

LOCAL, INDIGENOUS, AND TRADITIONAL KNOWLEDGE WITHIN START NETWORK.



ACRONYMS

ARC – Africa Risk Capacity

CARF – Crisis Anticipation Risk Financing

CLIP – Community-led Innovation Partnership

DRF – Disaster Risk Financing

DRR – Disaster Risk Reduction

EAA(s) – Early and Anticipatory Action(s)

EWS(s) – Early Warning System(s)

FOREWARN – Forecast-based Warning, Analysis, and Response Network

INGO(s) – International non-Government Organisation(s)

IPCC – Intergovernmental Panel on Climate Change

LITK – Local, Indigenous and Traditional Knowledge

L/NNGO(s) - Local and National non-Government Organisation(s)

MEAL – Monitoring, Evaluation, Accountability, and Learning

PDM – Post-Distribution Monitoring

SDGs – Sustainable Development Goals

SFB –Start Fund Bangladesh

SFN – Start Fund Nepal

UN – United Nations

UNDRR - United Nations Office for Disaster Risk Reduction

UNESCO – United Nations Educational, Scientific and Cultural Organisation

EXECUTIVE SUMMARY

This report presents an overview of the current utilisation of Local, Indigenous, and Traditional Knowledge (LITK) within Start Network whilst exploring potential avenues for its enhanced capture and utilisation. Drawing upon a thorough literature review and qualitative analysis of 22 interviews conducted with Start Network staff, member organisations, and community members, the report sheds light on the existing landscape and future prospects of LITK within the network.

Objectives:

- 1. Identify the ways LITK is currently being used within Start Network.
- 2. Highlight potential opportunities for greater facilitation and use of LITK within Start Network.
- 3. Identify further learning opportunities and areas of exploration involving members.

Findings:

1. Start Network is increasingly utilising LITK within DRR, EAA, and Innovation activities.

LITK is increasingly being employed in Start Network's DRR and EAA activities, particularly in pilots of localised EWS and models. The CLIP also extensively engages with LITK, allowing communities to tailor innovative solutions to their needs. Additionally, hubs are identified as critical spaces where LITK influences conversations and decision-making processes.

2. Opportunities exist within SF for greater engagement with LITK.

The global Start Fund is identified as a key area where LITK could be more effectively integrated. Enhancing accountability to affected populations necessitates creating more space for community consultation and co-design within Start Fund processes. Although balancing speed and inclusivity is challenging, localising the Start Fund through national funds and hubs can facilitate this integration. Encouraging members to establish relationships with at-risk communities outside the alert cycle can further support LITK inclusion. The growing focus on EAA and DRR presents additional opportunities for deeper LITK engagement. Expanding hub operations and broadening membership to include more L/NNGOs also show significant potential.

3. Further learning and pilots will support the greater integration of LITK within the network.

The research highlights the extensive knowledge within Start Network's staff and membership. To harness this knowledge, the network should provide resources, funding, training, and facilitate peer-to-peer learning exchanges. Given the topic's complexity and diverse contexts, further exploration by members and communities is essential. The increasing prominence of LITK in discussions on localisation and system change positions Start Network to leverage its network and contribute meaningfully to these conversations.

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1. INTRODUCTION

Start Network's overarching vision aims to create a "locally led humanitarian system that is accountable to people affected by and at risk of crises." This vision fundamentally depends on amplifying and integrating local voices into humanitarian discourse and operations. The ultimate objective is for at-risk and affected communities to become central to the system, shaping humanitarian responses in alignment with their LITK. However, the current norm is a humanitarian system dominated by international organisations based in the global North. To counter this and drive systemic change, Start Network is adopting a model of locally-led action, empowering local networks and organisations with decision-making authority. This approach places LITK on par with other knowledge systems and necessitates that organisations committed to localisation and system change make room for this type of knowledge within their activities. The extent to which Start Network has already achieved this integration remains unclear however due to a lack of comprehensive research and systematic inquiry.

To gain deeper insights into how LITK interfaces with, and contributes to, the localisation and system change endeavours of Start Network, this research aims to shed light on areas of the organisation that are both facilitating and harnessing it within Start Network activities. This undertaking is poised to provide a snapshot of the current situation and aid comprehension of how these forms of knowledge can be nurtured and promoted throughout the network moving forward. By accomplishing this, Start Network will be ensuring that it is providing space for knowledge of all kinds within the network, helping to draw itself nearer to its envisioned state of being locally led and decentralised.

A secondary consequence of this will be the closer alignment with the recommendations set out in the 2030 SDGs, particularly the Sendai Framework and the Paris Agreement, which both advocate for the inclusion of LITK in global DRR and climate action.

1.1 NOTES ON TERMINOLOGY

1.1.1 DIFFERENTIATING BETWEEN 'LOCAL' 'INDIGENOUS' AND 'TRADITIONAL'.

Whilst acknowledging the different epistemologies related to these terms, this report adopts the term "Local, Indigenous, and Traditional Knowledge" (LITK). This follows the example of UNDRR who similarly used this term in their recent report on LITK in DRR in the Pacific Region (UNDRR, 2023). Although clarifying information is provided below on each of the terms, they will most commonly be presented together in this acronym, as differentiating between them is challenging and potentially misrepresenting.

Local knowledge refers to daily practises and beliefs and is place specific. **Indigenous knowledge** refers to the understandings, skills, and philosophies that have developed over long periods within societies and are often deeply connected to the environment. This knowledge has distinct roots to indigenous peoples, both historic and contemporary. Whilst **traditional knowledge** encompasses other forms of historical knowledge within communities that similarly stems from shared understandings, skills, and philosophies and has been passed down from generation to generation. However, unlike indigenous knowledge, traditional knowledge has become less distinct and is not 'owned' by one group due to the assimilation of populations and cultures over extended periods. Broadly speaking, indigenous and traditional knowledge can be seen as subsets of local knowledge.

Localisation will also be commonly discussed alongside the acronym LITK, this refers to efforts to 'localise' humanitarianism through greater engagement with local communities and the heightened respect and space afforded to their unique knowledge. Broadly speaking, the relationship between all these terms is that localisation is the vehicle through which LITK is accessed and harnessed.

1.1.2 SHARED CHARACTERISTICS OF LITK

Though diverse, these terms exhibit certain consistent features. Firstly, a fundamental shared aspect is a connection to the natural environment. As articulated by UNESCO (2018), LITK represents "understandings, skills, and philosophies developed by societies with long histories of interaction with their natural surroundings." This intrinsic relationship with nature, derived from both physical integration with the environment and a reliance on natural resources, bestows upon indigenous and local peoples a unique depth of comprehension that distinguishes them from other kinds of communities.

A second recurrent theme pertains to the collective nature of LITK, which has been shaped through shared experiences and is perpetuated through oral and generational transmission traditions. This stands in stark contrast to scientific knowledge which is typically the purview of experts and selectively communicated to the wider public (Cuaton and Su, 2020). LITK is intergenerational, handed down from one generation to the next through life skills, narratives, teachings, and ceremonial practices. It is also rooted in reciprocity, emphasising that relationships should be mutually beneficial and based on interdependence across human and natural systems (UNDRR, 2022b).

Lastly, definitions of LITK often characterise it as place-based, intimately linked to the land, water, sky, plants, and animals from which it originates (UNDRR, 2022b). This inherent locality renders it adaptable to medium- to long-term changes within its specific context. Cuaton and Su aptly refer to it as a 'living practice,' highlighting its capacity to evolve and adjust in response to environmental, cultural, and social transformations (2020, p.2). This adaptability imparts LITK with a high level of sustainability; however, also means that it is less effective when faced with dramatic and fast-effecting changes.

These elements, alongside the more specific characteristics that were provided for each term, serve as the bedrock of the following definition that underpins the acronym; the shared understandings, skills, and philosophies developed by societies with long histories of interaction with their natural surroundings and ancestral homelands.

2 LITK WITHIN THE HUMANITARIAN SECTOR

2.1 DISASTER RISK REDUCTION (DRR)

DEFINITIONS:

DRR: Tending to be more focused on longer term activities, it is particularly used to denote activities that reduce the exposure and / or vulnerability of people to hazardous events and is conducted before any specific event is forecast. EAAs are forms of DRR; however, lots of other DRR activities are not (such as improving building codes) and therefore DRR is not limited to anticipation (UNDRR).

Indigenous and local communities have often found themselves at the forefront of disasters and their impacts, commonly living in isolated or environmentally vulnerable locations and facing heightened vulnerability due to intersectional social factors such as poverty and discrimination. Whereas previously the sector might have said they were more at risk of natural disasters, now there is growing recognition that whilst some hazards are natural and unavoidable, the resulting disasters almost always have been made by human actions and decisions (#NoNaturalDisasters, 2019). This therefore makes indigenous and rural peoples more at risk of disasters that are exacerbated by actors predominantly in the Global North. This has led to these groups commonly being categorised in state policies as 'needy' or 'vulnerable' due to heightened levels of poverty, environmental insecurity, and social marginalisation (Howitt, Havnen and Veland, 2012). Whilst accurate that these communities face a disproportionate risk from disasters (UNDRR, 2022b), it is also crucial to recognise their historical position at the forefront of disasters, signifying a reservoir of knowledge that can be optimally leveraged through collaborative partnerships rather than perpetuating a victimisation narrative (Ali et al., 2021).

This knowledge and experience has been used to shape DRR practices world over. Examples include the Australian Aboriginal technique of 'mosaic burning', which has received attention for its ability to reduce bushfire risks and minimise destructiveness and has since been incorporated into DRR practices in both Australia and parts of North America (UNDRR, 2022a). Natural flood management has received similar attention, with communities practising techniques such as planting flood resistant crops, digging drainage ditches and moats, and nature-based forecasting, being called upon to share their knowledge with the international community (UNDRR, 2022a).

Despite these positive examples, a shift in thinking around risk and knowledge will need to occur before LITK is meaningfully incorporated into international DRR. There has been some progress made such as The Sendai Framework (2015-2030) which advocates for cross-sector collaboration with grassroots and community initiatives to ensure that policies and strategies are contextually rooted and effective. Nonetheless, this represents limited commitment towards the establishment of a more localised and inclusive approach to DRR, with its full realisation hinging on the collective commitment and cooperation of governments, INGOs, community groups, academics, and scientists to better understand the ways it can complement and enhance current practice.

2.2 EARLY AND ANTICIPATORY ACTION (EAA) AND HUMANITARIAN RESPONSE

DEFINITIONS:

Early Action: Early actions aim to reduce the humanitarian impact of forecasted extreme events before they occur. They fill the gap between traditional disaster risk reduction, which seeks to reduce vulnerability to hazards over the long-term, and humanitarian response, which provides relief after an event has occurred and people are clearly suffering (Anticipation Hub).

Anticipatory Action: Although very similar to early action, and in many cases used synonymously, anticipatory action is often seen as requiring pre-agreed financing and pre-agreed programmes. This therefore differentiates it from EA, which does not necessarily require pre-planning or pre-allocated funding (REAP).

In this report these terms will be combined.

With this emphasis on DRR, longer term preparedness and mitigation tend to be the key areas where LITK is incorporated. Nonetheless, indigenous and local communities also assume a pivotal role closer to the disaster, through early and responsive actions.

A notable example of this is the response of Indonesia's Indigenous Simeulue community during the 2004 Indian Ocean tsunami. Aceh Province, the closest areas from the epicentre, received huge impacts. With no early warning system, poor disaster management, not enough knowledge about tsunamis, and the huge scale of the disaster's impact, it caused a high number of victims, with the death toll reaching 200,000 people. Contrastingly, Simeulue Island, which is situated in Aceh Province, only had 7 deaths from 78,000 of the total population (Syafwina, 2014). The reason the death toll was so low has been ascribed to the knowledge passed down in the story of Smong (meaning 'tsunami' in Devayan language) which tells of the experiences of the Simeulue people in 1907 when 70% of the island's population were killed by a tsunami. Since then, this story has been passed down orally across generations with a kind of early warning system being built into the story. The key warning signs it highlights are the shaking of the ground followed by a low tide and unusual animal behaviour, all of which should elicit populations to run to higher ground. The impact this story and the oral tradition had on saving lives in 2004 earned the community the Sasakawa Award for Disaster Reduction from the United Nations (UN) (UNDRR, 2005).

Moreover, indigenous and rural communities have a long history of mutual aid and reciprocity, pooling resources and supporting one another in times of crisis. For instance, the Ju/'hoansi hunter-gatherers in Africa's Kalahari Desert established gift-giving partnerships called 'xaro,' which allowed them to access each other's resources until conditions improved in their own territories (Wutich, 2018). And the 'Osusu' community savings and credit system that is practised in The Gambia in order to support individuals when they are most in need (Njie, 2022). This form of disaster response is modernised today through mutual aid networks and social media groups in countries like Sudan and the Democratic Republic of Congo (DRC) (Nasir, Rhodes and Kleinfeld, 2023). It is crucial for governments and humanitarian organisations to acknowledge these forms of resilience and response, otherwise they may end up inadvertently causing harm through policies that disregard the often-semi-autonomous responses initiated by indigenous and rural communities.

2.3 INNOVATION

In addition to its relevance within the domain of DRR and EAA, LITK frequently emerges as a potent resource for innovation and problem-solving. Communities grappling with increasingly complex challenges, including climate change, political and social upheaval, and poverty, are compelled to engage in innovation, making resourceful use of their often-constrained means in conjunction with the reservoir of LITK at their disposal. The term 'jugaad,' a colloquial expression in several Indo-Aryan languages, aptly encapsulates this ethos, denoting "improvised solutions born from ingenuity and resourcefulness, frequently emerging in the face of adverse circumstances and formidable challenges" (Radjou, Prabhu and Ahuja, 2012, pp. 4–5).

The instances where LITK have been harnessed to address contemporary issues are manifold. They range from the application of indigenous agricultural techniques rooted in age-old wisdom (Fiolhais, 2023), to the creation of modern inventions utilising traditional materials, such as the Mitticool, an electricity-free refrigerator crafted solely from clay and water (Radjou, Prabhu and Ahuja, 2012, pp. 1–4). These exemplars vividly underscore the imperative of not relegating LITK to the past but rather harnessing it for its capacity to be applied in novel and inventive ways to confront some of the most formidable challenges confronting contemporary humanitarian and development endeavours.

Despite this, as articulated by Tyson Yunkaporta, a nuanced approach is imperative when applying LITK to contemporary challenges and it is important not to cherry-pick and decontextualise knowledge without understanding its cultural origin. Yunkaporta contends that utilising LITK for problem-solving should be executed with caution, emphasising the need to adopt it as a conceptual lens rather than resorting to isolated, selectively chosen, instances. Drawing from an Australian Aboriginal standpoint, Yunkaporta advocates the utilisation of indigenous worldviews and belief systems as a novel perspective for examining issues and challenges, diverging from the tendency to assimilate examples of LITK into a predominantly Western narrative (Yunkaporta, 2020). The consequences of neglecting this imperative are exemplified by instances where indigenous knowledge pertaining to controlled burning has been appropriated with limited consultation, misapplied, and subsequently led to uncontrolled fires (Lambert, Scott and Redfern, 2020).

This underscores a formidable challenge for the humanitarian sector, necessitating a departure from entrenched perspectives that often characterise how humanitarian crises are perceived. The call is to transcend these rigid lenses and, by embracing new perspectives rooted in indigenous worldviews, bring forth novel ideas and insights to confront intricate and multifaceted issues.



2.4 CLIMATE ADAPTION AND MITIGATION

Among the ramifications of climate change, the heightened frequency and intensity of disasters stands out as particularly devastating. The immediate and cascading impacts of these events contribute to a growing prevalence of complex and unpredictable humanitarian crises, especially for vulnerable and marginalised populations (Cappelli, Costantini and Consoli, 2021).

Indigenous peoples and rural communities constitute groups disproportionately affected by the direct consequences of climate change and disasters due to their profound dependence on, and intimate relationship with, the environment and its resources (Schramm et al., 2020). Moreover, they commonly contend with political and economic marginalisation, land and resource loss, human rights violations, discrimination, and unemployment; all amplifying their vulnerability.

Given that approximately 80% of the world's remaining biodiversity is safeguarded by indigenous populations (UNFCC, 2022) and that indigenous groups occupy the forefront of climate change repercussions, their voices, alongside those of rural communities, remain conspicuously marginalised in decision-making arenas. Rashidi and Lyons critique the IPCC for insufficiently incorporating LITK into their work, attributing this shortfall to structural challenges in knowledge production and governance, along with inadequacies in the platforms extended to indigenous and community representatives (2022). Others, such as Whyte (2021), attribute this absence to the persistent influence of colonialism which has particularly resulted in indigenous peoples facing human rights challenges due to climate change; however, finding themselves marginalised in pertinent conversations and decision-making spaces (Mohamed, Anderson and Matthews, 2022).

This dearth of indigenous and local voices in climate change discourse is not only discriminatory but also shortsighted. Indigenous and local peoples possess unique insights into effective climate mitigation and adaptation strategies that global leaders and decision makers could learn from. Practices like planting mangrove forests for flood protection and employing wildfire management techniques have been integral to indigenous and rural communities for years, gaining recognition for their efficacy only recently (Menéndez et al.,2020; Nikolakis et al., 2020). These examples show just some of the ways indigenous and local experiences could be harnessed meaningfully on the global stage.

As the literature demonstrates, indigenous and local groups possess vital and unique knowledge that can be applied at all stages of humanitarian efforts. However, hierarchies of knowledge and the insufficient integration of indigenous and local individuals in decision-making processes has resulted in this knowledge being underutilised and deprioritised. This research will examine this phenomenon within Start Network, exploring the extent to which it has been drawn upon within the activities of the network, revealing possible opportunities for its greater use within the future.

3. METHODOLOGY

3.1 RESEARCH OBJECTIVES

3.1.1 Research Aim

To discover the extent to which LITK is currently being employed within Start Network and to explore ways it can be better facilitated moving forward.

3.1.2 RESEARCH OBJECTIVES

- 1. Identify the ways LITK is currently being used within Start Network.
- 2. Highlight potential opportunities for greater facilitation and use of LITK within Start Network.
- 3. Identify further learning opportunities and areas of exploration involving members.

3.2 METHODS & SAMPLE

Eleven online interviews were conducted with UK-based and global Start Network staff members representing key areas of work within the organisation. Six online interviews were conducted with individuals representing members from five of the Start Network hubs. Four in person interviews were conducted during a CLIP evaluation visit to Guatemala with community innovators from two separate Mayan communities and one interview was conducted in a Wayuu Indigenous community in Colombia during a Start Fund Visit. French and Spanish translators were used where required.

Consent forms were read aloud, and consent sought orally at the start of all interviews. Audio recordings were made (with permission) and then later transcribed and subject to thematic analysis. All interview data is confidential and anonymous including quotations.



PARTICIPANT ID	COUNTRY OF OPERATION/HUB COUNTRY	AREA OF WORK
S1	Zimbabwe	CARF
S2	Madagascar	FOREWARN
S3	UK	CARF
S4	Nepal	SFN
S5	Philippines	MEAL
S6	UK	CARF
S7	Bangladesh	FOREWARN
S8	UK	SF
S9	Bangladesh	SFB
S10	UK	Innovation
S11	UK	SF
H1	India Hub	Hub Secretariat Member
H2	India Hub	Hub Secretariat Member
H3	Somalia Hub	Hub Secretariat Member
H4	Afghanistan Hub	Hub Secretariat Member
H5	DRC Hub	Hub Secretariat Member
H6	Guatemala Hub	Hub Secretariat Member
K11	Colombia	Wayuu Community Member
K12	Guatemala	Community Innovator
K13	Guatemala	Community Innovator
K14	Guatemala	Community Innovator
K15	Guatemala	Community Innovator

S= Staff

H= Hub

KI= Key Informant

4. FINDINGS AND RECOMMENDATIONS

4.1 INCREASING INCORPORATION OF LOCAL, INDIGENOUS AND TRADITIONAL KNOWLEDGE (LITK) INTO EARLY AND ANTICIPATORY ACTION (EAA)

Although contributing to DRR, the majority of Start Networks activities are focused around EAA through the mechanisms of DRF, EWS, and forecasting. LITK is increasingly being integrated into these fields in order to achieve more contextual and effective outcomes to increasingly complex and severe forecasted events.



EARLY AND ANTICIPATORY ACTION AT START NETWORK

Start Ready is a pooled fund that pre-positions funding for crises with regular and predictable patterns, like floods, droughts, and heatwaves. It operates in Zimbabwe, Somalia, DRC, Senegal, Madagascar, Pakistan, Philippines, and Bangladesh, allowing members to use these funds to prepare for cyclical crises and respond early to their onset. Similarly, Start Network's Africa Risk Capacity (ARC) Replica partnership with African Risk Capacity and African Union member states helps African countries manage climate-related risks through disaster risk insurance. Members can also raise anticipatory alerts to the Start Fund, the network's rapid response fund, to mitigate the impacts of crises before they occur. Additionally, Start Network facilitates Forecastbased Warning, Analysis, and Response Networks (FOREWARNS), networks of humanitarian, anticipation, meteorological, and DRR experts who help members and humanitarian actors take early actions based on accurate and contextual information. In addition to a global FOREWARN, there are active national FOREWARNs in Bangladesh, Madagascar, Nepal, Pakistan, and the Philippines, recognising that those closest to the crises are best placed to respond. This portfolio showcases how Start Network engages with DRR, setting the stage for discussing its interaction with LITK.

To explore the extent LITK is feeding into the EAA activities of Start Network, staff were engaged from FOREWARN (S2, Madagascar; S7, Bangladesh), CARF (S1, Zimbabwe; S6, UK) and from hubs with an active DRF programme (H5, DRC) These interviews revealed that currently the integration of LITK is somewhat ad hoc and informal, but that there are consistent examples across different contexts of its application in EAA activities. This trend indicates that staff and members are recognising similar challenges and increasingly turning to localised and contextual knowledge to address them. A prominent example of this is the use of LITK in early warning systems (EWS), where technical experts and hub members see significant potential for enhancement.

FOREWARN experts in Madagascar (S2) and Bangladesh (S7) are exploring ways to incorporate LITK into EWS to improve the effectiveness of models for local communities. The motivation for this comes from the shortfalls many EWS have when it comes to reporting local events with accuracy. For instance, H5 (DRC) highlighted the frequent misreporting of hyper-local flooding by the national JBA flood model. The opportunity therefore being explored within the FOREWARN network and with members hosting DRF programmes, is the ability for LITK to be used as a further source of localised and contextual data which can be triangulated with scientific models to improve the accuracy and timeliness of EWS.

In this context, nature-based indicators were frequently discussed, with the behaviour of animals and the environment being suggested as possible triggers that could feed into local EWSs. The unusual behaviour of birds (S2, Madagascar), ants (S1, Zimbabwe; H1, India), and livestock (S5, Philippines; S4, Nepal) were all shared as sources of information that local communities use to predict oncoming crises. Although largely unproven scientifically, the example of Typhoon Haiyan (shared in the literature review) does show that this kind of information can contribute to improved outcomes around crises. This kind of information is inherently local, often stemming from centuries of interaction with an environment and observation of nature. It therefore offers invaluable contextual insights which other data sources often lack. Moreover, the inclusion LITK in EWS brings local people into the process, helping to promote by-in and demonstrating respect for diverse knowledge and experience.

These reasons are what H5 (DRC), S2 (Madagascar), and S1 (Zimbabwe) all quoted when explaining their reasoning for including more LITK in their work with EAA. In Zimbabwe this is being done through a pilot project using sentinel sites for community data collection on local and traditional warning signs, which will then be triangulated with scientific data. In Madagascar, a similar design is being taken forward in partnership with the National Disaster Management Agency of Madagascar in relation to localised flooding, with local communities being encouraged to report signs of oncoming local flooding which can then be used to improve the accuracy of the national flooding model.

The inclusion of LITK in EWS goes beyond improved accuracy and contextualisation, to contributing to heightened buy-in and trust from local communities. This was summed-up by S7 (Bangladesh), "communities are much more likely to listen and act on data that they understand through models that they co-design and co-own. If EWS are too technical or 'science-y' communities won't listen to them even if they are accurate". This shows the recognition that exists within the network as to the importance of localisation and community-centred design, with the inclusion of LITK in EWS representing a way that Start Network and its members can demonstrate their commitment to decolonisation and equity. The risks of not doing this were shared by H5, who provided an example from the DRC:

"We discovered that when we wanted to install the instrument for measuring the rising water, it was made of metal and for that community that material was viewed as external and therefore suspicious. The elders were not consulted and therefore the belief stuck that the instrument would not work undermining the value of the AA."

The examples already shared highlight how Start Network staff and members are already leading the way in piloting and trialling LITK as a means of improving outcomes from EAA. This is clearest in a pilot of a riverbank erosion AA system being run in Bangladesh. S7, working in FOREWARN Bangladesh, described how collaboration with anthropologists and the community led to the documentation of local knowledge on riverbank erosion. This knowledge, combined with flood forecasting data (CEGIS), helped create patterns for predicting erosion events, resulting in co-designed, community-owned thresholds for reporting risks. Some of these included water level, severity of cracks in the mud, and the occurrence of whirlpools and bubbles within the water. This helped the team to determine the areas most at risk from severe erosion and support those living in these areas to relocate safely. Although still early days, initial findings suggest that this EWS combining scientific and LITK has been highly effective both in terms of gaining the trust and buy-in of communities but also for accurately predicting erosion.

* You can learn more about this example in this video

What this and other examples demonstrate is that LITK is very relevant within the current work of staff and members working across Start Network's EAA functions. It is being formally trialled within EAA activities as a way of gaining community buy-in whilst also benefitting from the knowledge and understanding of crises held by communities. There is a clear desire among Start Network staff and members to explore its potential further, requiring more research, resource, and commitment from the organisation. In the meantime, experiences already been had within the EAA and DRR spaces can be drawn upon to explore the potential LITK may have in other areas of Start Network's operations.





Climate change is a critical factor when discussing LITK in relation to DRR and EAA. Climate change-induced shifts in weather patterns and habitat dynamics have rendered some LITK, particularly nature-based indicators, less reliable. As H3 from Somalia explained, communities previously could predict severe drought patterns and enact mitigation measures. However, the current erratic and more frequent drought patterns mean that local communities struggle to rely on their LITK to protect themselves. Similarly, nature-based indicators being trialled for EWS have become less reliable due to changes in animal and plant behaviour in response to climate change.

This issue is exacerbated by displacement due to climate change, urbanisation, and conflict, leaving communities in unfamiliar landscapes where place-based LITK is less applicable. S7 from Bangladesh provided an example where local communities previously used generational knowledge to build homes on land less prone to landslides. However, overcrowding and climate displacement have forced communities to move from their ancestral land, making this knowledge less relevant and leading to homes being built on unstable ground.

Climate change undeniably impacts the validity of LITK, with weather patterns, species extinctions, and landscape changes all altering too rapidly for LITK systems to adapt. Despite this, as S7 from Bangladesh noted, scientific models are also becoming less accurate due to climate change, reinforcing the need to triangulate LITK with scientific data.



4.2 CHALLENGES AND OPPORTUNITIES FOR INCORPORATING LOCAL, INDIGENOUS, AND TRADITIONAL KNOWLEDGE IN START FUND

Despite increasing focus on EAA within the organisation, the complexity and severity of global crises still necessitate rapid humanitarian responses. Since 2014, Start Network has primarily addressed these needs through Start Funds at both global and national levels.

The global Start Fund provides rapid response funding to under-the-radar, small to medium-scale crises within 72 hours of a member alert. Complementing the global Start Fund, national Start Funds offer similar contingency funding at a national level, empowering local decision-making. These funds are managed by NGOs that utilise their local knowledge for governance and decision-making. As of 2024, two National Funds—Start Fund Bangladesh (SFB) and Start Fund Nepal (SFN). Members can raise two types of alerts: one for responding to crises that have already occurred and another for anticipating crises. Although response alerts are more common, the number of Start Fund Anticipatory Alerts is steadily increasing. Both types of alerts require projects to be completed within a 45-to-60-day window, necessitating rapid and short-term action.

To assess the extent to which LITK is utilised within Start Funds, interviews were conducted with staff from the global Start Fund (S8 & S11, UK), SFN (S4), and SFB (S9), along with stakeholders from various Start Network hubs. A desk review of Start Fund alert notes since 2017 was also conducted, identifying 23 instances where 'indigenous' was mentioned, mostly as a vulnerability criterion. Sixteen of these instances were from Latin America, particularly Mexico, with the remainder from Bangladesh and the DRC. Only two alerts (045 Colombia & 651 Colombia) mentioned collaboration and consultation with indigenous groups, indicating a potential lack of meaningful engagement.

Interviews reflected a similar trend, with participants noting that LITK is rarely explicitly used in Start Fund projects. Whilst there are isolated examples of anticipatory projects incorporating LITK, the rapid and short-term nature of Start Funds often precludes the extensive community consultation needed for meaningful integration. The 45-to-60-day project completion requirement often results in abbreviated or skipped consultations, leading to member-led rather than community-led projects. Evaluation and Post-Distribution Monitoring (PDM) stages offer opportunities for community feedback, but these occur post-project and require strong feedback loops to inform future projects. An external evaluation of the global Start Fund highlighted these concerns, noting that short time frames limited participatory design processes (Tsunagu, 2023).

Some hub members, like H6 (Guatemala) and H3 (Somalia), did not view this as an issue, acknowledging the niche of Start Fund in rapid response. As S8 (UK) explained, the hub and national Start Fund models go some way towards mitigating the risk of irrelevant and uncontextualized projects noting, "The model of Start Fund is more focused on speed than community consultation which does mean that sometimes it is more member-led than community-led. That is why it is so important for us to be working with L/NNGOs, as they provide the community voice which helps to make projects more relevant and effective."

Suggestions for better integrating LITK into Start Fund processes included making Start Fund alert notes and documentation available in multiple languages, reducing form completion time, and allowing more time for community consultation (S11, UK). Adding a section on relevant LITK in alert notes was also suggested to prompt members to share this information (S11, UK). What these suggestions have in common is that they all call for space to be created within current processes for members to engage local communities and harness their unique perspectives and experiences, leading to more effective and locally owned response projects.

A NOTE ON LANGUAGE

Language emerged as a crucial aspect throughout the research, underscoring the importance of enabling indigenous and local communities to share information accurately and with ownership. H5 from the DRC highlighted the enormity of this challenge, noting the difficulties in incorporating LITK in a country that spans 2.3 million km² and has over 200 languages spoken (Translators without Borders, 2016). Similar challenges were noted by participants from India, Afghanistan, Somalia, Bangladesh, and Nepal. Currently, Start Network predominantly communicates in English, with French and Spanish as secondary languages. Although more languages are used in specific situations, such as Bengali and Urdu, the lack of language diversity likely prevents L/NNGOs and communities from engaging directly with Start Network, cutting off a crucial source of LITK. This was particularly noted as a challenge around the Start Fund, where the requirement for alert notes to be in English often leads to intermediary translations, potentially diluting the significance and accuracy of LITK (S3, UK).

This was also raised in the Anti-Racism and Decolonisation Framework created for Start Network in 2021. The framework highlighted that in order to make progress in this area, Start Network needs to look into conducting conversations and decision making in more local languages to increase accuracy. Moreover, it noted that language and word choice was also a problematic area, with the use of overly complex or anglicised wording being exclusionary. S7 from Bangladesh shared this sentiment, highlighting the significance of conducting conversations and producing materials in local languages to promote access rights and participation. They stressed the importance of visual representation by incorporating "indigenous and local faces" in images and infographics to better reflect cultural contexts and enhance engagement rates, fostering feelings of "trust, belonging, and ownership" (S7, Bangladesh).

Progress is being made, with Start Fund recently trialling the use of French and Spanish in alert notes and project documentation to enhance accessibility and accuracy. More budget has also been allocated to the translation of materials into other languages. Despite these positive steps, there is still a long way to go to ensure that members, staff, and communities all feel that they can engage equally with Start Network in a language they feel comfortable using.

Such space is more evident in Start Fund Anticipatory Alerts processes, where reduced urgency and enhanced community consultation allow for more instances of LITK integration. Anticipatory alerts aim to act before crises peak, providing resources for early community action. Although swift action is still required, the slightly less urgent nature of Start Fund Anticipatory Alerts projects allows more time for community engagement and co-design. This is essential as it is often the communities who are carrying out many of the project activities both within the funding period and after it ends.

For example, two projects carried out around water insecurity in Colombia (Alert 733 & Alert 776) in 2023 and early 2024 worked with local Indigenous Wayuu communities to come up with mitigating measures using LITK prior to peak drought conditions. As part of the projects, sustainable solutions using indigenous water catchment methods and local knowledge around water sources were employed to mitigate the worst effects of the drought. They were then sustained beyond the Start Fund Anticipatory Alert projects through the establishment of a multi-generational, community based water committee. An evaluation in the second quarter of 2024 concluded that community resilience to drought had been enhanced through engaging and using LITK, empowering communities and sustaining the project through active community involvement. This demonstrates an example where the role of Start Network is increasingly blurring the line between humanitarianism and development, with calls for longer term support and resilience building pushing it more into the realm of development.

Whilst Start Fund Anticipatory Alert projects show greater inclusion of community voices and LITK, rapid response projects remain necessary. National funds like SFN and SFB demonstrate how localisation can address some challenges of engaging communities meaningfully. SFN and SFB nationalise the process, bringing it closer to affected communities in proximity and culture. This allows pre-established relationships and contextual knowledge to be leveraged during crises, partially overcoming challenges present in the global Start Fund. Although the global Start Fund uses members to bridge this gap, national funds draw on the cultural knowledge of local staff and members, enhancing their ability to consult and co-design projects with communities.

S4 (Nepal) and S9 (Bangladesh) both shared that they feel the short timeframes required for SF projects reduces their ability to consult and co-design projects with communities but that preestablished connections and relationships with communities helps to mitigate this. For example, S4 (Nepal) described how the topography of Nepal can make it challenging to support rural and isolated communities during crises, with access and information gathering being slow and difficult. To overcome this, they have engaged local leaders and key stakeholders in at-risk areas prior to crises occurring, helping to ensure they can gather and share information swiftly when an alert is raised. This cultural proximity is also advantageous as it means that staff and members have a wealth of their own LITK that they can draw on and contribute to projects. S9 (Bangladesh) shared, "Indigenous knowledge is not very openly discussed in SFB projects, but it unconsciously informs a lot of what we do as many of us working on these projects have our own forms of LITK that we contribute." This compliments the argument that is given for localisation of the humanitarian sector, with humanitarian response naturally being more contextual and effective the closer it is to the crisis-affected communities.

Through these interactions and relationships, LITK emerges organically. Participants from national funds and hubs noted that by engaging with communities outside of alert cycles, they understand existing LITK and can harness it during crises. S9 (Bangladesh) advocated for systematising this approach by building formal spaces into partnership building and Start Fund alert cycles to engage communities and actively seek LITK. This strategy could be effective for broader Start Fund processes, prioritising localisation through national funds, hubs, and L/NNGO members who can work closely with local communities, creating opportunities to share and utilise LITK.

4.3 LESSONS FROM INNOVATION

Innovation within Start Network can be defined as an idea/programme/product that is new to the user or context, or is new in its application, and is better at creating social value than what already exists and specifically addresses the needs of communities affected by crisis or disasters. Innovation and experimentation are fundamental to address fundamental issues of the sector and support the change towards a humanitarian system that is locally led. Community led humanitarian innovation can be described as a process which, drawing on human centred design and system thinking, can help crisis affected communities to find and implement new solutions to the humanitarian problems which they directly experience.

Working from this basis, the innovation work of Start Network falls across three levels. At the micro level, it supports communities to learn and use innovation methodology of human- centred design to create innovation solutions that speak to the unique challenges they face within their contexts. Community Led Innovation initiatives, including the CLIP Programme with the Guatemala and South Sudan Hubs, and other locally or community led innovation initiatives with Hub Humanitarian India and Hub DRC fall into this category. The second level is the Meso level in which support is given to the hubs, members and teams to learn about innovation and the kinds of methods tools they can apply to their work. This has involved providing innovation training or running innovation challenges with members and hubs in which funding and innovation mentoring and coaching support is given to develop and test innovative ideas. Finally, the innovation offering at Start Network also covers the macro level, looking at how the innovation work done at Start Network can influence and leverage change within the network and the wider humanitarian sector. This involves sharing the learning from the micro and meso levels, collaborating with other organisations committed to innovation and experimentation, and influencing donors and other influential actors. This is currently being done through advocacy efforts and the release of a Systems Change Playbook which aims to support organisations committed to learn and push for systems change in the humanitarian sector.

Alongside and contributing to DRR and EAA, the Innovation initiatives within Start Network provide valuable insights into how the network can effectively encourage and integrate LITK into its programming. This was highlighted through an in-person visit to the Guatemala Hub, where interviews were conducted with the CLIP lead at ASECSA (H6, Guatemala) and four community innovators participating in the CLIP programme (KI 2, 3, 4, & 5). An interview was also held with a Start Network staff member from the Innovation Team (S10).

The CLIP programme in Guatemala, hosted by ASECSA, aims to support the emergence and development of locally-driven solutions to humanitarian problems, identified by people affected by crisis and promoting a more locally-led approach to humanitarian innovation. It is an example of community-led innovation methodology and initiatives promoted by Start Network and it provides an example of a way LITK can be engaged with and exemplifies the potential impact it can have on humanitarian programming. Through the CLIP, local communities design and develop innovations addressing their most pressing issues. The Start Guatemala Hub/ASECSA team build relationships with communities, facilitate an innovation process inspired by human centred design and supports communities to identify local issues and shape solutions based on their needs and desires. Community innovators are offered financial and non-financial support to develop and test solutions in their communities, and work towards making them sustainable and scalable. Examples of this include agricultural techniques that harness materials that have good water retention to counteract drought, and the catching and processing of the invasive fish species 'pez diablos' into animal feed as a way of clearing them out of the waterways. In Guatemala, this process includes the integration of Mayan cosmovision into the innovation methodology, leading to a programme approach and community ideas informed by indigenous knowledge. This approach contrasts with traditional humanitarian programmes, which often have predefined methodologies and prescriptive activities. As one community innovator expressed, "We have worked with other international and national organisations and sometimes they just tell us what to do and don't let us share our experiences or ideas. With the CLIP, we feel it is our programme and we decide what we do." (KI3, Guatemala).





The example of Guatemala illustrates that creating space within programming and promoting local-level initiatives result in more impactful and contextually relevant outcomes. Innovations developed through the CLIP programme, such as indigenous irrigation and agricultural practices, have not only successfully addressed drought but also revitalised Mayan culture. This approach has empowered local communities, enhancing resilience both within these communities and in others that have interacted with these innovations. This aligns with Yunkaporta's vision, as discussed in the literature review, which advocates for incorporating indigenous worldviews and belief systems into humanitarian programming and international development, rather than merely utilising isolated instances of indigenous knowledge. Yunkaporta argues that addressing challenges through diverse lenses and belief systems leads to more effective and culturally appropriate solutions (Yunkaporta, 2020). This represents a shift from traditional approaches that apply a western knowledge perspective and occasionally test isolated examples of LITK, often excluding indigenous or local people from the decision-making process.

A NOTE ON RESILIENCE

Resilience refers to the capacity of communities to respond to and recover from crises, and it emerged as a key subtheme throughout the research. Participants emphasised the importance of harnessing and integrating LITK into the network's work to bolster this resilience. H2 from India noted, "Women, adults, children, young people, they are all equipped and have capacity at the grassroots level. When communities face a disaster situation, they have their own traditional coping mechanisms and Start Network needs to start working alongside these."

Promoting LITK enhances resilience by empowering local communities and shifting decision-making to incorporate their knowledge and coping methods. It signals to local communities that their knowledge and methods for coping are valid and often more effective than those promoted by INGOs. S4 from Nepal highlighted that many communities have become dependent due to the 'hand-out' culture of traditional humanitarian aid. To counter this, Start Network should engage communities as co-designers, helping to dispel the damaging 'victimisation narrative' identified by Ali et al. (2021), which undermines local resilience. This is where a lot can be learnt from the Innovation and EAA programmes, where local communities are increasingly central to both the creation and delivery of programmes.

Alongside the CLIP programme, another example of using innovation methodology to support local communities to create and develop local solutions is the community-led innovation project within the India Humanitarian Hub, hosted by SEEDS India, which has also seen LITK being drawn upon within innovation projects. One such example is an innovation that is running in Jammu and Kashmir around DRR and preparedness in schools. Street plays and Ladishah, a traditional indigenous folk ballad, was used to raise awareness and provide training on disaster preparedness to both teachers and students in 100 schools across the region. This was done through changing the lyrics to incorporate mitigation measures. Not only does this reflect information sharing being done in a contextual and familiar way, the Ladishah singer, who is traditionally a man, was a woman which contributes to challenging traditional gender roles and brings women on as active contributors to DRR. Another project that harnesses LITK relates to building flood and cyclone resistant housing in Sundarbarns, West Bengal. Using a design based on LITK, the house is raised 5inches above the ground and employs a curved roof to mitigate the effects of heavy rainfall. As noted in the innovations catalogue, "In addition to resisting wind and water force, providing an anchor on land, and preserving life, the structure provides continuity of vernacular traditions of building, materiality, and craft, and by extension preserves the cultural collective memory of the communities."

The Guatemala and India community-led innovation projects demonstrate that at the micro level, Start Network's innovation initiatives are fostering the use of human-centred design and community-led creativity and problem solving, resulting in projects that integrate LITK with localised humanitarian action. At the meso level, the work being done through innovation challenges and the hub fellowship programme is further promoting this approach within the hubs. By collaborating with hub leaders and nurturing a culture of innovation, the methodologies championed by the innovation team being adopted across hubs and the communities they serve. The extent of this adoption varies based on the hub's culture, priorities, and existing knowledge levels; however, by equipping hubs with the necessary skills and tools, Start Network is enabling them to utilise innovation as a means to engage with communities in a more localised and equitable manner.

5. RECOMMENDATIONS

5.1 CREATE SPACE WITHIN START NETWORK OPERATIONS.

Participants emphasised the critical need to create dedicated space for LITK within Start Network's operations. Whilst progress has been made in areas such as CARF and Innovation, more effort is needed in areas like the Start Funds, which are the largest programmes of Start Network. Suggestions include encouraging more community consultation to ensure local voices are present in project design and having a dedicated space in alert notes calling for LITK to be shared. To help overcome the challenge of short timeframes, the provision of training and peer-learning opportunities on effective engagement tools and participatory methods may help members to make the most of community consultation time, even if short. This training could be provided as part of hub engagement or during learning events following Start Fund projects. In general, the continued expansion and use of hubs and national Start Funds as a vehicle for pushing response to a more localised level should continue to open up more opportunities for communities to engage and share their LITK.

5.2 APPROACH WITH A DECOLONISING LENS

DEFINITION: In the humanitarian sector, decolonisation involves addressing power imbalances and shifting resources, authority, and influence from the Global North to the Global South, which bears the brunt of humanitarian crises (Aloudat and Khan, 2021). This also includes restructuring organizations to align with broader decolonization agendas, encompassing information dissemination, expertise utilization, strategic goals, and staffing arrangements (Majumdar, 2020).

Start Network's decolonisation (2021) emphasises the need for the organisation to foster a culture which holds 'bravery, trust, and deep democracy' at the core. Although undoubtably essential, these pre-conditions are subjective and therefore arguably challenging to translate into practical actions. Therefore, one of the key recommendations to ensure that the decolonisation and anti-racism work of Start Network is accounting for LITK, is to review this framework and establish how and where it is being applied. This is a piece of work already in progress as of August 2024.

In terms of more specific actions, efforts are underway within the FOREWARNs to redefine the term 'expert', bringing community members, leaders, and local organisations alongside the likes of scientists, civil servants and academics. This broadens the scope of information sources and stakeholders involved in anticipatory decision-making processes whilst challenging the presence of a 'hierarchy of knowledge' A similar approach could be adopted organisation-wide, recognising that global staff, community members, and other LITK gatekeepers have fewer opportunities to engage in decision-making spaces. Progress could be advanced through the use of more local languages and inclusive engagement methods (such as small groups over plenary sessions) that encourage diversity and reduce the dominance of global north voices.

5.3 LINK IT TO LOCALISATION.

Localisation, in which power, decision making, and resources are shifted to local and community actors, is the mechanism through which the vision of systems change that Start Network are committed to can be achieved. This means that rather than having to establish a new stance and framework on how LITK can be better sought and engaged with, the mechanisms through which localisation are being pursued can be utilised. Currently the main vehicles for localisation are hubs, programmes, and organisational strengthening and therefore a recommendation from this report is to explore ways in which space can be created in these already receptive areas for LITK. Once space is built into these areas, more thought will be required as to what Start Network does with the LITK it is engaging with; however, that is where further research, collaboration, and learning with members comes in.

5.4 SUPPORT FURTHER RESEARCH AND PILOTS.

The research findings highlight both the opportunity and desire for further exploration of LITK's potential within Start Network. Next steps involve further research into specific contexts and operational areas, alongside trials and pilots incorporating LITK. Several participants already have ideas for these, particularly in DRR and EAA, and the next steps involve working with these individuals and teams to actualise these plans. Further research should work collaboratively with members and communities to ensure accurate representation and utilisation of the network's expertise.

5.5 CREATE MORE INCENTIVES AND AVENUES FOR GLOBAL STAFF TO SHARE THEIR LOCAL, INDIGENOUS, AND TRADITIONAL KNOWLEDGE.

Several of the study participants self-identify as Indigenous and all hold valuable LITK about their contexts and countries. This knowledge should be more effectively leveraged through creating direct and inclusive channels of communication, through empowering global colleagues, and through having dedicated open-space discussions around the topic.

Start Network plays a pivotal role in shaping the norms and requirements of humanitarian donors As was noted in the Decolonisation and Anti-Racism Framework, some of the ways these currently are limited include non-inclusive language options, the necessity of good internet to engage fully, and unaccommodating times in relation to time zones. All these challenges will inevitably be limiting the degree to which global colleagues can share their LITK beyond their immediate teams and areas of work. Although progress has been made around some of these, such as having an in-house Spanish and French translator, more needs to be done to ensure that all staff can participate equally in the organisation. Moreover, for colleagues to want to share their LITK with the rest of the organisation, they also have to feel that they are valued and seen equally and therefore discrepancies in salary amounts and representation in senior leadership should also be addressed.

5.6 INFLUENCE DONORS AND THE WIDER SECTOR.

Start Network plays a pivotal role in shaping the norms and requirements of humanitarian donors and the broader sector. Participants highlighted that donor expectations regarding project knowledge types, timelines, and activities often hinder LITK utilisation. Start Network is well-positioned to influence and disseminate its experiences integrating LITK, enhancing visibility and credibility across the sector. With donors, Start Network can advocate for greater flexibility around time, reporting, and evaluation requirements which may be able to reduce some of the barriers that donors currently exacerbate. This may help to promote projects that are more responsive and flexible to changing and diverse contexts. Within the wider sector, Start Network are regularly involved in panel discussions, forums, and conferences and therefore they can use these spaces to advocate more for the inclusion of LITK and can invite members and community representatives to speak for themselves on the topic.



6. CONCLUSION

This research focused on three main objectives regarding the exploration of LITK within a humanitarian context.

Firstly, it aimed to identify how LITK is currently utilised within Start Network. The findings show that LITK is integrated into Start Network's work in various ways and to different extents. In DRR and EAA, LITK is being thoroughly explored both within Start Network and by global entities such as the UNDRR. There have been pilots of EWS and EAA models incorporating LITK as a source of information, with ongoing research in places like Zimbabwe and Bangladesh. Similarly, the CLIP involves extensive engagement with LITK, enabling communities to design innovation programs tailored to their contexts. Whilst not universal, this approach has prioritised LITK in certain areas, such as Guatemala. Additionally, hubs are emerging as key spaces where LITK informs conversations and decisions.

Secondly, the research sought to highlight opportunities for greater engagement with and use of LITK within the network. The Start Fund emerged as a critical area where LITK could be more meaningfully integrated. To improve accountability to affected populations, more space is needed for community consultation and co-design within Start Fund processes. Although balancing speed and inclusivity is challenging, localising the Start Fund through national funds and hubs can support this effort. Encouraging members to establish relationships with at-risk communities outside the alert cycle can also facilitate better integration of LITK. The increasing focus on Start Fund Anticipatory Alerts should promote further engagement with LITK, with DRR and EAA already being prime areas for its integration. Hubs also show potential through further localisation of operations and broadening membership to include more L/NNGOs.

Finally, the research aimed to identify further learning opportunities and areas for exploration involving members. It revealed a wealth of knowledge among members, particularly in DRR, EAA, and Innovation. Harnessing this knowledge can be achieved through the provision of resources, funding, training, and facilitating peer-to-peer learning exchanges. This research, given the complexity of the topic and diverse contexts, cannot encompass everything. Therefore, it is now the responsibility of Start Network to support members and communities in exploring LITK more extensively and effectively within their own areas and fields of expertise. The wider sector indicates that LITK will become increasingly prominent in discussions on localisation and system change, positioning Start Network favourably to harness its network and contribute to these conversations.

Start Network thus faces a pivotal decision: to advocate for the inclusion of LITK in the humanitarian sector and invest in further research, pilot programs, and learning initiatives that promote diverse perspectives and voices, or to maintain reliance on existing knowledge paradigms. Although already part of a broader strategy, research participants clearly feel that, as an organisation committed to localisation and system change, Start Network should actively choose and pursue the former.

7. BIBLIOGRAPHY

Ali, T. et al. (2021) 'Facilitating Sustainable Disaster Risk Reduction in Indigenous Communities: Reviving Indigenous Worldviews, Knowledge and Practices through Two-Way Partnering', International Journal of Environmental Research and Public Health, 18(3), p. 855. Available at: https://doi.org/10.3390/ijerph18030855.

Aloudat, T. and Khan, T. (2021) 'Decolonising Humanitarianism or Humanitarian Aid?', Speaking of Medicine and Health, 13 July. Available at: https://speakingofmedicine.plos.org/2021/07/13/decolonising-humanitarianism-or-humanitarian-aid/ (Accessed: 3 April 2024).

Cappelli, F., Costantini, V. and Consoli, D. (2021) 'The trap of climate change-induced "natural" disasters and inequality', Global Environmental Change, 70, p. 102329. Available at: https://doi.org/10.1016/j. gloenvcha.2021.102329.

Cuaton, G.P. and Su, Y. (2020) 'Local-indigenous knowledge on disaster risk reduction: Insights from the Mamanwa indigenous peoples in Basey, Samar after Typhoon Haiyan in the Philippines', International Journal of Disaster Risk Reduction, 48, p. 101596. Available at: https://doi.org/10.1016/j.ijdrr.2020.101596.

Fiolhais, M. (2023) 'The Indigenous Roots of Regenerative Agriculture', Rainforest Alliance, 9 August. Available at: https://www.rainforest-alliance.org/insights/the-indigenous-roots-of-regenerative-agriculture/ (Accessed: 30 October 2023).

Howitt, R., Havnen, O. and Veland, S. (2012) 'Natural and Unnatural Disasters: Responding with Respect for Indigenous Rights and Knowledges', Geographical Research, 50(1), pp. 47–59. Available at: https://doi.org/10.1111/j.1745-5871.2011.00709.x.

Lambert, S., Scott, J. and Redfern, M. (2020) 'How Indigenous Communities Respond to Disasters'. Available at: https://www.thenewhumanitarian.org/feature/2020/08/18/Indigenous-communities-disaster-humanitarian-response-coronavirus (Accessed: 1 December 2023).

Lyons, P.R., Kristen (2022) 'Democratizing global climate governance? The case of indigenous representation in the Intergovernmental Panel on Climate Change (IPCC)', in Economics and Climate Emergency. Routledge.

Majumdar, A. (2020) 'Bearing Witness inside MSF', The New Humanitarian, 18 August. Available at: https://www.thenewhumanitarian.org/opinion/first-person/2020/08/18/MSF-Amsterdam-aid-institutional-racism (Accessed: 3 April 2024).

Menéndez, P. et al. (2020) 'The Global Flood Protection Benefits of Mangroves', Scientific Reports, 10(1), p. 4404. Available at: https://doi.org/10.1038/s41598-020-61136-6.

Mohamed, J., Anderson, P. and Matthews, V. (2022) 'Why are Indigenous peole being left out of climate conversations?', Prevention Web, 29 March. Available at: https://www.preventionweb.net/news/indigenous-peoples-across-globe-are-uniquely-equipped-deal-climate-crisis-so-why-are-we-being (Accessed: 21 November 2023).

Nasir, R., Rhodes, T. and Kleinfeld, P. (2023) 'In Sudan, mutual aid groups face security threats and funding gaps', The New Humanitarian, 2 August. Available at: https://www.thenewhumanitarian.org/news-feature/2023/08/02/how-mutual-aid-networks-are-powering-sudans-humanitarian-response (Accessed: 20 May 2024).

Nikolakis, W. et al. (2020) 'Goal setting and Indigenous fire management: a holistic perspective', International Journal of Wildland Fire, 29(11), pp. 974–982. Available at: https://doi.org/10.1071/WF20007.

Njie, H. (2022) 'Community Building and Ubuntu: Using Osusu in the Kangbeng-Kafoo Women's Group in The Gambia', in S.H. Caroline and C. P.J. (eds) Community Economies in the Global South: Case Studies of Rotating Savings and Credit Associations and Economic Cooperation. Oxford University Press, p. 0. Available at: https://doi.org/10.1093/oso/9780198865629.003.0007.

Radjou, N., Prabhu, J. and Ahuja, S. (2012) Jugaad Innovation. A Frugal and Flexible Approach to Innovation for the 21st Century. Random House India.

Schramm, P.J. et al. (2020) 'How Indigenous Communities Are Adapting To Climate Change: Insights From The Climate-Ready Tribes Initiative', Health Affairs, 39(12), pp. 2153–2159. Available at: https://doi.org/10.1377/hlthaff.2020.00997.

Syafwina (2014) 'Recognizing Indigenous Knowledge for Disaster Management: "Smong", Early Warning System from Simeulue Island, Aceh', Procedia Environmental Sciences, 20, pp. 573–582. Available at: https://doi.org/10.1016/j.proenv.2014.03.070.

Tsunagu, B.V. (2023) Accountability to Affected Populations (AAP) In Start Fund Processes and Start Fund Projects. Start Network.

UN (2015) Sendai Framework for Disaster Risk Reduction 2015 - 2030. United Nations.

UNDRR (2022a) 'Five risk-reduction strategies updated with age-old knowledge', Prevention Web, 5 July. Available at: http://www.undrr.org/news/five-risk-reduction-strategies-updated-age-old-knowledge (Accessed: 20 May 2024).

UNDRR (2022b) Using Traditional and Indigenous Knowledges for Disaster Risk Reduction. UNDRR.

UNDRR (2023) Thematic report on local, Indigenous and traditional knowledge for disaster risk reduction in the Pacific. UN. Available at: http://www.undrr.org/publication/thematic-report-local-indigenous-and-traditional-knowledge-disaster-risk-reduction (Accessed: 15 July 2024).

UNESCO (2018) Local and Indigenous Knowledge Systems (LINKS), UNESCO. Available at: https://en.unesco.org/links (Accessed: 26 October 2023).

UNFCC (2022) 'How Indigenous Peoples Enrich Climate Action', UN Climate Change News, 9 August. Available at: https://unfccc.int/news/how-indigenous-peoples-enrich-climate-action (Accessed: 22 November 2023).

Whyte, K. (2021) 'Is it colonial déjà vu? Indigenous peoples and climate injustice', in Literature and the Environment. Bloomsbury Publishing, pp. 150–162.

Wutich, A. (2018) 'Water Sharing Across Cultures: Gifts, Exchanges, and other Transfers between Households', Advanced Science News, 20 September. Available at: https://www.advancedsciencenews.com/water-sharing-across-cultures-gifts-exchanges-and-other-transfers-between-households/ (Accessed: 20 May 2024).

Yunkaporta, T. (2020) Sand Talk: How Indigenous Thinking Can Save the World. Harperone.