**Participation
for Humanitarian
Innovation**

Background paper
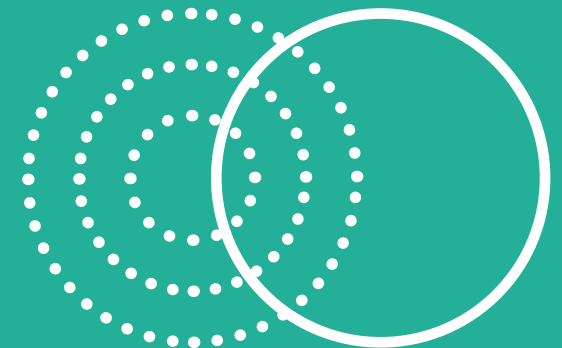## Toolkit

Created by

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About this paper

The *Participation for Humanitarian Innovation* resource comprises a toolkit, this background paper and its case studies. Elrha and The Massachusetts Institute of Technology (MIT) D-Lab developed this resource to help people who manage research and innovation projects in (and for) humanitarian contexts discover the opportunities of end-user participation, and address challenges in its implementation.

This background paper and its case studies present the concepts that underpin the *Participation for Humanitarian Innovation* resource, and outline the value of participatory humanitarian innovation. They aim to help teams decide when participation is possible, and how it can be delivered to maximum effect.

These resources build on Elrha's experience of supporting over 200 humanitarian innovation journeys through the Humanitarian Innovation Fund (HIF), and MIT D-Lab's background in participatory design approaches to tackle issues relating to poverty around the world.

About Elrha

Elrha is a global organisation that finds solutions to complex humanitarian problems through research and innovation.
The innovations funded through HIF identify, nurture and share more effective and scalable solutions to some of humanity's most difficult challenges. Working in partnership with humanitarian organisations, researchers, innovators and the private sector, Elrha aims to improve the effectiveness of humanitarian response and support better outcomes for people affected by crises.

About MIT D-Lab

The MIT D-Lab works with people around the world to develop and advance collaborative approaches and practical solutions to global poverty challenges. Its work in participatory design and inclusive innovation teaches people how to discern whether – as well as how and when – to use a participatory design process. This helps design and innovation teams to connect more meaningfully with people experiencing challenges of poverty or displacement, and to create effective solutions with them. Since 2009, MIT D-Lab has been applying these approaches in humanitarian innovation.

Acknowledgements

Suggested citations

Abbreviations and acronyms

ALNAP the Active Learning Network for Accountability and Performance
CLIP Community-led Innovation Partnership
DEPP Disasters and Emergencies Preparedness Programme
DFID UK Department for International Development
FCDO UK Foreign, Commonwealth and Development Office
HCD human-centred design
HIF the Humanitarian Innovation Fund
IRC International Rescue Committee
MIT The Massachusetts Institute of Technology
UCD user-centred design
UNHCR The United Nations High Commissioner for Refugees
UNICEF United Nations Children's Fund
WASH water, sanitation and hygiene
YSAT Youth Social Advocacy Team

Introduction

Introduction

There is no intrinsic reason why being caught up in a humanitarian crisis should strip people of the chance to control and shape their lives. However, because of the way it is structured and functions, humanitarian response can do just that. Displaced people and refugees are frequently viewed as vulnerable and passive recipients of aid rather than capable and active creators of solutions. Participatory approaches in humanitarian response – and innovation – can change that, enabling crisis-affected populations to assume agency and opening ways for them to work with others to shape humanitarian responses.

The current top-down structure of humanitarian aid focuses on the rapid distribution of products and services to the maximum number of people during the critical stage of an emergency. However, the protracted nature of 21st century conflicts and climate-related emergencies means that people affected by crises often live as displaced people or refugees for many years beyond the initial response and recovery phases. The continued dominance of top-down humanitarian approaches after the acute phase of a crisis prevents affected populations from participating fully in decisions about how humanitarian assistance is delivered and developed, limiting both their right to self-determination and the effectiveness of aid.

Elrha aims to understand and address humanitarian problems from the perspective of people affected by crises. We believe that increasingly participatory humanitarian response will foster more innovation and become more impactful.

The Humanitarian Charter and Core Humanitarian Standard on Quality and Accountability set out the rights of people affected by crises to participate in decision-making that affects their lives.[1] And the 2016 World Humanitarian Summit called for greater emphasis on this kind of participation. The Grand Bargain that emerged from that event specifically invoked a 'Participation Revolution', stating: "people receiving aid should be involved in making decisions that affect their lives".[2]

However, changes in practice have been slow. According to a 2018 study funded by the Organisation for Economic Co-operation and Development,[3] people who receive humanitarian assistance said they:

— are poorly informed about what to expect from humanitarian agencies and how to access support

— feel unable to participate in decisions that affect them

— criticise the quality and relevance of humanitarian assistance

— don't feel the support they currently receive will help them to become self-reliant.

1. Core humanitarian standard on quality and accountability. (2014). CHS Alliance, Group URD and the Sphere Project.

2. World Humanitarian Summit, commitment 6 of *The Grand Bargain – A Shared Commitment to Better Serve People in Need*, Istanbul, Turkey, 23 May 2016.

3. Ground Truth Solutions (2018) *The Grand Bargain: Perspectives from the Field*. Briefing note. Vienna. Ground Truth Solutions. Available at: https://www.oecd.org/dac/conflict—fragility—resilience/docs/Grand—Bargain—briefing—note—June—2018.pdf

Despite the growing discourse around participation, the humanitarian sector still lacks clear strategies, institutional mechanisms and practical pathways to promote greater participation of people affected by crises in developing innovations to improve their lives.[4] There remains a need for straightforward, actionable ways to enhance this kind of participation in humanitarian innovation.

Humanitarian innovation is a relatively new and rapidly evolving field that aims to improve humanitarian delivery through new products, services, programmes and systems. This presents fertile ground for increasing participation by end users, as it emphasises bringing new ideas, models and stakeholders (see Notes on terminology on page 7) into the humanitarian sector. Some participatory innovation experimentation is already happening.

Elrha is one of the most established actors in humanitarian innovation and is staunchly committed to supporting its grantees by developing resources that promote ethical, inclusive and impactful research and innovation. Supporting the adoption of participatory approaches is a crucial component of this. MIT D-Lab has worked in participatory design and inclusive innovation for 20 years, training people in low-resource areas to identify problems and create innovations, using appropriate technologies, products and tools. Over the last ten years, MIT D-Lab has increasingly been applying these approaches in humanitarian innovation.

Based on their experience and expertise, Elrha and MIT D-Lab partnered to develop a suite of resources to foster greater participation in humanitarian innovation. This partnership is based on the shared belief that increasing participation of the affected population in humanitarian innovation will result in improved innovations that are designed and delivered in new ways. Just as important are its intangible results, such as the agency and confidence that people gain when they contribute to solving problems in their lives. This is particularly important as top-down humanitarian assistance can foster dependence and routinely exclude crisis-affected people from participating in decision-making.

Participatory humanitarian innovation isn't easy. Innovators and people who manage innovation face various challenges, such as restrictive funding, tight timelines, over-extended staff and other resource limitations. Moreover, participation is a complex and dynamic process that requires time and effort to engage different innovation stakeholders in a meaningful and practical way.

The *Participation for Humanitarian Innovation* resource aims to provide the tools and insights to design humanitarian innovation journeys that enhance the participation of crisis-affected people. It helps implementers and other participants to assess the appropriate degree, nature and focus of this participation, to ensure an appropriate and meaningful participatory process.

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4. Communicating with Disaster Affected Communities Network (CDAC) and The Steering Committee for Humanitarian Response STHR (2017) *We hear the participation music, but why is nobody dancing? The 12 essentials for systems change.* Paper prepared for the CDAC Network and SCHR Global Forum "The authenticity challenge to the Participation Revolution". 22–23 May 2017, Bangkok.

There is a general consensus in the humanitarian sector that increased stakeholder participation in humanitarian innovation leads to significant benefits, such as more relevant outcomes and higher adoption rates. However, there is a lack of shared understanding in the sector about what exactly participation means (see below for the definition used in this paper and related resources). Despite a wide range of participatory approaches, few involve clearly defined pathways to increase stakeholder participation during an innovation journey.

This background paper and its case studies examine emerging examples of how people affected by crises participate in humanitarian innovation and seeks to contribute to the small body of evidence that exists.

Notes on terminology

Humanitarian innovation: This falls into two general categories: innovations designed for humanitarian actors to improve programme or service delivery; and innovations designed for people affected by crises as the principal users. This paper focuses on the latter. It makes no assumption about the nature of an innovation process or its end result.

Innovation team: All contributors to a participatory humanitarian innovation process, not just a defined team at, or commissioned by, an implementing organisation.

Participation in humanitarian innovation: A journey in which stakeholders – including but not limited to end-users – participate in developing or influencing a humanitarian innovation in a meaningful way.

Stakeholders: Anyone who might have an interest in an innovation process, project or solution. These individuals, groups and organisations include the innovation's primary users and implementers, other people affected by the problem or crisis, and implementation funders or partners. Even robust stakeholder mapping may have unintentional gaps, so 'all stakeholders' means all known stakeholders. Non-participating stakeholders might be people who are not invited to participate, those who choose not to participate or those who are unknown to the innovation team.

User-centred design: A creative problem-solving approach used to design products, services, and programmes across a wide range of sectors that puts the needs and experiences of the end-users at the centre of the design process and engages users in this process.[5]

Human-centred design: A creative approach to problem-solving, that starts with the people you are designing for and ends with new solutions that are tailor-made to suit their needs… It aims to develop successful solutions by keeping the intended users of the solution at the heart of the design process.[6]

Users/user-innovators: As MIT D-Lab's work focuses on innovations that are applied directly by people affected by crises, all references to 'users' or 'user-innovators' refer to people affected by crises.

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5. Bourne, S (2019) User-Centred Design and Humanitarian Adaptiveness. ALNAP Case Study. London: ODI/ALNAP p.10. Available at: https://www.alnap.org/help-library/user-centred-design-and-humanitarian-adaptiveness

6. Bourne, S (2019) User-Centred Design and Humanitarian Adaptiveness. ALNAP Case Study. London: ODI/ALNAP p.10. Available at: https://www.alnap.org/help-library/user-centred-design-and-humanitarian-adaptiveness

Background on participation for humanitarian innovation

Background on participation for humanitarian innovation

Developing this resource involved conducting a literature review of 41 journal articles, reports and documents. Overall, the literature makes strong arguments for participation in humanitarian innovation but also highlights the need to transform that into practice through clear pathways. Emerging examples of user participation in humanitarian innovation form a small but robust sample of different participation types, providing valuable insights and inspiration. The examples highlighted throughout this paper are drawn from the literature, the author's knowledge and experience, and Elrha's and MIT D-Lab's work.

The emergence of participation in humanitarian innovation

The concept of humanitarian innovation first appeared in the literature in 2009, when the Active Learning Network for Accountability and Performance (ALNAP) began researching the growth of humanitarian innovations.[7] In 2011, the then UK Department for International Development (DFID)[8] supported Elrha in establishing the HIF and funding for humanitarian innovation increased, catalysing more innovation and involvement from many UN and multilateral organisations.[9] [10]

Humanitarian innovation significantly expanded from 2009–2014. By 2015, many UN agencies had developed their own innovation units and started innovation labs that operated in the humanitarian sector, such as the United Nations Children's Fund (UNICEF) Upshift labs. Alongside this, The United Nations High Commissioner for Refugees (UNHCR) Ideas platform was conceived as a virtual innovation lab.[11]

Other humanitarian innovation labs – primarily run by humanitarian organisations, such as the International Rescue Committee (IRC)'s Airbel Impact Lab – also emerged at this time. In 2016, following the Nepal earthquake, a small group of INGOs established the Response Innovation Lab to improve global innovation coordination and collaboration in specific crises among INGOs, local innovators and global technology firms. The Global Alliance for Humanitarian Innovation was also formed in 2016.

7. Scriven, K (2016) 'Humanitarian Innovation and the Art of the Possible'. Humanitarian Exchange Magazine. London: Humanitarian Practice Network, ODI. 66: 5–7.

8. Since replaced by the FCDO

9. Obrecht A. and T. Warner, A. (2016) 'More than just luck: Innovation in humanitarian action'. HIF/ALNAP Study. London: ALNAP/ODI. Available at: https://www.alnap.org/help-library/more-than-just-luck-innovation-in-humanitarian-action

10. Scriven, K (2016) 'Humanitarian Innovation and the Art of the Possible'. Humanitarian Exchange Magazine. London: Humanitarian Practice Network, ODI. 66: 5–7

11. Bloom, L. and Faulkner, R. (2015) Innovation Spaces: Transforming Humanitarian Practice in the United Nations. Working Paper Series Number 107. Oxford: Refugee Studies Centre. Available at: https://www.rsc.ox.ac.uk/publications/innovation-spaces-lessons-from-the-united-nations

The importance of participation in humanitarian innovation

The April 2016 issue of *Humanitarian Exchange* published by the Humanitarian Practice Network features an overview of thought and practice in humanitarian innovation, with several articles emphasising the importance of user participation.[12][13][14] Published two years later, *Managing Humanitarian Innovation: the Cutting Edge of Aid* provides another overview of innovation experiences.[15] Betts and Bloom's proposed framework for ethical standards recommends ensuring that vulnerable and marginalised people are consulted at all stages of the innovation journey, and outlined the risks of not doing this.[16]

Foundational research papers from the Humanitarian Innovation Project at the Refugee Studies Centre in Oxford and ALNAP repeatedly call for engaging end users in humanitarian innovation.[17][18][19][20]

And Obrecht and Warner identify *"engaging with end users and gatekeepers"* as one factor that can help an innovation process achieve success.[21] Several other authors concur on the benefits of user participation in humanitarian innovation.[22][23][24][25][26]

12. Ramalingam, B., (2016) Innovations in the Nepal Earthquake Response, Ten Lessons from the DEC response review. Humanitarian Innovation Issue 66, London: Humanitarian Practice Network. Available at: https://odihpn.org/magazine/humanitarian-innovation/

13. Sorenson, K., (2016) *Innovating in an on-going armed conflict; the Mines Action Applications (MApps) project in Ukraine*. Humanitarian Innovation Issue 66, London: Humanitarian Practice Network. Available at: https://odihpn.org/magazine/humanitarian-innovation/

14. Obrecht, A., (2016) Separating the *"good"* failure from the "bad: three success criteria for successful innovation*. Humanitarian Innovation Issue 66, London: Humanitarian Practice Network. Available at: https://odihpn.org/magazine/humanitarian-innovation/

15. James, E and Taylor, A (2018) *Managing Humanitarian Innovation, the Cutting edge of Aid*. Practical Action, Reading, UK

16. Betts, A and Bloom, L (2015) *Principles for Ethical Humanitarian Innovation*. Draft Principles based on joint HIP-WHS Oxford Workshop. Oxford: Refugee Studies Centre.

17. Betts, A. and Bloom, L. (2013) *The Two Worlds of Humanitarian Innovation*. Working Paper Series, No. 94. Oxford: Refugee Studies Center. Available at: https://www.unhcr.org/innovation/wp-content/uploads/2017/10/wp94-two-worlds-humanitarian-innovation-2013.pdf

18. Betts, A. and Bloom L. (2014) *Humanitarian innovation: The state of the art*. OCHA Policy and Studies series, 009. New York: OCHA. Available at: https://www.rsc.ox.ac.uk/publications/humanitarian-innovation-the-state-of-the-art

19. Betts, A, Bloom, L & Weaver, N (2015) *Refugee Innovation: Humanitarian innovation that starts with communities.* Oxford: Refugee Studies Centre. Available at: https://www.rsc.ox.ac.uk/publications/refugee-innovation-humanitarian-innovation-that-starts-with-communities

20. Obrecht, A., Warner, A., and Dillon, N. 2017. *Evaluating humanitarian innovation*. London: HIF-ALNAP working paper. Available at: https://www.alnap.org/help-library/evaluating-humanitarian-innovation-hif-alnap-working-paper

21. Obrecht, A and Warner, AT (2016) *More than just luck: Innovation in humanitarian action*. HIF/ALNAP Study. London: ALNAP/ODI p.23. Available at: https://www.alnap.org/help-library/more-than-just-luck-innovation-in-humanitarian-action

22. Konda, N, Mansour, K, Mwendi, F, Tanner, L, and Gray, I (2019). *Support Models for Local Humanitarian Innovation; How to provide impactful support for grassroots innovations.* DEPP Innovation Labs Research Paper 04, London: Start Network. Available at: https://startnetwork.org/resource/support-models-local-humanitarian-innovation

23. Bourne, S (2019) *User-Centered Design and Humanitarian Adaptiveness*. ALNAP Case Study. London: ODI/ALNAP. Available at: https://www.alnap.org/help-library/user-centred-design-and-humanitarian-adaptiveness

24. Sandison, P (2019) *We're listening: An evaluation of User-centered community engagement in emergency sanitation.* Oxfam. Available at: https://policy-practice.oxfam.org/resources/were-listening-an-evaluation-of-user-centred-community-engagement-in-emergency-620617/

25. Global Systems for Mobile Communications Association, GSMA (2020) *Human-centered design in humanitarian settings: Methodologies for Inclusivity*. GMSA. Available at: https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2020/09/Research_Methodologies_R1_Spreads-1.pdf

26. Sorenson, K (2016) *Innovating in an on-going armed conflict; the Mines Action Applications (MApps) project in Ukraine*. Humanitarian Innovation Issue 66, London: Humanitarian Practice Network. Available at: https://odihpn.org/magazine/humanitarian-innovation/

The practice of participation in humanitarian innovation

Despite significant agreement that the participation of end-users in humanitarian innovation is important and beneficial, there remains a lack of pathways to support this.[27] [28] [29] [30] [31] A considerable proportion of humanitarian innovation processes remain largely top-down, primarily driven by humanitarian organisations that often define problems and engage external specialists and design/innovation teams to develop solutions. Elrha's Global Prioritisation Exercise for Research and Innovation phase one mapping[32] states that only around a third of humanitarian innovators consult the affected population. Although several examples of user participation have emerged, particularly since 2017, in most cases this has formed part of a verbal consultation process rather than active engagement in creating solutions.[33]

The growth of the HIF has been a catalyst for increasing participation in humanitarian innovation, as it emphasises this approach in its innovation

challenges[34] [35] and has created a funding stream for local innovation.[36] The most substantive examples of user participation in the literature are two studies completed as part of the HIF User-Centred Sanitation Through Rapid Community Consultation Challenge,[37] [38] a study of refugee-led innovations in Uganda, Jordan, Kenya, South Africa and the US[39] and a report from the Disasters and Emergencies Preparedness Programme (DEPP) Innovation Labs.[40]

Many humanitarian organisations are looking to the private sector and design firms to understand the role that user-centred design (UCD) and human-centred design (HCD) can play in their work, adding to information about different kinds of participation in humanitarian innovation.[41] [42]

27. Ramalingam, B (2016) Innovations in the Nepal Earthquake Response, Ten Lessons from the DEC response review. Humanitarian Innovation Issue 66, London: Humanitarian Practice Network. Available at: https://odihpn.org/magazine/humanitarian-innovation/

28. Berditchevskaia, A, Malliaraki E and Peach, K (2021) Participatory AI for Humanitarian Innovation; A Briefing Paper. London: Nesta. Available at: https://www.nesta.org.uk/report/participatory-ai-humanitarian-innovation-briefing-paper

29. Konda, N, Mansour, K, Mwendi, F, Tanner, L, and Gray, I (2019). Support Models for Local Humanitarian Innovation; How to provide impactful support for grassroots innovations. DEPP Innovation Labs Research Paper 04, London: Start Network. Available at: https://startnetwork.org/resource/support-models-local-humanitarian-innovation

30. Betts, A and Bloom, L (2013) The Two Worlds of Humanitarian Innovation. Working Paper Series, No. 94. Oxford: Refugee Studies Center. Available at: https://www.unhcr.org/innovation/wp-content/uploads/2017/10/wp94-two-worlds-humanitarian-innovation-2013.pdf

31. Obrecht, A, Warner, A, and Dillon, N (2017) Evaluating humanitarian innovation. London: HIF-ALNAP working paper. Available at: https://www.alnap.org/help-library/evaluating-humanitarian-innovation-hif-alnap-working-paper

32. Elrha. (2017) Global Prioritisation Exercise for Research and Innovation in the Humanitarian System Phase One: Mapping. Cardiff: Elrha p.49. Available at: https://www.elrha.org/researchdatabase/gpe-research-innovation-humanitarian-system-phase-one-mapping/

33. Obrecht, A, Warner, A and Dillon, N (2017) Evaluating humanitarian innovation. London: HIF-ALNAP working paper. Available at: https://www.alnap.org/help-library/evaluating-humanitarian-innovation-hif-alnap-working-paper

34. Bourne, S (2019) User-Centred Design and Humanitarian Adaptiveness. ALNAP Case Study. London: ODI/ALNAP. Available at: https://www.alnap.org/help-library/user-centred-design-and-humanitarian-adaptiveness

35. Sandison, P (2019) We're listening: An evaluation of User- centered community engagement in emergency sanitation. Oxfam. Available at: https://policy-practice.oxfam.org/resources/were-listening-an-evaluation-of-user-centred-community-engagement-in-emergency-620617/

36. Elrha (n.d.) 'Humanitarian Innovation Fund: Our Focus Areas and What We Fund'. Web page. Available at: https://www.elrha.org/programme/hif/#our-focus-areas-what-wefund

37. Bourne, S (2019) User-Centered Design and Humanitarian Adaptiveness. ALNAP Case Study. London: ODI/ALNAP. Available at: https://www.alnap.org/help-library/user-centred-design-and-humanitarian-adaptiveness

38. Sandison, P (2019) We're listening: An evaluation of User- centered community engagement in emergency sanitation. Oxfam. Available at: https://policy-practice.oxfam.org/resources/were-listening-an-evaluation-of-user-centred-community-engagement-in-emergency-620617/

39. Betts, A, Bloom, L and Weaver, N (2015) Refugee Innovation: Humanitarian innovation that starts with communities. Oxford: Refugee Studies Centre. Available at: https://www.rsc.ox.ac.uk/publications/refugee-innovation-humanitarian-innovation-that-starts-with-communities

40. Konda, N, Mansour, K, Mwendi, F, Tanner, L and Thomas, J (2019) Human centered Design and Humanitarian Innovation, Designing Solutions with People Affected by disaster, DEPP Innovation Labs Research Paper 03. London: Start Network. Available at: https://startnetwork.org/resource/human-centred-design-and-humanitarian-innovation

41. Global Systems for Mobile Communications Association, GSMA (2020) Human-centered design in humanitarian settings: Methodologies for Inclusivity. GMSA. Available at: https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2020/09/Research_Methodologies_R1_Spreads-1.pdf

42. Ereira, E and Blenkin, A (2017) Design Led Solutions for Humanitarian Aid. In Built to Adapt. Available at: https://medium.com/built-to-adapt/design-led-solutions-for-humanitarian-aid-5303b1c46f70

Challenges to participation in humanitarian innovation

Several barriers impede the wide-scale adoption and implementation of participatory design in humanitarian innovation. One structural challenge to developing a more participatory approach is that emergency funding and bureaucratic norms provide little flexibility for open-ended humanitarian innovation processes.[43] [44] Humanitarian funding approval processes usually require a pre-defined problem based on an evidence-based analysis of needs and a corresponding solution. This does not allow for people affected by crisis to input into these two critical innovation stages.

Another challenge exists in humanitarian delivery mindsets, which assume that outside specialists have a better sense of a problem and superior expertise about how to solve it than the people who are directly affected by it.[45] Within humanitarian organisations, there are few methodologies to incorporate local expertise and cultural relevance into innovation processes.[46]

Furthermore, the humanitarian innovation sector has borrowed heavily from the private sector, which leads to business vocabulary and models being adopted without fully understanding their implications, particularly around participation.[47] This has led some to question the wholesale application of corporate innovation language and practices to the humanitarian sector.[48] The high-risk high-investment approaches that succeed in Silicon Valley are frequently inappropriate in the humanitarian sector, and therefore design approaches that have their roots in this culture often make assumptions or use techniques that don't translate directly, and need to be modified.

43. Bourne, S (2019) *User-Centred Design and Humanitarian Adaptiveness*. ALNAP Case Study. London: ODI/ALNA. Available at: https://www.alnap.org/help-library/user-centred-design-and-humanitarian-adaptiveness

44. Sandison, P (2019) *We're listening: An evaluation of user-centred community engagement in emergency sanitation*. Oxfam. Available at: https://policy-practice.oxfam.org/resources/were-listening-an-evaluation-of-user-centred-community-engagement-in-emergency-620617/

45. Bourne, S (2019) User-Centred Design and Humanitarian Adaptiveness. ALNAP Case Study. London: ODI/ALNAP. Available at: https://www.alnap.org/help-library/user-centred-design-and-humanitarian-adaptiveness

46. Konda, N, Mansour, K, Mwendi, F, Tanner, L and Thomas, J (2019) *Human Centred Design and Humanitarian Innovation, Designing Solutions with People Affected by disaster. DEPP Innovation Labs Research Paper 03*. London: Start Network. Available at: https://startnetwork.org/resource/human-centred-design-and-humanitarian-innovation

47. Sandvik, KB (2017) *Now is the time to deliver: looking for humanitarian innovation's theory of change. International Journal of Humanitarian Action* Vol 2, Issue 8. Pp 1–11. https://jhumanitarianaction.springeropen.com/articles/10.1186/s41018-017-0023-2

48. Scott-Smith, T (2016) *Humanitarian Neophilia: the 'innovation turn' and its implications*, pp2229–2234, Third World Quarterly, Volume 37, 2016 Issue 12. London: Taylor and Francis online.

Past and current examples of participation in humanitarian innovation

Past and current examples of participation in humanitarian innovation

As of 2023, there are various approaches to participation in humanitarian organisations but no explicit agreement on how to characterise and classify them. This section provides a quick overview of the current landscape, organising these approaches into two overlapping categories: the use of User-centred design (UCD) and human-centred design (HCD) approaches (largely driven by humanitarian organisations) and community-based innovation (largely driven by users).

UCD/HCD approaches

UCD/HCD methods, or tools arising from them, have gained currency in the humanitarian sector since IDEO first launched the HCD toolkit in 2009.

There is no widespread agreement on the differences between these methods, which are closely related and sometimes used interchangeably. Both methodologies centre users' needs to achieve better solutions. ALNAP offers the following definitions:[49]

"User-centred design is... a creative problem-solving approach used to design products, services, and programs across a wide range of sectors that puts the needs and experiences of the end-users at the centre of the design process and engages users in this process."

"Human-centred design is a creative approach to problem-solving, a process that starts with the people you are designing for and ends with new solutions that are tailor-made to suit their needs... It aims to develop successful solutions by keeping the intended users of the solution at the heart of the design process."

This paper refers to these approaches as 'UCD/HCD'. UCD/HCD is used in various ways in the humanitarian sector by different organisations as

part of their innovation processes, with tools and techniques that range from surveys and focus group discussions to more inclusive methods that involve users throughout an innovation process.

Innovation implementers can use UCD/HCD without engaging users directly, but most versions of this approach offer participatory tools for some or all innovation stages. UCD/HCD entered the humanitarian sector through funder initiatives, such as DFID's Amplify scheme, which aligned humanitarian actors with design groups like IDEO, Pivotal and Outsight.[50] Increasingly, some humanitarian/design partnerships are sharing their experience, tools and methods with others. For example, UNICEF has practised UCD/HCD extensively and promoted it among its partners through a guide and a toolkit[51] and GSMA has published a guide on HCD in humanitarian settings.[52]

ALNAP's User-centred Design and Humanitarian Adaptiveness case study report provides a useful overview of how several humanitarian organisations use UCD/HCD with the support of design firms.[53] And HIF has incentivised humanitarian actors to use UCD/HCD by making it a core element of innovation challenges. These include its 2017 challenge to pilot rapid community engagement in user-centred sanitation (see Consultation case study 1 on page 28) and its 2020 challenge to involve people with disabilities and older people in developing programmes that affect them.[54]

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49. Bourne, S (2019) *User-Centred Design and Humanitarian Adaptiveness*. ALNAP Case Study. London: ODI/ALNAP p.10. Available at: https://www.alnap.org/help-library/user-centred-design-and-humanitarian-adaptiveness

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50. Calder, R, Millican, C, Poulson, C and May, K (2018) *Amplify Evaluation Report*. IPE Triple Line & A2B labs, London and Delhi. Available at: https://iati.fcdo.gov.uk/iati_documents/45213885.pdf

51. UNICEF (no date) 'Human Centred Design for Health'. Web page. Available at: https://www.hcd4health.org/benefits-hcd

52. GSMA (2020) *Human-Centered Design in humanitarian settings: Methodologies for Inclusivity*. GMSA. Available at: https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2020/09/Research_Methodologies_R1_Spreads–1.pdf

53. Bourne, S (2019) *User-Centered Design and Humanitarian Adaptiveness*. ALNAP Case Study. London: ODI/ALNAP. Available at: https://www.alnap.org/help-library/user-centred-design-and-humanitarian-adaptiveness

54. For further details, see: https://www.elrha.org/funding-opportunity/innovation-challenge-meaningful-participation/

Community-based humanitarian innovation

'Community-based innovation' within the humanitarian sector is generally accepted to mean an innovation process anchored in specific geographic or demographic communities, sometimes in a physical lab or centre. It is an ongoing practice that prioritises ownership and leadership from within the community. Among other things, this includes prioritising local expertise and knowledge, including marginalised groups, and building equitable, trust-based relationships.[55] This broad category covers both place-based innovation processes and individual innovators operating with or without external support. Community-based humanitarian innovation can occur with or without support from international actors.

One example of **place-based programmes that support community based humanitarian innovation** are the Start Network's DEPP Innovation Labs. From 2017–2019, innovation labs were established in communities in Bangladesh, the Philippines, Kenya and Jordan, in collaboration with partner organisations.[56] The four labs developed culturally appropriate processes and tools to build innovation skills locally and find solutions to problems related to humanitarian preparedness and response. The labs put people affected by crises at the centre of the process of designing solutions, from problem exploration to identification and development of ideas. Several innovation teams or innovators were recruited and selected to receive support.

After selecting the most compelling ideas, the labs provided innovators or innovation teams with training in UCD/HCD methods and design, capacity-building support, access to resources and networks, and also facilitated community engagement to ensure user input into the design process. The most promising innovations received further support and resources.

These labs explicitly supported different types of user participation in the innovation process:

— bringing in outside innovators who understood the context to collaborate with users from the community

— integrating users into innovation teams in some capacity

— supporting user-innovators to devise solutions and lead the innovation process

Since 2020, the Community-Led Innovation Partnership (CLIP), supported by Elrha, the Start Network and the Asia Disaster Reduction and Response Network, has continued the work begun by DEPP Innovation Labs. To date, CLIP supports community-led innovation initiatives in the Philippines, Indonesia and Guatemala. Each initiative helps to foster an enabling environment for innovation by communities affected by crises themselves, providing financial and non-financial support for locally-owned solutions.

55. Community-led Innovation Partnership (2021) 'What is the community and what are community-led approaches?' Medium post, 28 April 2021. Available at: https://medium.com/community-led-innovation-partnership/what-is-the-community-and-what-are-community-led-approaches-3e555a22fbd0

56. For further details, see: https://startnetwork.org/depp-innovation-labs

Two other programmes supporting innovation processes in communities solely focus on promoting user-led innovation in which the user is the primary innovator and makes all design decisions. MIT D-Lab has worked with a local NGO Kulika Uganda and the refugee-led organisation Youth Social Advocacy Team (YSAT) in Uganda and South Sudan, training people affected by crises in a design curriculum, Creative Capacity Building (CCB) to identify challenges and design solutions to problems they face. Through the Jordan DEPP Innovation Lab, the IRC trained a cadre of Syrian refugees in design, selecting a group to develop innovations that address the health, education and livelihoods problems they identified as priorities.

All of these examples built **local innovation ecosystems** to promote and support community-based innovation. MIT D-Lab defines local innovation ecosystems as *"place-based communities... engaged in producing innovation and supporting processes of innovation along with the infrastructure, resources and enabling environment that allow them to create, adopt and spread more effective ways of doing things."* [57] Local innovation ecosystems are generally built with external support.

The second main category of community-based humanitarian **innovation is innovation that occurs through an individual innovator** rather than via support for a broader innovation process. Although they may not be part of a formal local innovation ecosystem, these innovators receive support from a broader innovation ecosystem anchored in an external institution that provides support to user-innovators in different humanitarian situations.

For example, The International Federation of the Red Cross (IFRC) Lead User programme identified 'lead users' who have already developed innovations independently and supported them to move these innovations forward, by facilitating field tests, linking innovators to networks and by providing other support. Identifying these innovators can be time-consuming, but this initiative has had a significant impact.[58]

UNHCR's Refugee Led Innovation Fund, launched in 2022, provides a broader ecosystem of support for innovative refugee-led organisations (RLOs). RLOs can propose innovation ideas and, if selected, receive funding, and comprehensive technical and design support throughout the innovation process.[59]

The third type of community-based humanitarian innovation refers to spontaneous innovation – innovators operating within their community with no outside support. Spontaneous innovation is largely undocumented and unrecognised but exists across the sector. Given the resource constraints and challenges that people affected by crises face, they are used to constantly adapting and innovating to survive. Examples include individuals or groups developing creative solutions to problems, often linked to entrepreneurial efforts funded by the innovators or an informal network.[60]

57. Hoffecker, E (2019) *Understanding Innovation Ecosystems: A Framework for Joint Analysis and Action*. Cambridge: MIT D-Lab

58. Konda, N, Mansour, K, Mwendi, F, Tanner, L and Thomas, J (2019) *Human Centred Design and Humanitarian Innovation, Designing Solutions with People Affected by disaster, DEPP Innovation Labs Research Paper 03*. London: Start Network. Available at: https://startnetwork.org/resource/human-centred-design-and-humanitarian-innovation

59 UNHCR (n.d.) *'Refugee-led Innovation Fund: Championing the creativity of all displaced people'*. Web page. Available at: https://www.unhcr.org/innovation/refugee-led-innovation-fund/

60. For multiple examples of spontaneous innovations created by refugees in different countries, see: Betts, A, Bloom, L, and Weaver, N (2015) *Refugee Innovation: Humanitarian innovation that starts with communities*. Oxford: Refugee Studies Centre. Available at: https://www.rsc.ox.ac.uk/publications/refugee-innovation-humanitarian-innovation-that-starts-with-communities

Why increase participation in humanitarian innovation?

Why increase participation in humanitarian innovation?

There are several challenges to increasing user participation in humanitarian innovation. First, participation is complex, and managing it well is demanding. It requires time and human resources – and humanitarian administration and funding structures don't easily allow for the flexibility that is often needed.

These challenges mean that it's vital to understand the value of participation in humanitarian innovation, as clearly outlined in Start Network and ALNAP reports from 2019.[61][62] Their findings, and the benefits of user participation identified by MIT D-Lab, can be grouped into three categories that are explored below: improved innovation and innovation adoption; improved humanitarian structures and services; and improved agency for people affected by crises.

Improved innovation and adoption

The key to successful innovation processes is clearly understanding the problem in question. This increases the likelihood that the right problem, or the right part of a problem, will be addressed. Clearly, people directly affected by a problem will have unique insights into it. DEPP Innovation Labs documentation confirms that people affected by crises make important contributions to problem framing, often identifying elements that are missed by outsiders. Similarly, clearly understanding users' preferences at the beginning of an innovation process can help humanitarian organisations to target resources and avoid costly revisions.

User participation in designing facilities, systems, programmes or products will result in humanitarian innovations that are better tailored to users' priority needs, leading to more relevant and contextually appropriate responses. However, the importance of local, cultural and contextual knowledge has only recently been recognised in the humanitarian sector, and this knowledge is still not generally valued as much as technical and logistical knowledge. As early as 2014, the then Deputy Commissioner of the UNHCR highlighted the importance of this knowledge in developing appropriate cooking stoves, *"designers mistakenly think they can come up with a one-size-fits-all approach, failing to understand the cultural complexity of cooking or the conditions in which the stoves are used."*[63]

User participation in humanitarian innovation also increases the adoption of innovations intended for people affected by crises. Emergency programme outcomes often use the number of relief items distributed rather than the adoption and use of those items as an indication of success. Yet user input into problem definition and developing more culturally and contextually appropriate innovations strongly improves levels of innovation adoption. Research into MIT D-Lab design training of community members in Uganda shows that people are 4–13 times more likely to adopt technologies they have helped to create.[64]

Similarly, Oxfam's evaluation of the HIF's water, sanitation and hygiene (WASH) Innovation Challenge shows that crisis-affected communities took more ownership of innovation processes when they felt they had a stake in the design.[65]

61. Konda, N, Mansour, K, Mwendi, F, Tanner, L and Gray, I (2019). *Support Models for Local Humanitarian Innovation; How to provide impactful support for grassroots innovations. DEPP Innovation Labs Research Paper 04*. London: Start Network.. Available at: https://startnetwork.org/resource/support-models-local-humanitarian-innovation

62. Bourne, S (2019) *User-Centred Design and Humanitarian Adaptiveness*. ALNAP Case Study. London: ODI/ALNAP. Available at: https://www.alnap.org/help-library/user-centred-design-and-humanitarian-adaptiveness

63. Confino, J and Paddison, L (2014) "Cookstove designs are failing the poorest communities". *The Guardian*, 7 February 2014. Available at: https://www.theguardian.com/sustainable-business/cookstoves-design-poor-communities-refugees-unhcr-ikea

64. Nkonya, E, Bashaasha B, Kato, E, Danet, M and Bagamba, F (2017) *Impact of Creative Capacity Building (CCB) on Rural Household Welfare and Creativity*. IFPRI Memo.

65. Bourne, S (2019) *User-Centred Design and Humanitarian Adaptiveness*. ALNAP Case Study. London: ODI/ALNAP. Available at: https://www.alnap.org/help-library/user-centred-design-and-humanitarian-adaptiveness

Improved humanitarian structures and services

When people affected by crises feel listened to and/or see that their feedback influences humanitarian services or programmes, this helps to build trust between humanitarian actors and end users.

Participatory processes can provide a deeper level of engagement between these two groups. This can help humanitarian workers to see crisis-affected people differently, observing their capacity for innovation. As one humanitarian worker observes, *"you look at [users]... as beneficiaries; so, automatically you are always thinking that they are in need, [so] you give them something... If you think of them as users or customers, you [would] really want them to be satisfied the whole time."* [66]

The DEPP Innovation Labs, MIT D-Lab's work in Uganda and South Sudan, and the HIF WASH Innovation Challenge all resulted in relevant innovations developed by crisis-affected people. A key informant cited in the ALNAP paper reflected, "We see [crisis-affected people] as helpless and incapable but [some of the innovations] they suggest are even more cost efficient than ours".[67] Informants to that report *"... cited the repeated involvement of community members throughout the process of programme design... as a key feature that distinguished them from the standard programme approaches... This level of engagement and collaboration with community members was unprecedented for the respondents, and supported a shift in their perception of crisis-affected people."* [68]

Listening to end users and understanding their needs and priorities can also help humanitarian workers to realise that their own biases, assumptions and knowledge limitations can skew innovation ideas, limiting their effectiveness. For example, a WASH worker explained how their NGO assumed that people with special needs would want latrines in their homes for easy access. In fact, these people valued other things over easy access to latrines.[69]

Structured participation using methodologies like UCD/HCD can help humanitarian programming to move from standardised responses to tailored ones. In a DEPP Innovation Labs project in the Philippines, innovators developing partitions for school evacuation shelters conducted several rounds of field consultations on their prototypes, including meetings with diverse community groups: *"The design now includes openings that can cater for a wheelchair, local mats to sleep on and material that is termite-resistant."* [70]

66. Ibid

67. Ibid

68. Ibid

69. Ibid

70. Konda, N, Mansour, K, Mwendi, F, Tanner, L and Thomas, J (2019) *Human Centred Design and Humanitarian Innovation, Designing Solutions with People Affected by disaster.* DEPP Innovation Labs Research Paper 03, London: Start Network. Available at: https://startnetwork.org/resource/human-centred-design-and-humanitarian-innovation

Improved agency for people affected by crises

Although there are challenges to increasing the participation of the affected population in humanitarian innovation, the benefits are sufficiently compelling to justify the effort.

Participation in humanitarian innovation allows people affected by crises to apply their creativity, entrepreneurship, skills, local knowledge and experience to challenges that they face. For example, refugees involved in humanitarian innovation projects in Uganda run by MIT D-Lab, Kulika and YSAT have developed over 80 innovations, including a human-powered washing machine and an off-grid cooling system.

User participation can also lead to improved psycho-social outcomes for crisis-affected communities, giving them a chance to recover their agency and actively influence decisions affecting their lives. For people who are often labelled as 'vulnerable' or 'beneficiaries', the chance to participate actively in creating solutions to their problems can have a transformative impact. For example, a South Sudanese woman who attended training through a MIT D-Lab and YSAT project said, *"I felt happy and proud of myself for having developed a wheel cart. Some of my friends asked me where I got it from, I told them that my team and I developed it, and they were shocked and proud."* [71] [72]

71. Ahimbisibwe, L, Baracaldo, L, Pearson, G and Tanner, L (2022) *Local Innovation Ecosystems Evaluation South Sudan.* Available at: https://d-lab.mit.edu/resources/publications/building-resilience-and-social-cohesion-through-local-innovation-ecosystems

72. Ahimbisibwe, L., Komahangui, C., and Tanner, L. (2022) CCB *Evaluation for MIT D-Lab.* Cambridge: MIT D-Lab. Available at: https://d-lab.mit.edu/resources/publications/building-resilience-and-social-cohesion-through-local-innovation-ecosystems

Developing the Participation for Humanitarian Innovation resource

Developing the Participation for Humanitarian Innovation resource

The background to this resource

As outlined above, there is widespread recognition that more robust participation of people affected by crises is necessary for all areas of humanitarian response, including innovation. As many participation tools already exist, Elrha reviewed the humanitarian landscape to confirm the need for a toolkit specifically focused on participatory humanitarian innovation.

This review identified many tools that focus on UCD/HCD and specific participatory methods, as well as high-level frameworks to guide innovators working in humanitarian and development settings. For example, sources including ALNAP,[73] [74] Betts and Bloom[75] and Nesta[76] all outline the importance of the participation of, engagement with and accountability to local communities and people affected by crises throughout humanitarian projects. However, they don't offer insights or tools explicitly relating to humanitarian innovation.

The International Development Innovation Alliance[77] and the UNHCR Innovation Service[78] call for inclusive innovation, with the latter discussing the importance of bottom-up participatory processes and outlining a detailed framework for this. The DEPP Innovation Labs project also offers a top-line framework for user-led innovation.[79]

Despite the existence of these models, this review confirmed that there is a 'participation gap' in humanitarian innovation practice, and a lack of practical tools to help innovators facilitate appropriate, inclusive and effective user participation.[80] The *Participation for Humanitarian Innovation* resource, especially its toolkit, aim to fill this gap and bring together practical tools and overarching approaches that are tailored to, and have been tested in, humanitarian or humanitarian adjacent contexts.

73. Ramlingham, B, Scriven, K and Foley, C (2009) Innovations in international humanitarian action, in Ramalingam, B et al. 8th Review of Humanitarian Action. UK: ALNAP.

74. Bourne, S (2019) *User-Centred Design and Humanitarian Adaptiveness*. ALNAP Case Study. London: ODI/ALNAP. Available at: https://www.alnap.org/help-library/user-centred-design-and-humanitarian-adaptiveness

75. Betts, A and Bloom, L (2014) *Humanitarian innovation: The state of the art*. OCHA Policy and Studies series, 009. New York: OCHA. Available at: https://www.rsc.ox.ac.uk/publications/humanitarian-innovation-the-state-of-the-art

76. Berditchevskaia, A, Malliaraki E and Peach, K (2021) *Participatory AI for Humanitarian Innovation; A Briefing Paper*. London: Nesta. Available at: https://www.nesta.org.uk/report/participatory-ai-humanitarian-innovation-briefing-paper

77. For further details, see: https://www.idiainnovation.org/

78. For further details, see: https://www.unhcr.org/innovation/

79. For further details, see: https://startnetwork.org/focus-areas/past-programmes/depp-innovation-labs

80. Obrecht, A and Warner, AT (2016) *More than just luck: Innovation in humanitarian action*. HIF/ALNAP Study. London: ALNAP/ODI p23. Available at: https://www.alnap.org/help-library/more-than-just-luck-innovation-in-humanitarian-action

The evolution of this resource

The framework that underpins the *Participation for Humanitarian Innovation* resource was developed for the International Development Design Summit Design Notebook in 2014, building on a stakeholder analysis tool from a World Bank resource for participation and social assessment.[81] The MIT D-Lab Participation Matrix was further refined for a presentation at the International Humanitarian Studies Association conference in 2018[82] and was first used with humanitarian practitioners at the Humanitarian Innovation Exchange conference in The Hague in 2019.

The matrix was expanded through a collaboration with Elrha in 2020, when the participation toolkit was developed by a team from MIT D-Lab and Link–4, a Guatemalan NGO. The tools were tested by Elrha's HIF innovation managers and a select group of HIF grantees. Their input influenced additional improvements to the current *Participation for Humanitarian Innovation* resource, notably this paper and the toolkit.

In spring 2022, elements of the toolkit were used in the MIT D-Lab class 'Humanitarian Innovation: Design for Relief, Recovery, and Rebuilding' to prepare students for a co-creation workshop in Uganda with designers, refugees and humanitarian workers. Students found that the worksheet and activities around creating an enabling environment were useful in preparing for their field experiences) with one student remarking, *"I found that the enabling environment activity was very useful since by thinking about potential obstacles in participation in advance, we were able to address them before they even occurred."* The toolkit was further refined following feedback from these workshop participants.

MIT D-Lab's framework for design and participation

Since 2002, MIT's D-Lab has been developing a comprehensive and detailed overall framework, and a range of approaches and practical tools to ensure the meaningful participation of people affected by crises in humanitarian innovation. The framework explores three types of participation and the modes of design practice that most commonly represent them: consultation (design for users); partnership (design with users); and leadership (design by users).

A key distinguishing feature of these three modes is the level of decision-making and direction-setting that users have in the design process. All three have their merits, and are appropriate for specific humanitarian contexts, problems and innovations.

This section explores some recent examples of participation in humanitarian innovation to understand how these three types of participation play out, and their respective benefits and challenges. It also introduces the model that underpins the *Participation for Humanitarian Innovation* resource.

81. Cooke, B and Kothari, U (2001) *Participation: the New Tyranny?* London: Zed Books.

82. Anderson, M, Brown, D and Jean, I (2012) Time to Listen: Hearing People on the Receiving End of International Aid. Cambridge, MA: CDA Publications.

Overview of participation types and degrees

Type	Degree	Description
Consultation (design for, lowest level of stakeholder participation) Consultation is when a design or innovation team develops an innovation for people affected by crisis. This can range from having no interaction with users to engaging them in one or more design stages. In either case, the design/innovation team controls decision-making and defines the direction of the project.	Input	The stakeholder/stakeholder group provides information and shares their opinions. However, they have no opportunity to interact or discuss with the designer/implementer, and they don't have any decision-making power over how their input is incorporated into the innovation process.
	Interaction	The stakeholder/stakeholder group provides information and shares their opinions through a two-way, interactive process with the designer/implementer, who responds and reacts. However, they don't have decision-making power over how their input is incorporated into the innovation process.
	Iteration	The stakeholder/stakeholder group provides information and shares their opinions in repeated interactions that inform a series of refinements to the innovation. However, they don't have decision-making power over how these refinements are made.
Partnership (design with, medium level of stakeholder participation)[83] Partnership is when designers/innovators and users from the crisis-affected population participate in the entire design/innovation process. Users have input into the decision-making process as part of the design team.	Collaboration	The stakeholders participate in planning and implementing an innovation project according to their expertise, but the implementer determines their role in this. The stakeholders participate in decision-making but don't have the same decision-making power as the designer/implementer.
	Co-creation	The stakeholder/stakeholder group participates in planning and implementing an innovation project and shares equal decision-making power with the design/innovation team.
Ownership (design by, highest level of stakeholder participation) Ownership describes user-led or user-created design/innovation, where users identify a problem and then use the design/innovation process to lead innovation development to address the problem. Adapting the design framework for participation in humanitarian innovation.	Empowerment	The stakeholder/stakeholder group leads the planning and implementation of the innovation process. The design/innovation team provides input and support as needed. The stakeholder/stakeholder groups have final decision-making power.
	Leadership	The stakeholder/stakeholder group leads the planning and implementation of the innovation process independently, and they have the final decision-making power.

83. Nesta uses a similar distinction between collaboration and co-creation in Berditchevskaia, A, Malliaraki E & Peach, K (2021) *Participatory AI for Humanitarian Innovation; A Briefing Paper*. London: Nesta. Available at: https://www.nesta.org.uk/report/participatory-ai-humanitarian-innovation-briefing-paper

Adapting the design framework for participation in humanitarian innovation

While MIT's design framework is a helpful way to categorise different levels of user engagement, additional dimensions can enhance understanding of the meaning and scope of participation in humanitarian innovation specifically.

This resource, notably the participation toolkit, covers three dimensions of participation:

— **Extent of participation** (when) – at which innovation stage/s user participation occurs (gathering information, defining the problem, generating ideas, choosing the best idea, working out the details, testing the innovation and gathering feedback).

— **Type and degree of participation** (what) –the kind of participation users are involved in. This could entail providing input or feedback, actively participating in ideation, building models, engaging in decision-making, choosing an innovation or designing their own.

— **Quality of participation** (how) – how far meaningful participation occurs and users feel comfortable participating (and have their voices heard). To facilitate a genuine exchange of ideas that informs innovation, rather than a box-ticking consultation exercise, this involves considering factors that affect people's ability to participate, such as access to participation events and processes, power dynamics and language barriers.

To better understand the roles users can play in each participation type (consultation, partnership and ownership), they are mapped on to the revised Participation Matrix that MIT D-Lab adapted for Elrha.

Instead of aiming to replicate reality perfectly, this matrix offers a way to think about participation in a multidimensional way, reflect on its different forms and consider their implications.

Overview of MIT D-Lab 's Participation Matrix

The revised Participation Matrix that MIT D-Lab devised for Elrha in 2022 is a tool to create a shared vocabulary and understanding around stakeholder participation in humanitarian innovation. It's designed to help humanitarian innovation teams, organisations and other stakeholders understand the full range of possible participation levels and the various points where it can occur in an innovation process. In turn, this will help these teams, organisations and individuals to assess, plan and evaluate meaningful user participation. The understanding and insights gained from the matrix can help these actors establish mechanisms, structures and organisational environments that foster more meaningful participation.

The matrix (see Figure 1) is organised along vertical and horizontal axes. The vertical axis lists types of participation, and the horizontal axis describes the stages in the MIT D-Lab Design Cycle. Each cell represents a unique opportunity for participation. The matrix describes both these opportunities, and the interactions between the innovation implementers and other stakeholders (typically an innovation's end users).

Different types of participation may be more appropriate at different innovation stages, and more than one participation type might be used during an innovation project or process. Furthermore, humanitarian and development contexts involve an additional layer of complexity because the 'customer', 'user' and 'beneficiary' are frequently not the same person, necessitating more diverse participatory activities to incorporate multiple stakeholder groups and their perspectives.

MIT D-Lab's Participation Matrix

Figure 1

Introduction

Background on participation for humanitarian innovation

Past and current concepts in humanitarian innovation

Why increase participation in humanitarian innovation?

Developing the Participation for Humanitarian Innovation resource

Participation in humanitarian innovation case studies

Conclusion

Choose the answer that best applies to your practice.
Identify the stage you are focusing on. Read down each column and choose the description that best applies to your project. Then look to the left to identify the type and level of participation, either what you are currently doing or what you aspire to.

How is the stakeholder engaged in…	Defining the problem — Providing and/or gathering information?	Defining the problem — Deciding which aspect of the problem will be addressed and what the priorities are?	Identifying possible solutions / Creating an approach — Contributing ideas for possible solutions?	Identifying possible solutions / Creating an approach — Selecting one or narrowing down to a few solutions from the many possibilities generated?	Developing a solution — Exploring options for the details of the solution?	Developing a solution — Building the actual solution?	Testing the solution — Providing and/or getting feedback about the solution?	Testing the solution — Prioritizing and acting on the feedback to refine and/or finalize the solution?
No Participation — The stakeholder is **not engaged**	Not engaged	Not engaged	Not engaged	Not engaged	Not engaged	Not engaged	Not engaged	Not engaged
Consultation – Input — The stakeholder **provides** input, however there is no opportunity to interact or discuss with the innovation team, and the stakeholder does not have any decision-making power	They provide information to the innovation team but do not have the opportunity to interact or discuss	They provide input into the problem framing but do not have the opportunity to discuss or convince	They provide ideas for possible solutions to the innovation team but do not have the opportunity to interact or discuss	They provide input on the selection of the solution(s) but do not have the opportunity to discuss or convince	They provide ideas for the details of the solution(s) to the innovation team but do not have the opportunity to discuss or convince	N/A They are not engaged	They provide feedback on the solution(s) developed by the innovation team but do not have the opportunity to discuss or convince	N/A They are not engaged
Consultation – Interaction — The stakeholder **provides** input through an interactive process with the innovation team who respond and react, however the stakeholder does not have any decision-making power	They provide information to the innovation team through an interactive process; e.g. dialogue or discussion	They provide input into selecting the problem framing through an interactive process, e.g. dialogue or discussion	They provide ideas for possible solutions through an interactive process, with the opportunity to discuss and explain their ideas	They provide input on the selection of the solution(s) through an interactive process, but are not involved in the final selection	They provide ideas for the details of the solution(s) to the innovation team through an interactive process and have the opportunity to discuss and explain their ideas	N/A They are not engaged	They provide feedback on the solution(s) developed by the innovation team through an interactive session where they can discuss and explain their feedback	N/A They are not engaged
Consultation – Iteration — The stakeholder **provides** input multiple times, with the innovation team incorporating their feedback to refine each iteration. The stakeholder does not have any decision-making power about which refinements are made or adopted	They provide information at multiple points through an interactive and iterative process, validating the information and providing additional information as needed.	They provide input into selecting the problem framing through an interactive and iterative process, but are not involved in the final selection	They provide ideas for possible solutions at multiple points through an interactive and iterative process	They provide input on the selection of the solution(s) at multiple points through an interactive and iterative process but are not involved in the final selection	They provide ideas for the details of the solution(s) and on subsequent refinements through an interactive and iterative process	N/A They are not engaged	They provide feedback on the solution(s) developed by the innovation team at multiple points through an interactive and iterative process	N/A They are not engaged
Partnership – Collaboration — The stakeholder **takes part** in developing and implementing the solution according to their field of expertise, however they do not have equal decision-making power with the innovation team	They participate with the innovation team in the information gathering but do not participate in the planning, analysis or synthesis	They participate with the innovation team in selecting the problem framing but do not have equal decision-making power	They participate with the innovation team in collective ideation	They participate with the innovation team in the selection of the solution(s) but they do not have equal decision-making power	They participate with the innovation team in exploring options for the details of the solution(s) according to their fields of expertise	They participate with the innovation team in developing/building the solution(s) but do not have equal decision-making power	They participate with the innovation team in collecting feedback from the community, but not in planning the feedback collection	They participate with the innovation team in prioritizing and acting on the feedback but do not have equal decision-making power
Partnership – Co-creation — The stakeholder **takes part** in developing and implementing the solution and they share equal decision-making power with the innovation team	They participate with the innovation team in the information gathering as well as the planning, analysis and synthesis	They participate with the innovation team in selecting the problem framing with equal decision-making power	They participate with the innovation team in collective ideation	They participate with the innovation team in the selection of the solution(s) and have equal decision-making power	They participate with the innovation team in exploring options for all aspects of the details of the solution(s)	They participate with the innovation team in developing/building the solution(s) and have equal decision-making power	They participate with the innovation team in planning how to collect feedback as well as in the actual collection	They participate with the innovation team in prioritizing and acting on the feedback and have equal decision-making power
Ownership – Empowerment — The stakeholder **leads** the planning, development and implementation of the solution with the innovation team providing input and support as needed; the stakeholder has the final decision-making power	They lead the planning and gathering of information as well as the analysis and synthesis of the information; the innovation team provides support as needed	They select the problem framing with the innovation team's input; the stakeholder has final decision-making power	They lead the planning of the ideation process and the ideation of possible solutions; the innovation team provides support as needed	They lead the selection of the solution(s) with the innovation team's input; the stakeholder has final decision-making power	They lead the exploration of options for the details of the solution(s); the innovation team provides support as needed	They lead the development/building of the solution(s); the innovation team provides support as needed, the stakeholder has final decision-making power	They lead the planning and collection of feedback; the innovation team provide support as needed	They lead the process of prioritizing and acting on the feedback; the innovation team provides support as needed, the stakeholder has final decision-making power
Ownership – Leadership — The stakeholder **leads** the planning, development and implementation of the solution independently, and they have the final decision-making power	They independently lead the planning and gathering of information as well as the analysis and synthesis of the information	They independently select the problem framing and have final decision-making power	They independently lead the planning of the ideation process and the ideation of possible solutions	They independently lead the selection of the solution(s) and have final decision-making power	They independently lead the exploration of options for the details of the solution(s)	They independently lead the development/building of the solution(s) and have final decision-making power	They independently lead the planning and collection of feedback	They independently lead the process of prioritizing and acting on the feedback and have final decision-making power

Participation in humanitarian innovation case studies

Participation in humanitarian innovation case studies

These case studies illustrate how the three types of participation in humanitarian innovation – consultation, partnership and ownership – can work in practice.

Consultation

Most recent increases in participation in humanitarian innovation can be classed as 'consultation' (see overview table on page 24). In practice, consultation covers a wide range of engagement levels, ranging from a design or innovation team gathering information about users' needs to open communication at multiple stages of the innovation process. Users have input but the design process is led by the design team.

Consultation case study:
User-Centred Sanitation Design Through Rapid Community Engagement

Overview
Launched in 2017, the HIF WASH Innovation Challenge funded three partnership projects in which crisis-affected communities used UCD/HCD to develop latrine innovations, some specifically for children or people with special needs:

— Qatar Red Crescent, the Social and Economic Survey Research Institute at Qatar University and Syrian refugees in Lebanon

— Welthungerhilfe, Snook and South Sudanese refugees in Uganda

— Save the Children and Rohingya refugees in Bangladesh

— Save the Children and the Yazidi community in Iraq

Nature of user participation
The NGOs used different degrees of consultation, including input, interaction and iteration, to engage users through group meetings, surveys, informal chats and focus group discussions.

Users' satisfaction with their participation experience depended on the project's scope, resources, their expectations and how each NGO engaged with them.

In Bangladesh and Iraq, users could discuss their needs and brainstorm possible innovations with field staff. In Lebanon, refugees discussed and prioritised a predetermined list of innovations rather than having an opportunity to present their own ideas but they were consulted at multiple points. In Uganda, the process for developing latrines for people with special needs, which involved adapting a standard design based on user input, was deemed more participatory than the current process for developing household latrines.

Key findings
Although this represents relatively limited user participation, the projects resulted in positive outcomes. In all the projects, information from users influenced the innovation process, and the communities considered these innovations to be an improvement in three of the four sites.

NGOs institutional constraints and buy-in were crucial, given the need for training staff in UCD/HCD, and administrative and financial flexibility. The only instance where latrine design changed significantly following user input (those for people with special needs) was possible because 5% of Welthungerhilfe's project budget was allocated to those changes.

NGO staff generally appreciated the value of improved user participation, especially compared to standard quantitative needs assessments. However, they could have understood and applied the UCD/HCD tools them more effectively.

Benefits of participation through consultation

Improved innovations
All types of participation share key benefits around innovations: more realistic problem framing, and innovations better tailored to users' needs, which often lead to higher adoption rates. Good information about user preferences at the beginning of a project allows NGOs to make informed decisions about the direction of a project, saving costly redesign later on.

Improving the way humanitarian assistance is structured
Using properly applied UCD/HCD methods in consultation can help humanitarian workers to see crisis-affected people as actors who can make valuable contributions to innovation. It can also help humanitarian organisations and innovation teams understand that their operating assumptions may not be correct, and that users have useful cultural and contextual knowledge that can help shape innovations to make them more appropriate.

Increasing agency for crisis-affected people
Consultation partnership is a way to increase users' agency if they recognise their input in the resulting innovation.

Challenges of participation through consultation

Organisations or innovation teams leading consultation participation processes must fully understand, and be able to facilitate, UCD/HCD approaches to ensure that high quality participation leads to effective innovations. This requires a significant investment in capacity building.

Consultation processes are not necessarily costly but many humanitarian organisations' administrative and financial structures don't have the flexibility to accommodate changes to a project following user input, and crisis-affected people will become frustrated if their input doesn't appear to be used or valued. Humanitarian organisations need to invest in managing participants' expectations from the beginning of any participatory process, including the frequency and level of engagement, how input will be used, and any compensation for participation.

Partnership

The partnership type of participation (see overview table on page 24) encompasses much more user involvement than consultation, in most or all innovation stages. It ranges from users being junior members of a design or innovation team to being full participants with equal decision-making authority.

This type of participation has potential to significantly transform relationships between humanitarian organisations and crisis-affected populations by bringing them together in teams working on a project with a common vision. The opportunities for relationship-building are especially powerful in co-creation, but it is also the most challenging to manage because of the power differentials and biases among the different kinds of participating stakeholders.

Partnership case study: MIT D-Lab co-creation summit, Uganda

Overview
MIT D-Lab co-creation summits are hands-on, 2–4–week events that bring together diverse stakeholders in multidisciplinary teams. These teams follow the design curriculum created by MIT D-Lab and the International Development Innovation Network, and are centred around problems identified by the community.

In 2022, MIT D-Lab, Kulika Uganda and YSAT organised a residential co-creation summit in Arua Uganda to expand the impact of refugee-led innovations developed in two settlements, Rhino Camp and Imvepi.

Nature of user participation
Refugees, host community members, humanitarian workers and international specialists worked together in teams as equal collaborators led by a facilitator for two weeks. Each team focused on increasing the impact of a prototype technology designed by a community member or a refugee on the team. Teams of participants worked on refining the technologies such as an energy-efficient oven, a wheel cart, a groundnut roaster and a human-powered washing machine and exploring new business models to increase their impact.

Key findings

Input from the refugee and host community members was crucial to the co-creation, but in order to fully contribute, they had to feel comfortable participating, defending their opinions and disagreeing with other viewpoints. To help achieve this, MIT D-Lab invested in team-building activities, including evening social events, and conducted activities to help participants understand the power dynamics within different stakeholder groups. As the workshop progressed, refugee and community members took on more agency and the INGO participants grew to acknowledge the key importance of this contribution to the innovation process.

Benefits of participation through partnership

Improved innovations

Participation through partnership amplifies users' impact on problem definition and innovation, especially in co-creation processes.

Improving the way humanitarian assistance is structured

Partnership-based participation can result in improved humanitarian assistance if jointly developed projects can be integrated into humanitarian programmes.

By working together, humanitarian implementers and people affected by crises develop a new kind of relationship, helping humanitarian representatives to gain valuable insights and see 'beneficiaries' as active innovators and entrepreneurs.

Increased agency for crisis-affected people

As part of this type of innovation team, crisis-affected people learn new skills, understand the innovation process, and connect with new stakeholders and networks. They have a voice in defining the problem and influencing the design of the innovation. This particularly applies in co-creation, where participants' decision-making power can transform their self-perception and external recognition of their skills and abilities.

Challenges of participation through partnership

The first challenge in both role-based collaboration and co-creation, the two levels of partnership, is achieving meaningful participation by investing time and care in creating and maintaining an enabling environment where diverse stakeholders can contribute equally and feel comfortable and confident in doing so.

The second challenge relates to ensuring an innovation has impact. If the innovation is a product that is sold to users, there may not be a clear model for scaling the business among resource-poor communities. Meanwhile, integrating an innovation into humanitarian programmes requires a robust mechanism to share it with relevant humanitarian organisations. This gives rise to a third challenge – the appropriate compensation for members of a diverse team for their contribution to the project.

Ownership

'User-innovators' drive the innovation process in the ownership type of participation (see overview table on page 24), requiring some users from the crisis-affected population to learn about, and become confident in applying, innovation methodologies.

In the highest degree of ownership participation – leadership – participating stakeholders decide what training, resources or support they need to successfully implement the project.

Innovation challenges for crisis-affected people are one way that is commonly used to promote user-led innovation and can lead to useful products and services and much-needed recognition for innovators. However, although they claim to be 'open to anyone' differences in literacy and education levels and access to technology mean that people affected by crises need targeted support to have equal access to these challenges.

Ownership case study 1:
DEPP Innovation Lab, Jordan

Overview
IRC led the Mahali Lab in Jordan from 2017–2019, as part of the DEPP Innovation Labs programme. The Mahali Lab supported Syrian refugees and socio-economically vulnerable Jordanian community members to become innovators and solve long-term challenges related to displacement. After a problem identification process involving Syrian refugees across Jordan, IRC recruited refugee innovators for separate livelihoods, health and education innovation cycles through a competitive process. It identified innovators to progress to a six-month incubation process with financial, educational and technical support to develop their idea and provides an example of the empowerment degree of participation in which the crisis-affected innovators are given the support, resources and training to take the lead on directing the innovation process and making critical design decisions.

Nature of user participation
The innovations supported by the Mahali Lab were led by crisis-affected communities throughout the innovation process, from identifying, discussing and prioritising the problems to address, to creating the innovations designed to do that.

Innovators devised a range of services, from redirecting soon-to-expire drugs to pharmacies so communities could buy them cheaply to developing an education tool to teach Arabic sign language at home. The value of having user-innovators taking the lead over an innovation process is illustrated by the team of refugee innovators who reframed the problem of refugees' limited access to decent, paid employment as a lack of affordable housing near workplaces, resulting in high commuting costs. The proposed innovation was short-term, affordable rental accommodation near employment opportunities, and was an elegant solution that increased income by reducing expenditures rather than increasing pay, which had a variety of legal issues associated with it.

Key findings
The most successful user-innovator teams were those with the strongest community engagement. While the innovators all came from crisis-affected communities, not all of them maintained sufficiently close community engagement to support participatory innovation. Being from the community does not necessarily make user-innovators intrinsically participatory.

Refugees in a low-resource environment can find a fast-paced innovation selection process stressful; the opportunity to attend a months-long innovation bootcamp was offered as an incentive, however without financial support to reduce the burden of family obligations, especially for a program with an uncertain outcomes, made the incentive as initially presented less attractive. Adaptations to competitive design and incubator models could help to overcome this.

Ownership case study 2:
MIT D-Lab Creative Capacity Building (CCB) training, Uganda and South Sudan

Overview
MIT D-Lab partnered with Kulika Uganda and the refugee-led organisation YSAT to set up local innovation ecosystems in two refugee settlements in Uganda and two conflict-affected communities in South Sudan.

These initiatives have provided over 200 user-innovators with hands-on design training called Creative Capacity Building. Refugee participants spend one week identifying problems, learning the design process and working in teams to develop solutions. They then spend another week refining prototypes, with support in the form of materials, tools and mentorship.

Nature of user participation

Crisis-affected people have led innovation processes from start to finish. Problem identification by crisis-affected people has provided new insights into their communities' priorities, including the need for a stronger focus on viable income generation and provision of technical services such as milling, sharpening and crop processing to the community.

Key findings

Participants report experiencing substantial gains in their confidence, agency, skills and problem-solving abilities because of their involvement in this initiative.

Participants were able to apply the skills they learned at the training to other aspects of their lives, such as home repair, and as a result reduced household expenditures.

Many technologies developed through this initiative are being used to generate income, but a broader range of support is needed to transition them into small businesses. and few participants see a clear path to be rely solely on income as an innovator as a way to earn a living.

Another challenge is how to support user-innovators to expand the impact of their innovations beyond their local community.

Benefits of participation through leadership

Improved innovations

When users are leading the process of innovation, they are able to tailor it to their own needs in a highly effective manor, making innovations more likely to be adopted. This is borne out by MIT D-Lab's experience which has shown that crisis-affected participants in CCB design trainings not only make use of the technologies they create themselves, they appreciate the products that others have created in previous trainings and want to replicate them. This is an indication that the innovations are useful and relevant to the user-innovators.

Improving the way humanitarian assistance is structured

User-innovators' demonstrable ability to innovate helps humanitarian organisations, local government and UN organisations realise how people affected by crises can usefully participate in designing humanitarian programmes and services. It can also be a catalyst for changing perceptions and mitigating bias.

Increasing agency for crisis-affected people

Leadership builds the strongest degree of agency among people affected by crises. Winning design challenges or developing effective innovations can give users high and motivational levels of recognition.

Challenges of participation through leadership

Participation through leadership shares some challenges with partnership participation. This includes the lack of a clear pathway to move innovations forward, such as via entrepreneurial support or integration into humanitarian programmes.

In leadership participation and more in-depth forms of partnership participation, user-innovators need support for living costs to they can dedicate time to an innovation process with an uncertain outcome. User-led innovation in low-resource settings require robust local innovation ecosystems, which involve considerable investment to establish.

Finally, there may be ambiguity on how to handle the intellectual property of user-led innovations in contexts where patents are not operational or easy to acquire.

Conclusion

Conclusion

All three types of participation discussed in this paper can result in more realistic problem framing, innovations better tailored to users' needs and a greater sense of ownership among crisis-affected people, which can increase innovation adoption. They all have merits and drawbacks, and each suits specific situations. Partnership and ownership provide stakeholders with a robust role in the innovation process and so can have a more significant impact in terms of improved innovations, stakeholders' own sense of agency, and how humanitarian assistance is structured.

Humanitarian organisations could usefully take these participation types further and develop their significant potential. However, these participation types require a level of investment that is not feasible for many humanitarian organisations, and they are not suitable for all interventions.

If the aim is to increase stakeholder participation more broadly, consultation is the participation type likely to have the greatest potential to be accepted and integrated by the largest number of humanitarian organisations. This is the most flexible participation type, as it enables stakeholders to be involved in various ways, in one or more stages of an innovation process. The literature shows that there is so little interaction between humanitarian organisations and end users in service and solution design that even minimal application of participatory methods could generate positive results.

Mindsets and political will are important influences on whether participation in humanitarian innovation can continue to evolve and grow. However, it's just as important to overcome existing administrative and financial restrictions that obstruct integrating stakeholders' input into innovation processes. Unless the humanitarian sector, including funders, makes concrete changes to funding restrictions and administration mechanisms, it will only be possible to integrate the input of crisis-affected people into innovation processes in very limited ways.

For innovation with, and by, a crisis-affected population to influence humanitarian response, it will be essential to build much stronger engagement between humanitarian organisations and members of these populations. One way to do this is to create mechanisms for how innovations generated through ownership or partnership participation types can be integrated into humanitarian response. Another is to explore concrete ways for individuals and teams from crisis-affected populations who have design training or innovation experience to participate in humanitarian organisations' innovation teams, bringing their knowledge, experience and insight to humanitarian innovation.

When assessing the impact of participation in humanitarian innovation, the driving factors are how much stakeholders get to influence the innovation process, the quality and degree of their participation, and the capacity of the implementing organisation or innovation team to accommodate stakeholder input. In all cases, crisis-affected people involved in humanitarian innovation need to have clear and realistic expectations about the nature and impact of their involvement.

The complexities and challenges of increasing stakeholder participation in humanitarian innovation cannot be ignored, but its multiple benefits present a compelling argument for change.