Policy Brief

Innovation in Humanitarian Assistance

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Introduction

The role innovation can play in humanitarian response has received considerable attention from academics, practitioners, and policy-makers. Indeed, innovation has become a major topic in a broad rethinking of the humanitarian policy agenda as a whole. Proponents for an enhanced role of innovation in the humanitarian sector stress the potential for innovation to deliver more effective and efficient solutions that can yield greater benefits to affected populations per dollar spent, compared to currently employed solutions. Due to this, recent years have seen a flurry of novel initiatives to promote innovation within and across organisations, new collaborations between stakeholders, and increased investment in developing and testing innovations at the operational level. However, taking stock after several years of increased innovation efforts, there is a sector-wide perception that humanitarian innovation is falling short of its highly set ambitions to transform the sector and add value in tackling the prevailing strategic and operational challenges within the sector. Understanding the impact of innovation on strengthening effective and efficient responses to humanitarian crises continues to be a key policy and practice concern for donors and the broader sector.

This report presents the findings of a literature review on humanitarian innovation commissioned by the evaluation department of the Ministry of Foreign Affairs of the Netherlands. The analysed corpus of literature consists of 301 individual articles, from both academic and practitioner literature, spanning the period from 2015 up to and including the second quarter of 2021. The report's aim is to answer the overarching question: **What added value do innovative approaches bring in the pursuit of Dutch policy objectives and what are effective ways for the Netherlands as a donor and diplomatic actor to promote innovation?**

The primary insight gained from the review of the literature is that efforts to reform the humanitarian system by, amongst other things, leveraging innovation to provide improved solutions to humanitarian challenges have been primarily ad hoc, fragmented, and trying to serve diverse objectives. This has in turn resulted in the implementation of incremental improvements on the product and process level, rather than transformative change throughout the sector. Innovation in itself will not deliver radical, system-defining change unless organisations that hold power in the system adopt a more holistic and system-wide perspective and reform the system as a whole, which includes the outputs, institutions, actors, and contextual factors of the system.

From the literature, a number of strategic recommendations for donors are identified, which can aid in taking a system-wide approach towards innovation in the humanitarian sector:

What the Literature Tells Us

Application of concepts and practices

There is limited conceptual clarity regarding the role of innovation, how it is defined and what its concrete (policy) objectives are meant to be. Tellingly, no common definition for the term 'humanitarian innovation' exists, leading to a variety of perspectives on what constitutes an innovation. The same is true for key concepts related to innovation, such as

what makes an innovation "successful". Consequently, identifying success criteria and the type of evidence needed to support an innovation's claimed success is difficult. Some definitions describe a successful innovation as one that improves current practices and/or reaches significant scale. Nonetheless, the concept of scale itself is not generally agreed upon in the literature either. This lack of clarity negatively impacts the process of innovation itself, as it hinders effective resource allocation for donors.

Further, the literature shows that innovations in humanitarian contexts do not pursue or define a singular common (policy) objective, but rather a range of outcomes. This partially stems from innovation being conceived and assessed on a case-by-case basis. This approach is also reflected in the types of innovations introduced in the sector, which are mostly individual products or processes, innovation types that tend to offer incremental improvements over existing practices rather than transformational change. Similarly, innovation strategies pertaining to management are mostly on the level of managing individual projects.

Without a clear common goal to strive towards and limited suitable methods to achieve these goals, developing an overarching sector-wide innovation strategy is difficult. Donors and practitioners too frequently focus on singular innovations or innovation processes to drive innovations throughout the entirety of the sector. Steps towards a more holistic approach are undertaken by innovation intermediaries, who manage innovation at higher levels (i.e. programme or portfolio) and channel donor resources towards specific innovation themes or clusters. Nevertheless, the literature stresses the necessity to conceptualise humanitarian innovation even more broadly, taking into account the system in its entirety to identify the most potent levers and intervention points for successful innovation initiatives.

Types of Innovation

Most humanitarian innovations mentioned across the literature are either product or process innovations, which tend to offer incremental improvements over existing modes of practice. The dominance of these innovation types over more complex manifestations of innovation may relate to the conceptual opaqueness within the sector of what constitutes a humanitarian innovation. This lack of conceptual clarity results in an overly narrow focus, eschewing more complex types of innovations on the position or paradigm level, thereby impeding system-wide transformative change.

The focus on the product and process level is also a driver of technophilia, with digital technological innovations making up the majority of innovations newly introduced to the humanitarian sector. Further, this approach disregards how these innovations would also require underlying infrastructure and users to meet certain operational capabilities. Therefore, it is critical to move beyond mere classifications of innovations according to their types, and instead, acknowledge the business strategies that they imply in order to become successful.

WFP's mobile Vulnerability Analysis Mapping (mVAM)

The majority of humanitarian innovations mentioned across literature constitute either product or process innovation, which tend as a whole to offer more incremental change compared to 'position' and 'paradigm' innovations. It is, however, important to note that the different types of innovation have fuzzy boundaries, nor are they exclusive. There can be considerable overlap as to which factors could be considered innovative and innovations frequently take on multiple characteristics, which can evolve over time.

This was demonstrated by multiple innovations cited in the literature which pertain to multiple types. For example, the **Mobile Vulnerability Analysis Mapping** (mVAM) project of the World Food Programme uses mobile technologies to collect food security information remotely. It brings together a wide range of tools to support practitioners in data collection (product innovation) which simultaneously change the ways in which data collection takes place by (process innovation) as well as brings along considerable shifts in the fundamental approach to humanitarian work by facilitating remote operations (paradigm innovation).

Innovation initiatives such as mVAM confirm that a single innovation (project) can actually relate to multiple innovation types. Also, this example goes to show that innovation at lower levels (product or process) may lead to innovations at higher levels (position or paradigm).

Successful Innovation

Success is hardly ever defined in concrete terms and the commonly applied determinants of success, scale and impact, are also defined only vaguely. In its current iteration, "at scale" is mostly used to mean "reaching many people" and "impact" is determined on a case-by-case basis, though scientifically rigorous impact evaluations are rare. Only evaluating impact, and by extension success, on a case-by-case basis further hinders the formulation and pursuit of overarching innovation strategies and transformative change.

Without being able to judge an innovation's success and leaving the concepts of scale and impact open for interpretation, negatively affects the incentives to fund an innovation long-term. Scalability is often insufficiently considered during the early stages of innovation development and funding rarely specifically hinges upon scalability of an innovation. Supporting innovation to scale can be expensive and high risk, which deters many donors from long-term financing. There is broad recognition that the creation or invention of *novel* solutions has been supported at the expense of sufficient attention to how to scale them.

Cash-based programming

The (increased) use of "cash" in humanitarian crisis contexts is often cited as a successful innovation, as the use of cash/vouchers/debit cards at a larger scale delivers benefits such as more efficient resource allocation, since the affected populations can spend the money in whichever way they see fit. Using cash also simplifies logistics and supply chain operations significantly, and empowers affected populations.

Cash-based programming is not a singular innovation, but in fact consists of multitude of different innovations, such as the use of cash itself (debit cards, digital wallets), but also changing mental attitudes away from the belief that handing out cash will create dependency or that the cash will be spent irresponsibly.

Role of Data & Evidence

Lack of sufficient evidence results in barriers for donors and organisations to allocate funding to the most objectively suitable innovations. Humanitarian innovation rests on the assumption that innovation improves the quality and impact of humanitarian responses; however, very little generalisable evidence has been obtained. The literature lacks focus on assessing the impact of innovation in terms of the quality, efficiency, and effectiveness of humanitarian responses and outcomes for people in crises. This is also manifested in which innovations get funded. Rather than funding concepts or prototypes based on evidence, innovations are often funded based on perception and preference. A lack of data-driven decision-making also adds a level of arbitrariness to which innovations receive funding for being scaled up, as there is no way of telling whether they are "successful" due to a lack of common standards and data. This inhibits scaling of innovations in the humanitarian sector. Moreover, the basis for decision-making tends to forego evoking the voices and opinions of beneficiaries and affected populations themselves, thereby neglecting a most crucial form of data and opinions.

Structure of the Market

The customers of humanitarian innovation are often not the affected populations but rather the donors. Hence, an innovation specifically tailored to donors' desires and immediate needs is more likely to be considered successful and "purchased", without (necessarily) adding value for the affected population. In this setting, negative user experience is far less likely to result in the discontinuation of an innovation, as long as donors remain willing to fund the innovation. As a result, the innovations are primarily those "pushed" by donors due to preferences rather than based on objective qualities or suitability. Such donor behaviour can significantly influence the landscape of humanitarian innovation and tilt innovation efforts towards certain innovation trends and types desired by the donors.

An innovation specifically tailored to donor desires and immediate needs is not necessarily guaranteed to add value for the affected population. When looking at which end-users innovation is generally targeted, the majority of innovations are directed at improving the operational procedures and processes of humanitarian organisations and donors, instead of

being used by affected populations. The consequences of overwhelmingly targeting practitioners as users of innovation may also prove a hindrance to localisation efforts, as the focus on innovation for (non-local) practitioners seems to be counterintuitive to creating more local engagement, local capabilities, and strengthening local actors.

Innovation Strategies

Strategies in the sector are more related to the process of creating innovation, managing innovation, and which facets must be considered in the strategies (e.g. diffusion and scaling, design, and ethical considerations). How to best manage innovation in humanitarian contexts has received considerable attention through the sharing of lessons learned and best practices in terms of innovation management. The literature overwhelmingly describes humanitarian innovation strategies from a project-level perspective. Programme and portfolio-level analyses, which cluster together multiple innovation projects, are rare.

More recently, there have been calls to widen the scope more and conceptualise the humanitarian system in its entirety, taking into account more explicitly into account the existing complexities and interrelationships of actors and their interactions. Moving beyond the project-level strategy level to manage humanitarian innovations from a comparative- or systems-level perspective would yield a more holistic understanding of how innovation should be managed. The literature further states that intermediaries, for instance innovation funds, constitute a way for donors to meet some of the challenges mentioned above, as their operating mode tends to be more on the level of portfolio management, which enables them to consider a wider spectrum of innovations.

Strategic Recommendations for Donors

The literature consistently stresses the critical role of donors in creating effective policies and incentives to support innovation in humanitarian contexts. However, it also points to the fundamental lack of clear strategic and policy direction from most donors on innovation.

Humanitarian innovation as currently structured is falling short of its ambitions to consistently deliver more effective and efficient solutions to affected populations. Proponents of innovation are demanding a change that transforms the humanitarian system[1] as a whole. Current operating modes practised by the actors in the humanitarian sector result largely in the development and implementation of products and processes, which do not lead to the necessary system-wide transformation. A major obstacle currently facing humanitarian innovation is a lack of a holistic vision by donors and practitioners, who must go beyond focussing on singular innovations or innovation processes to drive innovations throughout the entirety of the sector. For developing such a holistic vision, the literature stresses the need to explicitly take into account the components of the humanitarian innovation system into their decision-making process, namely its output and performance (i.e. the innovations resulting from the system, and the degree of "success" they achieve), the innovation system's institutions (the formal and informal habits and practices, or routines shaping the way

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[1] Chapter 11 of the report further elaborates on the reconceptualisation and restructuring of the humanitarian system by providing a systems approach.

things are done within the system and how they inhibit or encourage innovation), the actors within the system and their relationships (the roles they play in driving innovation, their relationships, and networks), and lastly contextual factors (factors, both external and internal to the system, that have an effect on the humanitarian innovation system and cause it to change). According to the literature, the lack of a system's perspective makes the identification of possible levers and intervention points for successful innovation more difficult, as unexpected consequences arise from factors not taken into account in the decision-making process. Taking a systems-based approach is not only considered beneficial for delivering more effective, efficient, and appropriate solutions to beneficiaries, but also for reforming the humanitarian sector itself through ensuring that innovation is directed at higher-order policy objectives.

The priority strategic recommendations below are based on the findings of this literature review, which can serve as a set of tools to address the currently existing systemic shortcomings.

Strategic recommendation 1: Collaborate with other donors to increase coordination, knowledge exchange, and bundling of resources for innovation within the sector.

The literature stresses that collaboration between donors for the purpose of agenda-setting, sharing of best practices and data, can stimulate and encourage innovation. This can be accomplished, for instance, through increased integration of humanitarian actors' funding, data sharing, and coordination. This process has already made great strides, with initiatives such as the Grand Bargain. However, the literature points to the need for further intertwining of approaches and initiatives.

This recommendation can be achieved by:

- Donors working collaboratively to develop strategic approaches that outline agreed desired impacts and outcomes for supporting innovation action across humanitarian projects, programming, and systems;
- Individual donors ensuring these strategies are incorporated across innovation portfolios;
- Donors adopting a collective systems perspective of the humanitarian innovation sector, taking a tsystem-level point of view, allowing to see complexity, and stakeholder interconnection;
- Donors investing in incentives for intermediaries to facilitate partnerships, distribute funding, support humanitarian organisations in developing innovation expertise and facilitating open exchange of best practices and lessons learned;
- Harmonising and simplifying monitoring and reporting requirements and timeframes across donors, for example through common reporting templates, to simplify exchange of best practices and increase overall transparency on innovation in the humanitarian sector.

Strategic recommendation 2: Ensure active participation and inclusion of affected populations in innovation agendas and processes.

The literature notes the increased efforts towards a more inclusive user-centric approach regarding the role of the affected population in the context of humanitarian innovation. This is seen as necessary for increasing the appropriateness of the innovations designed (for those innovations targeted at affected populations directly), as well as having the potential for building capacity and resilience of the local population. The inclusion of the affected population throughout the different stages of the intervention makes use of local systems and expertise, building innovations from the bottom-up. While the call for an increase in collaboration with the affected populations is frequent in the literature, it is also noted that this is only infrequently practiced. Humanitarian innovation should therefore be more intimately linked with localisation efforts.[2]

This recommendation can be achieved by:

- Donors investing significantly, either through funding and/or advocacy, in innovations driven by the participation of affected people, including those based on the ideas of affected people from recognition all the way to diffusion;
- Encouraging collaboration with local and marginalised communities to ensure innovations are appropriate and empower these communities;
- Supporting and aligning with existing country-level strategies on innovation to support national and local actors in their efforts to drive bottom-up innovation and capacity building, and monitor and evaluate donor-funded efforts against these strategies.

Strategic recommendation 3: Facilitate collaboration and alignment between donors, innovators, humanitarian organisations, and private sector actors.

The literature considers the collaboration between multiple stakeholders as a primary driver for fostering more effective, efficient, and appropriate innovation in the humanitarian sector. This refers to increased cooperation between donors, innovators, humanitarian organisations (including intermediaries), and private sector actors. Collaboration between these stakeholders is considered crucial by the literature for the continuity and development of the humanitarian sector. Specifically, increased integration of humanitarian actors' funding, data sharing, and coordination is recognised as essential for supporting innovation in the humanitarian sector. Indeed, the literature shows that collaboration between actors can leverage synergetic effects through complementary skill sets and areas of responsibilities.

This recommendation can be achieved by:

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[2] For a detailed literature review on the subject of localisation in humanitarian action, please see Barbelet, Davies, Flint, and Davey (2021): *Interrogating the evidence base on humanitarian localisation: a literature study*.

- Investing in increased sharing of best practices and lessons learned, as well as the development of concrete tools and guidance to support improved innovation management practices;
- Donors providing platforms for knowledge exchange, networking and communities of practice around key humanitarian challenges to serve as incubators for identifying problems in a way that cultivates ownership and generates momentum to address these problems;
- Donors encouraging matchmaking between innovators and humanitarian organisations to ensure adoption and transfer of tested solutions;
- Entering partnerships with the private sector to leverage innovation capabilities and resources

Strategic recommendation 4: Facilitate evidence-based approaches and data-driven decision-making, for facilitating the operationalisation of appropriate innovations

The literature continuously stresses that evidence-based approaches are key to making decisions that are realistic and based on the needs of the affected community. Concrete data allows ascertaining which innovations work and which do not, thereby enabling the funding and scaling up of the most suitable innovations. Donors and practitioners are currently making insufficient use of evidence to base their decisions for funding humanitarian innovation, which leads to sub-optimal resource allocation and the resultant innovations not achieving the desired impact. Also, due to the high uncertainty associated with innovation, monitoring and evaluation are considered of particular importance to demonstrate not only effectiveness but measuring the accountability of the innovators. Further, as evidence serves to shape perceptions of innovation, and so influences whether stakeholders wish to support or take up the innovation, it can be used to promote adoption and diffusion of innovation amongst the intended end-users.

Therefore, donors and others with capacity to commission or produce research should invest in ways of measuring the impact of innovation on the quality of humanitarian responses and outcomes.

This recommendation can be achieved by:

- Supporting innovators to define 'objective' performance measurement related to (policy) objectives, to assess whether the innovation outperforms current practices on indicators of cost, output, outcome, or quality;
- Introducing common standards and practices for holding innovators more closely accountable to the impact achieved by their innovations by examining the proof for their value proposition;
- Sharing data, evidence, and case studies and thereby building lessons learned and best-practices on hands-on experience in order to facilitate learning and the application of suitable approaches without duplication of efforts;
- Conducting more cross-portfolio impact evaluations, particularly looking at the impact of innovations over time.

Strategic Recommendation 5: Increase the quality and quantity of funding going to innovation actors, and steer funding towards innovations explicitly catering to the needs of affected populations.

The literature repeatedly notes that the lack of financial resources is a key obstacle to humanitarian innovation. Outdated modes of financing and funding allocation are furthermore hindering getting the most value for money spent by donors. The financial resources available for innovation are low and not specifically well-designed for supporting the whole innovation process. Instead, the early stages of the innovation process usually have more funding, whereas there is little financing for the adoption and diffusion stages, where small programmes get stalled. Also, the market structure in the humanitarian sector may inadvertently push and pull innovators towards solutions that cater to donors' needs rather than the needs of affected populations, since donors are the ones ultimately funding innovations. This can in turn lead to practices that inhibit, restrict or stifle effective innovation. A pressing issue related to innovation for the sector is therefore to resolve the question of who the "customer" of the innovation is and who the "beneficiary" and restrict perverse incentives.

This recommendation can be achieved by:

- Donors moving beyond investing in individual innovations towards funding capabilities to adequately perform this type of investment (e.g. through investing in intermediaries managing innovation at programme or portfolio level);
- Providing dedicated funding to support the diffusion and transfer of innovation in order to ensure that innovation moves beyond initial innovation stages and scales sustainably;
- Providing alternative and flexible forms of financial aid (e.g. multi-year funding, pooled funding) to encourage humanitarian innovation projects by providing sustained and plannable financing;
- Providing incentives for humanitarian innovation to cater more explicitly to benefit the affected population, rather than the donors;
- Encouraging and supporting innovators to generate alternative income streams, outside of grant of core funding, to develop sustainable business models for supporting innovations.

In addition to the priority recommendations, the study highlights three actions to help improve understandings of innovation outcomes and opportunities. These actions constitute frequently occuring themes mentioned and described in the literature, which can help improve understanding of innovation opportunities.

Action 1: Provide a conducive environment for innovation inside donor organisations through fostering innovative cultures and strengthening innovation competencies. Donors and practitioners within the system are increasingly attempting to re-shape the system from the inside-out and make it more conducive to innovation. The aim is an increase in capabilities and a reform of culture and capabilities of the actors and as a result become a more fertile environment for innovation. This approach towards more open innovation, more interaction between actors, and a culture of innovation is argued to provide more and better outputs, actors with more suitable staff and capacities, and more entrepreneurial institutions that professionalise innovation management practices. Re-shaping donor culture and competencies ought to also incorporate an increase in coordination and alignment around the role of innovation, ensuring consistent use and

application of key concepts. Furthermore, the literature suggests the promotion and application of a systems perspective towards the role of innovation in the humanitarian sector, in order to facilitate achievement of desired transformational targets within the humanitarian sector.

Action 2: Link innovation with the humanitarian–development nexus. The humanitarian sector is increasingly recognising that its current operating mode insufficiently deals with the root-causes of crises related to countries' (economic) underdevelopment. Therefore, the humanitarian sector is being reshaped by the demand to more closely link humanitarian and broader development initiatives and utilising innovations for addressing root causes of vulnerability, fragility, and conflict. Donors should adopt a comprehensive strategy across its humanitarian, and development donor portfolio to support innovation in humanitarian action and in crisis response, including through strengthening blending of humanitarian and development financing.

Action 3: **Utilising cutting-edge innovation without sacrificing humanitarian principles**. Many novel technologies are not specifically developed for the humanitarian sector but are nevertheless adopted and adapted by both practitioners and affected populations. Technological development has pushed considerable changes in the humanitarian system leading to the introduction of new products and processes, as well as entirely new ways of working. Simultaneously, it sets considerable challenges for organisations and individuals in managing these technological and digital transformations. Donors within the sector must therefore take advantage of (technological) developments for transferring solutions towards the humanitarian crises, while maintaining a critical stance towards the potential and role of new technologies. This particularly entails encouraging principled and responsible innovation in order to mitigate the risks associated with innovation and experimentation. In introducing innovations in humanitarian contexts, the use of untested approaches can compound the risk of experimental practice with the risks of unstable environments. Mitigating risks in innovation projects can for instance be hedged by asking innovation teams to conduct risk assessment together with end-users and conduct a review of existing approaches and solutions in their early funded activities.