

Advancing Emergency Operations in Sri Lanka through the Triple Nexus Framework

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ABSTRACT

This study examines the Sri Lanka Red Cross Society's (SLRCS) response to the economic crisis through the triple nexus framework, which integrates humanitarian aid, development, and peacebuilding. The objective is to assess how the SLRCS interventions addressed immediate needs and long-term recovery in a complex emergency. Key findings show that unconditional cash transfers effectively supported urgent needs like food security and laid the foundation for economic recovery. However, conditional cash transfers faced challenges due to external factors such as poor agricultural inputs, highlighting the need for context-sensitive approaches. The study also identified gaps in achieving self-sufficiency, as reliance on external financial aid limited sustainability. Improved coordination among SLRCS, government entities, and NGOs was essential but requires better strategic alignment and feedback systems. The study contributes to the triple nexus literature by offering practical insights on operationalizing this framework in Sri Lanka. It addresses research gaps related to robust metrics, adaptive learning, and stakeholder engagement, emphasizing the importance of culturally sensitive and locally driven approaches. Implications for future research include the development of more comprehensive monitoring systems, policies promoting self-sufficiency, and adaptive learning. The study also advocates for scaling and replicating successful triple nexus strategies in other crisis settings.

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The economic turmoil that engulfed Sri Lanka in early 2022 was triggered by a confluence of internal vulnerabilities and external shocks and precipitated an unprecedented humanitarian crisis. The International Federation of Red Cross and Red Crescent Societies (IFRC), in collaboration with the Sri Lanka Red Cross Society (SLRCS), launched a multifaceted emergency operation under an Emergency Appeal to address the acute humanitarian needs arising from severe shortages of essentials, rampant inflation, and social unrest. This research paper evaluates the synergies within the triple nexus of humanitarian action, development, and peacebuilding in the context of the SLRCS interventions during Sri Lanka's complex emergency.

This evaluation seeks to understand if and how the SLRCS humanitarian interventions facilitated synergies within the triple nexus framework. The study delves into the effectiveness of these interventions in addressing the

immediate and long-term needs of the affected populations and explores the broader implications for humanitarian action in complex emergencies.

Sri Lanka is a country that has faced its share of complex emergencies resulting from hazards, conflicts, and socioeconomic challenges, where the need for a cohesive and integrated approach to emergency operations is particularly acute. This context underscores the importance of the proposed research question that seeks to explore how the SLRCS can enhance the effectiveness of its operations in Sri Lanka through the application of a triple nexus approach.

The relevance of this question is multifold. Firstly, it recognizes the interconnected nature of humanitarian, development, and peacebuilding challenges in complex emergencies. In environments such as Sri Lanka, where the impacts of civil conflict linger and are compounded

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by recurrent hazards disasters and persistent developmental challenges, a siloed approach to emergency response is insufficient. The triple nexus approach offers a framework for holistically addressing these interconnected challenges, potentially leading to more sustainable and resilient outcomes for affected communities. Secondly, the question is important because it seeks to identify practical strategies for operationalizing the triple nexus within SLRCS's existing frameworks and operations. This is crucial for ensuring that the organization's vast resources and extensive network are leveraged in a manner that not only addresses immediate humanitarian needs but also contributes to long-term development and peacebuilding objectives. By doing so, the SLRCS can enhance its impact and support Sri Lanka's journey toward recovery, resilience, and stability.

Moreover, this study aligns with global calls for more integrated approaches to crisis response, as articulated in international frameworks such as the Agenda for Humanity and the Sustainable Development Goals (SDGs). The study contributes to the ongoing discourse on how national and international NGOs, international organizations, and inter-governmental organizations can adapt their strategies and operations to better meet the complex and evolving needs of the communities they serve.

Finally, by focusing on the SLRCS operations in Sri Lanka, the research provides an opportunity to explore an application of the proposed triple nexus analytical framework over a specific and contextually rich setting. Insights gained from this exploration can inform broader efforts to enhance the effectiveness of complex emergency operations in other regions facing similar challenges. This not only has the potential to improve the SLRCS and IFRC's operational effectiveness but also contributes to the broader humanitarian and development community's understanding of how to implement the triple nexus approach in practice.

The proposed research question is both relevant and significant as it addresses a critical gap in understanding how to effectively integrate humanitarian, development, and peacebuilding efforts in the context of complex emergencies. By focusing on the SLRCS's operations in Sri Lanka, this research aims to contribute valuable insights into a practical application of the triple nexus approach, with the potential to enhance the effectiveness and impact of emergency operations in Sri Lanka and beyond.

Research Question

How can the SLRCS's response to the protracted economic crisis in Sri Lanka be enhanced by aligning with the triple nexus framework, and what synergies can be identified through the application of the triple nexus analytical framework to its past and future interventions?

Table 1

Research Gaps

Research Gap	Description
Robust Metrics and Indicators	A significant gap exists between developing and applying metrics for measuring outcomes from a triple nexus perspective, including immediate relief, long-term development, and peacebuilding outcomes.
Long-Term Studies	A lack of longitudinal research tracking the effects of humanitarian operations over time exists for assessing the contributions to sustainable development and peace.
Coordination and Integration	Limited research is found on effective coordination and integration across the humanitarian, development, and peace sectors, including the mechanisms, challenges, and successes.
Contextual and Cultural Factors	Evaluations often overlook the importance of contextual and cultural factors in triple nexus interventions. More research is needed on designing and implementing context-sensitive operations.

Stakeholder Perspectives	Insufficient research is found on the perspectives and experiences of all stakeholders (local communities, governments, NGOs, international organizations). The need exists for more participatory methods.
Adaptive Learning and Feedback Loops	Research is lacking on the adaptive learning processes and feedback loops that can enhance real-time effectiveness. More studies are needed on evaluation-based continuous adaptation.
Barriers and Facilitators	The need exists for comprehensive research identifying the specific barriers and facilitators for achieving integrated triple nexus outcomes.
Policy and Institutional Frameworks	Research gaps exist in understanding how policy and institutional frameworks impact the evaluation and implementation of triple nexus approaches. Studies are needed on policy levers and reforms.
Scaling and Replication	Limited research is found on the conditions for scaling up or replicating successful triple nexus initiatives in different contexts.

Methodology

The methodology for evaluating the SLRCS's humanitarian operation in Sri Lanka utilizes a mixed-methods approach combining qualitative and quantitative data collection techniques. The purpose is to assess the operation's impact by focusing on relevance and outcomes within the triple nexus framework. The evaluation combines multiple data collection methods, including desktop reviews, field visits, key informant interviews (KIIs), focus group discussions (FGDs), surveys, and case studies. This mixed-methods approach ensures that the data capture diverse perspectives and are both representative and inclusive of the different geographic and marginalized groups.

The evaluation's sampling strategy targets the individuals and communities that have been affected by Sri Lanka's complex crisis, with a particular focus on the most vulnerable populations. To enhance representativeness, the sampling covers multiple provinces across urban and rural areas. The study integrates qualitative insights from the KIIs and FGDs using quantitative survey data. The qualitative data from the KIIs and FGDs aims to gather insights into the SLRCS interventions from the perspectives of the SLRCS branches, volunteers, and recipients. In contrast, the quantitative data from the survey is focused on identifying the changes in population needs and on assessing the potential impacts on the emergency response between 2022-2023.

Additionally, case studies were selected to analyze the specific intervention types that were implemented during the emergency response, thus allowing for a deeper exploration of both the perspectives of those involved and the evolving needs of the affected populations. The study focuses on the communities most affected by Sri Lanka's crises, integrating them as case studies to gain a deeper understanding of their unique challenges and needs. Recipient communities were selected based on criteria such as heightened vulnerability and geographic diversity, with the study covering such districts as Ampara, Badulla, Colombo, Galle, Kalutara, Kurunegala, Monaragala, Mullaitivu, Nuwara Eliya, Puttalam, and Vavuniya. These districts provide a representative sample, thus ensuring an inclusive and comprehensive assessment of the varied impacts of Sri Lanka's complex emergency. The studied interventions include livelihood programs, school meal initiatives, cash grants, and the distribution of essential supplies (e.g., napkins, first-aid kits, school bags). By examining these varied interventions, the study aims to address the needs of diverse populations across the country and to provide recommendations for effective, long-term recovery strategies.

Table 2

Data Collection Tools and Techniques

Type	Tools/Techniques	Purpose	Details
Qualitative Tools	KIIs (Key Informant Interviews), FGDs (Focus Group Discussions), Case Studies	To explore the experiences of the targeted populations, volunteers, and SLRCS staff.	Emphasis on capturing perspectives from marginalized groups; including gender-sensitive approaches for understanding the diverse needs. KIIs: Interviews were conducted with stakeholders (i.e., government officials, local community leaders, IFRC and SLRCS staff, and beneficiaries) to gain insights into the operation's execution, challenges, and impacts. FGDs: Discussions were organized with diverse groups affected by the crisis in order to understand their perceptions, experiences, and satisfaction with the humanitarian aid provided. Case Studies: Detailed case studies were undertaken in selected communities to document the specific success stories, challenges, and lessons learned from the intervention strategies used.
Quantitative Tools	Surveys	To assess the broader impact of the interventions.	Statistical data are provided on key outcomes (e.g., food security and health).
Field Observations	Visits to Intervention Sites	To gather firsthand data on the operational environment.	Detail is added to the evaluation that provides context for understanding the implementation of interventions.

Table 3

Overview of the SLRCS KIIs, FGDs, and Case Studies

Area	Organization	Branch	KII Branch	FGD Volunteers	FGD/KII Communities / Case Studies
Western	SLRCS	Colombo	X	X	Daily Workers
	SLRCS	Kalutara	X	X	Multipurpose Cash/Conditional Livelihood Cash
Northwestern	SLRCS	Puttalam	X	X	Floods Affected
	SLRCS	Kurunegala	X	X	Conditional Livelihood Cash/Food Security
Northern	SLRCS	Mullaitivu	X		

	SLRCS	Trin-comalee	X (online)		
Central	SLRCS	Vavuniya	X	X	Multipurpose Cash/Conditional Livelihood Cash
	SLRCS	Nuwara Eliya	X	X	School Feeding/Multipurpose Cash Estate Community
Mideastern	SLRCS	Badulla	X	X	Child Health Clinique/SAM
Southeastern	SLRCS	Monaragala	X	X	School Feeding
Southern	SLRCS	Galle	X (online)		

Table 4

Summary of KIIs and FGDs (number of interviewees)

Location	KII-Internal	KII-External	FGD-Branch	FGD-External	FGD-Community	KII-External	FGD-Community	Survey
Ampara	0	0	0	0	3	0	22	314
Badulla	0	0	11	0	0	0	0	0
Colombo	0	0	14	0	0	0	21	256
Gampaha	0	0	0	0	0	0	0	0
Jaffna	0	0	0	0	4	0	0	0
Kalutara	0	0	7	0	0	0	0	11
Kurunegala	0	0	8	0	0	0	0	12
Matara	0	0	0	0	0	0	28	0
Monaragala	0	1	7	0	0	0	14	0
Mullaitivu	0	0	13	0	0	0	0	152
Nuwara Eliya	0	0	18	4	0	0	20	151
Puttalam	0	0	15	0	0	0	8	305
Vavuniya	0	0	8	0	0	0	9	0
Regional	4	0	0	0	0	0	0	0
National	1	3	0	0	0	2	0	0
Total	5	4	101	4	9	94	116	1492

To enhance the robustness of this study and ensure the validity and reliability of findings, a triangulation strategy has been employed to cross-verify the data that were obtained from multiple sources. Data triangulation is critical in corroborating findings from diverse methodologies. This approach allows for a more comprehensive and nuanced understanding of the SLRCS's humanitarian interventions, especially in the context of the triple nexus. By integrating these triangulation methods, the study is able to provide a more rigorous and valid assessment of the SLRCS's humanitarian operations. This approach also aligns with the best practices in qualitative research (Flick, 2004), which emphasizes the importance of combining multiple data sources and methods to strengthen the credibility of findings. Data triangulation was achieved by cross-referencing interview data with focus group insights and secondary data from project reports to ensure that the conclusions that were drawn are consistent across multiple sources.

Table 5

Triangulation Strategy

Triangulation Strategy	Description
Methodological Triangulation	The use of multiple data collection methods, such as qualitative (KIIs, FGDs, case studies) and quantitative (surveys) techniques provides a well-rounded perspective on the research questions. This combination helps mitigate limitations, cross-verify data, and increase reliability.
Data Source Triangulation	Multiple sources of data were drawn from various geographic locations, participant backgrounds, and stakeholder levels. Perspectives from urban and rural populations, marginalized communities, and different stakeholders ensures inclusivity and a representation of diverse experiences.
Investigator Triangulation	Data collection and analysis involved multiple investigators with expertise in both qualitative and quantitative research. Having different researchers cross-check the interpretations reduces bias and ensures a comprehensive data analysis.
Theoretical Triangulation	Contribution analysis (CA) and process tracing (PT) were used to analyze causal links between interventions and outcomes. These tools offer different theoretical perspectives, thus providing a deeper understanding of the causal relationships within the triple nexus framework.

The study also implements strategies to mitigate potential biases in data collection and analysis, particularly concerning the perspectives of the volunteers and recipients. These biases (e.g., social desirability bias) can distort the accuracy of the findings if not properly addressed. Social desirability bias occurs when respondents provide answers they perceive as more socially acceptable rather than their true views (Nederhof, 1985). This also takes into account the possibility that recipients' responses may be influenced by their difficult circumstances and their hopes of receiving additional support. To counter this, the study utilized anonymized surveys and confidential interviews to encourage honest responses. Additionally, neutral questioning techniques such as indirect questioning and the use of vignettes were applied to minimize the pressure on respondents to conform to socially desirable responses. Interviews were also conducted confidentially to reduce social desirability bias, with the participants being assured that their responses would not affect their access to aid or result in additional aid.

Ethical protocols have been strictly followed to ensure informed consent and confidentiality for all participants. This aligns with the IFRC and SLRCS guidelines for ensuring that the research is respectful, inclusive, and transparent.

Theoretical Background

Causality Theory

Thilly's (1907) work on causality challenged the simplistic understanding of causality as mere temporal succession by also understanding how one event can be the basis or cause of another (Sellars, 1909). Thilly argued for a more nuanced approach that considers causality as a complex interplay of events where one is the basis for the other (Thilly, 1907). Applying Thilly's insights to triple nexus research involves a deeper analysis of cause-and-effect relationships within these interrelated areas. Recognizing the complex and non-linear causality at play in the triple nexus can lead to a more thorough understanding of how actions in one area can impact outcomes in another, thus informing more effective strategies and policies in these interconnected fields.

Causality analyses within nonlinear systems, particularly when applied to the triple nexus framework, reveal a complex interplay between causes and effects. In such systems, causes generate effects, but those effects in turn influence

the original causes, creating a feedback loop. A single effect may arise from multiple causes, each rooted in its historical context, and can itself become a cause for future outcomes. This interrelatedness is particularly significant in social sciences, where identifying the true causes of events is essential for understanding social phenomena and constructing frameworks that offer explanatory power (Marini et al., 1988).

Causal assessments can be used not only to explain the reasons behind specific events but also to predict future developments and inform strategic interventions. Knowledge of these causal relationships allows for better steering of outcomes, which is crucial in policy-making and program evaluation. The ability to foresee and influence future outcomes hinges on understanding both direct and indirect effects, with the latter often involving mediating factors that complicate the analysis.

Causal analyses in nonlinear systems move beyond static estimations of cause-and-effect relationships. These analyses acknowledge that beliefs, probabilities, and outcomes evolve over time, especially in response to external interventions or shifting conditions (Pearl, 2010). This dynamic approach enables a more accurate understanding of complex systems, allowing for better anticipation of change and more effective interventions across humanitarian, developmental, and peacebuilding efforts within the triple nexus framework.

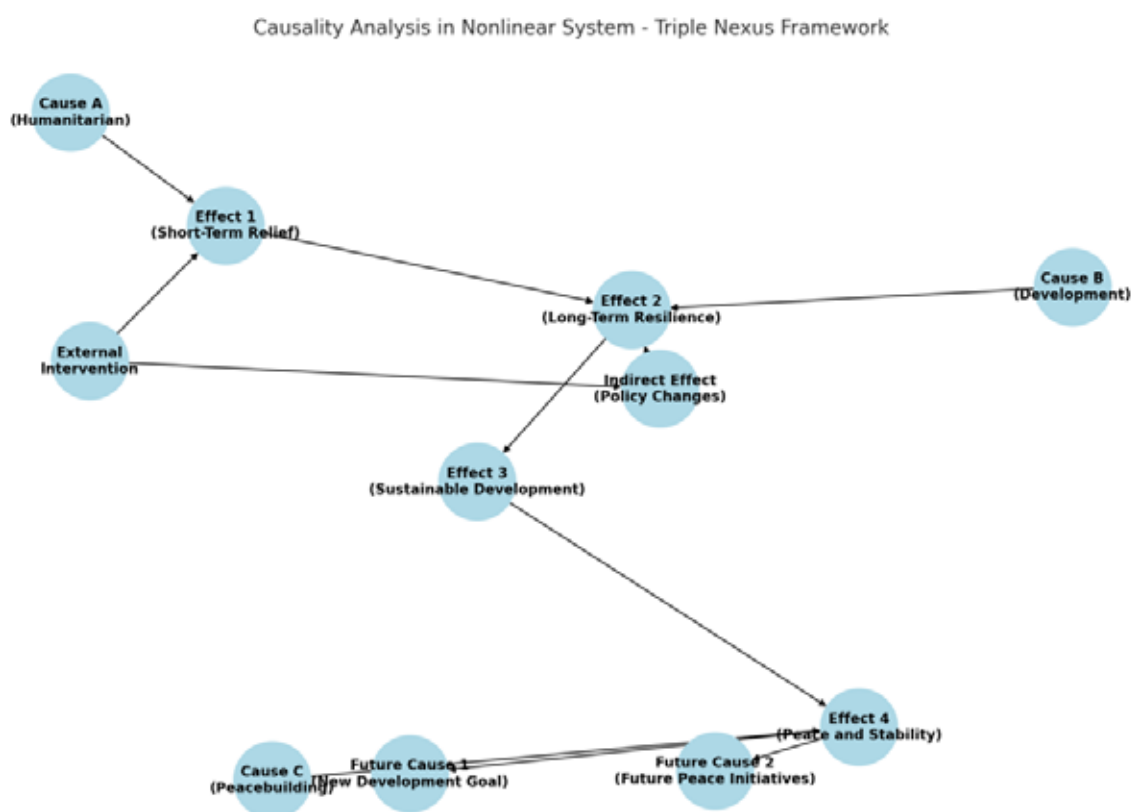


Figure 1. Causality analysis in a nonlinear system: The triple nexus framework.

The concept of causation is central to understanding the dynamics within the triple nexus framework, with its significance being long emphasized by scholars such as Hume. According to Hume (2000), causality can be understood as one object followed by another, with similar objects consistently producing similar outcomes. This relationship forms the foundation of the understanding of reality and existence, as causality allows one to make sense of the world beyond immediate sensory and memory experiences.

Causality plays a crucial role in building confidence in scientific inquiry, as it provides the basis for predicting and influencing future events. The ability to anticipate outcomes based on established causal relationships is the primary goal of scientific investigation, and human reflections and explorations are continually shaped by this fundamental connection (Ducasse, 1966; Hume, 2000). Understanding causality within the triple nexus framework is essential for ensuring that humanitarian, development, and peacebuilding efforts are aligned and effectively address the complex challenges in dynamic and interconnected systems.

Understanding causality in the triple nexus overall involves examining the relationships and effects among humanitarian, development, and peace efforts. The cause-and-effect dynamics involve investigating how various interventions (causes) lead to specific outcomes (effects), as well as the role of the external and internal factors that mediate these relationships. As for contextual and mediating factors, these include identifying the environmental, sociopolitical, and economic conditions that influence or alter the impact of these interventions. Feedback mechanisms acknowledge that actions within the triple nexus can create feedback loops, in which the outcome of one activity influences the input of another, leading to dynamic and evolving interactions.

Generative Causality: Contribution Analysis (CA) and Process Tracing (PT)

Contribution Analysis

First introduced by Mayne (2000), CA provides a structured, theory-based approach to evaluating program impacts, particularly within results-based management (RBM) frameworks (Wimbush et al., 2012). CA is essential for managers, researchers, and policymakers when assessing the effects of interventions, especially in contexts where experimental designs are impractical. This approach verifies a program's theory of change while considering external factors, thus offering valuable insights into cause-and-effect relationships (Mayne, 2000). By providing a reasoned judgment of a program's effectiveness, CA helps determine the extent to which an intervention has contributed to specific outcomes (Mayne, 2000).

The key components of CA include the need for robust theories of change and the use of nested theories to address complex environments (Mayne, 2000). Developing causal narratives supports credible claims and accounts for the limited influence of external factors on outcomes (Mayne, 2000). While contributory causes may not be solely responsible for achieving the desired results, they play an essential role alongside other influencing events, thus confirming that interventions contribute meaningfully to observed changes (Mayne, 2000).

CA enriches traditional theory-based evaluation methods by providing a systematic, participatory framework for evaluation, strategic planning, and performance monitoring (Wimbush et al., 2012). This approach enhances both the conceptual understanding and practical application when planning for outcomes. Moreover, the participatory nature of CA strengthens collaboration across organizations, helping public managers demonstrate how various entities contribute to addressing complex social issues (Wimbush et al., 2012).

CA is particularly valuable in the context of the triple nexus framework, as it offers an evidence-based method for assessing interventions spanning humanitarian aid, development, and peacebuilding efforts. By addressing the complexities and interdependencies of these areas, CA provides a comprehensive framework for the more effective planning, implementation, and evaluation of interventions within the triple nexus.

Flowchart of Contribution Analysis (CA) and Key Elements



Figure 2. Contribution analysis.

Process Tracing

PT is a key tool in qualitative analysis and is often employed by scholars for within-case analysis based on qualitative data (Collier, 2011). PT serves as a research methodology in case studies as it aims to explore causal processes and to understand both the specific dynamics of individual historical cases and generalizable causal mechanisms across various cases (Beach, 2017). PT involves causal-process observations; it emphasizes the importance of description and the placement of observations within a causal sequence (Collier, 2011). PT comprises three key components: 1) conceptualizing the causal mechanisms that link causes to outcomes, 2) examining the observable empirical manifestations of these mechanisms, and 3) addressing the concerns of case selection and generalizability (Beach, 2017).

As a methodology, PT seeks to trace causal mechanisms between causes (X) and outcomes (Y). This process involves a detailed examination of the causal pathways in order to achieve two objectives: improving the validity of causal inferences through robust within-case evidence and enhancing the understanding of how causes lead to particular outcomes (Beach, 2016).

Additionally, PT methods can be divided into three distinct variants, all of which aim to trace causal mechanisms while differing in approach (Rasmus et al., 2011). Theory-testing and theory-building PT are relatively parsimonious, focusing on mechanisms that are generalizable across cases. In contrast, explaining outcome PT combines systematic and non-systematic case-specific mechanisms, thereby creating eclectic explanations for outcomes (Rasmus et al., 2011). The former prioritizes nomothetic aims by concentrating on identifying or testing systematic mechanisms in single case studies, while the latter adopts an idiographic, case-centric perspective that seeks a minimally sufficient explanation for a particular outcome (Rasmus et al., 2011). Single case studies employing PT contribute significantly to theory-testing in the social sciences and thus offers the rigorous testing of theoretical frameworks through substantial empirical evidence (Ulriksen et al., 2016).

In recent years, the proliferation of indices, benchmarks, and scorecards (referred to as indicators) has influenced public policy and enhanced accountability. However, their actual impact on policy is often assumed rather than proven, with evaluative methods for assessing this impact still in development (te Lintelo et al., 2020). Incorporating Bayesian logic into empirical research can enhance the quality of case study research and provide greater inferential leverage when evaluating complex interventions (Schmitt et al., 2015). Bayesian logic is a statistical approach based on Bayes' theorem (Nguyen et al., 2002) that enables updating prior beliefs with new evidence to provide a framework for decision-making in situations with limited or uncertain data (Andersen, 1994). This method is widely applied across fields for making predictions, estimating parameters, and making decisions under uncertainty (Gigerenzer et al., 1995; Jacobs et al., 2020).

One analytical approach to PT, particularly in actor-centered and interpretive studies, conceptualizes mechanisms as abstract constructs akin to Weberian ideal types (Bautista, 2001). This approach allows for the examination of how mechanisms lead to specific outcomes and the evaluation of their function in particular contexts, thereby contributing to general propositions in foreign policymaking (van Meegdenburg, 2023). Weber's four ideal types of social action (i.e., instrumentally rational, value rational, traditional, and affectional) provide a framework for understanding the different motivations behind human actions (Aronovitch, 2012; Swedberg, 2017).

Applying PT within the triple nexus framework offers a rigorous methodological approach to investigating the causal pathways connecting interventions to outcomes, thus providing a comprehensive understanding of the interactions among humanitarian aid, development, and peacebuilding.

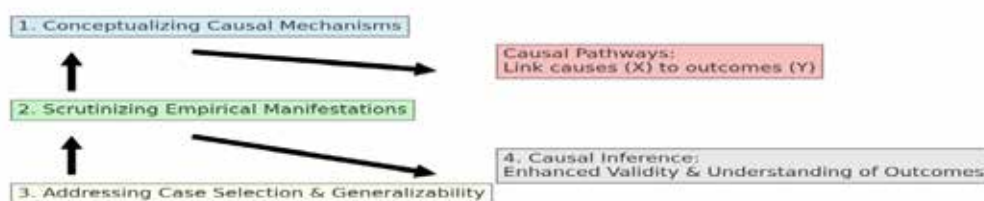


Figure 3. Process tracing.

Triple Nexus Analytical Framework

The proposed triple nexus analytical framework presents a structured approach to analyzing the complex interconnections among humanitarian aid, development, and peace-building initiatives. To ensure a more systematic integration of these components, the analytical framework draws on a multi-dimensional analysis of the interactions and mutual influences among the three pillars (Mosel et al., 2014). Understanding how humanitarian, development, and peace activities influence one another is essential for assessing the effectiveness of interventions. A clear articulation of these dynamics enhances the framework's ability to generate insights into the outcomes of the triple nexus approach.

The framework focuses on both independent and dependent variables across the triple nexus to provide a structured method for assessing the relationships among humanitarian, development, and peace-building efforts. Independent variables represent the inputs and drivers of change (e.g., policy decisions, program implementations, and resource allocations) while dependent variables reflect the outcomes and effects on peace, development, and humanitarian conditions.

Central to the analysis is the integration of the humanitarian, development, and peacebuilding components, which moves from treating these as discrete sectors to understanding their interplay. Analyzing how actions in one sector (e.g., emergency relief) might influence long-term development outcomes or peacebuilding efforts is crucial (Mosel et al., 2014). This calls for an analytical framework that captures both the synergies and potential conflicts inherent in these interactions.

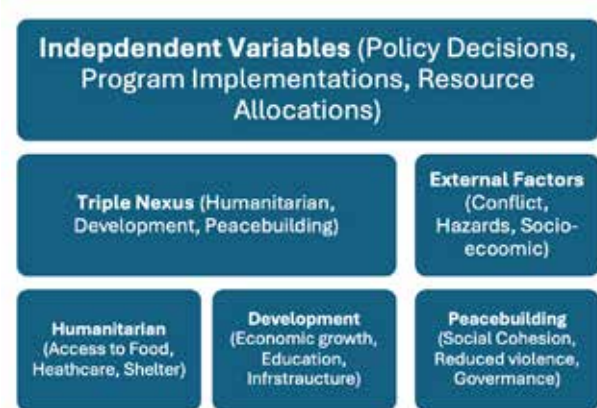


Figure 4. The independent and dependent variables of the triple nexus.

Humanitarian Variables

Humanitarian variables include immediate life-saving assistance, emergency response, and protection in crisis settings. These variables focus on essential needs such as food, water, shelter, and healthcare. The humanitarian component operates in the short term and is often shaped by the humanitarian principles of independence, impartiality, neutrality, and humanity (Slim et al., 2005). The framework assesses how humanitarian interventions interact with longer-term development and peacebuilding goals. For instance, rapid emergency interventions may provide immediate relief, but risk undermining sustainable outcomes if not aligned with development or peacebuilding strategies.

Development Variables

Development variables focus on the long-term goals aimed at addressing underlying vulnerabilities and fostering socio-economic resilience. Drawing on Sen's (1999) capability approach, development is measured by individuals' ability to live flourishing lives rather than just by economic indicators. This perspective informs the triple nexus framework by ensuring that development interventions target not just economic growth but also the education, healthcare, and infrastructure that build long-term stability. The interaction between development and humanitarian assistance is critical, as short-term relief must transition into development strategies that address the root causes of vulnerabilities. Similarly, peacebuilding interventions need to reinforce development outcomes to ensure that the communities emerging from conflict have sustainable paths to recovery.

Peacebuilding Variables

Peacebuilding variables encompass the mechanisms aimed at addressing the root causes of conflict, at promoting social cohesion, and at building resilience. Galtung's (1996; 1976) framework of conflict transformation distinguishes between negative peace (absence of violence) and positive peace (presence of justice and equality), which are essential

for framing peacebuilding interventions in the triple nexus. The framework integrates peacebuilding with both humanitarian and development efforts by recognizing that conflict-sensitive approaches to emergency aid and development can prevent a relapse into violence.

Synergies and Conflicts in the Triple Nexus

The triple nexus analytical framework emphasizes the potential for both synergies and conflicts within the triple nexus. Synergies occur when the three pillars of humanitarian, development, and peacebuilding mutually reinforce one another, thus resulting in enhanced outcomes. For instance, humanitarian assistance that incorporates conflict-sensitive approaches can simultaneously address immediate needs and support long-term peace by reducing tensions. Development interventions that prioritize equitable access to resources can strengthen peace by addressing structural inequalities.

However, conflicts can arise when efforts in one area negatively impact the others. For example, humanitarian interventions focused solely on immediate relief without considering long-term development strategies may lead to dependency and undermine sustainable development. Similarly, peacebuilding efforts that are not coordinated with humanitarian or development interventions may lack the necessary support to address the underlying socioeconomic grievances, thus risking a return to conflict.

Analytical Levels of the Triple Nexus

To fully operationalize the triple nexus, the analysis draws on Mosel et al.'s (2014) multi-level approach, which distinguishes among the micro- (local), meso- (national), and macro- (global) levels. This allows the different scales at which triple nexus interventions operate to be captured. The micro-level focuses on individuals and communities and assesses how triple nexus interventions affect local conditions at the grassroots level. The meso-level addresses national and regional dynamics by considering how broader policies and institutions influence the interactions among humanitarian, development, and peace-building efforts. Finally, the macro-level analyzes global factors such as international policies and trends, thus providing insights into how the global context shapes the triple nexus outcomes.

By systematically integrating these levels of analysis, the framework captures the complexity of crisis response by recognizing how interventions at the local level are influenced by national and global dynamics. This multi-level approach is essential for understanding how the triple nexus operates across different contexts, as interventions in one area may have ripple effects on others.

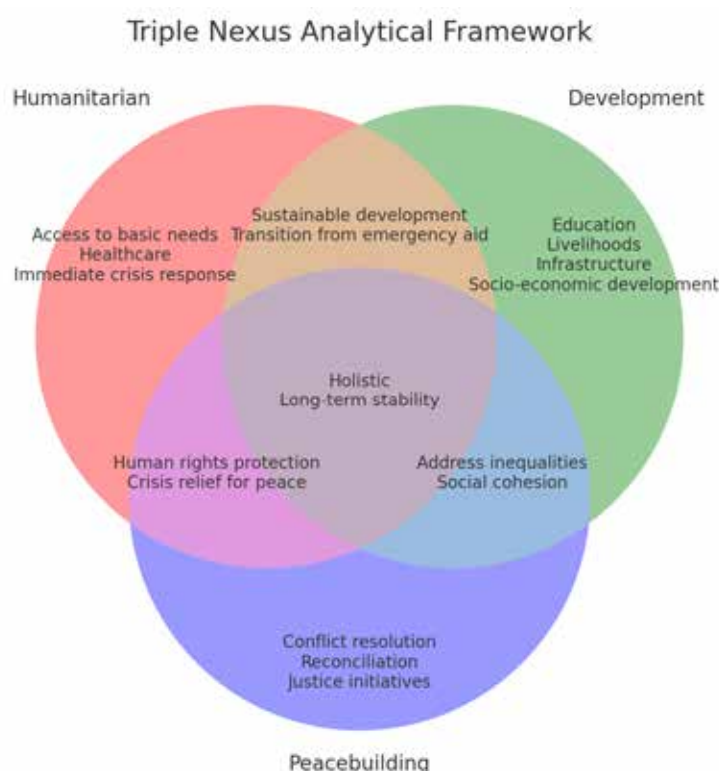


Figure 5. Triple nexus analytical framework.

Triple Nexus Conceptual Formula and Model

To develop a conceptual formula and model based on the triple nexus analytical framework, the complex interactions among humanitarian aid (H), development (D), and peace-building (P) need to be captured by considering both the independent and dependent variables across multiple levels of analysis (micro-, meso-, and macro-).

Table 6

The Triple Nexus Conceptual Formula

Triple Nexus Conceptual Formula	
Variables	H (Humanitarian): Immediate assistance, emergency response, and protection.
	D (Development): Socioeconomic resilience, capabilities, and infrastructure.
	P (Peacebuilding): Conflict transformation, social cohesion, and resilience.
	I (Interactions): Net effect of synergies and conflicts at the micro-, meso-, and macro-levels.
Pillars	Humanitarian (H): Represents immediate life-saving assistance (H1), emergency response (H2), and crisis protection (H3).
	$H = f(H1, H2, H3)$
	Development (D): Represents long-term goals such as socioeconomic resilience (D1), capabilities approach (D2), and infrastructure (D3).
	$D = f(D1, D2, D3)$
	Peacebuilding (P): Includes efforts like conflict transformation (P1), social cohesion (P2), and resilience against conflict (P3).
	$P = f(P1, P2, P3)$
Interactions	For synergy:
	$S = H + D + P$
	This implies a positive interaction in which each pillar reinforces the others.
	For conflict:
	$C = H \cdot D \cdot P$
	This implies a situation where an intervention in one pillar might hinder the others (e.g., humanitarian aid that undermines development).
Effect of the interactions (I) between the pillars	$I = S - C = (H + D + P) - (H \cdot D \cdot P)$
	If $S > C$, the outcome is a synergy where the triple nexus has a positive effect.
	If $C > S$, the outcome is a conflict where the pillars negatively impact each other.

Levels	Micro-Level (Local): Assesses individual and community impacts by focusing on grassroots intervention.
	$I_{\text{micro}} = S_{\text{micro}} - C_{\text{micro}}$
	Meso-Level (National/Regional): Analyzes the broader policy, institutional dynamics, and regional influences.
	$I_{\text{meso}} = S_{\text{meso}} - C_{\text{meso}}$
	Macro-Level (Global): Considers the international policies, global trends, and geopolitical factors that shape the nexus.
	$I_{\text{macro}} = S_{\text{macro}} - C_{\text{macro}}$
Total outcome of the triple nexus	$I_{\text{total}} = I_{\text{micro}} + I_{\text{meso}} + I_{\text{macro}}$
	This can also be expanded as: $I_{\text{total}} = (S_{\text{micro}} - C_{\text{micro}}) + (S_{\text{meso}} - C_{\text{meso}}) + (S_{\text{macro}} - C_{\text{macro}})$

This model allows one to evaluate the interactions across different levels while distinguishing between the synergistic and conflicting outcomes. The goal is to maximize synergies while minimizing conflicts, thus enhancing the effectiveness of interventions within the triple nexus framework.

Detailed Triple Nexus Analytical Framework: Variables, Synergies, and Causality

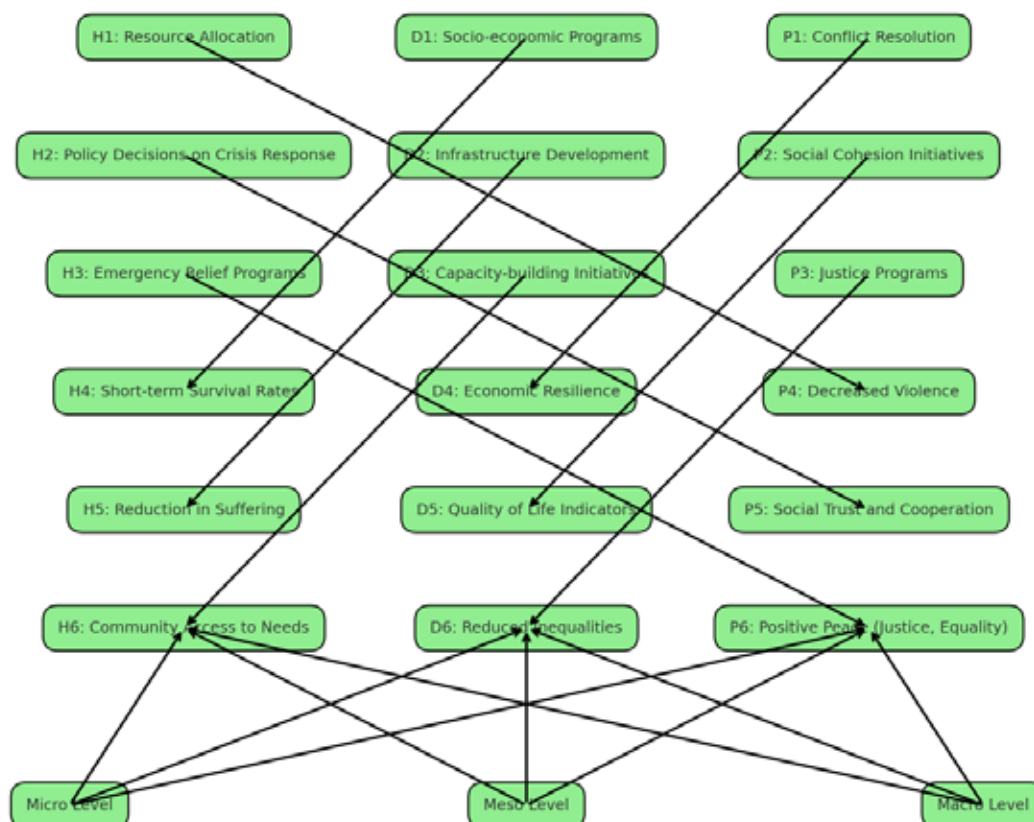


Figure 6. Triple nexus conceptual model.

Practical Background: The Case Study

Sri Lanka has been selected as the focus of this case study due to its unique socio-political context and the growing importance of disaster management and conflict recovery in the country. This research explores the application of the triple nexus framework, which is particularly relevant in Sri Lanka given the ongoing crises that have persisted since the end of the civil war in 2009. The country continues to face significant economic instability and climate-related challenges such as recurrent floods and droughts (Ganguly, 2024). These crises have repeatedly exposed the nation's vulnerabilities, underlining the need for a coordinated and comprehensive approach to address the multifaceted challenges it faces (Coface, 2024; Ghosh & Ruwanpura, 2023; Reuters, 2023b, 2023a; Sooriyaarachchi et al., 2023; United Nations Office for Disaster Risk Reduction & PreventionWeb, 2022; Wanigasinghe, 2022; World Food Programme, 2024).

The aftermath of Sri Lanka's 26-year civil war has left deep-rooted social divisions, economic instability, and ongoing peacebuilding needs (Ganguly, 2018, 2024; Jayawardana et al., 2019). These issues have been exacerbated by the recent economic crisis and its accompanying inflation, rising poverty, and food insecurity, as well as by frequent hazards and disasters such as floods. Together, these conditions emphasize the importance of adopting a holistic and integrated approach. This study investigates the potential of the triple nexus model to address complex and protracted crises while also providing sustainable solutions for long-term recovery.

Understanding Sri Lanka's multifaceted political, economic, and social landscape is crucial for fully comprehending the applicability and effectiveness of the triple nexus approach. This framework thrives on a deep understanding of local contexts, as success in disaster response and long-term development hinges on recognizing unique local conditions (Kelman, 2020). Compounded by social inequalities and political fluctuations, Sri Lanka's economic crises present a distinct backdrop for analyzing the effectiveness of the triple nexus.

Politically, Sri Lanka has been shaped by significant instability, and it continues to grapple with an ongoing economic crisis that has been exacerbated by external debt and mismanagement. Rising inflation, high unemployment, and public unrest have disproportionately affected vulnerable populations, particularly low-income families and communities still recovering from the civil war (Coface, 2024; International Bar Association, 2022; United States Institute of Peace, 2022; Wanigasinghe, 2022). This economic hardship has created an urgent need for cash transfers, healthcare, and food security measures. However, inefficiencies in government-led coordination have hindered the distribution of aid, resulting in duplicated efforts and inadequate coverage of affected areas. This highlights the need for a structured, transparent, and collaborative approach to humanitarian response for improving the efficacy of interventions. Interviews with international NGOs and United Nations (UN) agencies working in Sri Lanka underscore the absence of a cohesive humanitarian system.

Sri Lankan society has diverse ethnic and religious groups, and this complexity further complicates the peacebuilding process. The legacies of the civil war, particularly in the northern and eastern regions, continue to affect efforts to rebuild peace. Based on the interviews, issues such as land ownership disputes, war-related trauma, and ethnic tensions are seen to persist, thus proving the need for culturally sensitive humanitarian interventions that promote unity rather than exacerbate divisions.

The current economic crisis has deepened existing social inequalities, placing further strain on rural communities reliant on agriculture and fishing, particularly in regions such as Vavuniya, Puttalam, and Kalutara. Climate change has worsened these challenges, with more frequent floods and droughts threatening agricultural productivity and economic resilience. Any development initiative must consider these social and environmental factors in order to ensure long-term sustainability and success.

Despite the pressing need for immediate relief, long-term recovery solutions are equally critical. Local initiatives regarding healthcare and education have sustained communities, but their impact has been limited by uneven coverage and poor coordination. Expanding these efforts and ensuring equitable access to services are essential for achieving broader humanitarian objectives. Programs focused on agriculture, entrepreneurship, and education have shown promise, particularly in regions like Kurunegala, where improved farming practices and school meal programs have demonstrated scalability. These initiatives contribute to economic stability by building local capacity and fostering sustainable agricultural practices.

Healthcare services, especially mental health support and addressing shortages of essential medicines, have also been vital in the regions hardest hit by the economic crisis. These efforts are crucial for securing long-term health outcomes, particularly in areas facing both economic and environmental crises. As part of the triple nexus approach, such development programs highlight the need for sustainable solutions that extend beyond immediate humanitarian aid and focus on fostering long-term economic recovery.

Peacebuilding remains central to addressing the root causes of instability in Sri Lanka. Engaging local communities in program planning and execution is critical for ensuring that interventions are culturally sensitive and tailored to meet local needs. Regions such as Vavuniya and Mullaitivu are still recovering from the civil war scars and require peacebuilding initiatives that promote reconciliation and social cohesion to prevent future conflict. Within the triple nexus framework, integrating development and humanitarian goals is essential for sustaining peace (Bouzar, 2015; UN, 2024; UN Development Program, 2022), as demonstrated by efforts to promote social cohesion through education and community-driven development initiatives.

Sustainability has become a key theme in Sri Lanka's response to its overlapping crises. Areas such as Nuwara Eliya increasingly recognize the need for long-term support mechanisms (e.g., vocational training, self-employment opportunities) to reduce dependency on humanitarian aid and enhance community resilience. These efforts align with the principles of the triple nexus, which seeks to ensure lasting stability through integrated development and peacebuilding interventions.

Cultural sensitivity has also proven to be a critical factor in the success of humanitarian interventions. For example, volunteers in Kalutara have emphasized the importance of culturally respectful approaches, particularly when addressing sensitive issues such as menstrual health. These methods are essential for building trust within communities and ensuring the success of aid programs.

Findings and Analysis

The findings from the study of the SLRCS's response to the economic crisis provide valuable insights into the impact, challenges, and adaptations of humanitarian interventions. When combined with data from the needs assessment, these findings reveal how various approaches to cash-based assistance and community engagement influence the effectiveness of the humanitarian response.

Cash-Based Humanitarian Interventions: Conditional and Unconditional Transfers

Cash transfers were central to the SLRCS's crisis response strategy, as they addressed both immediate needs and long-term recovery goals. However, the type of cash transfer (i.e., conditional or unconditional) had significantly different outcomes, particularly in the context of Sri Lanka's multifaceted economic crisis.

Unconditional cash transfers proved to be more effective in addressing urgent needs such as food security, healthcare, and basic necessities. The recipients of these unconditional transfers reported using the funds primarily for essential goods, particularly food and healthcare, thus allowing them to exercise autonomy in determining how to best meet their immediate needs. The flexibility of this approach provided crucial relief during the peak of the crisis when many households faced severe food shortages and rising healthcare costs.

In contrast, the conditional cash transfers, which required recipients to fulfill specific conditions such as participating in agricultural development, were less effective in the immediate aftermath of the crisis. This was largely due to the urgency of short-term needs, which took precedence over longer-term objectives such as improving agricultural productivity. While the conditional grants aimed to promote restoring sustainable livelihoods, many recipients, particularly farmers, struggled to meet the conditions imposed due to external factors such as pest infestations, lack of agricultural inputs, and adverse weather conditions. The delays in realizing the benefits of these programs often undermined the immediate food security needs of vulnerable populations where agriculture forms the backbone of the local economy.

Food Security and Household Livelihoods

Food insecurity emerged as a persistent and widespread issue across all surveyed regions. The data from the focus group discussions and household surveys revealed that access to food significantly deteriorated during the crisis. For instance, over 60% of estate households and nearly half of rural and urban households reported worsened access to food

between 2022-2024. Rising food prices coupled with decreased household incomes exacerbated the situation, leading many households to rely on negative coping mechanisms such as borrowing money or reducing the quality and quantity of food consumed.

SLRCS's food kit distribution and cash assistance programs provided short-term relief, but the overall coverage and consistency of these interventions were limited by resource constraints. Consequently, many households remained food insecure despite receiving aid. The needs assessment (survey) highlighted how the majority of cash grant recipients had used the funds to purchase food, underscoring the importance of flexible, cash-based interventions for addressing food insecurity.

Agricultural Livelihoods and Conditional Support

The conditional cash grants aimed at improving agricultural practices in rural farming communities were met with mixed outcomes. While the intention of these grants was to foster long-term food production and economic recovery, the implementation challenges the recipients faced limited the program's overall impact. Many farmers reported difficulty fulfilling the conditions of the grants due to the high costs of inputs, lack of access to agricultural markets, and unpredictable weather patterns that led to crop losses. Additionally, pest infestations further hindered agricultural productivity, leaving many farmers unable to benefit fully from the conditional cash transfer schemes.

Despite these challenges, the program did provide some benefits in terms of improving local capacities for sustainable farming practices. Training programs linked to the conditional grants helped some farmers adopt new techniques, but the long-term success of these interventions was often hampered by external factors beyond farmers' control.

Health and Access to Healthcare Services

The SLRCS also focused on improving access to healthcare during the crisis, with a particular emphasis on addressing both physical and mental health challenges. The needs assessment revealed some improvements in healthcare access between 2022-2024, particularly in estate regions where targeted interventions were most effective. However, despite these gains, significant challenges remained, particularly in mental health services. The economic crisis exacerbated psychological stress, leading to a rise in domestic violence, substance abuse, and other psychosocial issues. These problems were further compounded by the limited availability of mental health services, particularly in rural and estate areas.

Moreover, government-run healthcare services struggled to cope with drug shortages and the migration of healthcare professionals, leading to reduced access to essential treatments. The survey indicated that nearly one-third of households reported worsened access to healthcare services, especially in rural areas where transportation and availability of medical supplies posed significant barriers.

Social Protection, Gender-Based Violence, and Community Safety

The study also highlighted several critical social protection challenges, particularly regarding the safety and security of vulnerable populations. Over 50% of households in low-income brackets reported feeling less safe than they did before the crisis, citing increased incidents of theft, domestic violence, and drug misuse. Female-headed households in particular were disproportionately affected by these issues and faced heightened risks of violence and economic insecurity.

Gender-based violence (GBV) also emerged as a significant concern during the crisis. The SLRCS protection programs attempted to address these issues, but limited resources and the scale of the crisis meant that many women and children remained vulnerable. Additionally, the rise in substance abuse, particularly among unemployed youths, further contributed to deteriorating community safety and exacerbated the challenges of maintaining social protection in these regions.

Volunteer Network and Local Engagement

One of the key strengths of the SLRCS response was the extensive involvement of its volunteer network. Volunteers were integral in both the delivery of humanitarian aid and the assessment of community needs. Their deep integration into the communities they served allowed for culturally sensitive and context-specific interventions. In regions such as Kalutara and Vavuniya, volunteers played a crucial role in both selecting recipients and implementing cash transfer programs, thus ensuring that aid reached the most vulnerable populations.

Additionally, the training programs provided to volunteers regarding agricultural practices, health interventions, and business development empowered local communities to build resilience and self-reliance. This grassroots engagement model proved particularly effective at fostering sustainable community development, as volunteers leveraged their local knowledge to overcome logistical challenges and ensure the appropriateness of interventions.

Monitoring and Evaluation Challenges

Despite the successes of the SLRCS interventions, the study identified significant gaps in monitoring and evaluation. Inconsistencies occurred in how cash transfer programs were tracked across different regions, creating difficulty in assessing the overall impact of these interventions. Focus group discussions revealed that, while some communities received timely and effective support, others experienced delays or gaps in service delivery due to logistical challenges and limited resources.

Moreover, feedback mechanisms were often underdeveloped, particularly in rural areas where the ability to monitor how cash grants were utilized was limited. This resulted in an incomplete understanding of the long-term effects of cash transfers and other interventions, thereby hindering efforts to adapt programs to better meet the evolving needs of affected populations.

The findings from the evaluation of the SLRCS's response to the economic crisis in Sri Lanka underscore the complexity of balancing short-term humanitarian relief with long-term developmental goals. While unconditional cash transfers and volunteer-driven community engagement provided critical support in addressing immediate needs, conditional cash transfers aimed at promoting sustainable livelihoods faced significant challenges. The ongoing issues of food insecurity, healthcare access, and social protection, particularly for vulnerable groups such as women and children, highlight the need for a more comprehensive approach to addressing both immediate crises and long-term recovery in Sri Lanka's post-crisis environment.

Analyzing the Findings in the Triple Nexus Context

The study of the SLRCS's response to the economic crisis in Sri Lanka was analyzable through the lens of the triple nexus framework and emphasized the need to transition from short-term relief to sustainable development and long-term resilience, especially in complex emergencies like the one faced in Sri Lanka.

The Links Between Humanitarian and Development Efforts

The triple nexus framework advocates for interventions that address both the immediate needs of crisis-affected populations while laying the groundwork for sustainable development. In the case of Sri Lanka, unconditional cash transfers were critical for addressing urgent humanitarian needs such as food security and healthcare. These transfers provided the flexibility necessary for recipients to prioritize their most pressing needs, thereby effectively supporting short-term relief efforts.

However, the long-term goal of achieving sustainable livelihoods, particularly in rural agricultural communities, was pursued through conditional cash transfers and development-oriented initiatives. These interventions aimed to improve agricultural productivity and restore livelihoods, which aligns with the development aspect of the triple nexus framework. Although the conditional programs contributed to capacity building and agricultural development in certain areas, external factors such as unpredictable weather and pest infestations often undermined their effectiveness. This illustrates the challenge of balancing immediate relief with long-term development in fragile environments where communities are vulnerable to both economic and environmental shocks.

The interplay between short-term relief and long-term development is crucial in fragile contexts. The SLRCS interventions highlight the need for more adaptive programming that can evolve as crises progress from acute phases to recovery. The relative success of unconditional cash transfers in addressing immediate needs emphasizes the importance of flexible humanitarian aid, while the conditional grants aimed at fostering sustainable livelihoods point to the necessity of linking relief efforts to long-term development goals. However, these initiatives require better integration of the agricultural, environmental, and market support systems in order to be truly effective.

Peacebuilding and Social Cohesion

In the context of the triple nexus, peacebuilding efforts aim to address the root causes of conflict and promote social cohesion in communities affected by crises. In Sri Lanka, the economic crisis exacerbated social tensions, particularly in rural and estate areas where food insecurity and economic deprivation contributed to rising crime, domestic violence, and substance abuse.

Involving local volunteers in both the assessment and delivery of aid helped foster trust and social cohesion within communities. By leveraging local knowledge, the SLRCS was able to ensure that interventions were culturally sensitive and aligned with community needs. This grassroots engagement model, which empowered volunteers to play a key role in humanitarian efforts, contributed to community resilience and social stability. Additionally, the efforts targeted at addressing and protecting vulnerable groups (e.g., female-headed households) were essential in promoting peace and reducing social tensions during the crisis.

However, challenges remain in terms of integrating peacebuilding more deeply into the humanitarian response. While the SLRCS interventions helped mitigate immediate social tensions, longer-term efforts to address the underlying drivers of conflict (e.g., economic inequality, lack of access to services) were less pronounced. Moving forward, integrating peacebuilding strategies such as promoting inclusive economic recovery and addressing systemic vulnerabilities will be crucial for ensuring the sustainability of the gains made through humanitarian and development interventions.

Strategic Coordination and the Triple Nexus

A key aspect of the triple nexus is the need for strategic coordination across humanitarian, development, and peacebuilding efforts. The evaluation revealed both successes and challenges in this regard. The SLRCS's ability to mobilize its volunteer network and collaborate with international organizations such as the IFRC was crucial in scaling up humanitarian interventions during the crisis. However, gaps in the expanded collaboration with other organizations, in monitoring, and in evaluation, as well as inconsistencies in feedback mechanisms, highlight the need for more robust coordination among the various stakeholders.

In particular, the inconsistent monitoring of cash-based interventions across regions limited the ability to fully assess the impact of these programs. This lack of coordination not only hindered the effectiveness of the interventions but also made adapting programs to the evolving needs of communities difficult. The triple nexus framework emphasizes the importance of aligning humanitarian responses with long-term development and peacebuilding strategies, and this requires strong coordination mechanisms to ensure that efforts across these domains are complementary and mutually reinforcing.

Moving forward, improving the coordination and data-sharing among humanitarian actors, local governments, and international partners will be essential for strengthening the integration of humanitarian, development, and peacebuilding efforts. This will also enable the more effective targeting of resources, ensuring that interventions are tailored to the specific needs of different communities and that the most vulnerable populations are prioritized.

The SLRCS's response to Sri Lanka's economic crisis offers important lessons for understanding how humanitarian aid, development, and peacebuilding can be integrated in a complex emergency. While the interventions provided critical short-term relief and contributed to some long-term development goals, challenges remain in fully realizing the potential of the triple nexus approach. To enhance future crisis responses, greater emphasis must be placed on strategic coordination, adaptive programming, and integrating peacebuilding efforts into humanitarian and development interventions. By addressing these challenges, the SLRCS and its partners can better support communities in transitioning from crisis recovery to long-term resilience and stability.

Discussion

Applying the Triple Nexus Analytical Framework to the SLRCS Interventions

The application of the triple nexus analytical framework to the SLRCS interventions highlights the synergies among the humanitarian, development, and peacebuilding efforts and brings a more balanced analysis by critically examining potential conflicts and trade-offs. As Medinilla et al. (2019) suggested, the operationalization of the triple nexus is not

without its challenges, and tensions between its components are often inevitable. Humanitarian aid is driven by immediate life-saving needs, whereas development and peacebuilding efforts are long-term processes that address systemic issues. This divergence in goals can lead to conflicts, particularly when one component is prioritized over others, as evident in the case study.

Macrae and Harmer (2004) emphasized the importance of understanding these trade-offs among humanitarian, development, and peacebuilding efforts. The SLRCS case study reveals prioritizing humanitarian aid in the immediate aftermath of the economic crisis to have led to delayed progress in both development and peacebuilding initiatives. While cash grants provided short-term relief, they did not necessarily contribute to long-term economic stability or social cohesion. For example, the short-term focus on humanitarian aid (e.g., unconditional cash transfers, food kits) may have undermined efforts toward sustainable development. While immediate relief was necessary, some interventions lacked alignment with long-term development strategies, potentially creating dependency without building resilience. The decision to focus on unconditional cash transfers provided immediate relief but did not sufficiently address structural vulnerabilities. This highlights a missed opportunity to integrate more development-oriented solutions that could have fostered economic resilience. Similarly, the absence of peacebuilding components in certain interventions delayed reconciliation efforts in post-war regions.

To address this, evaluating how synergies and conflicts manifest in the implementation of the triple nexus is evidently critical. For instance, the interaction between humanitarian relief and peacebuilding requires coordination to avoid exacerbating tensions, especially in post-conflict settings like Sri Lanka. Galtung's (Galtung, 1996; 1976) theory on conflict transformation underscores the importance of integrating humanitarian actions with peacebuilding to avoid a relapse into violence.

Incorporating Maxwell's (2005) critique of overconfidence in causal claims, especially when based on qualitative data, also provides valuable insights. While qualitative data from interviews and focus groups are valuable, tempering claims about program effectiveness by recognizing methodological limitations is important. In the case of the SLRCS interventions, the impact of cash transfers on livelihoods was significant, but difficulty is had in definitively claiming a direct causality between these interventions and long-term economic recovery. Future research must carefully calibrate these causal claims by emphasizing the constraints of qualitative data and providing a more transparent discussion on the nature and limitations of the gathered evidence.

While the triple nexus framework is designed to create synergies among these three areas, operational challenges often lead to tensions. The analysis highlights several critical areas where conflicts arose and where trade-offs were discovered.

Humanitarian-Development Conflict

In the immediate aftermath of the economic crisis, prioritizing humanitarian aid, particularly through unconditional cash transfers and food kits, provided short-term relief but undermined long-term development efforts. While addressing immediate needs was crucial, this short-term focus created a potential dependency on aid, thus delaying progress toward sustainable development and resilience-building. Interventions that prioritized immediate humanitarian relief often did so at the expense of implementing solutions that could have fostered long-term economic stability.

Development-Peace Conflict

Some development programs, especially in agriculture and education, did not fully account for the complex social dynamics in post-conflict regions. By not carefully coordinating with peacebuilding efforts, these initiatives risked exacerbating underlying social tensions. The development interventions that were not sensitive to ongoing reconciliation needs in post-war regions delayed peacebuilding and reconciliation efforts, thus potentially increasing the risk of renewed conflict.

Humanitarian-Peacebuilding Conflict

The intersection between humanitarian aid and peacebuilding presented another significant area of trade-off. Galtung's theory of conflict transformation suggests the need for integrating humanitarian actions with peacebuilding initiatives, particularly in fragile, post-conflict settings. However, the lack of explicit peacebuilding components in some humanitarian interventions, particularly in the post-war regions of Sri Lanka, meant that relief efforts might have inadvertently overlooked opportunities to support reconciliation and conflict resolution, potentially exacerbating divisions.

Short-Term vs. Long-Term Trade-Offs

The case study shows that immediate actions to address urgent needs often conflicted with long-term objectives. For instance, while cash grants were effective at providing rapid relief, they did not contribute to systemic changes that could lead to long-term economic stability or social cohesion. The decision to prioritize short-term humanitarian aid thus slowed progress on development and peacebuilding, which require sustained and systemic interventions.

Table 7

Variables and Causality in the SLRCS Interventions

Category	Independent Variables	Dependent Variables	Causal Relationships
Humanitarian Variables	Immediate cash transfers, emergency food kits, shelter provision.	Short-term relief, reduction in food insecurity, provision of basic needs.	Immediate relief efforts through cash transfers and food distribution addressed urgent needs during the economic crisis. However, over-reliance on emergency aid risks fostering dependency and limiting the transition to development.
Development Variables	Agricultural development programs, vocational training, infrastructure investment.	Socioeconomic resilience, sustainable livelihoods, reduced vulnerability.	Agricultural training programs in Kurunegala enhanced food security and resilience, but delays in agricultural yields and other challenges like pest infestations reduced their immediate impact. Careful integration with humanitarian aid is needed.
Peacebuilding Variables	Community reconciliation initiatives, conflict-sensitive programming, involvement of local volunteers.	Social cohesion, reduced ethnic tensions, preventing conflict relapse.	Peacebuilding interventions in Kalutara and Vavuniya fostered reconciliation, but peacebuilding efforts were sometimes secondary to humanitarian aid, delaying long-term peace and reconciliation efforts.

Table 8

Micro-, Meso-, and Macro-Levels in the SLRCS Interventions

Level	Humanitarian Synergy	Development Synergy	Peacebuilding Synergy
Micro-Level: Community and Individual Impact	Immediate cash transfers and food aid met the basic needs of vulnerable families. For example, in Vavuniya, unconditional cash transfers prevented economic destitution.	Agricultural training in Kurunegala improved livelihoods but delays in yields showed the need for better integration between immediate relief and long-term resilience.	Peacebuilding efforts focused on reconciliation within communities. Volunteer engagement fostered collaboration and peaceful coexistence, as seen in Kalutara.
Meso-Level: Regional and National Impact	SLRCS scaled up aid delivery to meet regional needs, but government inefficiencies led to resource duplication and uneven distribution.	Regional development programs (e.g., school feeding and healthcare in Kalutara) addressed vulnerabilities but were limited by poor coordination across regions.	In post-war regions such as Vavuniya, peacebuilding integrated with development efforts addressed root causes of conflict, enhancing regional stability.
Macro-Level: National and Global Impact	The economic crisis required national and international coordination. SLRCS engaged NGOs and donors but was limited by national funding and political instability.	Long-term development initiatives, such as government investment in infrastructure, were essential, but poor global and national policy coordination hindered the transition.	National peacebuilding efforts (e.g., land dispute resolution and reconciliation) were key to post-crisis recovery. Political instability undermined broader integration with development and humanitarian efforts.

Table 9

The Outcome of the SLRCS Interventions Based on the Triple Nexus Conceptual Formula

The outcome of SLRCS interventions based on the Triple Nexus Conceptual Formula	
1. Identifying the Pillars	
H (Humanitarian)	This includes immediate assistance, emergency response, and protection (cash transfers, food aid, and healthcare provision during the crisis). For SLRCS, unconditional cash transfers and food kits represented a significant humanitarian response.
D (Development)	This includes long-term development goals focused on socioeconomic resilience, capabilities, and infrastructure (agriculture support, livelihoods programs, healthcare improvements). Conditional cash transfers and agricultural interventions were aimed at supporting development.
P (Peace-building)	This includes conflict transformation, social cohesion, and resilience. This was reflected in SLRCS's efforts to foster community engagement, build trust, and address underlying social tensions, though less prominently than H and D.
2. Interactions Among the Pillars	

Synergy	$S_{\text{micro}} = H_{\text{micro}} + D_{\text{micro}} + P_{\text{micro}}$
	At the local level (micro), the SLRCS interventions involving cash transfers (H), agricultural training (D), and community engagement through volunteers (P) worked to address immediate needs and some aspects of long-term stability. This indicates positive synergy.
Conflict	$C_{\text{micro}} = H_{\text{micro}} \cdot D_{\text{micro}} \cdot P_{\text{micro}}$
	Here, conflict occurred, as immediate humanitarian aid sometimes undermined longer-term development goals, thus leading to dependency. Also, the limited integration of peace-building into humanitarian interventions contributed to delayed reconciliation.
3. Calculating Interactions at Different Levels	
Micro-Level	S_{micro} represents positive synergy from volunteer-driven engagement, localized cash aid, and agricultural support.
	C_{micro} represents conflicts arising from prioritizing short-term humanitarian relief over sustainable development and delayed peace-building interventions.
	$I_{\text{micro}} = S_{\text{micro}} - C_{\text{micro}}$
Meso-Level	S_{meso} represents broader national efforts (e.g., collaboration with IFRC) and institutional support for scaling up interventions.
	C_{meso} represents gaps in coordination, especially around monitoring and evaluation. This undermined the effectiveness of interventions.
	$I_{\text{meso}} = S_{\text{meso}} - C_{\text{meso}}$
Macro-Level:	S_{macro} represents international policies and trends that influenced the success of the SLRCS interventions.
	C_{macro} represents the global challenges (e.g., economic factors, climate issues) that hindered the effectiveness of such development efforts as agricultural interventions.
	$I_{\text{macro}} = S_{\text{macro}} - C_{\text{macro}}$
4. Total Outcome of the Triple Nexus	
Outcome	The final calculation is the sum of the outcomes at the three levels:
	$I_{\text{total}} = I_{\text{micro}} + I_{\text{meso}} + I_{\text{macro}}$
	This represents the total synergy and conflict from the SLRCS interventions within the triple nexus framework.
Conclusion	The balance between S_{micro} , S_{meso} , and S_{macro} versus C_{micro} , C_{meso} , and C_{macro} determines whether the SLRCS interventions created more synergy (positive outcomes) or conflict (negative outcomes) across the humanitarian, development, and peace-building pillars.

To implement a more balanced triple nexus approach, future SLRCS interventions should aim to integrate humanitarian, development, and peacebuilding strategies more systematically. The following are key recommendations for operationalizing this framework.

Applying the Causality Analysis Methods: Contribution Analysis (CA) and Process Tracing (PT)

The application of CA and PT in this study provides a methodologically robust framework for understanding how the SLRCS interventions contributed to outcomes within the context of the triple nexus approach. While the article has provided a theoretical grounding in CA and PT, greater detail is necessary to clarify how these methods can be specifically operationalized when analyzing the SLRCS's efforts. Such a clarification would not only improve the transparency of the analysis but also enhance the credibility of the causal claims made about the interventions' impact. CA and PT

are employed to map the causal mechanisms linking the SLRCS interventions to the outcomes. CA follows a six-step approach, starting with a clear articulation of the theory of change, while PT identifies causal process observations, thus confirming mechanisms through empirical evidence.

As conceptualized by Mayne (2001), CA is employed to map and develop a theory of change (ToC) for the SLRCS interventions. The use of CA is particularly relevant given the complexity of the interventions and the infeasibility of employing controlled experimental designs in the context of Sri Lanka's political and economic crises. CA can be used to construct a detailed ToC that hypothesizes the causal pathways through which interventions (e.g., cash transfers, agricultural training programs) can lead to desired outcomes (e.g., improved food security, enhanced community resilience). To develop a ToC for future interventions based on CA and the SLRCS's findings, this needs to be embedded within the triple nexus framework by integrating humanitarian, development, and peacebuilding efforts.

Table 10

ToC for Future Interventions Within the Triple Nexus Framework

Components	Details
Problem Statement	Sri Lanka's protracted economic crisis, exacerbated by inflation, social unrest, and natural disasters, has led to acute humanitarian needs. Simultaneously, long-term recovery requires addressing the root causes (e.g., socio-economic inequality, governance issues, peacebuilding in post-conflict regions).
Inputs	Humanitarian inputs: Resources for immediate relief (e.g., food, healthcare, shelter, cash-based interventions). Development inputs: Support for livelihoods, sustainable economic programs (e.g., agricultural support, vocational training). Peacebuilding inputs: Programs for fostering reconciliation, addressing gender-based violence, and promoting social cohesion.
Activities	Humanitarian Relief: Distributing food and healthcare supplies and providing cash transfers to meet immediate needs. Capacity Building: Implementing training for sustainable agriculture, livelihood programs, and entrepreneurship for economic recovery. Conflict Sensitivity Programs: Facilitating peacebuilding and reconciliation efforts, particularly in regions affected by the civil war by integrating culturally sensitive approaches.
Outputs	H: Improved access to essential services such as food, healthcare, and basic necessities. D: Strengthened livelihoods through skill development and access to markets. P: Enhanced social cohesion and reduced tensions in post-conflict regions.

Outcomes	Short-term outcomes:
	Immediate relief for vulnerable populations through cash transfers and food distribution.
	Increased access to healthcare and essential services, resulting in improved well-being.
	Medium-term outcomes:
	Economic resilience through sustainable livelihoods and strengthened agricultural systems.
	Reduced dependency on aid and increased self-sufficiency in targeted communities.
	Improved community relations and reduced conflict through peacebuilding initiatives.
Impact	Communities achieve greater resilience and stability through integrated humanitarian, development, and peacebuilding efforts.
	Long-term peace and sustainable development are fostered, reducing the risk of future crises and conflict.
Synergies within the Triple Nexus Framework	Humanitarian-development linkage: Immediate relief programs transition into long-term development activities by supporting livelihood restoration and ensuring that humanitarian interventions are aligned with sustainable development goals.
	Development-peacebuilding linkage: Development activities (e.g., vocational training, infrastructure development) are designed to promote social cohesion, especially in post-conflict areas.
	Humanitarian-peacebuilding linkage: Humanitarian interventions (e.g., cash transfers) are designed to be conflict-sensitive and include components that promote reconciliation and reduce social tensions.
Addressing Challenges and Tensions	Conflict between short-term relief and long-term development: While humanitarian aid provides immediate relief, it must be aligned with development objectives to avoid dependency and promote sustainable recovery.
	Balancing peacebuilding and development: Peacebuilding efforts must be sensitive to the sociopolitical context, thereby ensuring that development projects foster inclusivity and address grievances to prevent future conflict.

To operationalize CA, key assumptions systematically need to be identified embedded in the ToC and tested against empirical data collected through interviews, focus group discussions, and field observations. This triangulation of data allows the research to analyze how effectively the SLRCS interventions have addressed the intended outcomes while also accounting for the external factors (e.g., inflation, political instability, adverse weather conditions) that influenced the results. The empirical evidence shows that the SLRCS interventions acted as contributory causes as proposed by Mayne (2012). This means that, while they were not solely responsible for the observed outcomes, they played a significant role alongside other influencing factors. For instance, conditional cash transfers targeting agricultural development contributed to improved farming practices but were less effective at addressing immediate food security due to external constraints (e.g., pest infestations, climate-related challenges).

This nuanced application of CA is critical for understanding the limitations and successes of the SLRCS interventions. By focusing on contributory causes, CA helps the study explore the degrees of impact these interventions had within a complex, multi-layered environment. For example, while long-term agricultural improvements were observed, the immediate need for food security was better addressed through unconditional cash transfers that provided recipients with the flexibility to meet pressing needs such as food and healthcare. The operationalization of CA in this way not only allowed for a rigorous evaluation of the SLRCS interventions but also underscored the importance of developing and testing nested theories of change, particularly in complex, crisis-prone contexts such as Sri Lanka's (Mayne, 2019).

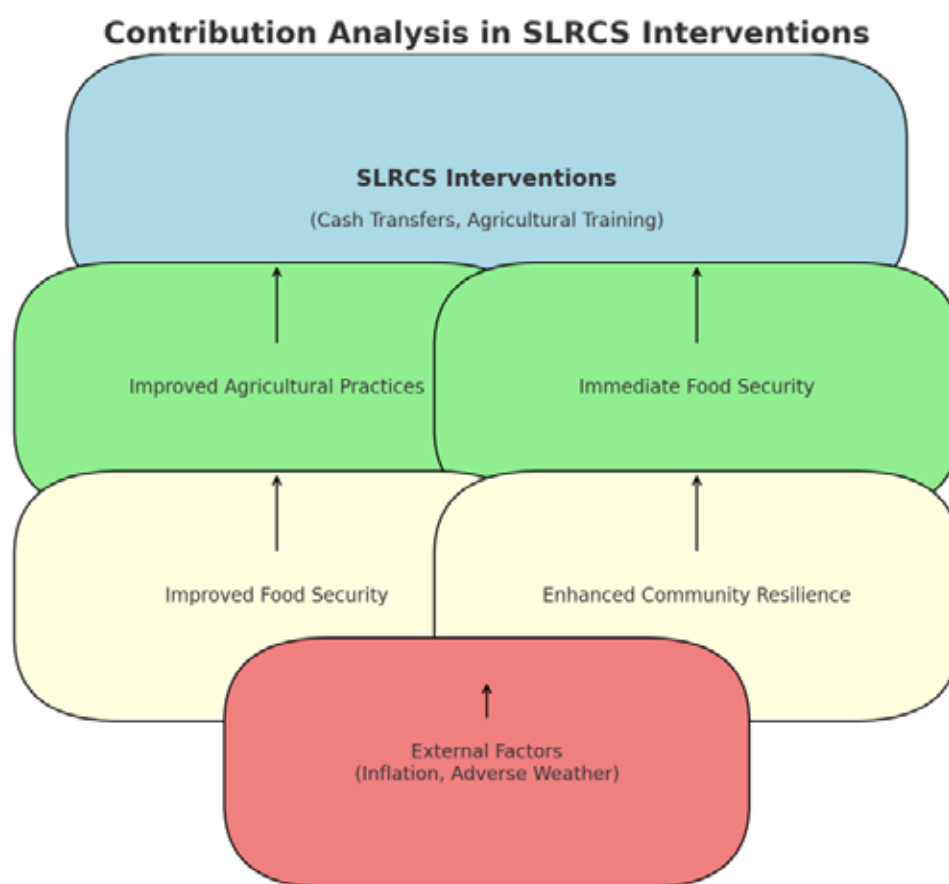


Figure 7. Contribution analysis regarding the SLRCS interventions.

In parallel, PT can be utilized to dissect the specific causal mechanisms linking SLRCS interventions to their outcomes, thereby offering a more granular understanding of how the interventions functioned. PT can be applied through both the theory-testing and explaining-outcome approaches (Beach et al., 2013). For instance, theory-testing PT can be employed to examine the hypothesized mechanisms through which conditional cash transfers would lead to sustainable agricultural outcomes. The detailed within-case analysis revealed that, while these transfers improved farming practices through training and resources, the causal pathway was disrupted by external factors (e.g., climate-related issues, pest infestations) that limited the overall impact on food production.

On the other hand, the explaining-outcome PT variant focuses on tracing the immediate effects of unconditional cash transfers. This approach aims to identify the unique, context-specific mechanisms that allowed recipients to use these funds for critical needs such as food and medical care, thereby mitigating the short-term impacts of the economic crisis. The empirical data from the focus groups and interviews with the recipients provided clear process observations, thus showing a direct link between the distribution of unconditional cash and short-term improved household well-being. This application of PT highlights the critical role of contextual sensitivity, as the success of certain interventions such as cash transfers depend heavily on the immediate socio-economic conditions facing recipients.

Applying PT also demonstrates the importance of considering both systematic and non-systematic mechanisms when evaluating the effectiveness of interventions. While theory-testing PT focuses on verifying hypothesized mechanisms, explaining-outcome PT allows for a more idiographic analysis that can uncover how interventions such as unconditional cash transfers produced varying effects based on local circumstances. This dual approach allows the study to offer a more comprehensive understanding of the causal processes at play and helps to explain both the successes and limitations of the interventions. For the example of agricultural support, PT reveals how the combination of financial assistance and capacity-building activities directly enabled communities to adopt more sustainable farming practices, even in regions where external support was limited.

Process Tracing (PT) for SLRCS Interventions

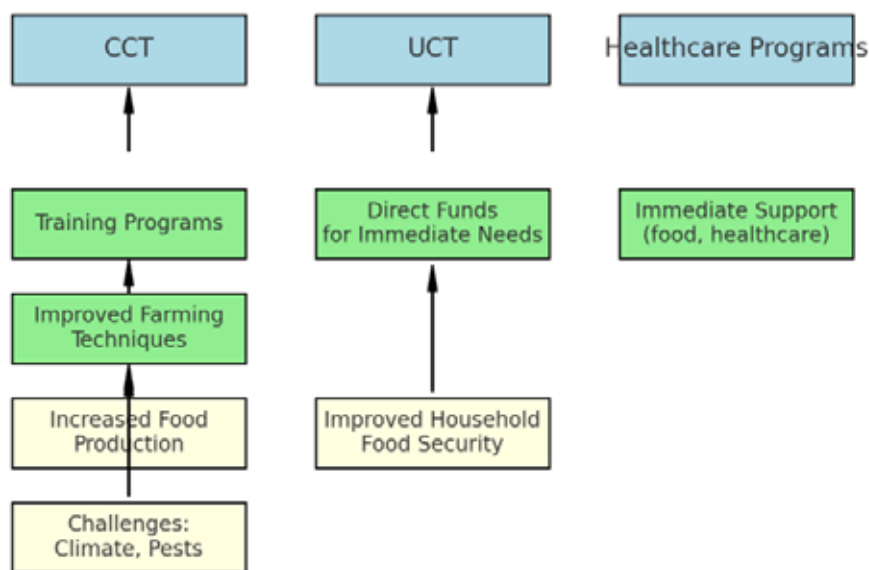


Figure 8. Process tracing the SLRCS interventions.

Integrating CA and PT allows for a multi-layered analysis that combines macro-level assessments of contribution with micro-level insights into the causal mechanisms driving specific outcomes. While CA provides an overarching view of how the SLRCS interventions might contribute to observed outcomes within the broader ToC, PT offers a detailed within-case analysis that unpacks the step-by-step processes leading to these outcomes. This complementary use of both methods allows the study to make more credible causal claims that are grounded in both theoretical and empirical rigor.

For example, the use of CA helped confirm that the SLRCS interventions had contributed to long-term improvements in agricultural practices, while the PT provided a deeper understanding of why these improvements were delayed due to external factors (e.g., weather conditions, pest infestations). Likewise, while CA demonstrated the overall effectiveness of unconditional cash transfers in addressing immediate needs, PT traced the specific causal pathways that allowed recipients to prioritize their spending on critical necessities such as food and healthcare.

This integrated methodological approach also highlights the importance of adapting both CA and PT to the specificities of the Sri Lankan context. By focusing on contributory causes and tracing causal mechanisms within a complex sociopolitical environment, the study can capture the dynamic and multifaceted nature of the SLRCS interventions. The insights gained from this approach not only enhance the understanding of how these interventions operated in real-world settings but also offer valuable lessons for future case studies that apply CA and PT in similarly complex environments.

Applying CA and PT has provided a robust framework for evaluating the effectiveness of the SLRCS interventions within the triple nexus framework. By operationalizing these methods in the context of a qualitative data analysis, the study can offer credible insights into the causal mechanisms at play and the factors influencing the success or limitations of the interventions. Expanding the use of CA and PT in this manner not only strengthens the causal inferences drawn from the research but also underscores the importance of contextual sensitivity and methodological rigor when evaluating complex interventions.

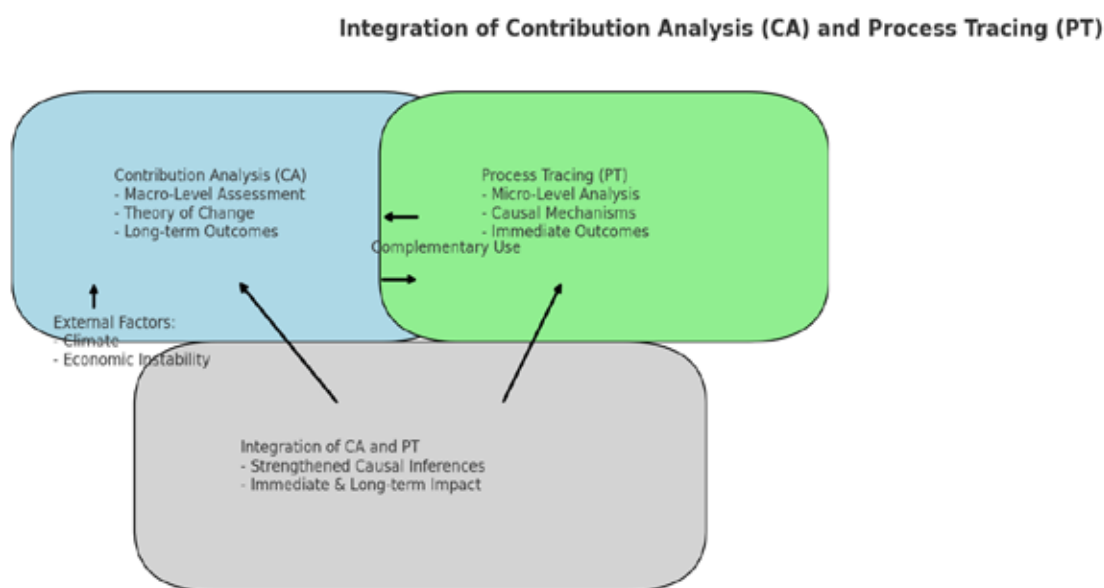


Figure 9. Integration of contribution analysis (CA) and process tracing (PT).

Alternative Explanations and Causal Analysis

While the evidence suggests the triple nexus approach to have positive impacts, limitations regarding sample size and the complexity of causal mechanisms mean that these conclusions should be interpreted cautiously (Maxwell, 2005). A critical component of evaluating the effectiveness of the SLRCS interventions within the triple nexus framework involves systematically considering and ruling out alternative explanations for the observed outcomes. While analyzing the program's impacts shows improvements in community conditions, assessing whether these outcomes were solely attributable to the interventions or if other factors contributed to the observed changes is essential. As Shadish et al. (2002) emphasized, accounting for alternative explanations is crucial for strengthening causal inferences, particularly in quasi-experimental research designs.

In order to build a more robust analysis, the following sections address alternative explanations for the outcomes observed in Sri Lanka's communities. These explanations include external factors, pre-existing community resilience, and the interactions among the humanitarian, development, and peacebuilding components.

One possible explanation for the improvements in community conditions could be external factors such as national-level economic recovery efforts or interventions by other international agencies. For example, macroeconomic stabilization policies the Sri Lankan government introduced alongside global aid flows might have indirectly contributed to improving living conditions in these areas. However, by employing CA (Mayne, 2012) and PT (Beach et al., 2018), the study carefully distinguishes between the impact of external factors and the specific contributions of the SLRCS interventions. While broader macroeconomic changes undoubtedly played a role, the targeted interventions in local communities, especially in regions less affected by national policies, demonstrate the distinct impact of the triple nexus approach.

Another alternative explanation is that the communities had inherent resilience or coping mechanisms that allowed them to recover more quickly, independent of the SLRCS interventions. This resilience could have stemmed from traditional community-based support systems or local leadership structures that may have predated or operated in parallel with the humanitarian and development efforts. The evidence suggests that, while communities had certain levels of resilience, the interventions (e.g., cash transfers, agricultural support) acted as catalysts that enhanced and reinforced these local systems rather than having acted in isolation.

The interconnected nature of the triple nexus framework means that improvements in one area (e.g., development outcomes) could have been influenced by the success of peacebuilding or humanitarian interventions. For instance, the reduction of tensions through peacebuilding efforts may have created a more conducive environment for economic recovery and agricultural productivity. Similarly, humanitarian aid addressing immediate needs may have alleviated pressure on communities, enabling them to participate in long-term development activities.

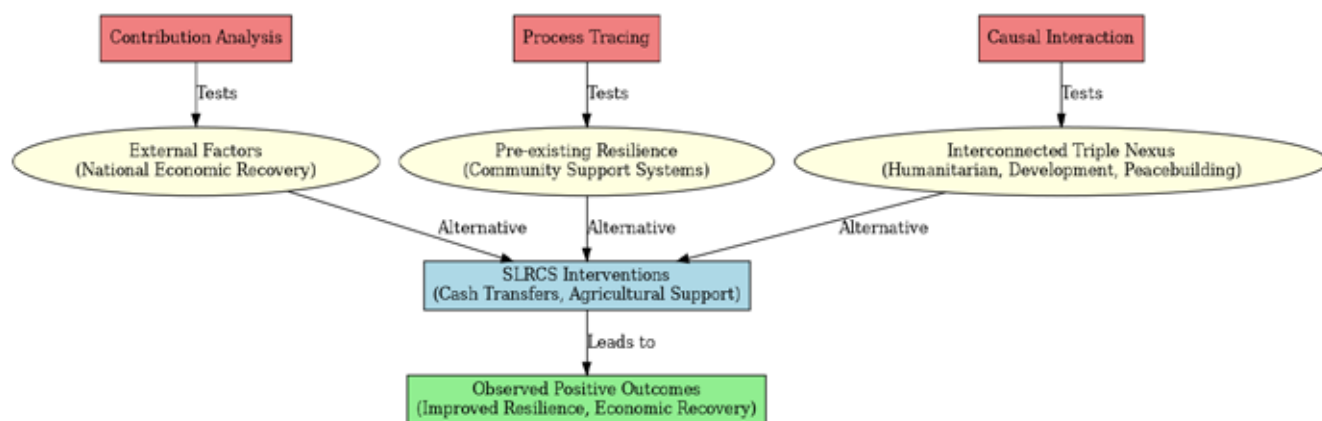


Figure 10. The causal analysis and alternative explanations.

Conclusion

This study of the SLRCS's response to the economic crisis in Sri Lanka through the triple nexus framework provides key insights into the critical intersections among the humanitarian, development, and peacebuilding efforts. Through the lens of the triple nexus, the research has addressed several important research gaps identified in this field such as the need for robust metrics, longitudinal studies, coordination and integration, and adaptive learning.

The findings highlight SLRCS's humanitarian interventions to have been effective at addressing immediate needs while establishing the foundation for long-term development. For example, the use of unconditional cash transfers provided immediate relief, particularly for food security, while also facilitating economic recovery and resilience. However, external challenges, such as poor agricultural inputs and adverse weather conditions hindered the effectiveness of conditional cash transfers. This underscores the importance of context-sensitive interventions, especially in fragile environments such as Sri Lanka's where multiple crises intersect.

In terms of coordination and integration, the study has revealed that, while the collaboration between the SLRCS, government entities, and NGOs was essential for executing a cohesive response, gaps remained regarding self-sufficiency due to the reliance on external financial aid. This points to a research gap concerning the need for policy and institutional frameworks that foster sustainable, community-driven solutions. The inclusion of volunteers in the crisis response was particularly noteworthy, as their local knowledge and community ties were critical to the successful implementation of interventions. This addresses the research gap related to stakeholder perspectives by highlighting the importance of local participation for ensuring the effectiveness and cultural sensitivity of humanitarian actions.

The research also emphasizes the significance of adaptive learning and feedback loops by revealing that, while short-term relief efforts were successful, limitations occurred regarding monitoring and evaluation that hindered the adaptation of long-term strategies. Implementing more robust mechanisms for real-time feedback and continuous learning will be crucial for future interventions, especially as crises evolve from acute emergencies to long-term recovery phases.

Research Implications

The findings from this study have several important research implications. Firstly, the need for robust metrics and indicators is critical for effectively assessing the outcomes of triple nexus interventions. This study suggests that future research should develop and refine tools to measure both immediate and long-term impacts more comprehensively, thereby ensuring that short-term successes translate into sustainable development and peacebuilding outcomes.

Secondly, a clear demand exists for longitudinal research that tracks the effects of interventions over time, particularly in post-crisis recovery phases. Long-term studies would help policymakers and practitioners understand how short-term humanitarian aid can transition into lasting developmental change, thus addressing a notable gap in the existing literature. Furthermore, contextual and cultural factors should be more deeply embedded in triple nexus research. This study highlights the necessity for culturally sensitive approaches, especially when working in ethnically diverse and post-conflict settings such as in Sri Lanka. Future research should focus on refining context-specific frameworks for intervention design and evaluation.

Thirdly, policy and institutional frameworks require greater attention in both academic and applied research. The gaps in self-sufficiency that were identified in this study point to a need for policies that promote local capacity-building and that reduce dependency on external financial aid. Researchers and practitioners should focus on exploring how local institutions can be empowered to implement triple nexus strategies independently by providing models for sustainable, community-driven development.

Lastly, the study underscores the need for scaling and replication of successful triple nexus initiatives. Future research should focus on identifying the key conditions and mechanisms that enable the replication of successful synergies among humanitarian, development, and peacebuilding efforts under different contexts. Scaling up effective interventions will require adaptive learning, as well as the continuous refinement of strategies based on real-time feedback and changing local conditions.

Research Contributions

From a theoretical standpoint, this study contributes to the growing body of knowledge on the triple nexus by offering practical insights into its implementation in the Sri Lankan context. It advances the understanding of how synergies among humanitarian, development, and peacebuilding efforts can be harnessed while also acknowledging the potential conflicts and trade-offs that may arise, such as the tension between immediate humanitarian needs and long-term development goals. These findings offer valuable implications for similar crises in other regions, thus demonstrating the importance of strategic alignment and integrated approaches to crisis response.

In conclusion, this research contributes to addressing the identified research gaps by demonstrating the need for robust metrics, contextually adaptive interventions, and coordinated efforts in order to balance humanitarian relief with sustainable development and peacebuilding. The study underscores the importance of building resilient, self-sufficient communities through the integration of humanitarian, development, and peace efforts, thereby ensuring that immediate relief transitions into long-term recovery and stability.

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