenda: Session 1

20th –22nd September 2022

Nairobi, Kenya

Note to the facilitator: The introductory meeting is our best opportunity to pitch systems thinking and the multi-stakeholder dialogues concept. It is assumed that between 10-12 representatives will attend the meeting.

8:00 am – 8:30 am	SET UP – finalize and hang / place any flipcharts or other materials needed

IN ADVANCE OF THE WORKSHOP: Ensure that you have set up a sign-in table (prepare sign-in sheet and name tags ahead of workshop). Distribute blank sheets of paper, 10 markers of various colors, 50 post-it notes of various colors, 5 sheets of flip chart paper to each table. Check audio/visual equipment; confirm that Power Point presentation is properly displaying.

Set up prepared flip chart for Day 1 Agenda and Ground Rules:

General Day 1 Agenda:

- Introductions

- Objective of the Participatory Workshop

- What is Systems Thinking?

- Review our Problem Statement

- Develop our Guiding and Provisional Near Star

- Draft our Framing Question

Ground Rules:

- Participate actively.

- Ask questions.

- Stay focused.

- Remain open to other ideas.

- Stay on time.

- … [leave space for other ideas from the group]

8:30 am – 9:00 am	Sign-In

- [Prepare in advance a sign-in sheet for each of the 3 sessions that captures the name of the participants, their title, organization, contact information and signature. Have name tags ready to pass out or have participants write their name on an adhesive, ready to go name tag.

- Ensure that each participant signs in.

9:00 am – 9:30 am	Welcome, Introductions, & Overview, Ground Rules and Logistics

Welcome and Brief Introductions

- Brief welcome and introductions

- Who is LINC?

  - US-based small business, working all over the world.

  - Our mission is around the localization of development.

  - Localization is a complex problem with systemic constraints, so LINC realized early on the importance of applying systems thinking to our work.

    - For example, power dynamics that affect local ownership.

    - International donor rules and regulations that make it easier for international NGOs to implement.

    - Financial and other incentives for international stakeholders to stay engaged or even lead development.

    - Mindsets and assumptions that everyone brings with them to their work often make it harder for local ownership.

  - LINC works towards our mission through a few types of activities:

    - Research on best practices to support changing policies and practices.

    - MEL to learn what's working and improve.

    - Training of local and international stakeholders to improve use of systems thinking and to shift mindsets.

    - Facilitate participatory processes like this one to incorporate systems thinking and increase collaboration.

    - Implement activities, typically with local partners.

  - Overview of LINC's scope within the GLP-IF

    - LINC serves as technical lead for two distinct components of the program: 1) Systems Thinking, and 2) Collaborating, Learning and Adapting (CLA)

- LINC will employ methods including Social Network Analysis, Causal Loop Diagramming, Participatory Systems Mapping and Collective Impact methods to better understand systemic dynamics.

- LINC also leads in the development and implementation of a CLA framework to ensure strategic collaboration, continuous learning, and adaptive management.

- General Workshop Overview

  - We will discuss in more detail what this means, but the main objectives of this series of workshops are:

    - Introduce system thinking and approaches.

    - Agree on the key problem we are seeking to better understand and a long-term vision - based on our Theory of Change

    - Through the workshop, we will identify and understand the systemic constraints that impede our progress towards the vision Create a visualization – a map – of the key issues and factors that describes our shared understanding of the current situation for inclusive labor markets in Kenya. We will use that map to identify important changes we need to make to the situation in order to move closer to our shared vision.

  - It is important to note that a map like this is just one tool to help us understand this very complex issue. The tool can help, but it alone cannot change our way of thinking or acting. It is up to you and your colleagues to work together, share your perspectives, participate actively and think strategically.

- Individual participant introductions

  - Let's also quickly go around the room to introduce ourselves –we'd like to hear your names, organizational affiliation and what you work on.

  - Please keep your introduction brief as we have a lot to do today!

- Icebreaker (facilitator is to come up with an engaging/ "get to know you" warm-up activity)

- Agenda - looking ahead (5-7 minutes) - [Go through the agenda on the wall – ask for any questions]

Session 1	• **Overview of Participatory Workshop** • **Introduction to Systems Thinking** • **Develop our Guiding and Provisional Near Star** • **Draft our Problem Statement** • **Explore Forces**
Session 2	• **Analyze Cause and Effect** • **Create Loops** • **Discover the Deep Structure** • **Build your Map** • **Craft your Narrative**
Session3	• **Update the Map** • **Find Opportunities for Leverage** • **Evaluate Feasibility, Potential for Impact & Fit** • **Construct Action Plan** • **Next Steps**

- Housekeeping items (3-5 minutes)
    - Take a few minutes to discuss any general "housekeeping" matters (i.e. location of bathrooms, break and lunch times).

- Ground Rules and Logistics (5-7 minutes)
    - [Ahead of time prepare a flip chart paper with some of the suggested ground rules below]
    - Present this to the group and see ask if they agree with the suggested rules and if they would like to add other (relevant) rules to the list (i.e. cell phone and computer usage).
    - [Go through the ground rules on the flip chart, ask for each one if everyone agrees]
    - Does anyone want to add any additional rules? [if everyone agrees to any new rule proposed, add to flip chart]

        o   [Point out location of rest rooms, logistics for lunch and breaks]

9:30 am-10:00 am	Overview of the Participatory Systems Workshops

- What is this participatory systems workshop about?

    i.   Quick overview of the GLP-IF consortium as a diverse collation with a shared objective

    ii.   Be sure discussion highlights the importance of multiple perspectives, inclusion, could explain that we want to be sure the group has the knowledge (variety of knowledge of the situation held across the group), stakes (all of the necessary perspectives/interests are represented) and power (authority to make or advocate for change) to analyze the situation and act on what we discover.

  b. Why are we holding this workshop?

    i.   Be sure the discussion comes to acknowledge that even though we may all be working on the same problem, we may not share the same vision and we may actually be working at cross-purposes.

    ii.   Some examples often help. One that we have seen is from work in India funded by the same donor who wanted to help improve the economy of a region in and near one urban center. One project they funded was helping farmers in the rural area near the city increase productivity of cotton through improved irrigation and other inputs. Another was helping urban entrepreneurs build textile businesses using the same cotton. However, the more the textile businesses grew, the more pollution went into the water supply which decreased cotton productivity and harmed the health of the cotton farmers.

    iii.   Even though the goal was the same and the two groups were building off of one another, the more success one group had the more damage they created for the other group!

  c. What is our ultimate goal/objective?

    i.   Hopefully this is easy to answer based on the intro given above. The discussion should be similar:

    1.   Share the knowledge of the members of this group with one another.

    2.   It is important to note that a map like this is just one tool to help us understand this very complex issue. The tool can help, but it alone doesn't change our way of thinking or acting. It is up to you

and your colleagues to work together, share our perspectives, participate actively and think strategically.

10:00 am – 10:45 am	Warm-up Exercise –Systems in Images / Triangle Exercise / Iceberg

- **Video: Systems in images** (10 minutes)

- We will start this session to begin to understand what we mean by a system with a video

- The words are helpful but not important – pay attention to the images and how our lives are based in systems

- Watch the video: **https://www.youtube.com/watch?v=KARwnk2RXS8**

- Ask participants to discuss the ideas that came to mind as they watched the video and the images

- Note the ideas on a flipchart. Be sure they include:

  o Systems can be big and small (cells, ecosystems)

  o Interactions between parts change the parts themselves: The way you play the cello changes when you are playing along with a violinist. This is true in our work too. The way you work with farmers changes when you are aware that someone else is working on policy or developing a hub.

  o Systems thinking builds up rather than breaking apart.

  o A different way of thinking about the world around us

  o Teamwork / group work / coordination is important – we each have a responsibility in creating the results.

Review The Iceberg

Exercise: Triangles – 30 minutes

- Ask if anyone has tried the triangle exercise before. If so, they can help too…

- Actors, their behaviors and how their behaviors interact are important aspects of a system.

- Ask the group to stand up and go to an open area of the room – it may be easiest if everyone stands in a big circle to start (best with 10-25 people, if you have more, you can break them into multiple groups or have some people do the exercise and others observe)

- This exercise will be conducted in silence, ask the participants not to speak to one another. No communication or agreement is necessary. There are only two rules:

    1. Silently (and secretly), think of any two other people in the room (except the trainers). Once you have thought of those people, do not change who they are (it doesn't matter who anyone else is thinking of – you only need to remember the two people you are thinking of)

    2. Move yourself around to always stay equidistant / in an equilateral triangle with those two people. Your triangle can be as big or small as you want/as necessary to be equilateral.

- Now, begin to move around the room to put yourself in position – forming an equilateral triangle. Continue moving and adjusting until everyone is in a triangle with the two others they are silently / secretly thinking of. Try to pay attention to see if there are 1-2 people whose movements seem to affect many other people (directly or indirectly).

- Once everyone has formed their triangles, ask one person to move to a new location several steps away (or move them from the center to the edge of the group). This is best if it is someone who was central (the ones you noticed before).

- Now ask participants to adjust their location to form triangles with the same people – the movement should "ripple" through the group, possible multiple times as people adjust to one another's movements. Once people start moving, let the person you moved know they should also move to reform their triangle.

- If necessary or useful, you can do it again moving more people. This is best if the first move did not have much of an effect.

- Ask participants to think about the group and the movements.

- Ask participants to reflect:

    o How does the movement of one person effect the whole system?

    o How is systems thinking related to relationships?

    o How was the "system" different from different locations (perspectives)?

    o What could the "people" represent in your work?

    o A set of only 2 simple rules allow the system to set up in a certain way. It could be set up any way with the same rules. Keeping the same rules and changing one or two items changes the whole configuration. Did the system change or did it just reorganize to produce the same results as before? How do you make more lasting change?

    o How could we have changed the rules to improve the way the system worked?

- Also, may discuss some of the following important systems topics:

    - Delays vs immediate effects (or direct vs. indirect relationships)

    - Some know where the change started, others may not (hard to trace the "root cause")

    - Some small changes created bigger changes elsewhere, some bigger changes created smaller changes elsewhere.

    - Our actions can have far reaching effects even if we can't see them – we tend to focus on our own work / situation / zone / role.

    - Interdependence of many parts

    - In this exercise, an external force created the change – how does that relate to our work? Are there other ways that this can happen in our work?

Now, putting these exercises together, what are your first thoughts about systems thinking?

- At your table, discuss the videos and exercise and come up with 2-3 insights to share.

- Record thoughts on a flipchart

- Some of the key elements that may be highlighted:

    - Reality is complex.

    - Events are just the tip of the iceberg (symptoms of something deeper happening)

    - Events repeat in patterns of behavior that are generated by the structure of the system.

    - Within a complex situation or problem, there are multiple factors, actors and processes that inter-relate / interact with one another.

    - Different positions in the system lead to different perspectives or different understanding of the system

    - If we want to understand a system, we need to consider the factors, the actors, how they interact (relationships) and how they experience the system (perspectives).

    - OK, now we are going to get to the fun of building a system map for inclusive labor markets using some of these same principles!

11:00 am - 12:00 pm	Introduction to Systems Thinking

- Introduction to systems thinking?
  - o Explain why it's essential to take on a systemic view of complex system problems.
  - o What is systems thinking? (analysis vs synthesis)
  - o Key Systems Concepts (System, Complexity, Unexpected Consequences, Perspectives, Boundary, Feedback Loops)

12:00 pm - 1:00 pm	Develop a Guiding Star and a Provisional Near Star and Problem statement

- **Visioning Exercise:** Today we will identify together an aspirational state (**guiding star**) and a nearer term desired outcome (**near star**) for your complex problem. Goal setting for this type of system or issue can look different since complex problems are ever-changing.

Instead of aspiring for a concrete end state, the goal should be a healthier state of the system or situation. We set a guiding star as a long-term vision for the future state of the issue we are addressing. This recognizes that we may make concrete plans to move toward the guiding star now, but we will have to adjust them over time as the situation changes. We still want to be moving toward the guiding star, but as the present state changes, we may need to adjust our work. [Display definitions using PowerPoint presentation]

- o **Guiding Star:** The vision of your desired future state of the system; Reaching a Guiding Star can take anywhere from 10-20 years and beyond.
- o **Near Star**: Your 5-10-year outcome that would constitute a significant step towards your Guiding Star
- o Share the examples below:

Guiding Star	Near Star
❖ **A system that eradicates the worst forms of human exploitation in the corporate supply chain**	❖ A new standard of corporate supply chain practice that will increase responsibility and decrease the risk of labor abuse.

Guiding Star	Near Star
❖ **A local, diverse community of civic stewards who are invested in the long-term health of their surroundings through mutually agreed upon outcomes.**	❖ Residents of New York operationalize a shared set of values that guide conscious and holistic decision-making for both individuals and groups.

Point to the Peter Senge quote: "The shift from reacting to co-creating is anchored in relentlessly asking two questions:

1. What do we really want to create?

2. What exists today?

This creative tension, the gap between vision and reality, generates energy, like a rubber band stretched between two poles."

- To begin thinking about building a guiding star for your system, start by thinking about the following question: **What future systems are you as a group are passionate about working towards?** [Depending on the group, start brainstorming individually, then break out in small groups to discuss individual ideas. Have each group present out to the wider group].

- A typical way to phrase that would be: "Our Guiding Star is a [name of system/issue] that produces [desired condition]" [Write down the guiding star on flip chart paper].

- Once the group agrees on a draft Guiding Star, begin to brainstorm as a group a distant, but foreseeable, goal. Some guiding questions are:

  o What have you learned works in this sector? (possible intermediate steps)

  o What outcomes are most important for the people affected by the problem?

- [Provide some examples; Capture brainstorming session on flip chart paper].

2:00 pm - 3:30 pm	Explore Forces

Next week we will identify key forces and factors that cause the system to behave as it currently does, analyze the causal relationship between those forces and start building loops!

To keep you thinking and reflecting about what we have discussed today, we would like to assign a small "homework assignment" to help us get a start on the next session. This should not take you more than 15-20 minutes to complete.

Instructions: For your homework assignment, we ask that you spend some time Individually, identifying two important forces that impact how the system works (these forces could include people, events, norms, beliefs, phenomena, institutions, laws, policies. etc.). Factors should be described in a short statement (5-7 words is enough) to clarify what they mean.

These can be positive (enablers) or negative (inhibitors). We will discuss these concepts in more detail during our next session. But for now, keep in mind that:

- ❖ **Enablers:** a significant force in the environment that supports, encourages or increase the health and effectiveness of the system as defined in your guiding star

- ❖ **Inhibitors:** a significant force in the environment that undermines or prevents the health and effectiveness of the system.

Tips: While brainstorming, keep in mind our framing question. Be vigilant about writing down factors that <u>currently</u> work in the system- not aspirational enablers and hypothetical inhibitors!

4:30 pm- 4:45 pm	Wrap-up and "Homework"

We have accomplished a lot today! We started out by reviewing systems. And then, we used our collective knowledge and experience to map our vision of our desired future state of the system.

In our next session, you will each share the two forces you have identified, and we will work as a group to identify the top 6-8 themes that define the system.

5:00 pm	End of Day 1

Causal Loop Diagramming: Participatory Systems Workshops

Detailed Agenda: Session 2

20th –22nd September 2022

Nairobi, Kenya

8:00 am – 8:30 am	SET UP – finalize and hang / place any flipcharts or other materials needed

IN ADVANCE OF THE WORKSHOP: Ensure that you have set up a sign-in table (prepare sign-in sheet and name tags ahead of workshop). Distribute blank sheets of paper, 10 markers of various colors, 250 post-it notes of each color, 5 sheets of flip chart paper, 50 dot stickers for dot voting. Check audio/visual equipment. Confirm that Power Point presentation is properly displaying.

Set up prepared flip chart with Day 2's Agenda and Ground Rules that the group came up with in the previous session:

General Day 2 Agenda

- Overview and Reflections

- **Analyze Causes and Effects:** Identify all possible causal relationships between the enablers and inhibitors

- **Create Causal Loops:** Visualize all possible causal relationships between the enablers and inhibitors

- **Build our Map(s):** Bring all our causal loops together into a cohesive visualization of the system

- **Discover the Deep Structure**: Review our map(s) and identify the central driving forces in our system

- **Craft our Narrative:** Create a cohesive narrative that helps tell the story of our system to others.

8:30 am – 9:00 am	Sign-In

- [Prepare in advance a sign-in sheet for each of the 4 sessions that captures the name of the participants, their title, organization, contact information and signature. Have name tags ready to pass out or have participants write their name on an adhesive, ready to go name tag.

- Ensure that each participant signs in.

9:00 am – 9:15 am	Brief Overview and Reflections

- We accomplished a lot in the last session! We started off by learning about what are complex systems and how system visualization tools can help us better understand the complex interactions between the diverse dynamic forces at play in the system. Then we had fun drawing toast and using our knowledge of the <issue system>and to identify our guiding and near star and develop our framing question.

- Today, we will identify the key forces and factors influencing the current situation and build causal feedback loops that explain what is happening in the system.

- Take a moment to review the Day 2 Agenda

10:15 am -11:15 am	Brief Overview and Reflections Review Homework / Explore Forces

1. First, let's take some time to write down each of the each of the forces that you identified in your homework assignment. Use the post-it notes provided at the center of the table to write out each of your forces- please only write one force per sticky note. Post your forces on the designated flip chart paper, [prepare 2 flip charts in advance, one with "enablers" and "inhibitors" written on top. Place on opposite sides of the room], making sure to keep your enablers and inhibitors separate for now. Try to put your forces near other similar forces to ease grouping later. (Give people about 5 minutes).

2. This is our starting point to understanding the complex problem of the <issue system>. If you don't know how the current situation is producing the outcomes you see/experience, you'll have great difficulty determining how to produce better outcomes. [reference the guiding star and framing question as appropriate]

3. Here is a good time to re-explain the difference between enablers and inhibitors. [Make sure that a PP slide is up with the definitions or that they are written on chart paper and hung where they are visible.]

4. In this next step, we are going to identify the primary forces that cause the system to behave as it does. You have already begun this process at home! At the end of this step we will have identified the most important themes that highlight the key forces at work in the system.

5. Start by working individually to identify as many enablers and inhibitors as you can in 10 minutes. Write each enabler on a green (or whatever color we have) post-it note – ONLY ONE ENABLER ON EACH NOTE – and write each inhibitor on a red (or whatever color we have) post-it note – ONLY ONE INHIBITOR ON EACH NOTE. Be sure to think of some of each. [Give the group 10 minutes to write their forces down and start to post them on the wall / flip chart / sticky wall. After 5 minutes remind them to think of both enablers and inhibitors.]

6. Now, we will review the enablers and inhibitor, and as a group, begin to move similar ideas next to each other, into clusters. We will keep enablers separate from inhibitors. If there are some clusters that are similar, put them near each other. [Pick 1-2 people from the group to lead the clustering]

7. As a group, give each cluster a meaningful name that describes how they are related. These are themes.

8. Prioritize the themes to select the top 5-7. (Including both enablers and inhibitors) To do this, fill in the blank: You can't understand the current situation for the <issue system> [Use the framing question] unless you understand _____.

An alternative way to approach this, would be to do a "dot voting"- letting each person individually place a dot next to the themes that they think are the most important. [If you choose this approach, give each person up to 5 dots that they can use. Participants can choose how they want to distribute their dots. For example, they can place the dots on five different themes or can choose to use all their dots on only one or two issues that they feel are the most important].

9. Note themes that "just missed the cut"

10. [Record the top themes on a flip chart (and whether they are enabler or inhibitor). Record some other strong themes that were not prioritized on a separate flip chart. Take photos of the clusters as well.]

11:15 am- 12:00 pm	Analyze Causes and Effects

1. In this session, we are going to dig deeper into the themes we prioritized in the previous session.

2. We will explore the upstream causes and downstream effects for each theme. [Show Power Point slide on causes and effects]

3. We will use the SAT (Structure, Attitude, Transaction) framework to try to be sure we continue to look at the system holistically.

4. We will identify initial causal relationships in this step – it is very similar to a problem tree or results framework approach at this point. We will use this in the afternoon to begin to build loops and piece together the map.

5. [Divide the participants into groups of 2-3 – hopefully in a way that each group can focus on only 1 theme, but if necessary, we can assign a second theme. Ensure that all participants have a "Causes and Effects" worksheet].

6. Each group will select 1 theme (or 2 themes, if necessary) that they will work on [Would be best if they get to pick themes, they feel most comfortable with – perhaps with a "draft" style format (one at a time each group chooses one theme, then go backwards for the second theme). It could also be ok if two groups work on the same theme – we can try to merge what they identify?]

7. Begin by reading all of the factors in your cluster and discuss in your group anything that is unclear.

8. Ensure that the group understands the difference between causes and effects.

- **Causes**: things that lead to theme or that cause it to happen.

- **Effects:** things that the theme causes to happen.

9. Instruct the groups to start with the causes sheet first. What causes the theme to occur? As you brainstorm causes, determine if a cause has structural, attitudinal and/or transactional implications. Write down the causes on the sheet in their respective categories. There should be lots of discussion about these. Take **15 minutes** to complete your causes sheet *[Facilitator to keep time!]* There is no specific number of causes – could be a few or many, but be sure to discuss and brainstorm on all of the SAT.

10. Next, start to identify effects on the other sheet. Take **15 minutes** to complete the effects sheet [facilitator to keep time] Note that it is ok to have some causes that are also effects! Again, there is no magic number, and it is ok if there are very different number of causes from effects. Again, be sure to discuss and brainstorm on all of the SAT.

11. Next, we will have groups rotate and run a world café round table. One person from each group stays behind to answer questions, and everyone else rotates to the next group. Once there, take **five minutes** to read the sheets and ask questions of the group that created the sheet, or suggest additional causes and effects. The group should then use that feedback to add any new causes and effects they have identified, remove causes or effects they feel are not relevant, or move or edit causes and effects.

12. Next, we will have groups rotate again. The same person could stay behind, or you can switch who stays behind, but each group will move to the next theme. Once there, take **5 minutes** to read the sheets and ask questions of that group, or suggest additional causes and effects. The group should again use that feedback to make any edits they agree to for their cause and effect sheets.

13. [Capture the results with a photo, and hang the final theme causes and effects on the wall (if we still have space)]

12:00 pm – 1:00 pm	Lunch

1:00 pm -3:00 pm	Create Loops

Initial overview and explanation of loops (~30 minutes):

1. In this session, we are going to look for patterns in the system – remember that no forces exist in isolation, they are all interconnected.

2. The forces that drive the symptoms, events, problems, behavior, and results that we experience are tied together in feedback loops. These loops will become the building blocks of the systems map.

3. We will find these by starting with the most important factors and tracing their downstream effects. When the effects circle back to affect the factor you started with, that is a feedback loop. [Show an example of a feedback loop based on something relevant to the discussion the group has given so far].

4. [Show slide on loops]

5. Before we get started on this exercise, let's discuss a bit more about loops and set some rules for how to create them.

   a. It is best if factors are written as "variables" that can increase or decrease (happiness rather than happy – also, note the difference between the variable "anger of youth" (youth as a group are getting angrier/less angry) vs. "angry youth" (the number of youth who are angry is growing/decreasing)). It is also better if they are neutral rather than positive or negative – this is not always possible, most important is that it is clear what an increase or a decrease refers to.

   b. If you find that two factors are connected, but the step from one to the next is hard to understand, it may be that you are missing a step – add factors in between to make the story clearer.

   c. Be sure to describe the **current** state, not what you hope for. Focus on the dominant forces in the current state of the system.

   d. As you move along, read loops out loud to tell the story and see if it makes sense or needs to be adjusted.

   e. Don't get stuck with the way you started – if you need to think about things differently, move the factors around to another arrangement.

6. Go back into the same groups and themes as before. For your theme, start by picking a factor (cause or effect) from the previous exercise that you think is particularly important.

7. Start working downstream from that factor. What does that factor influence? (in other words, if that factor increases, what other factors change as a result? For example, if violence among youth increases, response by police increases, right?) And for the next factor identified, what does that factor influence? (For example, if

response by police increases, youth in jail increases.) Keep moving downstream with further effects. (For example, if youth in jail increases, youth having trouble finding jobs increases, which increases youth seeking illicit income sources, which increases youth violence – back to where we started!) Note that there may be different branches from one factor – try to stick with one branch at a time, you can come back to other branches later.

8. Don't be afraid to synthesize and prioritize within your map so that your feedback loops make sense. You might be tempted to layer more and more details onto your map. Resist doing this! Please remember that you ultimately want to tell a clear story that will guide strategy.

9. To draw these, we will use post-it notes and **half** sheets of flip chart paper. Please label each flipchart / loop with your theme name or abbreviation so we can track it back later.

10. When drawing, arrows show that one factor influences another factor. Make sure the arrow is pointed only in **one** direction. If each factor influences the other directly, draw 2 arrows as a small loop [draw example on a flipchart], but first try to see if the influence is indirect (meaning there is another factor between the two in at least one direction of influence).

11. Each arrow should also be marked to show whether the influence is positive or negative – meaning, as A increases, does B increase or decrease? If an increase in one causes an increase in the other, we say that connection is a movement in the SAME direction ("S"). If an increase in one causes a decrease in the other, that connection is a movement in the OPPOSITE direction ("O").

12. Try to close your loops – meaning, try to get to a point where you have a downstream factor that causes your starting factor. Once you've closed a loop, give it a descriptive name.

13. [Use 1-2 groups' themes to give more examples from their SAT worksheets – or even better, have 1-2 groups try to create one loop for their theme in front of the plenary]

Create loops (~60 minutes):

14. Go back to your group of 2-3 people and start creating loops for your theme. Create as many as you can or as many as you think are necessary to understand that theme. Remember that you may use many of the same factors in different loops, but please put each loop on a separate sheet so that we can move them around easier later. You have about 1 hour to get started. The facilitator will move around the room to help you if you are getting stuck.

15. Each theme should generate 3-4 loops, if not more.

16. Continue building loops until you have covered all of the important stories for your theme (for this system) – remember to look at the causes and effects sheets and refer to the framing question as well to be sure you've covered all the necessary stories. Add more causes / effects (factors) or new loops if anything is missing.

17. [After about 30 minutes check in to see how groups are doing. If some groups are having great success and others are having trouble, merge the groups to work on the theme that is less developed.]

Review loops and discuss / group around similarities (~30 minutes):

18. To read a loop, and tell its story, start with one variable and say (for example) "As the use of fossil fuel increases, the reserves of fuel are depleted. As fuel reserves decrease, the price of the fuels increase. As the price increases, use of the fuel decreases."

19. Each loop should already be labeled with the theme and a name. Put the completed loops out on a large table/surface (floor?).

20. Start to observe factors that exist in multiple loops, move loops that are similar or related to the same area.

21. Observe if any 'regions' begin to emerge.

22. Working individually, start to think about what ties the loops and regions together – is there a main / dominant story for the overall set of loops?

3:00 pm -3:15 pm	Wrap-up and "Homework"

We have accomplished a lot today! Just look at all the loops that we have drawn today that visualize the forces in our system. Next week we will use these loops and our collective knowledge to combine our loops into one single map- how exciting!

To keep you thinking and reflecting about what we have discussed today, we would like to assign a small "homework assignment" to help us get a start on next week's session. This should not take you more than 30-45 minutes to complete. [Pass out **"Discovering the Deep Structure"** worksheet].

Instructions: For your homework assignment, we ask that you spend some time individually thinking about what is your system's core story? When thinking about the overall core story, try to answer the question: "What is the dominant behavior of the system and how does it behave?"

We encourage you to use the worksheet that we passed out to help you think through this process. Whether on this worksheet or on a separate piece of paper, draw the feedback loop (or interconnected loops) that represents your "deep structure." Remember, this structure

could be as small as 5-7 elements, it does not need to exhaustive or highly detailed. It should be one loop or could include 2-3 interconnected loops. Once you have your deep structure visually represented, please take a few minutes to explain your deep structure.

In addition, keep brainstorming feedback loops! We will take a few minutes in the next session to present any new loops that you drew that you thought might be missing. Also, in the next session, we will each present our deep structures and individual thinking and together decide on the commonalities that we hear emerge.

3:15 pm	End of Day

Causal Loop Diagramming: Participatory Systems Workshops

Detailed Agenda: Session 3

20th –22nd September 2022

Nairobi, Kenya

- Each group presents their individual CLDs, and narratives (1.5 hours / 30 mins each)

- Build our Main Map _ Craft our Narrative (1.5 hours)

  o Bring all our causal loops together into a cohesive visualization of the system.

  o Review how all the maps might fit together but might not be possible to actually build in the session; get input from participants about how to merge – talk the process through with participants in plenary, ask for suggestions.

  o Review our map(s) and identify the central driving forces in our system; narrative is documented in a bulleted list on flipchart paper.

  o Create a cohesive narrative that helps tell the story of the whole system to others; narrative is documented in a bulleted list on flipchart paper.

  o Capture any parts of the narrative that have not yet been captured, or merge narrative that are similar.

  o Describe how the different themes relate to each other.

- Find Opportunities for Leverage

  o Split up into groups: Analyze the map(s) and identify the most promising ways to potentially shift the system to a healthier state.

  1. Where is the system frozen? Look for places where system behavior is deeply entrenched and unlikely to change in the near future.

2. Where is there pent-up energy for change? Look for places where energy is disrupting the status quo or trying to reorganize and cause new patterns to emerge.

3. Where are places that seem like a mixed bag? (Meaning places with both good and bad elements.) Look for places that could swing either positive or negative.

4. Where are these places that seem like bright spots? Look for places where positive change is happening already.

5. Where are you seeing ripple effects? Look for strong factors and dynamics which have the potential to affect many other factors or dynamics downstream.

- Debrief based on what appears on the map and discuss areas of consensus (e.g. bright spots, frozen areas, etc.)

Make note of agreed upon leverage points on flipchart.

- Evaluate Feasibility, Potential for Impact & Fit:
  - As a group, assess the extent to which the leverage opportunities align with the program's values and capacities. Discuss the following and document on flip chart paper for each leverage opportunity:
    - Feasibility: how easily can the program act on this leverage option?
    - Potential for impact: does this leverage option have a low, medium or high potential for impact?
    - How well does this leverage option align with the programs values and capacities?
    - What are the underlying assumptions we need to consider?
    - Which leverage options should we prioritize as a program (I.e. which ones should be incorporated into upcoming strategy)?

- Construct Action Plan:
  - Develop a strategy for engaging the system based on what we have learned.

Reflection exercise:

- Reflect on the process; take notes on what participants have learned; this will be captured in the final map and narrative.

- Reflect on specific things that participants learned about the problem (e.g. blind spots, assumptions, mental models, perspectives, unintended consequences, new driving forces/cause-effect relationships, any information that was reinforced) and the project's activities.

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