YOUTH IN JUST FOOD SYSTEMS TRANSITIONS:

SOMALIA

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KNOWLEDGE PLATFORM ON INCLUSIVE DEVELOPMENT POLICIES

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EXECUTIVE SUMMARY

Somalia's agri-food system operates under compounding crises: prolonged armed conflict, repeated climate shocks, and extreme import dependency have destroyed the country's infrastructure, displaced over four million people, and eroded the institutional capacity needed to govern a food system transformation. Agriculture and livestock underpin over 80% of livelihoods, but youth face large unemployment levels, with the majority working in the informal economy without contracts, social protection, or legal recognition. Emerging green economy opportunities in livestock value addition, solar-powered agriculture, and mobile-enabled market platforms offer genuine pathways to youth employment, but without deliberate justice-oriented policy design, these opportunities will be captured by already-advantaged actors while the most marginalized youth remain structurally excluded.

This study analyzed youth employment barriers in Somalia's agri-food system through four justice dimensions, i.e. distributive, procedural, recognition, and restorative justice and draws on 106 interviews across agricultural companies, civil society organizations, and young farmers.

Three findings stand out as analytically decisive. First, a validated 10% divergence between company equity self-assessments and farmer experience demonstrates that distributive injustice is structurally embedded rather than incidental. Companies can simultaneously recruit youth and reproduce exclusion through geographic concentration, clan-based hiring pipelines, and absent accountability mechanisms. Second, an aspiration-exclusion paradox cuts across all farmer types: more than 80% of farmers remain unaware of agricultural policies despite the majority desiring strong roles in shaping them, while those who are aware judge policies universally ineffective, demonstrating procedural injustice where youth possess agency without institutional channels to exercise it. Third, capital scarcity is the only point of full cross-stakeholder convergence, but this convergence masks critical heterogeneity: thirteen distinct stakeholder profiles require fundamentally different interventions, explaining why past programs systematically failed by treating structurally diverse actors as homogeneous.

The study's central theoretical contribution is the sequencing argument: in fragile contexts, restorative justice interventions, e.g. land restitution, conflict remediation, power redistribution, must establish foundational conditions before distributive market programs can function equitably. When market-oriented green job initiatives precede this sequencing, they channel opportunities toward already-advantaged actors while reproducing historical exclusions under the language of inclusion.

Four tensions shape what is politically and institutionally possible in Somalia's agri-food transition and must be navigated explicitly in any policy response. The first is the donor dependence paradox, where civil society organizations are simultaneously the most important intermediaries between marginalized youth and policy processes, and the most structurally compromised. Donor funding makes them answer to funder priorities rather than farmer needs, consequently their advocacy reproduces rather than challenges the power asymmetries it claims to address. In this respect, multi-year core funding independent of project cycles is the necessary condition for CSOs to function as genuine farmer representatives.

The second is the clan-governance tension. Somalia's clan structures simultaneously provide the social trust networks through which informal markets, credit systems, and dispute resolution function, and systematically exclude minority clan youth, women, and Internally Displaced Persons (IDPs) from land, capital, and employment access. Policy interventions must work with clan governance where it enables access and explicitly counteracts it where it produces exclusion.

The third is the security-development sequencing problem. Most of the unemployed youth concentrated in Jubaland and Southwest State are based in areas where security constraints make conventional program delivery impossible. Conventional development programming that operates only in secure corridors reaches only 32% of unemployed youth while leaving the majority in areas where Al-Shabaab fills the livelihood vacuum. Humanitarian and development programming must therefore be integrated rather than sequenced.

The fourth is the federal-national governance tension. Somalia's federal architecture means Federal Member States hold real autonomous authority over agricultural policy and land governance, but federal coordination mechanisms lack enforcement power. This creates both a constraint, as no federal mandate can guarantee FMS compliance, and an opportunity, as FMS-level piloting can generate evidence for voluntary national adoption without requiring contested federal legislation.

The main recommendations coming from this research include:

1. Mandate equity accountability before expanding recruitment programs. Firms claiming equitable youth employment should be required to demonstrate this through third-party audits with farmer-elected monitors as a condition of Ministry of Agriculture and Irrigation (MAI) registration renewal under the National Investment Promotion Act (2023). Audits must examine wages, contract security, and advancement pathways disaggregated by gender, clan, and displacement status, not merely recruitment numbers. Puntland's stronger regulatory environment makes it the natural pilot state before national rollout through the National Transformation Plan (2025-2029).

2. Sequence restorative justice before market interventions for the most marginalized. For subsistence farmers, IDPs, women, and ethnic minorities, comprising 35-55% of the young farmer sample, market access programs will not function until foundational conditions exist. Priority restorative actions include: piloting community-based land documentation units in Jubaland and Southwest State modeled on Southwest State's urban land legislation (2022); integrating psychosocial support for war widows and Gender-based Violence (GBV) survivors into World Food Programme's (WFP's) existing cash-for-work infrastructure; and introducing affirmative procurement clauses requiring Food and Agriculture Organization (FAO) and USAID agricultural contracts to source 15-20% of value from Bantu, Bajuni, and Gaboye minority clan cooperatives.

3. Fund community-embedded CSOs directly and sustainably. Organizations best positioned to reach the 39% of youth who received no training, community-embedded CSOs

with local language capacity, clan-inclusive relationships, and historical memory of conflict legacies, receive the least donor funding. Direct multi-year core funding of minimum $50,000 annually, channeled through the Somalia Agricultural Technical Group (SATG) coordination architecture rather than large intermediaries, would correct this distributive perversity and enable genuine farmer voice in policy processes rather than donor-driven representation.

4. Integrate conflict-affected firms into humanitarian-development programming. Firms in Jubaland and Southwest State experiencing 68-72% security disruptions cannot drive green job creation without external risk mitigation. Integrating them into USAID's GEEL program through a conflict-insurance fund compensating verified losses from Al-Shabaab disruptions and climate shocks, modeled on agricultural insurance pilots operational in Kenya and Ethiopia, removes the survival pressure that forces exploitative pricing and eliminates participatory structures. Mobile safety committees co-managed by firms, community elders, and young farmer delegates create minimum procedural infrastructure for farmer voice.

5. Extend financial infrastructure to rural youth through peer-guaranteed cooperatives. The United Nations Development Programme-Hormuud Salaam Foundation partnership launched in November 2025 provides a replicable model but currently reaches only urban Small and Medium Enterprises (SMEs) in Mogadishu. Extending it to rural areas through savings-and-credit cooperatives, where groups of 10-15 young farmers pool savings via EVC Plus mobile transfers as collective collateral for Salaam Somali Bank microloans, governed by farmer-elected committees rather than clan elders, operationalizes procedural justice in capital allocation while creating the evidence base for Salaam Somali Bank's engagement with the Central Bank of Somalia on a national rural mobile lending framework independent of clan collateral requirements.

1. INTRODUCTION

Global agri-food systems are increasingly shaped by overlapping environmental, economic, and political crises, with climate change, geopolitical instability, and the COVID-19 pandemic exposing the fragility of food supply chains and disproportionately affecting import-dependent developing countries (Ben Hassen & El Bilali, 2024; James et al., 2021; Nagy & Szentesi, 2024; Sigatu, 2024). These converging pressures highlight the limits of incremental reform and point instead to the need for systemic transformation toward food systems that are productive, resilient, sustainable, and just (Just Rural Transition, 2023). Just transition frameworks emphasize that sustainability pathways must address power imbalances, protect vulnerable groups, and ensure equitable distribution of costs and benefits, requiring the integration of environmental stewardship with social equity, economic viability, and inclusive governance (James et al., 2021; Resnick & Swinnen, 2023).

Somalia faces these challenges to an acute degree, compounded by prolonged armed conflict, weak governance, and repeated climate shocks. Agriculture and livestock underpin over 80% of livelihoods, but decades of insecurity have destroyed infrastructure, displaced millions from fertile land, and eroded institutional capacity (Abdullahi & Arısoy, 2022). Between 2017 and 2022 alone, conflict displaced more than two million rural residents, while the 2021–2023 drought pushed nearly half the population into acute food insecurity (Insecurity Insight, 2023; Isse, 2024; Thalheimer et al., 2023). Extreme dependence on grain imports exceeding 90% further exposes the country to global price shocks (Kozielec et al., 2024).

Within this fragile context, youth and women face severe barriers to participation in agri-food systems but hold significant transformative potential. Somalia's population is overwhelmingly young, with youth aged 15-35 comprising roughly 70% of the population, while unemployment exceeds 68% (Federal Government of Somalia, 2022). The informal economy absorbs the majority of employed youth, with 85-90% of Somalia's workforce operating outside formal sector structures in activities providing irregular income without social protection or legal recognition (ILO, 2019; African Development Bank, 2021). Official unemployment statistics therefore paint a misleading picture: they undercount economically active youth while rendering invisible the precarity that defines their participation. Despite agriculture's centrality to livelihoods, limited youth interest in farming reflects poor returns, social stigma, structural barriers to land and capital access, and an education system that fails to prepare youth for agricultural careers (FAO, 2021; Rutherford et al., 2020; Jayne et al., 2019). Evidence from the region demonstrates that when barriers are addressed, youth can drive agricultural innovation, sustainability, and green job creation through agripreneurship, digital tools, and collective organization (Glover & Sumberg, 2020; Mikkelsen & Chapagain, 2023).

Just transition scholarship provides a useful analytical lens for examining agri-food transformation in such contexts. Beyond environmental outcomes, it emphasizes distributive, procedural, recognition, and restorative justice, calling for participatory processes that center marginalized voices and address entrenched power asymmetries (James et al., 2021; Just Rural Transition, 2023). In food systems, these principles intersect with political economy

dynamics where firms, civil society, and producers operate within unequal structures of authority and access (Resnick & Swinnen, 2023). Food systems research has historically privileged institutional and expert perspectives, often marginalizing smallholders, youth, and women. This study responds by integrating three stakeholder groups, namely agricultural companies, civil society organizations, and young farmers, triangulating their perspectives to interrogate equity claims, validate observed injustices, and identify where institutional narratives diverge from lived experience. Most critically, by centering young farmers as primary respondents, the study documents their policy awareness, aspirations, constraints, and experiences of justice and injustice in their own terms.

This article examines green jobs for youth within Somalia's agri-food system through an empirically grounded, multi-stakeholder analysis. It develops analytical insights and typologies that inform understanding of youth inclusion and justice in a fragile context.

This study addresses one central research question:
What are the main drivers and systemic barriers for youth employment in Somalia's food systems transition, and how do justice dimensions shape access to emerging green jobs?

Three sub-questions guide the analysis:

- What structural barriers prevent youth access to climate-smart agriculture and renewable energy value chains?
- How do power asymmetries exclude youth from shaping transition policies?
- What trade-offs exist between rapid job creation in extractive sectors and long-term sustainable livelihoods, and how do justice dimensions mediate these trade-offs?

2. BACKGROUND

2.1 Agrifood Systems in Fragile Contexts: East Africa and Somalia

Like most of East Africa, Somalia's agri-food system is characterized by smallholder dominance, significant infrastructure deficits, and persistent productivity gaps that constrain agriculture's capacity to drive inclusive growth and food security (Lokuruka, 2020; Adeyanju et al., 2023). However, Somalia's challenges are compounded to a far greater extent by prolonged armed conflict, weak governance, and repeated climate shocks that have fundamentally reshaped who controls food system actors, resources, and opportunities.

Somalia's food system involves multiple overlapping actors with divergent interests and limited coordination. Government structures include the federal Ministry of Agriculture and Irrigation (MAI) with restricted operational capacity beyond Mogadishu, five member state agricultural ministries (Puntland, Jubaland, Galmudug, Hirshabelle, Southwest State) operating semi-autonomously, and the Ministry of Livestock and Forestry managing the livestock export sector worth $360M annually.

International institutions dominate financing and technical assistance. FAO leads funding for agricultural production, WFP transitions from emergency food aid to livelihood support, the World Bank finances infrastructure through Multi-Partner Fund mechanisms, USAID supports private sector development, Turkish international aid agency (TIKA) funds mechanized farming, and United Arab Emirates (UAE) investments target export agriculture. The civil society landscape includes 23 active organizations such as ACTED, Concern Worldwide, Solidarités International, and Save the Children, delivering fragmented extension services, with the Somalia Agricultural Technical Group (SATG), a technical coordination platform bringing together United Nation (UN) agencies, non-governmental organsations (NGOs), and government counterparts to harmonize agricultural programming, attempting coordination among 18 members but lacking enforcement power.

Private sector actors stratify into several tiers. There are three major agribusiness exporters, namely Daryeel Bulsho Guud, Horyal Investment, and Hassan Elmi Corporation, controlling 60% of banana and sesame trade, approximately 200 medium-scale commercial farms supplying urban markets, Turkish and UAE multinationals investing $180M in mechanized production, diaspora-owned SMEs operating across production, processing, and retail, and an informal network of livestock traders connecting pastoralists to export markets in Saudi Arabia, UAE, and Egypt through Berbera and Bossaso ports.

Beyond primary production, Somalia's food system operates through informal value chains with minimal processing and heavy import dependency. Livestock value chains employ approximately 60% of the rural population but remain largely unprocessed. More precisely, 95% of exports are live animals shipped to Gulf markets (Somalia Investment Promotion Office, 2022). At the same time, agricultural value chains face severe post-harvest losses estimated at 30-40% for fruits and vegetables due to absent cold storage infrastructure, poor road networks, and limited processing capacity (World Bank, 2022). Somalia's extreme import dependency

further exposes the country to global price shocks while offering limited opportunities for domestic value-addition (Kozielec et al., 2024). Digital platforms offer partial compensatory potential, with mobile money penetration reaching 73% and emerging e-commerce platforms connecting urban consumers to rural producers, but electricity access at only 28% in rural areas and limited internet in pastoral regions restrict scaling (Federal Government of Somalia, 2022; Rutherford et al., 2020).

This fragmented, import-dependent food system structure directly shapes youth employment prospects. Opportunities are concentrated among actors with infrastructure access, donor relationships, and clan connections, systematically excluding the majority of young Somalis from the value-addition, logistics, and processing roles where green job potential is greatest.

2.2 Youth Demographics, Employment, and Agricultural Engagement

Somalia's youth, defined as 15-35 years old, comprising around 70% of the population, face severe employment challenges. Youth unemployment among those aged 15-24 stands at around 68%, though this figure undercounts actual economic precarity since 85-90% of the workforce operates in the informal economy. Moreover, Not in Employment Education or Training (NEET) rates reach approximately 58% for youth aged 15-24, and the majority of economically active youth engage in petty trade, livestock brokering, transport services, and casual agricultural labor providing irregular income without social protection. This means employment without contracts, earning without protection, and working without recognition (World Bank, 2024; ILO, 2023; World Bank, 2021; ILO, 2019; African Development Bank, 2021).

Despite agriculture and livestock underpinning over 80% of livelihoods nationally, only 24% of young men and 14% of young women express interest in agricultural livelihoods, deterred by poor returns, social stigma, structural barriers to land and capital access, and an education system disconnected from viable agricultural careers, resulting in approximately 32% of rural youth participating predominantly as unpaid family labour (FAO, 2021; Rutherford et al., 2020; Jayne et al., 2019; UNDP Somalia, 2020). Government and international initiatives targeting these barriers include FAO's youth farmer field schools, WFP's cash-for-work livelihood programs, USAID's agribusiness incubator support, and Turkish cooperation's mechanized farming training centers (FAO, 2021; WFP, 2023). However, the 2019-2021 Youth Employment and Skills Development Project reached only 18% of its 50,000 target due to insecurity restricting rural access and homogeneous program design failing to account for divergent realities across rural versus urban youth, settled versus displaced populations, and majority versus minority clan members (World Bank, 2022; Federal Government of Somalia, 2022).

Gender inequalities compound these challenges through intersectional disadvantage. Women perform 60-80% of agricultural labor but control less than 20% of land and receive less than 10% of credit and extension services (FAO, 2021). In Somalia, gender disparities are particularly acute, with female literacy at 26% compared to male literacy of 50%, and cultural constraints, such as restrictions on mobility, patriarchal land governance, and social stigma in market-facing roles, identified as the most significant barriers to women's participation (FAO, 2021; Rutherford et al., 2020). Young women additionally face age-based exclusion from

elder-dominated land allocation systems and clan-based credit networks that confer authority on the basis of seniority, while conflict-specific barriers including displacement, insecurity, and trauma further compound their exclusion (Villa & Belli, 2024).

These demographic and employment patterns establish the justice stakes of Somalia's agri-food transition: with 70% of the population under 35, the distribution of emerging green job opportunities is not merely an economic question but a justice question.

2.3 Structural Barriers to Youth Participation in Agrifood Systems

Youth participation remains constrained by multi-dimensional structural barriers. Financial exclusion represents perhaps the most binding constraint, as youth typically lack collateral for formal credit, face discrimination in informal lending systems, and encounter few youth-tailored financial products (Jayne et al., 2019). Land access is limited by customary tenure systems that allocate rights based on lineage and elder authority, formal markets requiring capital youth lack, and in Somalia specifically, clan-based governance that particularly disadvantages youth from minority clans, displaced populations, and women (FAO, 2021).

Educational and skills gaps persist, although youth have higher average educational attainment, formal schooling is often disconnected from agricultural realities, and vocational training systems have atrophied. In Somalia, conflict destroyed agricultural schools and extension infrastructure, contributing to only 24% of young men and 14% of young women expressing interest in agricultural livelihoods (FAO, 2021). Gender inequalities compound these challenges through intersectional disadvantage. Women perform 60-80% of agricultural labor in Sub-Saharan Africa but control less than 20% of land and receive less than 10% of credit and extension services (FAO, 2021). Young women navigate both patriarchal gender norms restricting land ownership, mobility, and decision-making, as well as age-based exclusion. This entails that youth are systematically sidelined from elder-dominated land allocation systems, clan-based credit networks, and agricultural decision-making structures that confer authority and resource access on the basis of seniority.

2.4 Digital Transformation in Agriculture

Digital technologies, which encompass mobile telecommunications, precision agriculture sensors, artificial intelligence for decision support, and e-commerce platforms, promise to democratize information access, reduce transaction costs, and enable smallholders to capture greater value (Lajoie-O'Malley et al., 2020). However, adoption remains highly uneven, with digital tools predominantly reaching wealthier, male, educated farmers in peri-urban areas, often exacerbating inequalities (Adeyanju et al., 2023).

Multiple divides constrain equitable digital transformation. Infrastructure gaps persist despite mobile penetration exceeding 80% in urban areas, with rural coverage remaining spotty and internet connectivity below 30% in rural populations. Affordability barriers mean data costs consume significant household budget shares for poor families. Digital literacy and capability constraints are severe, with rural and female populations far lower, limiting digital service uptake

even where infrastructure exists (Federal Government of Somalia, 2022). The gender digital divide is also pronounced, with women exhibiting lower mobile phone ownership, internet access, and digital literacy, reflecting income gaps, cultural restrictions, and educational disparities (Rutherford et al., 2020).

2.5 Sustainable Agriculture and Green Jobs

Green jobs in agricultural contexts encompass employment that reduces environmental impact while providing decent livelihoods, spanning renewable energy applications in farming, such as solar-powered irrigation, biogas from livestock waste, soil and water conservation, organic and regenerative farming, agroforestry, waste reduction and management along value chains, and sustainable market linkages (ILO, 2023; Just Rural Transition, 2023). Evidence from sub-Saharan Africa suggests green jobs can simultaneously address youth unemployment and environmental degradation when embedded in functioning value chains and supported by enabling infrastructure. However, quality matters, as jobs must provide living wages, safe conditions, and career progression (Mikkelsen & Chapagain, 2023; Just Rural Transition, 2023).

In Somalia's specific context, green job potential is concentrated in three areas directly linked to the country's dominant livelihood systems. First, livestock value chains, which employ approximately 60% of the rural population, offer green employment in rangeland restoration, sustainable pasture management, and climate-adaptive herding practices, but remain almost entirely unprocessed (95% live animal exports), meaning value-addition roles in meat processing, hide treatment, and dairy that could absorb youth remain underdeveloped (SDRB, 2025; FAO, 2021). Second, crop agriculture presents opportunities in solar-powered irrigation, post-harvest storage reducing the estimated 30-40% loss of fruits and vegetables, and agroforestry reversing conflict-era deforestation, but absent cold chain infrastructure, reliable electricity (28% rural access), and secure land tenure, these opportunities remain structurally inaccessible to most youth (World Bank, 2022; Federal Government of Somalia, 2022). Third, mobile-enabled market platforms connecting rural producers to urban consumers represent an emerging green economy pathway given Somalia's 73% mobile money penetration, but digital literacy constraints and pastoral infrastructure gaps limit scaling beyond peri-urban areas (Federal Government of Somalia, 2022; Rutherford et al., 2020).

Critically, Somalia's fragile context means green job creation cannot be treated as a market-driven process. Conflict insecurity, clan-based resource governance, and unaddressed displacement mean that without deliberate justice sequencing, green economy opportunities will be captured by already-advantaged actors, such as large exporters, urban youth, majority clan members, while subsistence farmers, women, and IDPs remain structurally excluded from the transition.

Mapping green job opportunities onto Somalia's food system value chain clarifies where youth employment potential is concentrated and where structural barriers are most binding. At the production node, climate-adaptive herding, rangeland restoration, solar irrigation, and agroforestry represent green job categories accessible primarily to farmers with land access and basic capital. At the aggregation and post-harvest nodes, opportunities in cold chain logistics,

solar-powered storage, and waste reduction are structurally inaccessible without infrastructure investment, meaning they currently benefit only firms operating in Mogadishu and Puntland. At the processing node, meat processing, dairy value addition, and hide treatment represent the largest underdeveloped green employment potential given that the vast majority of livestock exports remain unprocessed, but capital requirements and insecurity exclude most youth. At the market and retail node, mobile-enabled platform roles represent the most accessible entry point given 73% mobile money penetration, though digital literacy constraints limit this to peri-urban farmers. This value chain mapping reveals that current green jobs programming concentrates at the production node while the aggregation, processing, and market nodes where youth could more readily participate remain systematically underinvested.

2.6 Just Transitions, Multi-Stakeholder Governance, and Power Dynamics

Just food systems transformation requires coordination across multiple stakeholders. However, Somalia's institutional landscape is characterized by acute fragmentation that undermines coherent transition pathways. Coordination failures in Somalia's food system operate across multiple dimensions. Horizontally, companies, NGOs and government entities pursue parallel mandates with minimal information sharing, duplicating efforts in accessible areas while leaving contested regions entirely unserved. Vertically, value chain actors, including producers, processors, traders, and retailers, lack integration mechanisms, meaning that gains at one node rarely translate into improved outcomes for actors upstream or downstream. Public-private partnerships present a further coordination gap, as donor-funded projects create temporary collaborations structured around funding cycles, dissolving once external financing ends without leaving durable institutional arrangements. Finally, the proliferation of international actors compounds these failures, as 23 active NGOs and 8 major international institutions pursue separate programmatic priorities, generating reporting burdens and conflicting demands that overwhelm Somalia's already limited government coordinating capacity. This fragmentation means that policies and programs designed to support youth employment in green transitions are not informed by previous efforts and they either duplicate previous efforts or end up failing because of not being data and evidence-driven. Understanding this fragmented stakeholder landscape is essential for explaining why Somalia's food system, despite substantial international investment ($400M+ annually in agricultural programming), generates limited youth employment outcomes and why justice dimensions reveal systematic exclusions.

Just transition frameworks, adapted from energy and industrial contexts to food systems, emphasize that sustainability pathways must address power imbalances, protect vulnerable groups, and ensure equitable distribution of costs and benefits (James et al., 2021; Just Rural Transition, 2023).

2.7 Research Gaps and Study Contribution

While youth are widely recognized as potential agrifood transformation agents, structural barriers limiting participation persist, reflected in low engagement of youth in agriculture in Somalia. Existing studies predominantly reflect institutional perspectives, governments, donors, companies, and civil society organisations (CSOs) with limited empirical attention to young farmers' lived experiences as primary knowledge producers. The few studies centering youth voices reveal critical gaps in policy awareness, digital access, gendered constraints, and disjuncture between aspirations and opportunities, but these remain under-explored systematically (FAO, 2021; Rutherford et al., 2020).

Heterogeneity within stakeholder groups and regions also remains underexplored, constraining differentiated, context-sensitive intervention design. Cross-country evidence from Sub-Saharan Africa consistently shows that youth employment programs treating farmers, civil society organizations, and private sector actors as homogeneous groups systematically underperform, failing to account for substantial internal variation in digital maturity, resource access, sustainability commitment, and socio-cultural characteristics (Ronconi et al., 2024; Mikkelsen & Chapagain, 2023; Jayne et al., 2019). Somalia's own program history reflects this pattern, with past agricultural and livelihood interventions reaching only a fraction of their targets. For example, the 2019-2021 Youth Employment and Skills Development Project achieved 18% of its 50,000 target, partly attributable to homogeneous program design that failed to account for the divergent realities of rural versus urban youth, settled versus displaced populations, and majority versus minority clan members (World Bank, 2022; Federal Government of Somalia, 2022).

Justice dimensions in agrifood transitions have been conceptually elaborated through environmental justice scholarship (Schlosberg, 2007; Walker, 2012) and just transition frameworks (James et al., 2021; Just Rural Transition, 2023), but lack empirical examination in fragile contexts where outcome data is scarce and perception gaps themselves constitute justice outcomes. Critical questions remain unaddressed in the existing literature. First, the extent to which stakeholders converge or diverge in perceiving barriers has not been systematically examined in fragile contexts, where divergence between company equity claims and farmer inequality experiences, or between CSO program priorities and farmer-identified needs, itself constitutes a just outcome. It reveals whose narratives dominate policy discourse. Second, the alignment between companies' self-assessments of equity and farmers' lived experiences of inequality remains unvalidated, leaving unchallenged the assumption that employers and beneficiaries share a common understanding of what constitutes fair access to agricultural opportunities and employment.

3. METHODOLOGY

This study adopts a Design Science Research approach, developing typologies as analytical artifacts to address the practical problem of youth exclusion in Somalia's agri-food transitions (Hevner et al., 2004; Peffers et al., 2007). The research employs a multi-stakeholder mixed-method design examining youth employment barriers through four justice dimensions: distributive, procedural, recognition, and restorative (Schlosberg, 2007; Walker, 2012). The design integrates systematic literature review, primary data collection through structured questionnaires, and typology development to capture heterogeneity across stakeholder groups while interrogating how justice failures perpetuate exclusion. Triangulation across the three stakeholder groups serves a specific analytical purpose beyond data completeness: it enables the research to validate or challenge institutional claims against lived experience, treating convergence across groups as signaling high-confidence findings and divergence as analytically meaningful evidence of power asymmetries. This helps reveal whose narratives dominate policy discourse and whose are systematically marginalized.

This triangulation logic also directly informed both sampling decisions and the analytical coding scheme, as described below. Stakeholder identification and categorization follow Clapp and Moseley's (2020) political economy approach to food systems, which maps actors by power resources, a choice made because justice analysis requires understanding who shapes system rules versus who operates within imposed structures. This framework distinguishes between actors who shape system rules, such as governments, corporations, and international institutions, and those who operate within imposed structures, namely smallholders, workers, and civil society, with power asymmetries determining whose interests dominate outcomes. Applied to Somalia's food system, this framework reveals that government entities hold formal authority but face severe capacity constraints and contested legitimacy, creating governance voids filled by clan structures and international actors; the private sector ranges from large exporters exercising policy influence to micro-enterprises navigating insecurity and credit exclusion; farmers and agropastoralists constitute the numerical majority but possess minimal market power; and civil society organizations occupy an intermediary position between power holders and marginalized populations while facing donor dependence, coordination failures, and security risks limiting rural access (Resnick & Swinnen, 2023). This power-based mapping directly informed the selection of the three stakeholder groups, namely agricultural companies, civil society organizations, and young farmers, as they represent structurally distinct positions within Somalia's food system.

The study adopts four justice dimensions, namely distributive, procedural, recognition, and restorative, as its primary analytical framework. This was chosen because principle-based frameworks provide comprehensive ethical guidance but tend to treat power asymmetries, historical inequalities, and differential impacts as implementation concerns (James et al., 2021; Just Rural Transition, 2023). Justice dimensions, by contrast, are explicitly designed to interrogate these structural and relational dynamics. Schlosberg (2007) and Walker (2012) demonstrate that they capture how transitions produce winners and losers, who shapes transition pathways, whose knowledge and livelihoods are valued, and how historical injustices are addressed or perpetuated.

The four dimensions are also more operationalizable for empirical analysis than principles. Distributive justice provides concrete criteria for examining resource access, employment opportunities, and value distribution across stakeholder groups. Procedural justice enables systematic assessment of who participates in decision-making and through what mechanisms. Recognition justice offers analytical tools for examining whose knowledge systems and livelihood practices are valued or erased in policy discourse. Restorative justice adds the critical temporal dimension absent from the other three, asking not merely whether current opportunities are equitably distributed, but why certain groups bear disproportionate burdens traceable to historical harms that contemporary programs fail to address (Walker, 2012; Anderson et al., 2021).

This temporal dimension is particularly essential for Somalia's fragile context, where civil war legacies, conflict-induced displacement, and clan-based exclusion fundamentally structure which youth can access emerging green job opportunities. Without the restorative dimension, an analysis of youth exclusion in Somalia's agri-food system would risk treating historically produced inequalities as naturally occurring conditions, obscuring the political and institutional processes that created them and that any just transition must therefore address. The four dimensions collectively encompass the core concerns of principle-based approaches. (Clapp & Moseley, 2020; Anderson et al., 2021).

We conducted a systematic literature review (SLR) on agrifood systems following Kitchenham's (2004) guidelines. Structured searches in Scopus, Web of Science, and Google Scholar combined terms related to agrifood systems, Somalia, East Africa, youth, agriculture, green jobs, and food system transformation. Grey literature from FAO, USAID, and World Bank supplemented peer-reviewed sources. Inclusion criteria required English-language sources published 2017-present, focusing on East Africa or Somalia, addressing youth aged 15-35, and engaging substantively with agrifood systems.Thematic analysis following Braun and Clarke (2006) identified recurring themes concerning smallholder-dominated systems, Somalia's conflict and climate vulnerabilities, youth potential and exclusion, financial and land constraints, gender disparities, digital divides, and persistent injustices across justice dimensions. These themes informed questionnaire development and analytical priorities.

Semi-structured interviews were held with agricultural companies, civil society organisations and young farmers while maintaining comparability across key dimensions: youth engagement barriers, digital adoption, sustainability practices, gender inclusion, security and climate impacts, policy awareness, and collaboration patterns. Data collection occurred October-December 2025 across five Federal Member States (Puntland, Jubaland, Galmudug, Hirshabelle, Southwest State) and Mogadishu. The sample was 25 agricultural companies through purposive sampling ensuring geographic and sectoral diversity (formal exporters, medium-scale domestic suppliers, informal traders, firms in high-constraint regions), 17 civil society organizations representing training providers, advocacy groups, community-embedded organizations, and multi-functional actors, 64 young farmers aged 15-35 through convenience and snowball sampling facilitated by local networks, achieving gender parity and representation across regions.

Table 1: Sample of this research

Stakeholder group	N.	Selection criteria	Sectors/ Disaggregation
Agricultural Companies	25	Geographic and sectoral diversity	Formal exporters, medium-scale domestic suppliers, informal traders, firms in high-constraint regions
Civil society organizations	17	Geographic and sectoral diversity	Training providers, advocacy groups, community-embedded organizations, and multi-functional actors
Young Farmers	64	Aged 15-35	50% male, 50% female

We employed a deductive-inductive coding scheme combining theoretically-derived justice dimension categories with emergent themes. Initial deductive codes mapped to distributive (resource access, inequality), procedural (participation, voice, transparency), recognition (knowledge validation, identity erasure), and restorative (historical harms, remediation) dimensions. During coding, we inductively identified sub-themes not captured initially, for example, distinguishing skill mismatches, capital constraints, geographic concentration, and clan-based hiring as distinct mechanisms of distributive exclusion, or differentiating erasure of traditional knowledge, devaluation of informal livelihoods, and youth misrecognition as problems under recognition injustice. Cross-dimensional analysis identified how injustices reinforced each other. Procedural exclusion led to distributive failures rooted in recognition erasure. This iterative process moved beyond descriptive cataloging toward explanatory analysis of systemic mechanisms perpetuating exclusion.

Stakeholder typologies were developed following Kluge's (2000) approach. Initial empirical grouping based on observable, theoretical refinement using relevant dimensions, and internal homogeneity/external heterogeneity verification. We employed them as analytical units within the justice framework, systematically examining: (1) which types experience injustice most acutely and through what mechanisms; (2) which types perpetuate or benefit from injustice; (3) how interactions between types produce or mitigate injustice. This approach revealed, for instance, that 78% of distributive justice violations involved large-scale investors and government officials concentrating benefits away from marginalized youth, demonstrating structural mechanisms embedded in Somalia's political economy.

A research validation workshop was conducted on 30 April 2026 to present and critique the study's findings and typologies with senior policy stakeholders. There were 25 participants, coming from the ministry of agriculture of the federal government, universities in Mogadishu, entrepreneurs in the agriculture sector, as well as agriculture students. All representatives formally endorsed the study's findings and the recommendations emerging from the research. Ministry officials confirmed the aspiration-exclusion paradox, acknowledging that while instruments such as the Farmers' Cooperative Policy are in place, the finding that nearly 80% of

young people are unaware of existing agricultural policies reflects a recognized implementation gap that the Ministry committed to address through targeted awareness campaigns, educational workshops, and expanded use of social media and digital channels. Officials validated the finding on youth desire for policy participation, noting that young professionals are already being integrated into ministry operations and that the Somalia Food System Resilience Project provides a vehicle for improving food systems, strengthening climate resilience, and creating sustainable livelihoods for youth and small-scale farmers. The Ministry officials further explained that the agricultural research institute is currently under construction, expected to become operational within 2026, as a dedicated structure for bridging the gap between academic knowledge and farming realities identified under recognition justice in this study. Participants validated all five company typologies, four CSO typologies, and four youth farmer typologies, confirming their analytical and practical utility. The workshop thus fulfilled the dual function of validation and dissemination, and the Ministry's endorsement strengthens the feasibility assessments attached to the policy recommendations in Section 5.

4. FINDINGS

This chapter presents the findings, namely the typology and each type's characteristics, summarized in Tables 2-4. Table 2 presents the company typology across five types, assessed against the four justice dimensions. The most striking pattern is the gap between formal equity claims and structural exclusion mechanisms, as firms across all types recruit youth or claim equitable relationships, but the justice analysis reveals that hiring practices, geographic concentration, and clan-based networks systematically reproduce inequalities. Notably, the distributive injustice documented across Company Types 1 and 5 are not aberrations confined to exploitative firms, but structural features reproduced even by companies with genuine intentions toward inclusion.

Table 2: Company Typology

Company Type	Distributive Justice	Procedural Justice	Recognition Justice	Restorative Justice
Large-Scale Enterprises	Concentrate opportunities geographically. While 52% claim promoting equity 62% of farmers report inequality	Exercise disproportionate policy influence through donor relationships while 80% of farmers are policy-unaware.	Legitimize themselves as modern, while dismissing 39% untrained and 73% business-oriented farmers as unskilled	Operates on conflict-shaped land/markets without assuming responsibility for remediation and exclusion of clans, women, and IDPs.
Medium-Scale Enterprises	Face the same capital scarcity as farmers, but default to hiring well-connected urban youth over marginalized populations.	Lack policy power themselves but extract value from CSO-trained youth without hiring commitments or assuming broader accountability.	Partial digitization framed as innovation facing constraints.	Emerged post-conflict but operate in value chains shaped by unaddressed land insecurity and destroyed infrastructure.
Small-Scale Informal Enterprises	Excluded from all support systems designed for the formal sector, struggle in shared precarity with farmer-suppliers.	Policy designed without their input, possess critical local knowledge that policymakers ignore.	Dismissed as inefficient petty traders despite providing essential access in insecure regions where large firms won't operate.	Products of war-destroyed infrastructure, inherited disrupted value chains without compensation or rebuilding support.
Firms Under High	Face distributive injustice, but survival pressures	Marginalized in Mogadishu-designed policy, exclude	Dismissed as high-risk despite remarkable adaptive capacity in	Navigate landscapes where militia control, ethnic cleansing, and

Operational Constraints	push toward exploitative practices.	farmers procedurally through authoritarianism born of crisis.	conditions that would bankrupt Mogadishu firms.	land seizures remain unaddressed without transitional justice
Firms with Limited Equity Integration	Embody the 10 point gap: 52% claim promoting equity while farmers report 62% inequality through unequal wages and clan favoritism.	Recruit youth, but exclude them from decision-making, no farmer voice mechanisms or grievance systems exist.	Recognize youth as capable workers but not autonomous agents deserving decision-making power and fair compensation.	Hire conflict- affected youth but impose productivity standards without accommodations.

Table 3 presents the CSO typology across four types. The dominant pattern is a distributive perversity running across CSO types. Organisations best positioned to reach the most marginalized populations, such as community-embedded CSOs serving women, minorities, and IDPs, consistently receive the least resources, while donor funding concentrates in larger, more visible organizations that reach already-accessible youth. Procedurally, all CSO types face structural constraints on their ability to represent farmer interests authentically, because donor dependence means they ultimately answer to funder priorities.

Table 3: CSO Typology

CSO Type	Distributive Justice	Procedural Justice	Recognition Justice	Restorative Justice
Multi-Functional System-Oriented Organizations	Distribute per donor priorities rather than farmer needs, 82% prioritize training despite 60% coverage.	Claim to represent farmers but answer to donors, creating procedural paradox where advocacy depends on funder approval.	Validate injustice (82% observe systemic problems) but may impose external donor frameworks not resonating with farmers.	Lack of mandate/ resources for restorative programming, donor cycles prevent long term commitments needed for historical harms.
Training-Focused Capacity Providers	Training remains weakly linked to employment; distribute skills without jobs, creating educated unemployment.	Rarely include farmers in curriculum design; train youth for company/donor agendas, perpetuating exclusion.	Embody deficit framing dismissing that 73% are business-oriented with entrepreneurial motivation.	Address present skill gaps without examining historical causes

Community-Embedded Outreach Organisations	Address most severe injustices but have fewest resources	Minimal policy power but most legitimate community authority; can facilitate authentic local voice and clan-inclusive decision-making.	Validate marginalised identities but dismissed as unsophisticated by donors preferring professional CSOs.	Maintain historical memory (know which families lost land, which clans suffered) but lack resources for transitional justice.
Policy- and Advocacy-Oriented Organisations	Do not directly distribute resources but shape systems; document 62% inequality vs 52% company claims as evidence base.	Attempt inserting farmer voices but face limited leverage; farmers judge policies universally ineffective despite CSO advocacy.	Frame experiences as injustice not misfortune; legitimize grievances as structural problems requiring policy solutions.	Document conflict legacies for future accountability but face implementation gaps, even successful policy changes aren't enforced.

Table 4 presents the young farmer typology across four types, ranging from high-resource market-oriented farmers to highly marginalized and excluded farmers. The central finding is that justice failures compound as one moves from Type 1 to Type 4. Each dimension of injustice intensifies and intersects with others, meaning that highly marginalized farmers do not simply face more barriers but face qualitatively different barriers that require foundational justice interventions before market-oriented programs become relevant.

Table 4: Young Farmer Typology

Farmer Type	Distributive Justice	Procedural Justice	Recognition Justice	Restorative Justice
High-Resource, Market-Oriented Farmers	Relatively advantaged but capital remains binding constraint even for empowered youth, hitting ceilings created by systemic barriers.	Possess agency but lack institutional voice and, thus, cannot influence policies governing agriculture despite capability.	Validated but recognition remains conditional, seen as beneficiaries not experts whose knowledge shapes policy.	Unclear if historical injustice; may perpetuate or overcome clan/urban privilege patterns.
Moderately Resourced, Aspirational Farmers	Embody interest participation gap, majority being business-oriented but barriers prevent participation.	Likely the majority experiencing a lack of policy awareness; subjects of programs not co-designers, consultation is tokenistic.	Ambiguous recognition, as they are validated as having potential but dismissed as not quite there but, always conditional, future-oriented.	Moderate resources may represent partial conflict recovery without reaching pre-war stability or full restoration of family assets.

Low-Resource, Subsistence-Oriented Farmers	Farm but don't benefit, absorb all risks without rewards	Procedurally invisible, as 80% unawareness concentrates here; policies designed for commercial farmers exclude subsistence by design.	Recognition erasure: farming but not considered real farmers, traditional knowledge dismissed as lacking training , with 39% considered untrained.	Current condition is direct conflict/ climate legacy; farm war-degraded land with destroyed infrastructure using lost knowledge.
Highly Marginalized and Excluded Farmers	Compounded injustice across every dimension, as there are around 40% untrained farmers, the majority of which also face capital scarcity and inability to train	Procedurally absent, as they are outside systems where rights could be exercised; high level of policy awareness	Erasure at every level: women invisible in statistics, IDPs temporary despite decades, minorities face ethnic stigma.	Concentrate on Somalia's unaddressed injustices

4.1 Company Typologies: Firm-Level Responses to Structural Constraints

Company Type 1: Large Scale Enterprises

Under this category fall established companies with formal registration, export orientation, operating primarily in higher-maturity ecosystems in Mogadishu and Puntland. These were the companies identified with the highest level of digital adoption. With regards to distributive justice, large-scale formal enterprises concentrate both opportunities and benefits geographically and socially. While 72% of the respondents recruit youth, the study reveals critical distributive injustice in recruitment practice. Recruitment is geographically concentrated in Mogadishu and Puntland, systematically excluding youth from Jubaland, Southwest State, and other lower-maturity ecosystems where unemployment is highest. Within accessible areas, informal hiring pipelines favor educated, urban, clan-connected youth, meaning that the 62% of young farmers experiencing opportunity inequality are not excluded despite companies' recruitment efforts but because of how those efforts are structured. More specifically, 52% of companies self-assess as having very equitable relationships with farmers, but 62% of young farmers experience opportunity inequality. As pointed out by one of the respondents, "*We recruit many youth every year, maybe 50-60 new workers. But most come from Mogadishu, have some education, and can use computers. The rural youth from Jubaland or Southwest don't have the skills we need, such as basic literacy both in agriculture, but also how to simply operate a laptop. It's not discrimination, it's business reality*".

With regards to procedural justice, these firms exercise policy influence through advisory positions and donor relationships, shaping program designs while young farmers remain catastrophically excluded. More specifically, 80% are unaware of agricultural policies, those

aware report universal ineffectiveness, and no institutional mechanisms exist for farmer voice in company decisions. From CSOs questioned, 82% said that systemic injustices persist but they lack leverage to enforce accountability, while companies self-determine equity performance. This happens despite the validated divergence between their assessments, as 52% of them claim fairness, and farmer reality, as 62% of them experience inequality. The recommendation for mandatory third-party equity audits and farmer feedback systems as conditions for public incentives directly addresses this procedural imbalance where power holders control both outcomes and evaluation without external accountability.

Recognition dynamics among large-scale enterprises reflect a pattern documented across interview respondents. These firms are positioned as modern, professional and legitimate development partners by government agencies, donors, and civil society organizations, with their digital capabilities and export orientation reinforcing their status as preferred implementation partners. However, this recognition hierarchy has a consequence that young farmers with traditional knowledge, but without formal training are viewed as skill-deficient with traditional agricultural knowledge, contextual market intelligence, and adaptive strategies developed under fragile conditions unrecognized in program design and hiring criteria.

Finally, in terms of restorative injustice, they participate in unaddressed historical injustices by operating on land and in markets shaped by war-era disruptions without remediation responsibility, with their concentration in Mogadishu/Puntland reflecting not just infrastructure but historical recovery patterns driven by clan dynamics and international engagement. Specifically, respondents across all stakeholder groups mentioned that the concentration of post-conflict reconstruction investment in Mogadishu and Puntland, where majority clan governance structures provided the security guarantees and interlocutors that international donors and implementing partners required, while regions contested by minority clans or experiencing ongoing Al-Shabaab presence received systematically less infrastructure rehabilitation, financial services restoration, and value chain rebuilding support Their failure to implement structural equity mechanisms means they reproduce historical exclusion in the present, and women, with almost 60% facing family/cultural barriers, remain excluded from formal employment, perpetuating intergenerational disadvantage where farmer inequality persists despite companies' recruitment claims.

Company Type 2: Medium-Sized Enterprises

This category encompasses mid-sized enterprises with partial formalization, moderate capital, serving domestic markets, operating across various ecosystem maturity levels. Medium-scale enterprises exhibit partial digital adoption, selectively deploying digital tools for communication and marketing functions, while production management, inventory tracking, supply chain coordination, and financial record-keeping remain largely manual, reflecting rational prioritization of visible revenue-generating applications over back-end operational digitization given capital constraints. In terms of distributive justice, they face capital scarcity, but competition dominates over solidarity: medium enterprises prioritize survival over equity and, without deliberate inclusion mechanisms, default to hiring patterns favoring connected, urban, educated youth over the 62% experiencing opportunity inequality. While their distributed geographic presence

beyond Mogadishu/Puntland theoretically improves access, security impacts (68-72% of firms in certain regions) and climate shocks disproportionately affect these enterprises, limiting job stability precisely where unemployed youth concentrate.

They also lack the procedural power of large firms but also contribute to procedural exclusion by not creating participatory mechanisms, implementing programs without farmer input even as farmers aware of policies judge them universally ineffective. The weak training-to-employment pipeline (80% of farmers prioritize training despite 60% coverage with minimal job conversion) implicates their hiring practices. Medium enterprises benefit from CSO-trained youth without formalizing partnerships or preferential hiring commitments, extracting value from civil society investment without reciprocal accountability. One of the respondents said, more specifically, CSOs train these youth, give them certificates, then they come to us expecting jobs. But we only hire 2-3 per year. We can't afford more. The training is good but who will employ them all?.

In terms of recognition of injustice, they are less valorized than large firms but more legitimate than informal traders. Their partial digitization is framed as openness to innovation that nonetheless faces constraints, which is a sympathetic narrative not extended to young farmers with similar resource limitations. These firms' reliance on social media for marketing validates youth digital capabilities in consumer-facing roles while dismissing the same youth as "lacking skills" for production management. This selective recognition exploits youth labor without valuing their full potential, reproducing recognition hierarchies within employment structures.

Finally, when it comes to restorative injustice, these companies emerged post-conflict, many founded by diaspora or local entrepreneurs rebuilding after war. However, they operate within value chains shaped by unaddressed historical injustices, without taking responsibility for addressing these legacies.

Company Type 3: Small-Scale And Informal Enterprises

The main companies in this type are micro-enterprises and informal traders with minimal capital, serving local markets, often family-operated, minimal or no formalization. Minimal digital adoption. With regards to distributive justice, these companies represent survival entrepreneurship operating under the same capital scarcity (72%), infrastructure deficits, and insecurity affecting young farmers, with their minimal digital uptake reflecting rational response to contextual constraints.

Distributive injustice manifests as exclusion from support systems all designed for the formal sector, though the 52% vs 62% equity divergence likely doesn't apply here because these enterprises don't make equity claims but simply struggle alongside their farmer-suppliers in shared precarity. However, desperation-driven exploitative buying practices means small enterprises can perpetuate distributive injustice by reproducing poverty.

In terms of procedural justice, these companies are practically invisible as policy is designed without their input, programs implemented without their participation, and value chain governance structures dominated by large firms and donors exclude them entirely—with this

exclusion extending to young farmers when small traders serve as primary market links for subsistence farmers, leaving both groups without voice in determining prices, standards, or trade conditions. but these enterprises possess critical local knowledge (market timing, farmer needs, cultural practices, security dynamics) that policymakers ignore, and the 80% of farmers who are policy-unaware reflects systematic failure to engage the informal distribution networks where actual farmer-market interaction occurs.

When it comes to recognition justice, companies of this type face severe recognition injustice. Those dismissed as inefficient or petty traders despite providing essential market access in insecure regions, remote villages, and marginalized communities where large firms won't operate, with policy recommendations to encourage cooperatives implicitly devaluing existing informal networks already functioning as organic cooperatives based on clan, kinship, and trust. Their minimal digitization is framed as deficiency, verbal contracts, and mobile trading strategies that formal digital systems cannot replicate in Somalia's context, with young farmers' similar limited familiarity with advanced digital tools pathologized differently based on actor type.

Finally, in restorative justice terms, these companies are products of unaddressed historical injustice. Civil war destroyed formal market infrastructure, banking systems, and regulatory frameworks. This, in turn, forced commerce into informal channels where current operators inherited disrupted value chains without compensation or rebuilding support. However, informal enterprises can also perpetuate historical injustices by reinforcing clan-based trading networks excluding minority clans or operating on supply chains built on war-era land seizures without questioning ownership legitimacy, with the absence of formalization meaning no accountability for historical harms embedded in current business relationships.

Company Type 4: Firms Under High Operational Constraints (Security/Climate)

This type contains companies operating in insecure and climate-affected regions (primarily Jubaland, Southwest State) where security instability and climate shocks dominate decision-making over business strategy. Digital adoption varies but is deprioritized due to survival focus. From a distributive justice point of view, these companies face injustice, as they are excluded from infrastructure investments, donor programs, and supply chain partnerships concentrated in secure areas, being unable to offer stable youth employment due to security incidents, climate shocks and logistical barriers creating irregular operations and income.
Their presence in high-constraint regions is critical because these areas concentrate unemployed, marginalized youth. This raises a question of distributional injustice, about whether these firms are exploiting youth desperation for cheap labor or being the only available income source. The data suggests both, as survival pressures push firms toward exploitative practices even if unintended. All of the capital and security resource constraints are basically making youth employment generation very difficult without external risk mitigation. One of the respondents said *during our operations we have lost a truck due to Al-Shabaab, while also drought has destroyed half the harvest. How can we plan youth employment when we don't know if we'll survive next season? We need security first, then we can think about fair wages*.

These firms face procedural marginalization at the system level: policy is designed in Mogadishu by actors with limited understanding of high-constraint operational contexts, programs are implemented in secure corridors that do not reach Jubaland or Southwest State, and no mechanisms exist for these firms to participate meaningfully in sector governance or program design. but procedural exclusion operates in both directions. Security pressures and survival imperatives within these firms simultaneously eliminate the internal participatory structures that would give young farmers procedural voice at the firm level. One respondent captured this dynamic directly, saying that 'when we don't know if the truck will arrive or if there will be fighting, we can't sit and consult. We just have to decide and move.' The result is what might be termed authoritarianism born of crisis. Exclusionary decision-making that is less a product of deliberate policy than of compounded operational constraints that leave no institutional space for participation. The study's recommendation to integrate these firms into humanitarian–development programs acknowledges this procedural reality but risks further exclusion by relegating them to humanitarian cases.

Moreover, firms in this type face also recognition injustice, dismissed as high-risk, unstable, or not investment-worthy despite operating in conditions that would bankrupt Mogadishu firms, with their remarkable adaptive capacity and survival unrecognized while policymakers attribute operational challenges to poor management. Young farmers in these regions (Types 3 and 4) suffer compounded recognition injustice through double invisibility, namely working for marginalized firms in marginalized regions. In those cases, more than 80% of CSOs have observed systemic injustices where policy attention is not focused.

Finally, companies in high constraint limitation contexts have recognition injustices historically, meaning that they are in regions where historical matters, such as militia control, ethnic cleansing, resource extraction, remain unaddressed. In these contexts, firms are navigating landscapes shaped by war-era power structures, land seizures, and environmental degradation. Some of them are benefiting from these legacies, as they are operating on contested land, employing clientelist networks established during conflict. However, others struggle against them, being unable to access land due to disputed ownership, excluded from clan-controlled markets. The absence of transitional justice, security sector reform, or land restitution processes means firms and farmers operate in permanent post-conflict limbo where historical harms structure current opportunities without acknowledgment or remediation.

Company Type 5: Firms With Limited Equity Integration

This type entails companies across size categories that report fair practices and active youth recruitment (72%) but lack structural equity mechanisms. Operate within value chain structures perpetuating unequal opportunities despite inclusive rhetoric. Firms in this category have distributive injustices, as they embody the study's core distributive injustice finding: the validated divergence between company self-assessments and young farmers' lived reality. The finding that youth recruitment does not automatically translate into equal opportunity means firms reproduce inequality through unequal wages, insecure contracts and clan-based favoritism, as more than 70% of large firms admitted having informal talent pipelines. Moreover, this finding is

viewed in the lack of advancement pathways, with more than 80% of CSOs saying they observe systemic injustices. Hence, while firms hire youth, they do not provide equitable shares of the value created, generating distributive injustice.

These firms also have procedural justice issues, as they recruit youth but exclude them from decision-making about workplace conditions, wage structures, contract terms, or business strategies affecting their livelihoods, with the absence of farmer voice and grievance mechanisms meaning firms unilaterally determine what constitutes equity without accountability to workers' perspectives. The 80% of farmers unaware of policies and universal ineffectiveness judgments from aware farmers extend to company-level governance. The recommendation for third-party audits acknowledging that internal equity assessments are unreliable when power asymmetries prevent honest feedback.

These firms also face recognition injustice, as they recognize youth as capable workers not as autonomous agents deserving decision-making power, fair compensation, or advancement opportunities, with this partial recognition extracting youth labor while denying full humanity. The gap between transactional fairness and structural equity reveals firms recognize youth in relation to firm needs but not youth needs.

From a restorative justice point of view, they operate without examining how current value chain structures inherited historical injustices. This is important, because youth hired from displaced communities bring trauma, lost assets, and disrupted education but firms impose productivity standards assuming level playing fields. There are no accommodations, such as flexible scheduling and trauma support, which results in firms benefitting from cheap labor without responsibility for structural disadvantages that created it. The study finding that many marginalized youth are women, IDPs and minorities means firms recruiting youth may actually hire from privileged subgroups while claiming inclusive practices, reproducing historical clan, gender, and displacement hierarchies under youth inclusion rhetoric.

4.2 Civil Society Organization Typologies

CSO Type 1: Multifunctional System-Oriented Organizations

The core characteristics of this type is that they operate across training, advocacy, research, and coordination functions and they are most visible in moderate-maturity ecosystems (Puntland). Engage multiple, interlinked barriers requiring comprehensive approaches. Multi-functional CSOs recognise that distributive injustice stems from interconnected barriers , such as capital, skills, policy and security, requiring integrated solutions. However, their effectiveness remains constrained by donor dependence. More specifically, they distribute services according to donor priorities, with 80% of farmers still prioritizing training despite 60% coverage suggesting CSO service distribution misaligns with what farmers actually need. These CSOs exercise distributive power by deciding who receives programs, potentially reproducing inequalities if they prioritize accessible, educated, connected youth over marginalized

populations, with the 39% who received no training likely concentrating among those CSOs cannot easily reach, including women, remote rural youth, and minorities.

This type of CSOs address the procedural dimension of justice as they aspire to bridge farmer-policy gaps through coordination and advocacy. However, their effectiveness remains constrained by donor dependence and limited authority to influence policy implementation, creating a procedural paradox where they claim to represent farmer interests but answer to donor priorities, potentially advocating for what funders want to hear. The recommendation to provide multi-year core funding to support policy co-design, implementation monitoring, and equity verification acknowledges CSOs cannot credibly advocate for farmer voice when their own voices depend on donor approval. Moreover, the call to institutionalize young farmer participation through CSO-facilitated policy platforms recognizes that CSOs should be bridges, not representatives and that farmers must speak for themselves.

CSOs of this type address the recognition injustices as they help amplify marginalized voices, providing essential recognition that government and private sector deny, but CSO framing can also result in stakeholders like donors having a complete say in the policies implemented, that don't resonate with farmers' self-understanding. The study finding that training is weakly linked to employment outcomes suggests CSOs may recognize youth as needing capacity building. This recognition pattern, though well-intentioned, perpetuates paternalism.

Finally, with regards to restorative injustice, these CSOs operate in conflict-affected contexts that navigate historical injustices but don’t have the capacity to address current needs, such as skills and food security without capacity to tackle historical harms. To add to this, donor funding cycle structure prevents long-term restorative work requiring 5-10 year commitments. However, CSOs can play restorative roles through documentation. The 82% observing systemic injustices represents essential truth-telling about ongoing harm, laying groundwork for future accountability even if immediate remediation isn't possible.

CSO Type 2: Training-Focused Capacity Providers

The primary focus of this type of CSOs is on skills development and workshops and it reflects finding that 70% of CSOs identify capacity building as core function. Dominant CSO model in Somalia's agri-food ecosystem. Training-focused CSOs aim to address distributional inequality by equipping youth with skills to access opportunities, but training is weakly linked to employment outcomes, meaning CSOs distribute skills without distributing jobs, creating educated unemployment. The paradox that more than 60% received training but more than 80% still think that they are not fully prepared to succeed within a just transition suggests skills alone cannot overcome structural barriers, such as capital and security. This, in turn, creates a distributive issue where CSOs invest donor resources training youth for jobs that don't exist or aren't accessible due to clan favoritism, capital requirements, or geographic exclusion. This means that youth acquire capabilities but no capacity to deploy them, bearing psychological costs of raised expectations unmet.

These types of CSOs have been found to not address the procedural injustice element, as they rarely include farmers in curriculum design. They deliver what they think farmers need, with the recommendation to deliver competency-based programs aligned with company skill needs still centering company requirements over farmer aspirations, perpetuating procedural exclusion where youth are trained for others' agendas. The weak training-to-employment pipeline (80% prioritize training despite 60% coverage with minimal job conversion) indicates CSOs and companies don't consult each other or farmers about what skills actually enable employment, reflecting procedural fragmentation.

With regards to recognition justice, these types of CSOs embody deficit framing dismissing existing capabilities. More specifically, the majority of business-oriented farmers possess entrepreneurial motivation, subsistence farmers have survival skills, and all young farmers navigate Somalia's complex security, clan, and market realities requiring sophisticated judgment. The focus on formal training devalues informal knowledge transmission and traditional agricultural expertise, with narrow skills definition failing to recognize the full spectrum of capabilities youth already possess.

Finally, there is a restorative injustice element, as these CSOs address present skill gaps without examining why those gaps exist while providing training without acknowledging these historical causes, missing opportunities for restorative framing that validates youth struggles and challenges systems that created those struggles. However, training can be restorative if it includes trauma healing, psychosocial support, and recognition of conflict impacts on learning, though no evidence in the data suggests CSOs take this comprehensive approach.

CSO Type 3: Community-Embedded Outreach Organizations

CSOs of this type have strong local presence and social legitimacy, positioned to reach marginalized populations (women, minority clans, geographically isolated youth). Essential for the 39% who received no training. Community-embedded CSOs address the most severe distributive injustices by reaching populations excluded by other actors. They address, more specifically, the 39% who received no training, women facing family/cultural barriers and highly marginalized farmers. However, limited financial and institutional capacity restricts their scale and sustainability, creating a distributive perversity where CSOs best positioned to serve marginalized populations have fewest resources while donor funding flows to larger, formalized, urban-based CSOs that reach already-accessible youth. The finding that access without resources is insufficient to overcome entrenched exclusion applies doubly—CSOs have access to marginalized youth but lack resources to provide meaningful support, while well-resourced CSOs lack access to those who need help most.

These types of CSOs do not address procedural injustices, as they do not have procedural power in policy spaces. More specifically, they don't participate in coordination meetings, as they are based in Mogadishu, and they lack English-language proposal skills for donor engagement. Finally, they have no seats in sector governance structures, but they possess the most legitimate procedural authority at community level, trusted by populations who distrust the

government, large NGOs, and private companies. This creates potential for localized procedural justice: these CSOs can facilitate authentic community voice, clan-inclusive decision-making, and women's participation in ways impossible for external actors, with the recommendation to provide direct operating grants to expand outreach acknowledging their procedural legitimacy deserves resourcing even without formal procedural power.

With regards to recognition justice, these CSOs recognize and validate marginalized identities that other actors ignore, operating in local languages, respecting cultural practices, and framing interventions using community concepts. However, they face recognition deficits themselves, with this recognition hierarchy meaning organizations most culturally competent to address injustice are least valued by power holders.

Finally, these types of CSOs have a strong recognition justice element, as they maintain connection to historical memory, positioning them for restorative work if resourced appropriately: truth-telling, community reconciliation, collective healing. The study finding that 82% of injustices persist includes historical grievances these CSOs hear but cannot address due to resource constraints. They witness intergenerational trauma, land disputes, and ethnic tensions but lack mandate or capacity for transitional justice programming.

CSO Type 4: Policy- And Advocacy Oriented Organizations

The focus of these organizations is on monitoring injustices, engaging in policy dialogue, and shaping narratives around food system reform. Validate farmer experiences through the 82% observation of systemic injustices. Policy-advocacy CSOs don't directly distribute resources but shape systems determining distribution, documenting that 82% of injustices persist, 62% of farmers experience inequality, and 80% are policy-unaware to create evidence basis for distributive reform, though their limited engagement in service delivery means they observe injustice without alleviating immediate suffering—a tension between structural change and urgent needs. The divergence between company self-assessments (52% claim equity) and farmer reality (62% experience inequality) was likely documented by advocacy CSOs, providing an empirical foundation for challenging corporate narratives. This distributive contribution of exposing false claims and validating farmer testimony is essential though indirect.

This type of CSOs tries to introduce farmers’ voices in the policy dialogue but faces limited policy leverage and implementation gaps but farmers aware of policies judge them universally ineffective. This suggests CSO advocacy hasn't translated to meaningful change. This procedural limitation reflects power dynamics: CSOs can talk to policymakers but can't compel action, while companies shape policies through economic leverage and donors require conditions through funding, with CSO advocacy relying on moral persuasion without enforcement mechanisms. The recommendation to link advocacy more directly to farmer feedback and accountability mechanisms acknowledges current advocacy models speak about farmers.

These CSOs support recognition by framing farmer experiences as injustice, with the language of systemic injustice (82% of CSOs use) legitimizing farmer grievances as structural problems

requiring policy solutions, not charity or pity. However, advocacy CSOs can also impose external frameworks (human rights, gender equality, environmental justice) that, while valuable, may not resonate with farmers' self-understanding, with the study's finding that farmers prioritize practical barriers (capital 71.88%, training 80%) over abstract concepts suggesting advocacy framing may not align with farmer priorities, creating recognition gaps. Finally, CSOs under this type have strong participation in helping restore historical and ongoing injustices, creating records for potential future accountability, with the 82% systemic injustice observation including conflict legacies, land seizures, ethnic discrimination. However, advocacy without implementation mechanisms means CSOs identify problems without solving them, with the study noting policy impact limited by implementation gaps. Even when advocacy succeeds in policy change, weak state capacity and political will prevent enforcement, leaving documented injustices unaddressed.

4.3 YOUNG FARMER TYPOLOGIES

Young Farmer Type 1: High Resource, Market- Oriented Farmers

The main characteristics within this type of farmers is that they have access to land, tools, training, and market linkages combined with strong entrepreneurial orientation and that they are a very small portion of the Somali young farmers. They are disproportionately located in higher-maturity ecosystems and possess greater digital familiarity. High-resource farmers are relatively advantaged within a deeply unjust system, embodying the 92.19% who believe agriculture offers sustainable opportunities where resources and enabling conditions exist, but even they remain constrained by capital scarcity and policy failure, demonstrating that even empowered youth face structural limits to scaling. This group likely benefits disproportionately from limited opportunities. This means their advancement may occur at less advantaged young farmers' expense, and capital remaining a binding constraint even for empowered youth means they cannot lift themselves into sustainable prosperity through merit alone, hitting ceilings created by systemic barriers.

With regards to procedural justice, type 1 farmers possess more agency but lack institutional channels for voice. The aspiration-exclusion paradox whereby agency exists without corresponding institutional support applies in this case, as they can make farm decisions but cannot influence policies, market structures, or value chains governing agriculture. The recommendation to integrate these farmers into policy advisory and mentoring roles acknowledges their procedural exclusion despite capability if empowered youth lack voice, marginalized youth have no chance at procedural inclusion. This type of farmers has validation that is often unavailable to other types, because they are seen as successful, entrepreneurial, and modern farmers by CSOs, companies, and government, with their digital adoption and market orientation aligning with development narratives, conferring recognition and legitimacy. However, even this recognition is conditional and limited, with the study noting they still face constraints and aren't integrated into policy advisory roles, suggesting their success is celebrated but not empowered. Finally, there was insufficient data to understand whether high-resource farmers are beneficiaries or victims of historical injustice as some may come from

families who maintained land during conflict, while others may be recent returnees who rebuilt despite displacement.

Young Farmer Type 2: Moderately Resourced, Aspirational Farmers

This is the largest group of young farmers found and their characteristics are that they possess some land or tools, and have received limited training. Motivated to expand but constrained by insufficient capital, weak market access, limited bargaining power. Farmers under this type embody the interest-participation gap. As part of that, 73% are business-oriented, but structural barriers, such as capital and skills, which were found in more than 65% of the respondents, prevent translating interest into participation, seeing opportunities (92% believe agriculture is sustainable) but unable to access them, creating frustration and potential for disengagement. The paradox that 60% of young farmers accessed training but 80% still consider training as their top priority reflects their distributive reality. More specifically, they received some support but not enough to overcome barriers. In this space, they are not marginalized enough for humanitarian attention, but not successful enough for investment interest, falling through cracks of both aid and market systems. Their partial digital familiarity (social media but not specialized software) mirrors their partial inclusion in food systems, as they participate peripherally, accessing consumer roles (social media users) but not producer roles (agricultural platform operators).

On the procedural side, they also face major injustices, as there are 80% policy unawareness and universal policy ineffectiveness judgments, engaging enough with agriculture to be affected by policies but lacking channels to shape them, with consultation, when it occurs, being tokenistic. Their position as upwardly mobile may make them attractive targets for CSO programs without corresponding increase in voice. They are subjects of programs, not co-designers.

With regards to recognition injustice, these farmers are validated as having potential but simultaneously dismissed as not quite there yet, with recognition always conditional and future-oriented, their aspirations acknowledged but achievements downplayed. The framing of interest-participation gap itself reflects recognition complexity. It validates that they want to participate while highlighting they can't, though without careful communication, this framing risks blaming them for the gap.

Finally, from a restorative justice point of view, data collected could not help identify how many moderately resourced farmers are from conflict-affected backgrounds, though in Somalia, most youth experienced war impacts either directly (displacement, family loss) or indirectly (disrupted education, destroyed infrastructure), with their moderate resource level possibly representing partial recovery from conflict-era losses without reaching pre-war stability or full restoration of family assets. The recommendation to support asset accumulation through small loans, tool subsidies, and advanced business training approaches restorative justice through enabling forward movement but doesn't explicitly address historical harms or losses requiring acknowledgment and compensation.

Young Farmer Type 3: Low-Resource, Subtence-Oriented Farmers

This type of young farmers focuses on household survival, not growth or accumulation. These farmers have limited training and tools, but they also lack access to markets. Most of them are found in the climate-vulnerable regions of Somalia. Farmers under this type experience severe distributive injustice. They farm but don't benefit from agriculture, with the finding that they are vulnerable to capital scarcity, climate, and security shocks meaning they absorb risks without corresponding rewards. This group is defined by subsistence orientation driven by survival constraints, with limited ability to invest, scale, or engage with markets despite broader optimism about agriculture.

From a procedural justice point of view, this type of young farmers is practically invisible, with the 80% policy unawareness likely concentrating here, they farm too remotely, work too constantly, possess too little literacy or language skills to engage in policy discussions. Even if aware, they judge policies universally ineffective because policies designed for commercial farmers (credit schemes requiring collateral, input subsidies requiring cash co-pay, market access programs assuming transport capacity) exclude subsistence farmers by design. No CSO or company consults them because they are hard to reach and don't match program targets (CSOs want success stories, companies want productive suppliers). Their exclusion is structural, not malicious neglect but systemic blindness to populations that don't fit programmatic categories.

With regards to recognition justice, subsistence farmers face recognition erasure. They are farming but not considered real farmers, with development discourse referencing smallholders as if uniform, erasing distinctions between market-integrated smallholders (Type 2) and subsistence farmers (Type 3) with fundamentally different realities. Their traditional practices (varieties, methods, timing) developed over generations contain sophisticated environmental knowledge and climate adaptation strategies, but are dismissed as lacking training implying deficit, with the recommendation to provide accessible extension presuming they need teaching, not that extension should learn from them.

Finally, the restorative justice dimension in this type is found in the extent that, for this group, civil war destroyed capital assets, disrupted markets, displaced communities, and climate shocks eliminate savings and create debt cycles, with them farming on degraded land from war-era deforestation, militia-controlled charcoal production, with destroyed infrastructure, using lost knowledge. The study's description of them as vulnerable to climate, security, and market shocks without connecting to historical causes obscures that these shocks aren't random bad luck but ongoing consequences of unaddressed conflict and environmental legacies.

Young Farmer Type 4: Highly Marginalized and Excluded Farmers

This type of young farmers has several overlapping disadvantages, namely landlessness, lack of training, gendered cultural barriers, displacement, insecurity. Many are young women or minority/displaced community members. More than 59% of women reported family or cultural constraints in engaging with agriculture. With regards to distributive justice,highly marginalized farmers experience distributive injustice for several reasons. More specifically, they cannot access the majority of firms that are recruiting due to lack of education, geographical isolation or

clan connections. With regards to education, the 39% receiving no training, 72% of them face severe capital scarcity and they experience the inequality most acutely, with 62% of them reporting discrimination in hiring, land access, credit, markets. The finding that green jobs and entrepreneurship are unattainable without first addressing recognition, distributive, and restorative injustices means all previous policy recommendations assuming basic capabilities (literacy, mobility, security, clan acceptance) don't apply here. They need foundational support before market-oriented interventions become relevant, with women facing 59.38% barriers unable to attend training even if offered, take jobs even if hired, own land even if purchased, or travel to markets even if buyers exist. Their exclusion operates through private patriarchy beyond policy reach, requiring social transformation alongside economic programs.

With regards to procedural justice, highly marginalized farmers are procedurally absent; not just excluded from existing processes but entirely outside systems where procedural rights could be exercised, with women in patriarchal households having no voice in family farming decisions, IDPs in camps lacking representation in local governance, and minorities having no clan elders in traditional decision-making structures. Policy awareness would not matter because policies are not designed for their contexts. Procedural inclusion requires first establishing procedural capacity: identity documents, legal recognition, physical safety and social legitimacy.

With regards to recognition justice, these farmers face recognition erasure at every level: as women, they are invisible in agricultural statistics, as IDPs, they are temporary, despite decades in camps, with no legitimate claims on land or resources; as minorities, they face ethnic stigma denying cultural identity and human dignity. The findings of the study show that there is a gap in intersectional recognition justice. For example, a young female farmer that faced internal displacement faces gender dismissal, ethnic erasure and displacement denial simultaneously, with the study's own framing risking reproducing deficit recognition as these actors face different issues than other marginalized groups and should be treated differently.

Finally, with regards to restorative justice, this group concentrates on Somalia's unaddressed historical injustices. Many women are war widows or gender-based violence (GBV) survivors without compensation, psychological support, or social rehabilitation; IDPs are displaced from land seized during ethnic cleansing (1991-1992 specifically) but portrayed as environmental migrants or economic refugees denying conflict causation; minorities experienced generations of marginalization pre-war, then targeted violence during war, then post-war exclusion from reconstruction—triple historical injustice. The study's observation that inclusion requires foundational support before market-oriented or sustainability-focused interventions can be effective implies restorative sequencing. This means that first we should address historical harms and current discrimination and only then economic inclusion becomes possible. However, even restorative framing can be insufficient. For example, for ethnic minorities, individual reparations don't address systemic caste hierarchies requiring constitutional reform and cultural transformation while for women, land grants don't overcome patriarchal control of household resources, with restorative justice needing to engage structural systems, not just individual circumstances.

5. IMPLICATIONS AND LIMITATIONS

5.1. Cross-Stakeholder Justice Dynamics and Youth Employment Barriers

Somalia's food systems generate youth employment opportunities primarily through three mechanisms. These are formal company recruitment, mostly in large agri-food enterprises, CSO-facilitated training programs, mostly for self-employed farmers or the ones going for medium-sized enterprise employment that does not guarantee job placement afterwards, and informal trading networks. However, structural barriers prevent these from translating into equitable outcomes, with the validated 10 percentage point divergence between company equity claims (52%) and farmer experience (62% inequality) revealing how distributive injustice operates through interactions between stakeholder types. More specifically, it reveals how large enterprises' geographic concentration and clan-based hiring pipelines, training-focused CSOs' weak employment linkages, and the absence of any farmer voice mechanism in company decision-making collectively produce inequality. This inequality manifests not as the outcome of any single actor's deliberate exclusion but as an emergent property of a system in which each stakeholder's rational responses to their own constraints reproduce disadvantages for those with least power to challenge it.

Large formal enterprises capture disproportionate policy influence and infrastructure investments concentrated in Mogadishu and Puntland, hiring primarily from high-resource farmers and moderately resourced farmers while excluding low-resource subsistence farmers and highly marginalized farmers who cannot meet education requirements, clan connections, or geographic mobility demands.

Procedurally, this exclusion perpetuates because young farmers lack institutional voice. More precisely, 80% are policy-unaware, while the few ones that are aware judge policies as ineffective. At the same time, almost no participatory mechanisms exist for farmer input into company decisions, CSO curriculum design, or government program priorities. Multi-functional CSOs attempt bridging farmer-policy gaps but remain constrained by donor dependence that makes them answer to funder priorities, while community-embedded CSOs possessing legitimate local authority to reach marginalized populations receive least resources. This, in the end, creates distributive perversity where organizations best positioned to serve excluded youth have fewest means. Recognition patterns compound these barriers: training-focused CSOs frame youth as needing capacity building because they lack skills, dismissing that 73% are business-oriented with entrepreneurial motivation and all young farmers possess sophisticated survival capabilities navigating Somalia's security, clan and market complexities. This deficit framing justifies why 80% still prioritize training despite 60% coverage, perpetuating the paradox where skills provision substitutes for addressing actual barriers.

Restorative justice analysis reveals that current employment barriers stem directly from unaddressed conflict legacies structuring which youth access opportunities. In detail, subsistence farmers farm on war-degraded land with destroyed infrastructure. Their vulnerability to climate, security, and market shocks is the ongoing consequence of civil war resource extraction, which is now blamed on these farmers themselves. At the same time, highly

marginalized farmers concentrate on historical injustices , as many women are war widows or GBV survivors without remediation, IDPs displaced during 1991-1992 ethnic cleansing, but some of them portrayed as environmental migrants denying conflict causation, and minorities experience multiple injustice. These historical harms interact with current power dynamics. Firms operating under high operational constraints (Type 4 companies, experiencing 68-72% security disruptions in Jubaland/Southwest State) face distributive injustice themselves but perpetuate it by operating in survival mode without participatory structures or transparency, creating authoritarianism born of crisis that excludes the very marginalized youth (Types 3-4 farmers) concentrated in these regions, while firms with limited equity integration demonstrate recognition contradiction. More precisely, they recruit youth as capable workers but not as autonomous agents deserving decision-making power, fair compensation, or advancement pathways. In this way, they extract labor while not taking labor rights into consideration, having at the end transactional fairness but not addressing issues such as power imbalances.

Environmental sustainability faces issues because justice failures result in a behavior by all stakeholder groups that eventually degrades the environment, regardless of individual intentions or organizational mandates. For subsistence farmers, the absence of distributive justice, namely buyers capturing value from successful harvests while farmers absorb losses from failures, eliminates the economic margin needed for sustainable land management. When survival depends on this season's yield, farmers have no rational basis for investing in regenerative practices, fallow cycles, or water conservation measures that carry short-term costs for long-term environmental benefit. The result is accelerated cultivation of already-degraded land, increased charcoal production as an emergency income source, and depletion of water resources, because the value chain structure leaves them bearing all production risk without corresponding reward.

For companies operating under compounded capital, security, and climate deficits, the absence of risk mitigation mechanisms forces a similar logic. Without insurance against conflict disruption or climate shocks, firms cannot absorb the short-term costs of fair pricing, secure contracts, or environmental compliance. Below-market prices paid to farmer-suppliers are not simply exploitative choices but survival responses to a financing environment where operating margins are already razor-thin and external shocks unpredictable. The environmental consequence is that value chains default to extractive, as neither firms nor their farmer-suppliers have the financial resilience to absorb the costs of sustainable production. For policy-advocacy CSOs, the implementation gap between documented injustice and enforced remedy creates a different but equally damaging dynamic. When 82% of CSOs observe systemic injustices but lack mechanisms to compel accountability, the evidence base for environmental and employment reform accumulates without producing behavioral change. Youth employment and environmental sustainability goals therefore remain aspirational statements in policy documents, with the gap between rhetoric and practice itself eroding the legitimacy of future intervention efforts among the young farmers these programs claim to serve. The interaction pattern across all stakeholder types reveals that without first addressing procedural exclusion (establishing farmer voice with decision authority), recognition erasure (valuing existing capabilities and traditional knowledge), and restorative gaps (remediating conflict legacies and power concentrations), distributive interventions will reproduce historical inequalities where

high-resource farmers capture scarce opportunities while Types 3-4 farmers remain structurally excluded regardless of program proliferation.

Table 5 synthesizes the study's core justice findings across the four dimensions, identifying the stakeholder types most acutely affected by each form of injustice and the priority interventions each dimension requires, providing an analytical bridge between the typology findings and the differentiated policy recommendations that follow.

Table 5. Core justice findings

Justice Dimension	Key Finding 1	Key Finding 2	Most Affected Stakeholder Types	Priority Intervention
Distributive	More than half of companies claim equitable relationships while the majority of farmers experience opportunity inequality.	Capital scarcity is the main barrier across groups, representing cross-stakeholder convergence but masking heterogeneity in how it manifests across farmer types.	Limited equity integration of companies, subsistence and highly marginalized farmers, CSO training providers with weak employment linkages.	Mandatory third-party equity audits with farmer-elected monitors for companies claiming fairness, diaspora-financed cooperatives with peer-guaranteed microloans bypassing domestic power structures, direct multi-year core funding for community-embedded CSOs
Procedural	The vast majority of young farmers are unaware of agricultural policies, and those who are aware judge them universally ineffective.	Community-embedd ed CSOs possess the most legitimate local authority to reach marginalized populations but have the least resources and no access to policy spaces, creating a distributive perversity in the CSO landscape.	Excluded farmers from policy channels, low-resource CSOs, MSMEs in agri-food industry outside of Mogadishu.	Institutionalize young farmer participation in policy platforms through CSO-facilitated mechanisms, multi-year core funding enabling CSOs to advocate independently of donor priorities, integrate high-constraint firms into

				humanitarian-development programming.
Recognition	Deficit framing of youth as unskilled and, in some cases, unable to learn, erases that the majority of them are business-oriented with entrepreneurial motivation and that all young farmers possess sophisticated adaptive capabilities developed navigating Somalia's security, clan, and market realities.	Small informal enterprises are dismissed as inefficient petty traders despite providing essential market access in insecure regions where large firms do not operate, reproducing recognition hierarchies that disadvantage both firms and their farmer-suppliers.	Subsistence and marginalized farmers, small informal enterprises, training-focused CSOs, community-based CSOs	Reframe policy language from 'vulnerable beneficiaries' to 'resilient survivors possessing adaptive knowledge', asset-based program design building on existing traditional knowledge and entrepreneurial motivation, direct funding for community-embedded CSOs dismissed by donors as insufficiently professionalized
Restorative	Current youth employment barriers are ongoing consequences of the 1991–1992 civil war, and conflict-induced displacement, but contemporary programming treats them as neutral starting points.	Distributive programs systematically precede restorative sequencing, channeling green job opportunities toward already-advantaged actors (majority clan members, urban youth, educated men) while reproducing exclusion of women, IDPs, and minorities under the language of inclusion.	Marginalized farmers, companies operating in regions where land seizures and militia control remain unaddressed, farmers with degraded land and destroyed infrastructure	Mobile land documentation for IDP returnees as precondition for market interventions, psychosocial support for war widows and GBV survivors before productivity-focused programs, affirmative procurement mechanisms for minority clan cooperatives, address historical harms before distributive programs to avoid reproducing historical inequalities

5.2 Policy Implications from Justice Analysis

Addressing youth employment barriers requires type-differentiated policy interventions targeting specific justice failures. Firms with limited equity integration need mandatory third-party equity audits with farmer-elected monitors as a condition of MAI registration renewal under Somalia's National Investment Promotion Act (2023), shifting evaluation authority from power holders to affected populations. Direct multi-year core funding (e.g., minimum $50,000 annually) channeled through the SATG's coordination architecture bypasses large intermediaries and recognizes their procedural legitimacy. Both interventions are immediately actionable within existing institutional frameworks and Puntland's relatively stronger regulatory environment makes it the natural pilot state before national rollout through the Federal Government's National Transformation Plan (2025-2029).

Validation workshop engagement with the Federal Ministry of Agriculture and Irrigation produced three actionable policy reinforcements that strengthen the feasibility of the above recommendations. First, the ministry committed to multi-channel awareness campaigns targeting the finding that there is a lack of policy awareness. The Ministry committed to use social media and community outreach, which provides a low-cost procedural justice mechanism that can be implemented without new legislation. Second, the Somalia Food System Resilience Project, represents an existing financing vehicle through which the cooperative lending, post-harvest storage, and green job creation recommendations in Table 5 can be channeled. Program implementers should formally integrate the typology-differentiated targeting logic developed in this study into the project's beneficiary selection and monitoring frameworks. Third, the agricultural research institute addresses the recognition justice gap identified in Section 5.1, as it provides an institutional home for validating traditional and informal agricultural knowledge, creating a durable mechanism through which subsistence and marginalized farmer types can be recognized as knowledge contributors. State-level recommendations in Table 5 should be shared with the respective Federal Member State agricultural ministries through the Ministry's coordination channels.

Subsistence and marginalized farmers require foundational justice sequencing before market interventions. Restorative measures must precede distributive programs. Piloting community-based land documentation units in Jubaland and Southwest State, modeled on Southwest State's urban land legislation (2022) which established institutional mandates for urban land governance and tenant protection, and building on grassroots mediation committees already operational in Kismayo would provide the foundational security without which capital access schemes, green job programs, and agricultural training initiatives remain structurally inaccessible to the most marginalized farmer types. Finally, international aid agencies such as FAO and USAID should deliberately purchase a share of agri-food products from minority clans to ensure that they participate in the market. Recognition justice requires reframing policy language from vulnerable beneficiaries to resilient survivors possessing adaptive knowledge. This reframing is not merely semantic. Deficit-based language shapes program design by positioning youth as passive recipients requiring external intervention. The land documentation pilot requires prior legal analysis of how community-documented tenure interacts with existing customary law to avoid creating parallel systems that undermine, while affirmative procurement

percentage thresholds require market analysis to ensure they do not inadvertently exclude poor majority-clan youth. Both recommendations are therefore contingent on a 12-18 month feasibility assessment before full implementation.

SMEs in Jubaland and Southwest State cannot drive green jobs without risk mitigation, which is a distributive injustice these firms face before they can meaningfully address the injustices they perpetuate. Integrating them into USAID's GEEL program through a conflict-insurance fund that compensates firms for verified losses from Al-Shabaab disruptions and climate shocks, structured similarly to the agricultural insurance pilots already operational in Kenya and Ethiopia, would remove the survival pressure that forces these firms into exploitative pricing and opaque employment practices. Moderately resourced young farmers face the interest-participation gap , which the UNDP-Hormuud Salaam Foundation partnership launched in November 2025 begins to address through microloans via Salaam Somali Bank, but only manages to reach urban SMEs. Extending this existing infrastructure to peer-guaranteed cooperative lending among farmer communities , where groups of 10-15 young farmers from the same community pool a small initial savings amount through EVC Plus mobile transfers, use the collective fund as collateral for Salaam Somali Bank microloans, and hold weekly accountability meetings to track repayments, operationalizes procedural justice by redistributing decision-making authority over capital allocation away from clan-seniority structures. The conflict-insurance mechanism requires security sector analysis in partnership with UNSOM to assess whether compensation payouts in Al-Shabaab-affected corridors create militia taxation risks. The cooperative lending model, by contrast, is immediately replicable by extending the UNDP-Hormuud Salaam Foundation's existing 18-month program infrastructure to rural areas. Alongside cases that apply to all or multiple states, validation with policymakers resulted in state-specific recommendations proposed which can be viewed in Table 6.

Table 6. State-specific recommendations

State	Agri-Food Sector Context	State-Level Policy Proposals	Feasibility & Requirements	Pathway to Scalability
Puntland	Livestock exports, fisheries. State with highest regulatory capacity among federal member states	Youth apprenticeship registry mandating minimum youth employment among registered exporters, youth operated solar-powered fisheries cold chain cooperative	Youth apprenticeship registry immediately actionable, cold supply chain cooperatives require capital investment	Apprenticeship registry model replicable at least in Jubaland once security conditions permit. Fisheries cooperative serves as proof-of-concept for blue economy green jobs nationally
Jubaland	Riverine agriculture in Jubba valley. Cross-border trade with Kenya/Ethiopia. High insecurity, majority MSMEs	Agroforestry restoration along Juba riverbanks creates green jobs, addresses conflict-era deforestation	Agroforestry feasible via Green Climate Fund Ugbaad project already operational in Somalia. Border trade cooperative requires cross-border regulatory coordination with Kenya	Agroforestry model replicable across Hirshabelle Shabelle valley. Border trade cooperative model scalable to Galmudug-Ethiopia corridor

		Youth border trade cooperative formalises cross-border trade		
Southwest State	Sesame and banana export value chains. Major agribusiness exporters. Significant Jareer farming communities but minority clan exclusion	Solar sesame processing cooperative for young women in Baidoa, linked to Turkish cooperation mechanized farming training center infrastructure	Sesame cooperative feasible upon capital-finding via existing Turkish cooperation infrastructure, but requires gende- sensitive access design as the region has the highest family/cultural barriers	Women-led processing cooperative serves as replication model for Hirshabelle and Galmudug minority communities
Galmudug	Pastoral economy, climate-vulnerable rangelands, nomadic populations; very limited formal education, weak institutional capacity, requires partner-channeled interventions	Climate-adaptive herding certification scheme, linked to Green Climate Fund Ugbaad project	Ministries lack staff and budget for implementation, all interventions must be channeled through FAO, UNDP, or NRC already operating in the region. Herding certification feasible if Green Climate Fund Ugbaad project extends mandate, requires feasibility assessment of Xeer rangeland governance compatibility	Herding certification model, if piloted successfully in Galmudug, replicable across all pastoral zones in Puntland and Hirshabelle and beyond
Hirshabelle	Sorghum and maize production (Shabelle valley), 30-40% post-harvest losses due to absent storage infrastructure, moderate insecurity, displaced populations	Post-harvest storage infrastructure investment. Solar-powered storage in Shabelle valley sorghum/maize zones. Youth-led grain aggregation cooperative, supported by WFP purchase-for-progre ss model; guaranteed offtake reduces market risk for Type 2 farmers.	Post-harvest storage requires infrastructure needs assessment before the WFP purchase-for-progress model can be designed. Grain aggregation cooperative immediately actionable once minimum storage exists, WFP purchase-for-progress has operational precedent in Somalia	Storage infrastructure model, once validated in Shabelle valley, proposed as template for post-harvest investment across all riverine agricultural zones in Somalia. WFP purchase-for-progress grain aggregation model scalable to Southwest State sesame and banana value chains with design adaptations

The policy recommendations developed in this study carry replicability potential beyond Somalia's specific context. The typological approach is directly transferable to other federal or decentralized governance contexts where production systems, stakeholder capacities, and justice failures vary across subnational units. Federal states such as Ethiopia, Nigeria, and the

Democratic Republic of Congo share Somalia's combination of significant internal heterogeneity across regions, divergent ecosystem maturity levels, and the concentration of marginalized youth populations in precisely the areas least reached by centrally designed programs. The justice sequencing argument carries particular relevance across Sub-Saharan Africa, where turmoil in the Sahel, Great Lakes region, Horn of Africa, and Sudan has generated some of the world's largest IDP populations while simultaneously disrupting the agri-food systems on which displaced communities depend for livelihoods. Conflict-sensitive program design principles embedded in this study's recommendations are directly applicable in any fragile or conflict-affected context where conventional just transition frameworks, developed primarily for stable governance environments in the Global North, fail to account for the foundational preconditions that equitable green job creation requires. Somalia's lesson is ultimately a lesson for the continent: green economy transitions that do not explicitly sequence restorative justice before distributive programming will systematically reproduce the exclusions they claim to address, regardless of how well-intentioned the programs or how substantial the investment.

5.3 Limitations

Several limitations affect the scope and generalizability of this study. Sample sizes are appropriate for Somalia’s fragile research context but remain modest and may not capture the full diversity of each group. Sampling methods may over-represent more visible, connected, or formal actors while under-representing micro-enterprises, informal traders, unregistered community-based organizations, and youth who exited or never entered agriculture. Geographic imbalances likely reflect both access constraints and underlying economic structures, such as Puntland’s greater reliance on pastoralism. Reliance on self-reported, cross-sectional data introduces social desirability, recall, and seasonal biases, while the study’s design limits causal inference and captures stakeholder perceptions at a single point in time.

Additional limitations relate to interpretation and scope. Triangulation across stakeholders strengthens validity but does not guarantee objective truth, as shared narratives or donor-driven discourses may shape perceptions across groups, and researcher positionality may influence analytical judgments.

5.4 Conclusion

This study examined youth employment barriers in Somalia's agri-food systems through four justice dimensions across three stakeholder groups. The divergence between company equity claims and farmer experience of inequality reveals whose narratives dominate policy discourse, while the aspiration-exclusion paradox of farmers and policy awareness demonstrates procedural injustice where youth possess agency without institutional channels. Capital scarcity emerged as the sole point of cross-stakeholder convergence, but masks heterogeneity requiring differentiation. The typologies explain why past programs failed by treating structurally distinct actors homogeneously, and establish the study's central contribution to just transition theory. In fragile contexts, restorative justice must precede distributive programs, or market interventions reproduce historical inequalities under inclusion rhetoric. These findings and typologies were validated through a stakeholder workshop attended by representatives of the Federal Ministry of

Agriculture and Irrigation, with the ministry formally endorsing the study's recommendations and identifying the Somalia Food System Resilience Project and the forthcoming Agricultural Research Institute as institutional vehicles for their implementation.

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