The co-production of research between academics, NGOs and communities in humanitarian response:

A practice guide

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Introduction

This practice guide explores how to co-produce research, and highlights ways in which the concept of co-production has specific relevance and importance for academics, non-governmental organisations (NGOs) and communities within humanitarian settings.

In recent years, there has been growing focus on the importance of collaborative research and localisation within both humanitarian aid and academia. At the World Humanitarian Summit in 2016, humanitarian actors made commitments to changing how aid is funded and implemented. This included the Grand Bargain, which contained commitments related to providing more support and funding for local organisations, ensuring that people who receive aid can participate in decisions affecting their lives, and ensuring more collaborative planning and funding. Within these localisation and collaboration agendas, debates have focused on key issues including the definitions of local versus international organisations, and the question of whose voices are included and excluded within localisation efforts. [1,2]

Alongside these developments around considering the power hierarchies within humanitarian aid, co-production has re-emerged within academic discourses as a means of equalising research partnerships. It is also becoming increasingly important to NGOs, particularly within research processes. Co-production is seen as representing a change in practice: a way of conducting research that challenges dominant approaches to decision making, communication, capacity strengthening and being participatory during research processes. In this guide, we suggest that co-production holds potential for addressing some of the entrenched power hierarchies within research collaborations that have been identified within the humanitarian sector. This guide focuses on academic-NGO-community research partnerships to acknowledge the role NGOs play in delivering humanitarian aid, the recent shifts towards localisation in the humanitarian sector, the emphasis on including communities and service users in research concerning them, and the increasing recognition that power needs to shift from donors and international actors, towards local actors who are often better-placed to implement activities and conduct research.

We suggest that conducting co-produced research within humanitarian settings presents unique added-value as well as challenges that are important for researchers to consider. In humanitarian settings, understanding the local context can be even more challenging given rapid change, short-term funding and operational cycles, multiple actors and political/social sensitivities, alongside magnified power inequalities. However, the benefits of using co-production principles in these settings can result in more relevant research that bridges the gap between knowledge and action.

We have created this guide to support academics and NGO practitioners in embedding co-production principles when developing new academic-NGO-community research partnerships. Our intention is to provide helpful guidance on what works, insights into challenges, and useful strategies to help structure your research partnerships to better support co-production. We recognise that it may not be possible to implement all the co-production principles fully or immediately, and that using co-production principles is more of a journey than an outcome. This guide is designed to support that journey. It should help you to thoughtfully consider power hierarchies, decision making, communication, capacity strengthening and participatory processes in your research partnerships and equip you with ideas for how to reflect co-production principles within your research.

Methods

This practice guide is based on an extensive literature review on co-production, and 32 semi-structured interviews. It is also informed by the co-authors' experiences working in the humanitarian sector, including conducting research in a wide range of humanitarian settings. While focused on the topic of co-production, this research and the guide itself was not co-produced.

Our **literature review** included academic and grey literature on co-production, including guidance documents, manuals and NGO reports. The review identified a sparse amount of literature on co-production within humanitarian settings, and so in this practice guide, we have sought to apply lessons on co-production from non-humanitarian contexts to the humanitarian sector. The literature on co-production is wide-ranging and continually growing; as this is a practice guide, we have sought to cite only the most relevant literature on co-production, in order to focus the document on practical ways of operationalising co-production.

For **interviews**, we sought to reach participants who either had direct experience conducting co-produced research, or had been involved in some form of academic-NGO-community research partnership. We prioritised ensuring that participants included a diverse group of academics and practitioners from different geographical locations, as outlined in the table below. We interviewed 32 participants, including 15 academics, 12 NGO practitioners, and five participants who were independent researchers or who worked for consultancy firms or (non-academic) research institutes. Participants had experience conducting research in either humanitarian or non-humanitarian contexts. The NGO practitioners who were interviewed tended to work on programming rather than research specifically. In total, we interviewed 18 women and 14 men. Ethical approval to conduct interviews was received from the London School of Hygiene & Tropical Medicine.

Number of interview participants	Europe	North America	Africa	Middle East	Asia	Australia
Academic	9	2	1	2	1	0
International NGO	1	0	1	0	0	0
Local/national NGO	1	0	5	2	2	0
Other (research institutes, social enterprises, independent researchers)	2	1	1	0	0	1

In this guide, we use varied terminology to represent people based on particular features of their identity (e.g. academic/practitioner, geographical location of their organisation, local actors, gender). We recognise this terminology is sometimes contested and does not always fully represent the multiple overlapping identities people may hold now, or in the past.

Structure of the report

This guide is divided into seven main sections:

A) What is co-production?

This section explores what we mean by co-production, helping to distil complex definitions and academic debates.

B) What are the benefits of co-production?

This section briefly outlines some of the positive outcomes that can result from co-production.

C) What are the key principles of co-production?

This section details the seven principles of co-production identified in the literature and from interviews.

D) How does co-production relate to research in humanitarian settings?

This section briefly outlines the particular power dynamics and priorities present in humanitarian settings.

E) What are the challenges of co-production in practice?

This section explores the key challenges identified in the literature and from interviews, as well as mitigation strategies.

F) What does co-production look like across the research cycle?

This section includes critical reflection questions to help you think about co-production at every stage of the research process.

G) What have others learnt in implementing co-production principles?

This section distils lessons from research partnerships, presenting case studies on co-production.

What is co-production?

Co-production is a term that originated from the use of participatory methods in the provision of public services, originating from the work of Elinor Ostrom.[3,4] Underpinning her work is the notion that citizens can play a role in influencing goods and services directed towards them, through the process of co-production, which she suggested was a horizontal, equitable relationship between citizens and public officials.

The term co-production is now used not only to describe service provision, but also to help stakeholders rethink other power hierarchies, including those within research and knowledge production processes. Co-production is sometimes conflated with other terms such as co-design, co-creation, collaboration, or being participatory. There is no single definition for co-production: people may have different interpretations of what co-production involves. Many interview participants described co-production as being distinct from other commonly used terms such as collaboration, suggesting that co-production required more effort and focus.

> “I think collaboration is the light-touch version of co-production.”
>
> (Female, NGO practitioner, Africa).

> “Often, a decision has already been made and it’s already been sorted. They just want an opinion to tick a box to show that people have been consulted but called [it] co-production. In terms of collaboration, I suppose collaboration doesn’t necessarily mean that power and decision making will be shared. You can collaborate on something, you can be involved in part of it, but you may not be involved in the overall decision making of the entire piece.”
>
> (Female, practitioner, Europe).

In this guide, based on existing definitions of co-production,[5,6,7] we use a simple definition to capture what co-production means during the research process. We have created this definition because other definitions tend to focus on only some key principles or take a service-delivery approach to defining co-production. For this guide, we have specifically defined co-production in research as follows:

> Co-production in research refers to a horizontal partnership between researchers (both academic and non-academic) and active research participants to undertake research that can inform action. Co-produced research tackles unequal power dynamics, challenges existing knowledge production hierarchies, ensures more equal partnerships and shared decision making, emphasises reciprocity, promotes mutual capacity strengthening, ensures greater reflexivity and enables flexible ways of interacting and working across the research cycle.

Co-production represents a change from research as usual: it means intentionally engaging with the power hierarchies surrounding every step of the research process. It means shifting from normal ways of conducting research and deliberately doing things differently.

> "An old mode of academic production was the god's-eye view, objective analysis of whatever the situation or the condition was … at which point there was a truth that emerged from the academic and then was disseminated worldwide to interested parties. Co-production is an effort to try to move past that; a recognition that people shouldn't just be interviewed or subjects of analysis, but should actively be taking part in producing it."
>
> (Male, academic, Africa).

> "[C]o-production to me means the sharing of power and decision making throughout, and involving a mixed group of people to do a piece of research. By that, I mean not just researchers but actually members of the local community or patients, carers, and also, if we're talking about health research, health practitioners as well. Principles-wise, I would say that it's an approach that's very open and accessible to all."
>
> (Female, academic, Europe).

Our definition captures the seven key principles we feel best embody co-production within research. However, these principles are not necessarily new to research processes. For example, feminist research places emphasis on addressing power hierarchies between researchers and research participants, engaging in reciprocity and being reflexive. As another example, participatory action research places focus on ensuring research participants are actively involved throughout the research process. In fact, many research perspectives and disciplines endeavour to incorporate a few of these principles. Co-production is different, in that it draws together more than just one or two of these principles, representing a concerted effort to intentionally engage with unequal power hierarchies. It expands upon other research perspectives that seek to increase equity, by acknowledging power hierarchies at every stage of the research process.

Considering power at every stage is critical to co-production. However, this does not necessarily mean that co-production must result in every principle being precisely achieved. We suggest that conceptualising co-production as aspirational offers greater potential for these principles to be realised. It is more helpful to think about co-production on a spectrum,[8] rather than co-production as an outcome. For some research projects, the appetite may exist to truly co-produce at every stage of the research, while for others, funding, resource and capacity constraints may mean only certain components are co-produced. We suggest co-production is not an all or nothing process, but may at times involve incremental shifts from traditional research processes. However, the extent to which co-production principles are incorporated into research must be a collective decision, not one made by those who hold the most power and resources within the research partnership. Whether co-production principles are strongly or lightly incorporated into research, all stakeholders involved in the partnership should have a sense of ownership over each stage of the process.

> "In a way, sometimes, co-production is more of a guiding light."
>
> (Female, academic, Europe).

> "The point I want to make is that these researchers were doing some questionnaire design, something pretty conventional. I think their first participant gave a running commentary out loud as they were completing the survey, which the researchers found so interesting that they promptly incorporated that into the research design, and asked all the other participants to do the same. Now, that's one end of the spectrum because that's a very tiny spontaneous disruption that the researchers then adopted. That participant contributed to the research design, but not knowingly, not purposely. That's the smallest example I can think of."
>
> (Female, researcher, Europe).

> "Choosing when to do co-production is actually quite important I think when you don't have the luxury of doing everything in a co-produced way. You have to pick your moments about what parts are going to be fully co-produced."
>
> (Female, NGO practitioner, Africa).

However, even if action is not deliberately taken to realise a co-production principle, there must at least be recognition of the unequal power hierarchies shaping the research process. We specifically draw attention to this because of the way the language of co-production may be appropriated to make it appear that research is co-produced. Like many other buzzwords that have come in and out of vogue, the language of co-production may be misused.

> "I think you see a lot of virtue signalling in this process without addressing many of the problems that are going on."
>
> (Female, academic, North America).

Co-production recognises that power hierarchies undeniably infuse research: from who funds the research and develops the research question, to who is invited to participate in research and who is given the freedom to interpret the results. Those who have power within the research process may not, however, be the only ones with knowledge.

Co-production challenges traditional approaches to knowledge production that prioritise knowledge produced by academics. It suggests that a broad range of stakeholders and research participants themselves have important knowledge that should be used not only during data collection, but throughout the research process. It suggests that NGOs, who are often the ones who identify the research issue and who may also fund research, will also have important knowledge to contribute throughout the other stages of the research process. People with lived experience equally contribute valuable knowledge to the partnership: co-production values everyone's input equally.

Benefits of co-production

When academics, NGOs and communities work together to co-produce research, it can have a wide range of benefits, as listed below.

Being responsive to community needs in humanitarian crises

Co-producing research expands expertise beyond academics, and may help centre research on the lives of people affected by and responding to crises. Doing so helps ensure research is relevant and responsive. Academic-NGO-community co-production on humanitarian issues can create greater understanding of the priorities and challenges facing local, international and academic stakeholders in humanitarian responses, with potentially far-reaching benefits. For example, if co-production is carried out on a cyclical basis or over a long period of time, the findings can help communities and aid actors to anticipate recurrent crises (floods, cyclones, droughts, etc.) and strengthen resilience and response.

Disrupting, challenging and changing long-standing power dynamics

Academics from Western universities have historically maintained a disproportionate share of power and resources, while subcontracting local researchers for tasks such as data collection. In a co-production approach, more equitable distribution of funding and power can help shift hierarchies of expertise and decision making toward local actors, in line with global commitments towards greater localisation of humanitarian responses.

Enabling greater dissemination and impact

Co-produced research often has the advantage of involving those living and working in the context under study, such as NGOs and local stakeholders responding to a humanitarian crisis. Their involvement from the outset helps ensure that the research is focused on issues of real, practical concern, and that findings are applied and used to create real-world impact. This may mean that research at times moves into implementation and that academics may even find themselves engaging in advocacy.

> "If people genuinely understand co-production and are fully embedded in doing it authentically, then they realise the benefits … the work that you're doing ends up being much more practically applicable in the community in the long run. You're doing health research that is wanted by the community, that is relevant to the community, and that will have an impact on them."
>
> (Female, practitioner, Europe).

Establishing strong channels of communication, networks and partnerships

While the onset of humanitarian crises and response can be a challenging time to find new partners and forge partnerships, those with strong networks and existing partnerships can more easily activate them in order to respond promptly to new humanitarian crises. As the case study on earthquakes (see page 36) exemplifies, having strong pre-existing academic/NGO relationships can help enable an efficient, effective translation of evidence into response at the onset of a new humanitarian crisis.

Creating a virtuous cycle

As noted in the context of climate change,[8] co-production can create a so-called virtuous cycle in which investing in capacity to better co-produce research contributes to more relevant findings, more tailored communication, better understanding, use and benefit of findings, and increased demand for more high-quality research findings. Co-production offers opportunities for new ideas to emerge – for example, multiple participants mentioned that as a result of co-producing research together, other stakeholders went on to continue conducting research in a more participatory and equitable manner.

> "We always believe that through collaboration you can really unlock opportunities. We just simply couldn't do the stuff that we do alone."
>
> (Female, NGO, Europe).

Key principles of co-production

We present several key, interlocking principles that are important to the concept of co-production. Many of these principles may be familiar to you as they often inform specific research approaches. We feel these principles best capture how co-production in research can occur, helping to address existing gaps/weaknesses within academic-NGO-community research partnerships. While this practice guide focuses on co-production within research, the principles we identify as important for co-production may also apply to co-production within service delivery or policy development.

Diagram: The Seven Key Principles of Co-production

TACKLING UNEQUAL POWER DYNAMICS

In this guide, we position power as an important force that infuses the research process. Power, which can be understood as "the ability to direct or influence the behaviour of individuals and groups,"[9] affects all aspects of research, and therefore is critical to how we think about power dynamics during research. Power is "not absolute, it is dynamic and relational … it shapes almost everything."[10] It can be affected by structures and identities such as gender, race, economic status, education, occupation and geographical location. It is held in place by social relations and access to resources. In this guide, we posit that tackling unequal power is a principle to consider in its own right, as well as a dimension that infuses the other principles that are part of co-production. In this sense, power is also a cross-cutting issue; each principle we detail involves some consideration and challenge to existing power dynamics.

Within research, power dynamics manifest in myriad ways, including: who funds research and who controls the budget; who takes leadership over research; who makes decisions and how; whose voices are heard; what language is used and how; how participants are engaged and whether findings are communicated back to them; and authorship of outputs. Co-production of research on humanitarian issues raises particular challenges around power, including everything from historical and present-day power asymmetries between Northern and Southern partners to tension between technical knowledge and local experiential knowledge, and who has access to resources that ensure their safety and security in high-risk fieldwork sites.

> "[I] usually tell the funders, 'You're not allowed to speak. I will tell you when you can talk. Otherwise no speaking, you can talk at the debrief at the end of the day.' I think the funder one [power hierarchy] is the one that I see most acutely and it's the one that's most obvious. It's the most obvious one."
>
> (Female, social enterprise, North America).

> "The editors [of a co-produced, special issue journal] were selected consciously to ensure that African voices were allowed to come out in the publications. These are the different, delicate decisions that are intangible, that are not simple. That these are conscious, soft decisions that we're taking, but jointly in collaboration [with the partners]. Without compromising quality, but painstakingly, but also it took a lot of time, allowing voices to be heard, but also balancing power."
>
> (Male, academic, Africa).

> "I must say, however, having the brand of [university name] also opens doors in these countries because it is a respected institution … It's good I think to leverage that brand to open doors, but as individual academics in these institutions, we have to be very cautious about the dynamic, and also how you're perceived, and not using that brand to then dictate how things are done, because you're automatically more powerful in that setting."
>
> (Female, academic, Europe).

> "[I]n my experience, particularly over the last couple of years … I am the power. I really try and work hard to listen to the voices of the less powerful within the organisation and we try and promote mechanisms that will give voice to the under-represented, to the early career researchers, to the women, to make sure that we respect the cultures of the communities that we're working in. I have no doubt that no matter how I try, people's attitudes change when I come into the meeting because I'm perceived as the person with the final say, as the principal investigator. I have no doubt about that and it means that no matter how much we try to level, to promote the ability of people to influence the decisions and to make decisions, ultimately there's an awful lot of deference to authority."
>
> (Male, academic, Europe).

Gendered power hierarchies extend beyond merely trying to ensure gender balance but relate to the expectations and assumptions made about women and men during the research process, which may relate to capacity, contributions and ultimately the value they each bring. Unequal power between men and women might result in men's decision making and knowledge being preferred over that of women. Race and disability-related power hierarchies may also influence research processes, so it is important to consider these when tackling unequal power dynamics.

> "I would say, before it was negatively affecting co-production because there was already an imbalance looking at the academics within the female category. You will find many academics, many professors, many associate researchers are all males. When you get one or two female in the group, they [the men] always think that they will not be capable to go at hard-to-reach areas, they'll not be able to suffer, climbing mountains, going down valleys, they'll not be able to really assess scientifically."
>
> (Male, NGO, Africa).

> "I work with young women, sending them into the field when it's not their country and town. It is just extremely problematic often because women, for example my students, they go, bringing with them their own power, understanding, independence and all of that, and they're going into the settings where that's not how they're viewed at all. They're viewed as people with no power. They're young, they're often from a different ethnicity or nationality, whatever. It's a real problem and we've had problems like that. These are realities that have to be addressed. You have to be aware of that as a researcher, that not everybody values gender equality. Quite the opposite. It's an issue that gets in the way a lot, I think."
>
> (Female, academic, North America).

"Even though we have senior leadership positions and international NGOs still tend to be hogged by people from the North, but I think it's a lot worse in academia. There's not a lot of diversity. You'd hope that researchers are conscious of that when they design grants, when they work with counterparts in the NGOs. It will seem odd to a lot of NGOs if your research team is all white or all white men, but academic institutions don't seem to be sensitive to that. I think it does affect the dynamic in a partnership in co-production because in a way, it could … I could see how it could intimidate your in-country counterparts."

(Female, academic, Europe).

"[C]reating a co-production process that tries to level the playing field between the implicit power hierarchies that might exist is quite important for the success of the process. Especially in Africa, you tend to find that if you don't think about that, you just get men dominating the conversations, the women don't participate and you get a skewed idea of what's really going on … You tend to find in most African contexts that women won't speak up as much, especially if their boss is male. It's a common problem. Splitting people up into smaller groups for discussions where they don't have to have their boss listening to every word and try not to have as much in plenary allows us to break down some of those gender dynamics and make sure that we're hearing from everyone. Also mixing it up all the time, so not keeping you in the same group so that if there is a power dynamic, it might've been for that one little group, but it's not going to influence every time you move around."

(Female, NGO, Africa).

"The male questioning of female expertise is a key way in which patriarchy manifests itself, globally."

(Male, academic, North America).

Co-production seeks to disrupt traditional power hierarchies between researchers and the researched, and between academics and NGOs who partner on research, to facilitate the more equitable distribution of power among stakeholders. Naming power dynamics and being able to discuss them openly and constructively is a first step, to be followed by deliberate action to address those that warrant change. Some ways of acknowledging and disrupting power hierarchies could be agreeing not to use titles, asking those not holding positions of power to share their ideas first, and encouraging contributions through various means (such as in writing, small group discussions) rather than larger meetings where some may not feel confident sharing or challenging ideas.

"I think people that have more power should really think of themselves as facilitators, listeners, rather than as a people that want to solve the problem. I think that's why also you don't want the more senior people because their careers are built on being the smart people that have the answers, and it's really, really, really hard to get out of that mindset."

(Female, social enterprise, North America).

"It's not just about the research design, it's about everything else. We need to sit down with people and say: 'Right. Well, here's the budget. How do we split it out between us, how do we share this and how do we make it work for the research and how do we make it work for us? … Where are the power imbalances in this potential research team that we're beginning to convene and how do we address those? … [W]hat is there around race, what is there around gender, what is there around homophobia, what is there around religion around and belief, what is there around all of these things, what is there around childcare?'"

(Female, researcher, Europe).

Power dynamics "need to be acknowledged but cannot be managed away. Instead, it will be vital to allow for pluralism, create scope to highlight differences and, enable the contestation of interests, views, and knowledge claims."[11] It is also important to note that power hierarchies are complex and do not always operate from Northern actors towards Southern actors; within different contexts, power hierarchies may be felt at multiple levels.

"Within the Southerners too, there are many power imbalances within those teams too. It's not something you imagine, like everybody from Sudan is the same. Not at all. That's an issue that can really hijack the research if everyone isn't aware of that and recognising this. I do think that understanding these power differentials is something that should be brought up early on and talked about. It could be related to race, it could be related to income, but then also related to that often it's the Northerners who have all the resources, they have the funds."

(Female, academic, North America).

"We have worked with Kenyans, or Bangladeshis … who are from those places, but are by no means in touch or particularly sympathetic to the poor or refugees that we work with. There's that issue which needs to be addressed. There are people also from those institutions [who] probably need to be incentivised somehow to try to speak globally. A lot of my colleagues … across sub-Saharan Africa really see no interest in partnering with anyone outside of that area except for money. They're not interested in projecting their voices globally … They work locally and that's where their money comes from … If we really want equitable partnership, there has to be an incentive from both sides to do that."

(Male, academic, Africa).

It is important to keep in mind that the notion of creating equal partnerships "can obscure an intricate web of power dynamics that operate in practice."[7,12] We explore other challenges in addressing unequal power dynamics in co-produced research, including the risk of reinforcing inequalities, discomfort and tension that may arise when addressing issues around power, and challenges posed by organisational structures, in the challenges section of this report.

"By saying we co-produced this with refugees or trans women or whoever your group is, you hide the fact that it's still you who might be setting the agenda. It's still you who brings the resources, and maybe who controls how it's disseminated."

(Male, academic, Africa).

CHALLENGING KNOWLEDGE PRODUCTION HIERARCHIES

Critical to co-production is the recognition that some forms of knowledge have been excluded from academic research while others have been privileged.[3] This traditional knowledge hierarchy, which suggests that certain forms of knowledge are more objective than others, means that scientific knowledge may be valued over experiential knowledge.[13]

> "Also we tend to find that academic or research or Northern views are sometimes prioritised and indigenous knowledge or local ideas sometimes are given a lesser footing in these processes. Trying to create more of a level-playing field where everyone feels empowered to speak up and to contribute effectively is actually quite a tricky and important principle for us."
>
> (Female, NGO practitioner, Africa).

> "[T]he most important thing is the joint setting of the ambitions of the project so that everybody agrees where we're going. That very often, for me, is as an academic, it involves listening more than anything else. We do need to be clear about understanding what the challenge is from the perspective of the people who are facing the challenge. The academics very often are not directly involved with the problem that they're trying to contribute to the solution [for]."
>
> (Male, academic, Europe).

Co-production attempts to challenge this hierarchy, expanding "what counts as knowledge and whose knowledge counts."[14] Building on principles of participatory approaches, which have long been part of many disciplines, co-production seeks to make knowledge production more democratic, such that those who are sometimes merely seen as service users or beneficiaries are valued for their lived experience.

Challenging knowledge production hierarchies is more than just "adding voices to an academic monologue"[15] but is about producing knowledge that is new and exploring how the interaction between different voices and different narratives contributes to knowledge. It is an important principle of co-production in research because it means valuing contributions of those with lived experience, not as research participants but as members of the research team. This challenges how power hierarchies have shaped processes of knowledge production.

> "I also think it is really valuable to bring people, the representatives from these organisations. I think everyone reaches for the biggest name, the highest title. I want the big thinker, or I want the head of research, or I want the head of progress. Usually, I say, screw all that, bring the people that are actually doing the work because A, they have a much more intimate knowledge of what it's going on. B, they don't have the fundraising responsibility, the political representation responsibilities, whatnot and they don't have a big theory to prove or whatnot … the groups that tend to be under-represented in these consortia are implementers, people that are generally doing this work, and what we call living experts, people with actual lived experience."
>
> (Female, social enterprise, North America).

> "They wheel in, they take some information from me, and they never come back. They're not interested in what I have to say or in me having a part to play. They just want the data and that's it. The research sometimes has a bad reputation of using people as participants and gathering the information they want, and then just dropping them. I had to do a lot of work to get people to understand that actually, this was a longer-term thing and we wanted to work together."
>
> (Female, practitioner, Europe).

"[I]t's very easy to say, 'Oh, you participants are over there and I'm over here and I do this expert, clever thing I'm trained for and you just give me data. You're just repositories of data'."

(Female, researcher, Europe).

In co-produced research, knowledge contributed by a community member is positioned at the same level of importance as key informants who might be gatekeepers or community leaders. In research in humanitarian settings, this means including a potentially diverse range of stakeholders as researchers and contributors, including people affected by crisis, local NGOs and civil society. When involving affected populations, valuing knowledge equally means moving past solely hearing the voices of key informants (who are often power-holders or tend to represent a male elite) but will require sensitive planning and outreach to ensure opportunities for the voices of women, of those without power, and of typically excluded groups like people with disabilities and people from ethnic minorities to be heard. This valuing of diverse voices and knowledge can disrupt the status quo and cause risks, including backlash from community leaders, which may need to be carefully considered and managed as part of the co-production process.

"[W]e are asking [service users], what are the right terms to use … what are your suggestions to improve this? That gives us the sense that we are answering our target group's zeitgeist. We are not somewhere else and they are not at some other place. We are really working towards one aim."

(Female, academic, Europe).

ENSURING MORE EQUITABLE PARTNERSHIPS AND SHARED DECISION MAKING

Making partnerships more equal and sharing decision making are at the heart of co-production. Whereas research often focuses on process and outcomes, by identifying equitable partnership as a principle we are recognising the importance of relationships in co-produced research. This principle is particularly important for co-produced research in humanitarian settings because partnerships in humanitarian response can be exclusionary, often driven by international actors who hold the funding, define the terms of work, assess the capacity of local partners, and focus on outcomes rather than process.[16] Power hierarchies structuring the delivery of aid also affect how research is conducted in humanitarian settings.

"[I]n co-production, everyone's a researcher, and everyone's an expert. Everyone has expertise to bring to the research. They may not have the same kind of expertise as each other."

(Female, researcher, Europe).

"The idea is about collective ownership. Collective in a sense that all those who participated in it owning, and having influence over the research. Ideally, it is a more equitable form, less exploitative form of research production."

(Male, academic, Africa).

Much of the existing literature and initiatives on partnership adopt "a somewhat simplistic idea of 'partnership' as a balanced relationship between two coherent and static entities engaged in a discrete and short-term collaboration framed by specific grants and projects rather than as dynamic/emergent research relationships."[17] The nature of co-production requires partnerships be seen as the latter: dynamic research relationships forming and evolving over time.

Case Study

Forming partnerships during the COVID-19 response

An academic we interviewed described how a partnership with a network in a Northeast African country emerged in response to COVID-19. The co-founder of the network approached the academic and asked her to speak to community volunteers about COVID-19, as they had started running awareness campaigns about handwashing and social distancing, but did not feel people were listening. Upon further discussion, they decided it was important to do more than raise awareness, and decided to study why people weren't responding to the campaigns, with the intention of using the findings to improve the campaigns. They started the research without funding, but attracted attention of a donor in-country, who funded them for a series of studies and the implementation of the campaigns.

The partnership, formed in direct response to a need identified by the community network, drew on the unique skills and strengths of each partner. The academics provided technical research support. While the community network had never conducted research themselves, it was comprised of people with strong networks of their own, experience with community engagement on sensitive topics, and excellent communication skills. Yet because of their lack of research experience, the network was initially hesitant to be seen as an equitable partner, and looked to the academics for strong guidance on what to do. The academics pushed back, encouraging them to recognise and leverage their strong transferable skills to conduct the research. The key challenges they have faced have been specific to COVID-19: not being able to engage or conduct face-to-face trainings, connectivity issues and trying to work cohesively while conducting remote research in sites around the country. These have been somewhat mitigated by the community network being a nimble, motivated organisation, and over the course of the work the relationship between the academic and youth network has progressed into a very strong partnership. As a result of this research partnership, they found that lack of adherence to COVID-19 prevention strategies was linked to lower social acceptability of the practice of shielding. The study was able to identify ways of leveraging cultural and moral beliefs to ensure shielding was viewed as more acceptable.

In this guide, in line with the literature on co-production, we suggest that the foundation of fruitful, equitable partnerships is best formed by involving partners from the proposal phase, so that there can be joint involvement in key activities such as deciding the area of focus and methodology, budget, timeline, outputs and communication strategy.[18,19,20] Involving all stakeholders at the beginning of the research scoping process was a particular point that was also emphasised by multiple interview participants in our research: that being brought in after the research has been scoped out undermines the notion of co-production.

> "I think the main thing is to involve them from the early beginning. … No one would be happy to be on the receiving end of something that is already prepared and designed."
>
> (Male, academic, Europe).

> "Always look at the end product as something that is contributing to your partners. Never look at the commissioning or a study simply as a commission. Never see your partners as an instrument. Treat them equally the way that you want to be treated by others."
>
> (Male, NGO, Asia).

The notion of being brought in too late was also tied to the practice of outsourcing data collection to local organisations, specifically the way this action is framed as being collaborative or even may be termed co-production. During interviews, some participants expressed criticisms of this kind of approach, suggesting this not an equitable research partnership, but could merely be referred to as subcontracting research. Indeed, a few interview participants described co-production in research that sounded more like subcontracting, for example consulting local organisations on research scope or asking them to contextualise data collection tools developed by someone working outside the region.

> "[A] partner … [has] a … cookie-cut prescribed product that they want. … They'll ask about the structure of the data collection format. They wouldn't give us the reason behind it, they wouldn't bother about the philosophy of it. 'Just give me the data and I will train you how to administer the instrument.'"
>
> (Male, NGO practitioner, Asia).

> "[S]omeone coming from UK also asked me, "[Name of participant], we need to work with you in research." My answer was that … '[W]e don't want to be data collectors for your research. … [W]e want to be researchers with you, to collaborate with you, not just take [us] because we are in the field.'"
>
> (Male, NGO practitioner, Middle East).

Within co-produced research in humanitarian settings, valuing partnerships with communities means willingness to engage a diverse range of stakeholders, including people affected by crisis, local and national NGOs, as equal partners. The drivers and incentives for partners involved in co-produced research may differ, which is to be expected given different individual positionings and professional mandates. What is important is that the basis of the partnership and end goals are mutually agreed and defined, and that everyone benefits from being involved in co-production.

> "At no single point, one should feel that there is a hidden agenda. If someone feels like there is a hidden agenda in the co-production, then it's gone. It's all gone. If someone just discovers, 'No, I was not told this. I was not told this.' It's just in the middle of project that this variable has sneaked in or they'll tell you that, 'No, just when I got at the field that I just realised that I should also check on this and this variable. It doesn't work that way.'"
>
> (Male, practitioner, Africa).

Forming strong partnerships to co-produce research requires questioning and recalibrating roles and expectations for the duration of the partnership. This is particularly the case for academic researchers, who need to shift from being subject experts to partners, willing to learn from people who may have ample experiential knowledge and less or no formal education.[21,22,23] Levelling the playing field requires more than lip service, it may mean making a practical gesture or taking concrete action to value experiential knowledge. For example, ensuring that verbal and non-verbal communication is welcoming and creates space for those who might otherwise not feel as comfortable to share their experiences, or being open to different formats and leadership of meetings. This often means ceding power and decision making for the sake of a more equal partnership. It can be uncomfortable and may feel artificial at first to take this kind of approach, but it is a vital part of co-production. Equalising relationships also means thinking critically about the barriers to each party being on an equal footing, as well as understanding the value each stakeholder brings, without having to force their participation.

> "I think that's why there's also often a question. Do you want everybody in the same room at the same time? I think people like the optics of it, people like the feeling of it. But is it actually the best-suited? Maybe not. I think very active and firm facilitation, and if you're able to stamp out those disruptors, you're able to pull out people that usually wouldn't participate. I think the prompts you get you can give

> a group questions that the people with the academic training just simply are not going to know. It's a lived experience type of question. I think there's ways to manage that. I think going in with a good sense of what everybody wants. Are there problematic actors in the room that might flip everything?"
>
> (Female, social enterprise, North America).

> "There are some people who are happy to stand up in a meeting and make their voice heard, other people who won't even step foot in a meeting. There are some people who are dynamic leaders and others who want to contribute, but in a different way. I think a lot of the work that we do around setting up collaborative processes for design placemaking are about recognising different people will want to and be able to contribute in different ways within different contexts, within different formats. How do you create a tapestry of ways for people to contribute?"
>
> (Female, NGO, Europe).

Ensuring the meaningful and active participation of communities in decision making as part of the co-production process may also require a mindset shift among communities themselves. Community members may not have previously been involved in similar partnerships or may not feel ready to take on these roles. Work is thus required to not only prepare academics/NGOs to cede decision-making power, but also to prepare communities to voice their needs and concerns.

> "[T]hey [communities] still think that it's not their duties to do this kind of service. It's the duty … of a government."
>
> (Female, academic, Asia).

Ensuring more equal partnerships also means: willingness to accept challenge and change as part of the partnership; establishing trust; respecting the capacity and contributions of all partners; and having strong methods of communication within the partnership. It also relates to how decisions are made within research. There may not be one final decision maker; rather within co-produced research, decisions are made collectively, with compromises being made by different stakeholders for the sake of maintaining the partnership.

> "Even co-production needs management. It doesn't have to be hierarchical." (Female, researcher, Europe).

> "[F]rom those who are here on the ground, if they are not strong enough, knowledgeable enough, they try to be just saying, 'Yes, yes, yes, yes, yes,' to what the other is bringing on the table and then at the end, you end up having ideas from one side and not ideas from the other side."
>
> (Male, NGO, Africa).

> "The key was that it's actually a capacity building exercise with the legal clinic, and that the legal clinic is actually leading sort of, not leading on the process, but working directly with an NGO and that students have a say in the process, they are attending court cases, they're doing the methodology, they're doing everything. For us it was the collaborative process that was much more important than the research outcomes per se. You're going to tell me, 'Yes, that might not be a very good example because here you compromise on the research outcomes to prioritise the collaborative exercise?' True, but this is also sometimes what you need to take into consideration when you want the collaborative process, because this is a collaborative process that takes into consideration the knowledge and the power between the two actors, so we choose something that is more balanced. We are more flexible in the timing, and then, eventually, we don't put pressure on them. This is how we can maintain the equal relationship, if you will. Yes, there's sometimes things that you need to do, in some way. We need to recognise the assets and the tools and the capacities of that in order to do so."
>
> (Male, NGO, Middle East).

At a practical level, equalising the relationship might mean thinking critically about the physical and social spaces used for co-production, and recognising that power hierarchies also shape the locations where co-production occurs.

> "I would also say, and this is a classic one for engagement or involvement work, but you need to go out of your setting to where people are and not expect them to come into a university because it's an imposing place."
>
> (Female, academic, UK).

> "To me, a well-run co-creation or co-production process is one that really recognises and honours the fact that each actor coming to the table brings something unique and brings something really valuable. I think it is the job of whoever is convening or facilitating the process to be able to know all the dynamics, hurdles, challenges, whatnot that get in the way of these people being able to create, contribute equally together."
>
> (Female, consultancy, North America).

EMPHASISING RECIPROCITY

Linked to the concept of an equal partnership is the notion of reciprocity between the different stakeholders who are co-producing research.[24,25,26] Co-production relies on reciprocity: an exchange of time, knowledge, and participation across all stages of the research process for mutual benefit. Having such an exchange can foster trust, respect, and responsibility-sharing. It can also incentivise future participation in similar research.

> “What’s the ask and what’s the offer? … One of our core principles of the [organisation name] is that the design process can be an empowering journey in its own right and can be an opportunity for people to gain skills and confidence … That clarity about what you’re asking of people, what is information gathering, what is contribution gathering, and then what do you give back? … We’re always exploring where’s that balance of ask and offer and what are the roots and what makes it relevant and interesting for people to take part?”
>
> (Female, NGO, Europe).

> “In some cases, it was like a fisherman would have to miss a day’s catch to be part of the co-production process. Is it worth it for him economically? Can he afford to give up a day’s work? Those are things I think people in the research community need to take a little bit more into consideration.”
>
> (Female, NGO, Africa).

For reciprocity to work, it is essential that the distinct capacities and contributions of different stakeholders are valued. The term mutuality is sometimes used instead of reciprocity, describing “relationships that are more than the sum of their component parts. Its central idea is that both parties contribute and benefit – although usually in different ways – by combining their distinctive complementary contributions to the joint undertaking.”[27]

> “A lot of the time, we expect participants to just give their time for free. We also expect people to be part of something that then has an academic paper as an outcome. That has very little relevance to most of the stakeholders that you’re engaging with. There’s got to be something in it for them. There’s got to be a stake in it for them. There’s got to be some value in them attending.”
>
> (Female, NGO, Africa).

> “If people are contributing to research, they should be appropriately rewarded for doing that and not just expected to do it out of their own goodwill in their own free time, for the benefit of some imaginary future population.”
>
> (Female, researcher, Europe).

Reciprocity might look different at different parts of the research process. It may involve practical considerations like ensuring research participants feel they have received something back for their participation. When conducting research with reciprocity in mind, researchers should recognise that participating in research may be a heavy burden for people affected by crises, including those in protracted refugee settings.

> "I think that in many places, in camps especially, one of the biggest problems that researchers face, [is] that some areas [are] horribly over-researched. For example, Za'atari Camp in Jordan is one of the most over-researched, and problematic research comes out of there, and so is some places like Uganda that are over-researched by people … People are very fatigued from being asked these same questions by researchers. The same old stuff with no reciprocity, no payback, no nothing comes out of it ever."
>
> (Female, academic, North America).

> "Go to where the people are and don't be in a rush, stay, hang out, get to know people, let them get to know you because it is all relational and personal, so wear your heart on your sleeve, be yourself and be honest, be kind, and help; wash the dishes, stick around, put the chairs away. Put your body into it as well as your mind. Provide practical help because these are usually situations where practical help is also needed."
>
> (Female, academic, Europe).

> "We have to do some creative stuff and we did things like bought them phone top-ups that were way bigger than they actually needed for the research and we bought them transport passes that had much longer time periods and much more reach on them. … We bought lots of lunch when we have meetings at lunch and made sure they got loads to take home and it wasn't just curly [stale] sandwiches, we made sure. … We'd say, "Oh look, there's packets of biscuits here. Take these." They knew. They were in on this, we worked it out with them, we didn't just do it to them."
>
> (Female, researcher, Europe).

Reciprocity does not necessarily imply a financial benefit. It can also mean inclusion within decision making, being supported with training opportunities, or creating channels of communication with aid actors to ensure the research influences policy and practice of direct relevance to the communities who took part (such as meeting unmet needs identified through the research). Thinking about actively ensuring reciprocity might also affect how authorship of papers is managed.[28,29]

> "For the first year, we did pretty much nothing. It took a year of me and they getting to know each other, sussing each other out. That takes time to get to know someone on a deep level, so you really get them as a person. Going to see them a lot, chatting on the phone, going to events together, and then building a project helps to make sure that there's less of a cognitive gap when you're doing the project because then you know you're on the same page about why you want to do a co-produced research project rather than a top-down research project."
>
> (Female, academic, Europe).

PROMOTING MUTUAL CAPACITY STRENGTHENING

Capacity strengthening is an important concept for co-production within research.[10] Capacity can be defined as the ability to contribute to co-produced research. In co-produced research, it is critical that each stakeholder, with their diverse knowledge, skills, experiences and views, is recognised as an asset capable of making a valuable contribution to the research. Capacity to contribute is not dependent on formal qualifications, educational background or job title. Rather, knowledge, education, experience, and training are highly contextualised, and in co-produced research this diversity is valued.

Framing capacity strengthening as mutual is a vital part of co-production. While the terms capacity building, capacity development and capacity strengthening are often used interchangeably, capacity strengthening is increasingly recognised as the most appropriate. This is because it recognises that increasing capacity does not mean building capacity from nothing, but rather strengthening existing skills, knowledge and ability.[16] Mutual capacity strengthening is a levelling principle, recognising that each actor can learn from the others and can expand their capacities in different ways. It is not about those with more resources and formalised education strengthening the capacity of those with less, it is about a willingness to have mutual interchange, learning and development.[9,18]

> "I think that the assumption that we need to always build capacity and that there's no capacity, especially in Africa, is very misleading and insulting. I think there is plenty of capacity, but it's just that there's various challenges to it. A lot of the time, there's pockets of capacity, but they're over-utilised and they're just stressed out and don't have enough time or because of mandates or authorities of governments and the way things are … power hierarchies, the capability that does exist isn't deployed properly. That doesn't mean that there's no capability existing."
>
> (Female, NGO practitioner, Africa).

> "I think as researchers, if we're doing co-production, we need to think about having our own capacity strengthened, not about how we might strengthen the capacity of communities or individuals or participants, because again, that's the paternalistic model that I really would like to see us move away from. Yes, of course, that can happen too, but there's this principle of reciprocity. It's mutual, it's not one-way traffic. I feel quite strongly about that. I think if we're really doing co-production, we need to have that frame of mind."
>
> (Female, researcher, Europe).

Capacity strengthening happens at different levels, including individual, organisational and community levels. Emphasis is often on one-off training for individuals to develop technical skills to meet the needs of the project. Yet what is often needed is longer-term efforts that focus both on technical and soft skills to improve people's capacity to do their job well and contribute to research beyond the scope of the project. Sustainable capacity strengthening also often requires strengthening systems, processes and organisations, as well as individuals.

It may be helpful for all of those involved in co-produced research to explore capacity early on (through a formal capacity assessment and/or informal interactions and team building) and explore how it can be strengthened. In research on humanitarian issues, local partners often have: extensive contextual and experiential knowledge; language skills; lived experience of the context being researched; better understanding of populations affected by crisis; relationships with key stakeholders; and access to people and areas important for the research. Local partners stand to strengthen the capacity of non-local partners in co-produced research. For these reasons, should extra capacity be needed outside the existing research team, it can be helpful to look for local and national partners to provide expertise and capacity in the first instance, rather than bringing in international trainers, consultants or capacity.

Capacity strengthening involves costs, including money, time and energy, and these should be factored into partnerships from the outset. Its value extends beyond skills development; it can be a way for partners to acknowledge and redress imbalances, including asymmetrical access to resources (financial, educational, training) and power. It can be seen as an important investment and gesture of partnership, particularly when it provides benefits beyond the immediate co-produced research.

Case Study

Mutual capacity strengthening between a local NGO and academic partner

The idea of mutual capacity strengthening was demonstrated by an example from an interview participant who works in a local NGO in the Africa region. His organisation partnered with a US university to co-produce research. Part of the process of capacity strengthening was the local NGO taking the time to explain the research context to the US-based academics:

> **"What we do is, before we start the research as such, we'll do a training on the technical aspect. … If we are going to do an education research, for example, we'll explain to the people the constitution, what it says in terms of education, the Ministry's education development plan, the budget, so that they have a clear picture of what education is at local level, at provincial level, at national level. We'll explain to them what is the hierarchy within the education system, from the division to the inspection to the ministry, provincial, national, to the inspectors, all that, so that they understand exactly the type of actors they'll be working with and the responsibilities with what everybody is responsible of and what are the limits of each individual."**

This process enabled the local NGO to use their expertise on particular topics. The research here went beyond the typical approach of a university/research actor coming into a context to train people on the data collection tools, but ensured those usually not in positions of power also had opportunities to share their knowledge and expertise.

Case Study

Strengthening the capacity of displaced groups to conduct research

At times, capacity-strengthening activities can extend far beyond the scope of a single research project. An academic from a US university shared an example of her work among displaced communities in an Asian country. In order to reach multiple displaced groups, they used a range of local researchers of different nationalities, using this as an opportunity to strengthen capacity:

> **"We spent a lot of time at the beginning where we were training people to do the survey, but we didn't just see it as training people, we really saw it as building capacity in those communities… [W]e saw that as an opportunity also to build capacity in their own communities by having the researchers understand what it means to study your community, what it means to gather information about your community and how this information, you could use it beyond just our project."**

By investing in the capacity of local researchers the intention was that these locals could lead future research in their communities, strengthening data on displaced communities in that context:

> **"It's easy to say and hard to do, but I do think that we were able to persuade people in our training group… that this is something they could take away afterwards and try to do in their own communities. That is a form of capacity building where studying your own community and gathering information about your own community is something you can do on your own without this Northern group coming in and doing it."**

In this way, capacity strengthening can also be a more intentional, longer-term strategy to challenge existing knowledge production hierarchies.

ENSURING GREATER REFLEXIVITY

Reflexivity represents an important principle for co-production. Reflexivity within research means critically reflecting on all aspects of the partnership and research cycle, specifically thinking about how our positionality (our own background, culture, identity) and perspectives (assumptions, beliefs, worldviews) shape the research process.[30] This means recognising the blurred lines between our personal identities, preferences and assumptions, and the research process.[31] It involves thinking intentionally about methodologies, ethics and outcomes, especially analysing how unequal power hierarchies shape these dimensions within our research. While reflexivity is often viewed as a necessity in academia, our experience suggests that this practice is not implemented as consistently in NGO-led research.

> “The first thing would be to think twice about whether you’re doing it simply because it sounds cool and sexy, or whether you’re committed to the uncertainties of doing it, and are able to commit to the time and emotional energy required to manage what is effectively a quite intimate relationship with the groups of people.”
>
> (Male, academic, Africa).

In contrast to an evaluation or reflection at the end of a project, incorporating reflexivity throughout the research process enables stakeholders to explore interpersonal dynamics, points of tension and areas of opportunity as they emerge. Reflexivity “offers up the chance to be critical at every step of the way, rather than descend from god-like vantage points with a neat presentation of the answers or of what our research has ‘revealed’ of some pre-existing set of realities.”[31]

> “I don’t think you can really collaborate well unless you acknowledge what people step into the room with in terms of power and what you would like them to step out of the room with and how the processes need to change a little bit to accommodate that.”
>
> (Female, NGO, Europe).

Reflexivity can be challenging, particularly reflecting on difficult or messy aspects of co-production, or thinking about the politics associated with research.[31] It challenges the idea that research is objective or neutral and embeds the researchers themselves within every stage of the research process. Reflexivity enables co-produced research to be informed and intentional, acknowledging power and recognising how the personal, whether we are aware of it or not, infuses research.

During interviews, a number of participants reflected on their own power and positionality within the research process, and specifically how their age, organisational affiliation, gender and race/ethnicity may affect how they are perceived and how others interact with them. Incorporating this type of reflexivity into the research process is a vital part of co-production.

> “I was a white global North researcher, which comes with its own points of privilege. I was also not only a member of this large NGO; I was a programme coordinator. There were multiple hierarchies that were overlapping in terms of my position there. On a very practical or material level, that meant that I ultimately was the one signing off on the budget for this whole project. I was the architect of this whole process. It’s funny because I think in many ways, as problematic as it is, it was a dynamic that a lot of folks were comfortable with. A lot of the people participating in the project were comfortable with because that is the dynamic for how large humanitarian organisations interact with community-based organisations… I think I probably could have tried to do more in retrospect to try to address those imbalances.”
>
> (Male, academic, North America).

ENABLING FLEXIBLE WAYS OF INTERACTING AND WORKING

For co-production to occur, it is vital that stakeholders change from rigid or traditional ways of working, to more flexible, evolving means for partnering with each other. When stakeholders with different backgrounds, such as academics and local NGOs, work together to co-produce research, their differing mandates, incentives, ways of working, timelines and resources can pose challenges. Flexibility is vital in overcoming these. This might mean taking a more open approach to how interactions and decisions occur, and being willing to sacrifice structure and fixed timelines for a more flexible approach that recognises the different perspectives of each stakeholder. This may also mean, as multiple interview participants mentioned, being less concerned about the outcomes of the research than the process of the research, which can also be a challenge because of the demands on different stakeholders.

> “I think projects tend to suffer when donors require very stringent outputs at the outset. They say, ‘Oh, take a co-production approach, but you need to produce these results.’ [chuckles] It doesn’t give you much ability to actually use the co-production process for the benefit that it could have. Funders need to be a lot more flexible about co-produced projects and let the outcomes emerge.”
>
> (Female, NGO, Africa).

Being flexible may mean being responsive to the research process as it unfolds, and adapting, abandoning or developing new plans if necessary. While the process of co-production encourages this, it is not necessarily easy. Recognising that each stakeholder works at a different pace is an important part of working flexibly. Compromises, particularly when one stakeholder feels they are receiving lower financial benefits than the others, can lead to resentment and may be difficult to manage when they challenge entrenched ways of working. Being tolerant of uncertainty, willing to learn and try new approaches, and honest about things that are non-negotiable can all help generate compromises that facilitate co-produced research.

> “That consortia set up the process. They said, ‘We don’t know what we’ll get out of the process, but we’re setting up this process to have learning labs with different cities … and to co-produce with them what we think are relevant outcomes.’ Two years in, people were still like, ‘What is the output going to be? We don’t know.’ I think a lot of people felt very uncomfortable. It puts people in a very strange space. Now, at the end of year four and going into year five, people say it’s one of the best projects that has ever existed. … It’s created such strong relationships and people really know how to work together. It’s influenced policies … It has had great impact by taking this more humble approach of like, ‘We don’t know where we’re going to go, because we’re going to go where everyone tells us is the right place to go.’ It’s quite a different mindset.”
>
> (Female, NGO, Africa).

At a more practical level, being flexible might also mean changing how decisions are made. A few participants expressed the need to shift from a top-down approach to running meetings, towards a more open, facilitated session that is more like a workshop. Facilitated sessions offer the opportunity for more voices to be heard and for more diverse perspectives to be included.

> “We felt that a lot of the time the success of the co-production process was made or broken by the strength of the facilitators. In a lot of research projects, facilitation is still not really understood as a key skill. It’s often still outsourced to others. That doesn’t mean that researchers should necessarily be facilitators, but that good facilitation really makes [a difference], and conscious facilitation meaning that if it’s someone who’s really trying to look out for, ‘Are we keeping the playing field level? Are we making sure all voices are heard? Are we living true to our co-production principles?’ Having someone facilitate in that way is quite a challenge and isn’t a skill set that necessarily everybody has or should have. Valuing that skill set and building more of it I think was seen as quite important.”
>
> (Female, NGO practitioner, Africa).

What does co-production look like in humanitarian settings?

Humanitarian settings present unique challenges for any research partnership, let alone co-produced research. Within protracted displacement or conflict settings, affected populations may experience research fatigue; conversely, some may be excluded from or unrepresented in research.[32]

Whether within long-term or shorter-term emergencies, conflict- and disaster-affected communities face significant challenges in meeting daily needs and accessing services, and the additional request of participation in research may feel like a challenging expectation.

> "I think that IDPs [internally displaced persons] and refugees … their basic trust system is shaken. For me, my understanding is that they could not control their lives. They are dropped from their houses, their gardens, their roots. Very often they don't have pictures. They grieve their pets. This is the grieving, disorientated. … They don't control. This loss of control very often translates into mistrust. If you cannot control yourself and your life so who. … Very often I remember especially [name of refugee population] just telling us, that the whole world is an enemy, everybody is an enemy. Imagine living in a world where you cannot trust anybody."
>
> (Female, academic, Europe).

> "There's also hierarchies that just come from knowledge, that working with refugees, I can walk into UNHCR and ask them something, whereas a refugee will be locked outside on the street. I have access to information. I have access to insight in comparison, which people won't."
>
> (Male, academic, Africa).

> "During [an] emergency, it's really difficult to do a research because people are in big problems, and they all look for support. They don't want to talk to you for other things. …"
>
> (Male, NGO practitioner, Asia).

"[I]f you're speaking to people who have been spoken to or been approached by different agencies over the course of however long, and everybody's asking them different questions about what they need, or what they think… [F]or me, that's a bit of ethical dilemma and a do-no-harm consideration that needs to be made in those sorts of situations, to make sure that you're not actually frustrating people and doing more damage to people by engaging them as part of a research process when they're already living in a completely, in a really challenging and stressful situation. I don't think that that's necessarily about co-production."

(Female, social enterprise, Australia).

It is also important to think through the politics and power dynamics around how the lives of conflict- and disaster-affected communities are described within research; assumptions made about these communities' lives may overly flatten complex experiences. For example, reinforcing stereotypes about refugees as perpetually stuck in limbo and always vulnerable may negate their decision making and power even during a state of flux, and result in research focusing on particular narratives of loss and lack to the exclusion of other issues. Alternatively, the opposite narrative of the so-called resilient refugee might also understate the constraints faced by refugee communities and result in a narrow focus on refugee agency/action within research. Either of these singular narratives may lead to assumptions about refugees that end up affecting the trajectory of the research, including research questions, analysis and recommendations. This highlights the importance of grounding any research on conflict- and disaster-affected populations within existing data on their lived experiences, without making assumptions and recognising that generalisations are not always helpful.

A couple of interview participants also discussed the fact that in conflict settings, data may be politicised or easily manipulated by certain actors, requiring researchers to also reflect on the consequences of focusing on particular issues or certain kinds of data. There may be a danger in accepting what is said by participants at face value, as they may also reflect certain power hierarchies or agendas. This can be particularly difficult to manage in co-produced research, when data collection and analysis is supposed to be supposed to be based on more equitable decision making. At times, as a few participants explained, this may mean not publishing certain data because of the consequences it may have on people's lives.

Organisations responding to humanitarian emergencies also grapple with competing priorities, short-term funding for research and implementation, and a constantly shifting context. Research may stretch limited financial and time resources. Humanitarian organisations are also shaped by and reinforce racialised, gendered and neo-colonial hierarchies in their engagement with communities.[33,34,35] The power held by humanitarian organisations stands in stark contrast to the challenges faced by communities they serve. Co-producing research with the involvement of people affected by crises, in which they are able to identify research priorities, determine appropriate methods, participate in data collection, analysis and communicating research findings, can help to rebalance this, but it can be challenging.

"There are hierarchies also of, say, a mental wellness in the sense that people are dealing with certain types of desperation, and frustration, and an existential precarity. They're looking at a short-term survival mode of living, whereas you have the luxury of long-term perspective, and strategic thinking, which I think in itself, that very temporality is a form of hierarchy."

(Male, academic, Africa).

Partnerships with academic or research institutes may place additional strain upon those responding to humanitarian emergencies. Often, the pace of co-produced research may be different to the speed with humanitarian organisations often produce rapid assessments therefore managing and setting clear expectations becomes particularly important.

Engaging the right actors within a humanitarian organisation is an important part of co-production, in order for decisions to not be viewed as top-down. It is also important to discuss risk, safety, and power hierarchies within the research team, particularly if local actors will be carrying out most of the fieldwork. The challenges and intricate power dynamics around access to conduct research in humanitarian crises should not be underestimated, nor risks to the researchers who use their networks to gain access; ultimately, those with the greatest experience living and working in the research setting should be those making decisions about what is feasible.

> "Local NGOs, as much as we have a lot of contacts and acquaintances and friends, we are not always a good friend of governments, we are not always buddy-buddy with the military, nor we are hand in hand with the militia for example. We do need to deal with this hierarchy, and explaining the purpose of the study alone will take a lot of energy, a lot of courage. I wouldn't say that we have exposed ourselves to danger or hazard in doing that. I'm just saying that there are extra efforts. When a study says, 'Well, we need to have x number of high officials to collect data from,' they'd really have to start from the ground, go to the next official, get the endorsement… Then, of course, there are party lines that we are to reckon with, we have to observe when asking questions, when interpreting, and then there are times when the hierarchy of power would impose their own kind of interpretation or accountability."
>
> (Male, NGO, Asia).

> "Partly, it has been because within these organisations, they actually have to sell research. We're dealing with headquarter offices. They have to sell the project to countries to get them to participate. Now, that hadn't been done prior to the project design. The design was mainly a headquarter discussion. The time it takes to get countries on board, engaged and willing. … We've had to be very patient and trying to support them in selling it. It really was essentially a marketing campaign. Saying, 'We have this project, this is how it could help you.' It feels like countries, unless they're convinced it will have a real impact on their day-to-day work without generating a lot of workload, so one of the first questions we get is, 'Is someone going to come and do this?' or, 'What do you expect from us' in countries. There's a lot of hesitance really to how much extra work is that going to generate for our staff, and how much resourcing will you bring, not in terms of money but in terms of competing for their time and attention of staff… In design, you need to engage the actual field sites you intend to design in and not just a representative of the organisation, at headquarter or regional level. Or at least just factor in the time it takes for those discussions to happen within an organisation to identify sites."
>
> (Female, academic, Europe).

"[T]here's no sustainability and they [NGOs] don't continue to the end… Seeing the refugee camps like a guinea pig for organisations. They come, they try maybe the ideas that they have and they just leave. …"

(Female, academic, Middle East).

"I think it would be important to try to break free from the short-term funding cycle that humanitarian agencies are often bound by. I know that's easier said than done, but most large humanitarian organisations have money that's … unallocated … They have funding that could support something like this from one funding cycle to the next."

(Male, academic, North America).

In humanitarian contexts, the challenge remains balancing the need for research with the need to respond swiftly to a crisis. Humanitarian actors struggle with this tension, which is made more challenging by limited research funding. At times, it may be more ethical to meet humanitarian needs rather than conduct research among conflict- and disaster-affected populations, while at other times it may be unethical to implement activities without being informed by evidence. Alternatively, conducting operational research or action research can be a useful way of bridging the research-implementation divide.

"Especially when we are working with communities affected by conflict … communit[ies] have many needs. They need to be supported: house building, water, school for children, and health caring and other needs. When we are researchers, we arrive in the affected community, we say, 'We can't help you people with something. We come only to do a research and our report can't help you.' There, it caused some problems and some person said, 'We can't contribute to your research. We need a humanitarian organisation here, not a research organisation.'"

(Male, NGO, Africa).

"I think in general, finding funding to work in those settings is not easy because they're considered high-risk settings and many funders are not … are quite risk-averse. They don't like extensions and changing project sites at the last moment and so on but that's the reality of research in these settings. You have to just put all the worst-case scenarios in place. You might lose your data. You might have to change project sites all kinds of things happen so that's one challenge. …"

(Female, academic, Europe).

Case Study

Co-production between local and international stakeholders in a conflict-affected state

A partnership between a UK university, a local NGO in the Middle East region and other key stakeholders involved in health-systems strengthening in Syria is using an embedded operational research design to ensure that (1) design of research activities is drawn from local priorities, (2) implementation of activities is locally owned and locally led, and (3) research activities benefit communities.

They have intentionally designed the research to ensure that data collection links to the interventions being carried out. Co-production in this project involved thinking beyond the academic focus on "how to generate, produce papers and research outputs", explained one interview participant. For his UK university, the focus was in supporting the work of humanitarian actors:

> **"We need to find a design that supports those humanitarian actors while doing this research, to keep doing the very critical and important work they do."**

In so doing, this co-production process involved intentionally building in time to ensure that the research outputs translate into practice and policies. They have directly engaged communities even during the planning for the research, through workshops:

> **"I think this is very key because if you come to them towards the midpoint of the project where you cannot have the flexibility of changing anything. I think this would be very challenging, because they would be more reluctant to engage."**

Engaging with humanitarian actors and communities at the outset is an important way of understanding each stakeholder's needs:

> **"Especially the people, community members they are really overloaded with the different needs that they have. The different actors that they collect data for either for funding purposes. They're really fed up with the data collection that they cannot see the implication of this. While if they were part of the design effort, this design reflects their midterm and long-term needs, the research activities could complement the health interventions they receive, and later the research outcome would inform better practices which will lead to better outcomes for those communities."**
>
> (Male, academic, Europe).

Case Study

Long term NGO/academic partnership on disasters

We interviewed an academic (seismologist) and the emergency director of an INGO who had collaborated for over 15 years on disaster response. Rather than carefully planned, future oriented research, they began co-producing in response to the Indian Ocean and Haiti earthquakes. In Haiti in the immediate aftermath of the 2010 earthquake, the NGO director reached out to the academic for help, specifically regarding aftershocks. The academic gathered insights from his network of leading scientific advisors, and provided evidence and advice to the NGO director to inform real time decision making.

They spoke daily, with a sole focus on generating solutions to real problems as they unfolded. The collaboration went as well as it could, but both decided they needed a more systematic approach – to plan in advance how to respond when the next earthquake happened. They now had a clear sense of the operational issues, and secured funding to work on systematising a response. Part of this work involved honing a critical understanding of the science and differentiating between what was interesting from an academic sense versus what was realistic in practice. For example, while people who hadn't been through the Haiti earthquake may have thought a new, up-and-coming technique was appropriate, they recognised that it posed scientific challenges and opted to use older, more reliable techniques. They had a clear understanding of the operational risks, and risks that could be described in an academic paper took on a different – for them unacceptable – meaning knowing people's lives would be affected.

Speaking broadly about academic-NGO relations, the NGO director expressed his view that the scientific community is often more interested in the pursuit of learning and knowledge for its own sake than the practical application of research that would be of benefit to an NGO working in poor or vulnerable communities. He identified that NGOs find it challenging to know what evidence to access, who to trust if there are conflicting opinions, and how to weigh an academic perspective alongside others, in order to ultimately determine how evidence can be applied to help the poorest and most vulnerable in humanitarian crises. He said that for a seismologist, something imminent might be 100 years away, whereas NGOs operate on a much shorter timelines – he saw his capacity strengthening work as trying to engage academics on the reality on the ground for vulnerable communities. He felt that what differentiated the academic he worked with from others was his strong disciplinary focus combined with his commitment to use science to produce a positive impact for disaster affected populations. Reflecting on their work together over the years, the academic felt they developed a good understanding of each other's perspectives and ultimately had developed something useful, in a mutually respectful way. He is now leading a large research study, and feels the principles of mutual respect and academic listening honed during earlier co-production have contributed to its success.

Challenges of co-production in humanitarian settings

Some of the challenges of conducting research on humanitarian issues are the same regardless of whether the research is 'co-produced' or not. Such challenges may include accessing physically hard to reach or high-risk research sites; ensuring research is timely and appropriate in rapidly-evolving crises; and the significant practical and ethical considerations of involving participants affected by crises in research.

However, co-producing research can present additional challenges, many of which are related to power, partnership and investment (of time and finances). In their 2019 article, Oliver et al. explore the "dark side" of co-production in health research, identifying five types of challenges that can affect co-produced research (such as different priorities and values, disagreements and power being held by certain individuals) and their costs.[36] Williams et al. (2020) responded critically to this article, arguing "for greater scrutiny of the structural factors that largely explain academia's failure to accommodate and promote the egalitarian and utilitarian potential of co-produced research."[37]

The following section explores three key challenges for co-producing research in humanitarian settings identified by the people we interviewed and in the limited literature on co-production in humanitarian settings. While it is helpful to be aware of these when embarking on co-produced research, it is important to recognise that it may not always be possible to avoid or mitigate such challenges, and this is part of the research process. Indeed, challenges, particularly when responded to using the principles of co-production, can provide an opportunity to strengthen both research and partnerships.

The table on the following page summarises challenges for co-production in humanitarian settings and includes approaches to mitigate or resolve these challenges, which we have compiled from throughout the practice guide. The challenges are discussed in more detail below and elsewhere in the report.

Challenges of co-production in humanitarian settings	Mitigation strategy or solution
Lack of common understanding of what co-production is	• Establish a mutually agreed approach to co-production across each stage of the research at the beginning of the research. • Identify where co-production principles can be implemented, and where it may not be realistic to implement these.
Differing roles, responsibilities and timelines of NGO and academic partners	• Establish mutually-agreed ways of working at the beginning of the research, including decision-making processes, division of roles and timelines. • Reach agreement on representational issues (e.g. authorship, branding) early on in the partnership.
Time to receive ethics approval (particularly in rapidly-evolving humanitarian crises); NGOs not being familiar with academic ethics requirements	• Discuss ethics from the outset and apply for ethical clearance as early as possible. • Make joint decisions around how the research will be conducted in a way that is ethical, and adheres to both formal guidelines and community norms and best interests. • Explore opportunities for mutual learning and capacity strengthening around ethical issues. • In the longer term, work with ethical review boards to facilitate changes in their approach to co-produced research.
Actualising the principles of co-production	• Build in moments for reflection on co-production efforts during the research. • Make a concerted effort to disrupt traditional power structures and draw on the unique strengths of those involved. • Continue to check-in with each other and be willing to adapt and adjust roles, responsibilities and the direction of the research if needed.

LACK OF COMMON UNDERSTANDING OF WHAT CO-PRODUCTION IS

A key challenge identified in the literature and by those we interviewed is the sometimes-interchangeable use of the terms co-production, partnership and collaboration, and the misconception that subcontracting research to local or national actors is co-production. Multiple participants appeared unsure about whether a particular dimension of their research would be termed co-production and it seemed more common that certain elements of a project were intentionally co-produced while others were not, aligning with our conceptualisation of co-production as aspirational and incremental.

Differing understandings of what co-production means and involves is challenging because it can easily lead to confusion regarding roles, responsibilities and expectations. Researchers may underestimate what is required of them, or have unrealistic expectations of their partners. Establishing a mutually agreed approach to co-production at the outset of each project can help manage expectations and lay a strong foundation for the work, helping to identify the areas where the research can truly be co-produced as well as areas where it may not be realistic.

DIFFERING ROLES, RESPONSIBILITIES AND TIMELINES OF NGO AND ACADEMIC PARTNERS

Olivier et al. identifies "differences in roles, disciplinary backgrounds, organisational affiliations, objectives, and metrics of success, as well as the funding contexts of researchers and NGOs"[38] as sources of challenges of NGO-academia research partnerships. Academics, for example, may face questions or criticism about the quality of co-produced research from colleagues sceptical about co-production. They may have practical challenges co-producing research involving complex research designs, such as RCTs, with non-experts.[39] This can require difficult trade-offs related to ensuring methodological rigour while conducting research aligned with the principles of co-production. Academics involved in co-production also face a significant recalibration of their roles, as they relinquish power, autonomy and expert status and embrace collective inquiry, shared decision making and different means of knowledge production.

NGOs may struggle to justify and balance investment in co-produced research alongside life-saving humanitarian programme work. They may not be able to access academic journals, may be unfamiliar with academic language and processes, and may gain more value from raw findings than peer-reviewed publications.[21]

While academics and NGOs may be united in the purpose of a particular co-produced project, they ultimately have different core priorities, reward and accountability structures, and professional incentives.[20] During interviews, academics discussed the pressure they face to publish in academic journals, whereas NGO practitioners discussed the tensions between completing research and implementing activities. Academics are often promoted based on authorship, especially being first author or sole author in some disciplines. This can pose challenges when joint papers are discussed, creating the possibility that NGO actors are relegated or left out of authorship of articles. Academics and NGOs also work with different timeframes. Academics may have to work according to school semesters and often have multi-year research cycles. NGOs' timelines are often shorter (linked to opportunities to influence policy or respond to immediate need), and their budgets may be time-limited and inflexible. Yet co-produced research can take longer than non-co-produced research, and require sufficient resources to support capacity strengthening and staff involvement for the duration of the research.

While these differences can pose challenges to co-production if left unacknowledged, perhaps more than any other type of research, co-production provides opportunities to redefine roles, incentives and priorities and find a way to answer research questions of mutual importance.

ACTUALISING THE PRINCIPLES OF CO-PRODUCTION

Putting the principles of co-production into practice can be challenging. It is one thing to agree at the outset to principles such as tackling unequal power dynamics, reciprocity and ensuring more equal partnerships, but the reality of having to build trust and share power and resources can be confronting and complicated. As Flinders et al. write, "there is often a 'rhetoric-reality gap' between what is promised and delivered in self-styled 'co-production' endeavours."[40]

Research partnerships do not become equitable just because partners want them to be; they are created by navigating and negotiating the research process together. This may mean: overcoming differences stemming from

language, communication styles, culture, values, risk tolerance; redefining roles and dynamics in pre-existing relationships; and explicit attention to issues of power and privilege as they arise. The latter is particularly important, as scholars have asserted that the process of co-producing research may in fact recreate, mask or increase inequality and power imbalances[11,12,41] when those involved depoliticise the co-production process and fail to challenge established research processes and power structures.

Numerous articles on co-production highlight the importance of acknowledging the potential messiness of it.[19,26] It is an imperfect process, rendered more so by the realities of building, breaching and reforming trust, disrupting and redistributing power, and making decisions on issues such as timelines and ethics across diverse cultures and institutions. It is important for researchers to recognise from the outset that conducting co-produced research on humanitarian issues is likely, at times, to be challenging and beyond their comfort zone. This does not mean that they have done it wrong; indeed, working through challenges is part of the process. As Miles et al write,[19] "It is important to illuminate co-production 'messiness' and encourage continuous reflection throughout the co-production process to help improve understanding of how a co-production approach can be implemented and improved."

Co-production across the research process

It is important to think about co-production across each stage of the research process. This section outlines the critical co-production issues that may apply within each research phase, including key questions practitioners and academics should ask themselves.

Diagram: Research stages

IDENTIFY RESEARCH TOPICS

Even in the identification of a topic for research, power hierarchies may be present. Different stakeholders (donors, NGOs, academics) may have particular interests in what should be researched. At times, the research topic may be prescribed by the donor or grant requirements rather than necessarily being something that is needed. In the identification of the issue, it is often those with power who make decisions and not necessarily the communities who are affected by the particular issue. At times, the topic to be researched may not even be a research gap, but may merely demonstrate current politics or in vogue issues within the sector. In contrast, co-production is about prioritising research that is actually relevant and important to communities, and reflects the issues that affect their lives.

> "Not to mention that in the height of humanitarian emergencies, people are being assessed to death with so many repetitive assessments, which many of us try to hold back of doing it. … When we research on certain topic, we try to make sure that there are programmes related to this, that some information will be useful. Make sure that when we go to the community, we treat them with respect, and be ready to share some of, notwithstanding, interim results if necessary."
>
> (Male, NGO, Asia).

The following questions help us in thinking about key issues related to the principles of co-production within the topic identification phase of research.

- Who identified this issue/topic for research?
- Why is this issue important?
- To whom is the issue important?
- How might communities view the importance of this issue? How have their voices/perspectives been captured in identifying this research issue?
- Who funds the research? How does funding shape the identification of the research topic?
- How will the findings be shared and who will be the named authors/organisations?
- What might the practical and psychological impacts be for local researchers/participants who are contributing to co-produced research within a humanitarian emergency?

> "We are experts in research and the others are experts in addressing and doing and implementing projects, but we're not meeting halfway to have a better impact on the life of people at the end. … We have both expertise but we are not sitting together and talking about what is really needed."
>
> (Female, academic, Middle East).

> "I think a lot of the times the researchers go in with a very specific outcome in mind and then co-produce to get to that outcome, but taking the idea of, 'What does the community actually need?' takes longer but can be a lot more transformative in the long run."
>
> (Female, NGO practitioner, Africa).

> "We to need to sit down with people and say, 'Right. Well, here's the budget. How do we split it out between us, how do we share this and how do we make it work for the research and how do we make it work for us and how do we deal. … Where are the power imbalances in this potential research team that we're beginning to convene and how do we address those?'"
>
> (Female, researcher, Europe).

DEFINE RESEARCH QUESTIONS

The selection of research questions also reflects power hierarchies between stakeholders. Communities who are affected by the issue or service users rarely have a say in the framing of research questions. It may be that the question itself is framed from an academic or theoretical perspective, or it may be shaped to meet the needs of an NGO. When this happens, the research questions themselves may not directly be relevant or important to communities.

> "[I]t's very much the case that academics come up with a research question in their offices or talking to other academics or reading the literature or whatever. They develop a research question which they then import into wherever it is, the field site. Often that question can be quite misguided. It can miss the point because it just has to be localised and contextualised. Often academics think that they're running the show and that they know what the important questions are and they bring those. … That's a really important piece, giving more time at the beginning to prepare the research and to engage with refugees on what the right questions are. There's that. That the beginning of the research is to be prepared to change

the design and change the question. Even clearing with IRB [Institutional Review Board, an ethics committee], that's a problem, because you get IRB clearance to go in and do a research study. Then if you go in and try to change that study because you realise you're asking the wrong questions, you have to get IRB clearance again. It's a real problem. Not everyone can do this kind of work."

(Female, academic, North America).

The following questions help us in thinking about key issues related to the principles of co-production within the research question development phase of research.

- Who frames the research questions?
- What are the motivation and/or drivers behind the choice of research questions?
- What disciplines or perspectives are reflected and not reflected in the choice of research questions?
- Who funds the research? How does funding shape the identification of the research questions?
- What opportunities exist to include communities during the process of identifying research questions?
- When are meetings held to discuss the research questions, and do these meetings enable participation of all stakeholders?

"[I]t's sometimes more the practicalities of being inclusive. Thinking about what time of the day to hold the workshop, thinking about the mechanism. If it's all Zoom calls, can everyone access Zoom or are you going to need to provide data bundles to some people to be able to do that. Really thinking through the mechanics, I suppose, of how to create an inclusive environment is quite important."

(Female, NGO, Africa).

IDENTIFY RESEARCH METHODS

Particular disciplinary and methodological lenses may dominate the decision-making process on research methods and which participants are engaged using each method. For example, researchers who tend to implement large-scale surveys may prioritise research with heads of households, which can lead to the voices of older men being heard over other household members. Sometimes, research in humanitarian settings may prioritise the voices and perspectives of key informants: experts who are most often male or represent the elite in that society. These may be community leaders, religious leaders, government officials, UN agencies or other NGO specialists. If expert views are emphasised, this means that the perspectives of communities may be less visible. It also means the perspectives of women, people with disabilities, people who identify with a particular sexual orientation or identity, and people from minority ethnicities may be lower in priority, affecting the extent to which the research findings and implications are relevant to their lived experiences. Research methodologies thus represent an important moment where the principles of equality, inclusion, impartiality (important for NGOs) and participation can be promoted. Understanding who the stakeholders are and collectively identifying them was an important step associated with identifying research methods which interview participants mentioned. This may alter during the actual data collection process, however it is still important to reflect on these issues at this stage.

"Gender is a key issue, again, especially in conflict settings usually women they are not given the power to take part in different processes, including research or design. I think this needs to be filled carefully, how to encourage local partners or NGOs to empower women without having this confrontation with those NGOs. Introducing this as part of strengthening the design of the project, I think this would really help to ensure that as we're keen to consult local communities. We're keen to consult from other groups or the different groups of this community, including women or different age groups or different ethnicities."

(Male, academic, Europe).

"From the researcher point of view, it's often fear, like fear of the unknown. We get a lot of people saying, 'Oh, but how do I reach that group? That's impossible,' and it's like, 'Go and talk to them.' It's a weird wall of what people would do in their everyday home life. They would chat with a person and have a conversation, suddenly, it becomes a really weird thing to do in a research situation."

(Female, practitioner, Europe).

"I think the first step is always mapping. Really understanding the context. The community we know is not a homogenous just lump of people. It is a whole, again, a tapestry of lots of different communities."

(Female, NGO, Europe).

"I think you should give yourself more time to understand the context, whether it's a camp or an urban setting of some sort. It's an urban setting, a huge city like Cairo, you have to figure out where people are, who's where. You have to talk to locals who know what's going on. Really a strategy is giving yourself enough time in the beginning, a week or more, to figure out the story, the scene, and the context, and to go slowly. Feel your way into the city before you decide who the team should be, who your main guides, who the interlocutors should be."

(Female, academic, North America).

The following questions help us in thinking about key issues related to the principles of co-production within the identification of research methods phase of research.

- Who chooses the research methods?
- Why might certain research methods be prioritised over others?
- What disciplines or perspectives are reflected and not reflected in the choice of research methods?
- Who identifies research participants?
- Which groups or parts of the community are excluded as research participants?
- What opportunities exist for using more participatory methods or being more inclusive in the selection of research participants?
- What power does the field team have to change the research methods based on their experience conducting the research on the ground?

Ethics approval for co-produced research

Interview participants from both local NGOs and academia highlighted the importance of discussing and agreeing on ethical issues as part of co-producing research. Ethics processes can be an opportunity to collectively discuss what is most appropriate in the local research context. As many local ethics review boards require partnerships with local actors, this can strengthen the inclusion of local actors in research. Interview participants also discussed challenges associated with obtaining formal ethical approvals for co-produced research in particular. Formal ethics approval processes were seen as sometimes contradicting the nature of co-production (particularly the flexibility and adaptiveness associated with using co-production principles during research). A similar point is made in an article by Beebeejaun et al.,[42] who critique how the existing model of research ethics considers communities as vulnerable subjects. They suggest that co-production can be helpful in reframing the relationship between researchers and "the researched" to create new ways of thinking about public value, instead of solely thinking about public harm.

> "Then there's some other key things which might seem more peripheral, but they're not. Research ethics committees really getting in the way of co-production. That can be very difficult because research ethics committees have a real understanding of researchers and participants as very separate entities and a quite paternalistic approach to having to protect participants."
>
> (Female, researcher, Europe).

These challenges include the time it may take to receive ethics approval (particularly in evolving humanitarian crises), and NGOs not being familiar with academic ethics requirements or not having their own ethical review process. Participants noted additional challenges academic ethical review can pose for the implementation of co-produced research. One participant noted that one must receive ethical clearance to conduct a study, but given the iterative nature of co-produced research, if it becomes clear during fieldwork that you need to adapt or change your research questions or approach you must seek further ethical clearance, which can be problematic. Furthermore, while it is important to try to seek local or national ethics approval in the country where you are doing research, there may not be a local ethics committee in countries affected by conflict or crisis, or it can be a difficult, time-consuming bureaucratic process.

It can help to discuss ethics from the outset, to make decisions around how the research will be conducted in a way that is ethical and adheres to guidelines, and to explore opportunities for mutual learning and capacity strengthening around ethical issues.

> "I've worked with NGOs for a long time and we used to do a lot of surveys like KAP [knowledge, attitudes and practices] surveys, nutrition coverage surveys, post-distribution monitoring. Every time, so as an epidemiologist, I'd always say can we seek ethics approval first. They say, 'No, no, no, we're not going to publish it, it'll take forever. We just need it for our programme and we're not going to violate anyone's rights', but then that means that you can't publish and you can't share it as widely as you'd like. You can't reuse the data in the future I feel like not getting ethics approval restricts you from sharing knowledge widely, but also highlighting how much research work is actually being done in NGOs because a lot of people think there isn't research, but usually there is, it's just not published and it's usually just internal."
>
> (Female, academic, Europe).

> "Yes, the ethic approvals. That is a headache. You easily get them there in the North, but here, you may easily spend three months looking for ethic authorisation. Either the person to give you that does not understand what you're talking about, either the person is absent, either they want you to pay money, either they want you to bring the project and then you bring the project and they don't get time to read it. That is a nightmare. IRB is a problem."
>
> (Male, NGO, Africa).

> "For example, there was the constraints about being in an institution and in academia. … [Y]ou need everybody to comply. … You send me the form and that becomes quite tricky, because when you want people to get into this process or you want them to happen spontaneously. In the case of [our research], we were in public space and we were inviting people to participate. If then you have to stand in the front of the project and say, 'Well, you have to sign me here and dah dah and dah dah dah,' people would say, 'No, no, thank you. What do you want my information for?' … It's so subtle. It's so tricky to build this space that data protection and all this very technical stuff that are required as a researcher."
>
> (Female, academic, Europe).

COLLECT DATA

During the data collection period of research, it may not be possible to undertake the research in the way it was planned. This is particularly true in humanitarian contexts where rapidly-changing security situations and complex field realities may mean the data cannot be carried out as intended. This is perhaps most evident in the selection of research participants. The practical and logistical elements involved in actually identifying these research participants can be subject to power hierarchies. For example, if community leaders recommend research participants, these participants may not necessarily represent the voices of communities but may instead align with community leader perspectives. Or, where NGOs select research participants from existing lists of aid recipients/beneficiaries, those selected may feel obliged to present the NGO in a certain light, or indeed may have been selected because they represent a positive case study. At times, it may be the same individuals who have repeatedly been selected to participate in research. These selection processes raise important issues about power and ethics within the research participant identification process. Thus, thinking carefully about entry-points into communities is very important. While it may be convenient to identify participants through community leaders or religious leaders who we are already familiar with, this may exclude certain voices and groups in the community. While being aware of this is important, it might not be possible to deviate from established approvals and norms when trying to gain access to conduct research with communities.

During or just before data collection is also often when capacity strengthening occurs, and this activity has the potential to be a very top-down process instead of a mutual way of engaging across different stakeholders. The identification process for the locations and timings for data collection are also subject to power hierarchies, particularly gendered power hierarchies that reinforce women's position in certain roles, including caregiving responsibilities. These expectations for gender roles can constrain participation, making it difficult for women to meaningfully contribute to co-produced research. Thinking carefully about accessible locations for women and other vulnerable groups, as well as timings that do not limit participation for particular groups, is a vital part of ensuring data collection is truly participatory.

> "The other problem here is who represents refugees. If you're going to a camp, how do you get a sense of who's representing the refugees? You can talk to an NGO who says, 'These people are very good. These are the refugees, so-called leaders,' but who knows who the leaders are really? The UNHCR says some people are leaders and NGO say others and refugees may disagree. It's really a problem. All of these issues have to be addressed in research."
>
> (Female, academic, North America).

> “I think most people just don’t even think about that when they’re starting those processes. They think, ‘Oh, well, I’ll convene a meeting and it’s open to everyone.’ There, it’s open, but it might be at a time that some people have caring responsibilities or are at work, it might be in a place that you can’t get to with public transport, it might be some people can’t afford to get there on public transport, all of those dynamics.”
>
> (Female, NGO, Europe).

Lastly, at the most practical level, power becomes very important when it comes to who actually conducts the fieldwork. Their positionality and the power they hold can shape how they conduct interviews, focus group discussions, or how they implement surveys. This, however, does not mean simply outsourcing research to the most vulnerable groups in an attempt to equalise power hierarchies, which may not change the power hierarchies that researchers are subject to or be the best course of action for the research. Additionally, in many settings, it may create different challenges for refugee researchers to conduct research among their own communities. Similarly, as noted by a few interview participants, emphasising a partnership with a local university, research institute or even NGO does not necessarily mean power hierarchies are equalised, because local individuals within these structures may also represent an elite of the community – those with higher socio-economic status and education. Within the category of local actor, there may be multiple power hierarchies.

> “Researchers think they can get past these problems of research fatigue by recruiting refugees to work on their team, but that is not solving the problem. That’s just like this little band-aid thing. It’s the same thing you’ve been talking about. You’re just using refugees to promote your research or to make your research look good. ‘Oh yes. We have a team of refugees doing this.’ Unless you’ve addressed some of the gender and power and other issues involved in this, that’s nothing. That’s not changing. It’s not really co-producing.”
>
> (Female, academic, North America).

During the data collection process, equalising power between participants and researchers may also involve practical actions to make participation easier and respect the time of participants. For example, covering transport expenses or providing light refreshments for participants during the data collection can be a practical way of engaging in reciprocity. However, these efforts should be context-specific.

The following questions help us in thinking about key issues related to the principles of co-production within the data collection phase of research.

- Which participants are ultimately involved in the research? Who was not included and why?
- Who manages the fieldwork logistics?
- Whose capacity is strengthened, by whom?
- What opportunities exist for more mutual capacity-strengthening processes?
- Who asks the questions during an interview, survey or focus group discussion? What positionalities and power do they hold?
- What opportunities exist to engage in reciprocity during data collection?

ANALYSE DATA

During data analysis, the power held by the people responsible for data analysis and write-up can reinforce inequalities. Often, the academic/research institution analyses the data, making meaning out of content that they may not have collected themselves. It is important to think about the background/positionality of people involved during this phase of the research, because perspective can be crucial in determining how data is interpreted. In the process of analysis, it can be easy for those doing analysis to generalise and simplify the findings, but this can flatten the complex experiences of research participants.

> "I think that as researchers, humanitarian actors we tend to grab onto buzzwords and that's partly the influence of how the funding works. … I think unless the stars align and you have folks who are from the affected population, but who are also ready and have the resources to engage in the process that participatory research demands, and that's very rare in an emergency setting, then I don't think it's going to happen. Maybe that's okay. Maybe there are other things that we can do. … I think that improving qualitative analysis, putting more effort into doing rigorous qualitative analysis, is sometimes more important than trying to do a slapdash participatory process, that's not actually participatory. I say that because a lot of the qualitative analysis that I've seen coming out of humanitarian research is just like, 'Okay, here's what a bunch of people said.' It's just a long, hard-to-navigate list of excerpts of people, of interviews, and without really serious analysis of how that relates to anything else. I guess that that might be a bit harsh, but that's what I've seen in quite frequently. I think the time and space to really do this research when possible, and if that's not possible, not trying to conform to the trend of hitting the buzzwords."
>
> (Male, academic, North America).

Taking care in how analysis is done and including communities themselves in the analysis process, including validating the data, can help to address these issues.

> "Once we already have the first draft information that is now about to be published, we'll go again to the community and explain to them that, 'This is what our final report will likely look like. Do you have information to add in? Do you have someone to come and explain in local language?' I've never seen a community that does not have two or three people who are quite well educated, that can take their time to read through the project and ask questions and ask more questions about how we did arrive to this type of conclusion. Finally, if they agree, if it's not a sensitive topic like security, sexual violence, we will also include them as the co-producers. They'll also be put on the final document."
>
> (Male, NGO practitioner, Africa).

Directly involving communities in analysis can be a means of challenging existing knowledge production processes. However, this is not necessarily an easy process, as demonstrated in the examples below. The majority of our interview participants talked about co-producing qualitative rather than quantitative research. The gap in studies reporting on co-produced quantitative research has also been noted in the literature.[43,44] Importantly, analysis of quantitative data also involves unique challenges for co-production, including the financial cost of software and capacity requirements.

> “[Q]uite commonly in co-produced research projects, normal people will do all of the interviews and the focus groups but then the data goes back to the university or whatever for the number-crunching and the qualitative analysis. I was like, how can we not do that? … [H]ow can we do it together? We did things offline which worked really well like with post-it notes and lots of big sugar-paper drawing, listening to the audio recordings together and saying what particularly struck us or what we think is particularly meaningful in this conversation or what are they saying, but I failed to translate that into any collaborative, digital experience. I couldn’t do – I was like, how can I use NVivo or some qualitative software with community researchers and that didn’t work at all. That’s just because it’s hard to do qualitative data analysis, and also, it’s like not everyone’s interested in that thing. They like having a conversation in the community, but not the next step because they don’t have the skills and training or necessarily desire for it.”
>
> (Female, academic, North America).

Case Study

Data analysis as part of co-production

One interview participant (female, researcher, Europe) shared her experiences co-producing during the analysis part of the research process, recognising that “being fully involved in all stages of the process” is the aspiration of co-production. There may be particular challenges associated with co-production during the analysis phase, however:

> **“[A]t the start, people often say, ‘Yes, I’d love to be involved with all of it.’ Then they get involved with planning the project, collecting the data. When it gets to analysis, and you sit down and explain what’s involved, in my experience people. … That’s where people tend to go, ‘You do that. … You do that bit. Come back and tell us when you’ve done that.’ Because it’s quite demanding.”**

Knowledge production hierarchies are difficult to dismantle and in fact may be intimidating for those who have previously held less power during the research process. The expectation that analysis is more technical, or can only be done by specialists may result in some stakeholders in a research partnership not feeling they can or should be involved during analysis.

This interview participant shared her experiences doing more collaborative analysis:

> **“I’ve only really worked with one group, who went through the whole process and actually did the analysis. I’m sitting on a pub floor teaching people to use NVivo on my laptop while our kids were playing around us. It was great. They did a fantastic job. They really wanted to and two of them went on to go to college, which I doubt they would have thought of doing**

before. More often when I've worked with groups on co-production… we've got the analysis bit and I was like, 'Right, how are we going to do this? Let's all get together and explain what's involved.' They go, 'No, that's too nerdy. You do it.' Which is fine. … I think with co-production, maybe this is where it really breaks down, however hard you try, because people can drop out."

This example of conducting analysis with NVivo is perhaps more unusual. Manual coding and analysis of qualitative data using flipcharts and sticky notes which many NGOs use, or which are more accessible given the cost of qualitative software, may also provide opportunities for communities to be involved in analysis.

The following questions help us in thinking about key issues related to the principles of co-production within the analysis phase of research.

- Who identifies themes and conducts analysis?
- What positionalities and power are held by people doing data analysis and write-up?
- How are findings summarised and in what ways does the summarisation process flatten complex experiences of communities?
- What opportunities exist to diversify the analysis process and include more perspectives?

SHARE FINDINGS

Power hierarchies of certain stakeholders may also become evident during the process of sharing the research findings. This relates not only to written outputs such as reports and articles, but also how findings are presented verbally, in terms of who presents the findings and how they describe the partnership and the contributions made by others. A significant challenge noted by a few interview participants was the fact that academics face very particular demands for what counts as a successful research output. The pressure to produce papers can stand at odds with the notion of co-production.

> "That pressure to publish in the top-ranking journals of your field militates against involvement in co-production because the co-production brings in issues that the journals aren't interested in, and yet if I want promotion as an academic in a university, my REF [Research Excellence Framework] performance is one of the biggest things I need."
>
> (Male, academic, Europe).

> "In most cases … you prepare with the communities, and you use the participatory tools to find information. You gather those, you prepare reports and details … and you send it to the academic partner. Then, in many cases, you will find that in the final report, you are not recognised … Oh, they are using only their name."
>
> (Male, NGO practitioner, Asia).

> "Also the very last thing I would like to mention is the tension value usually is found in academic environments, for example who's the one with published status, who's the first author, who's is the last author. … In very respectful and very powerful academic institutions in the Middle East, these are key issues. That usually either men or even sometimes women but men with more influence, or women with more connections. That they would marginalise the role of other people when it comes to having their names out, having their books published and I think this is very key. Also the NGO staff, they're less informed about this environment. That's why they might not be aware that they should be part of, for example co-authoring the work because they would be interested in doing the work rather than the outputs. I think these elements are really important to think about."
>
> (Male, academic, Europe).

Further, the final products of research, most likely reports or papers, often do not reach the research participants or communities who may be most interested in the findings and implications. Instead, it may be only those who are literate and have access to academic journals, or the network of the research team themselves who are able to access the research findings. Reports or journal articles are not the only products that may be associated with research. There may be opportunities to think more creatively to develop more accessible products including in-person feedback sessions, short videos, podcasts and webinars, which may be more relevant to the communities whose lives are most affected by the research.

> "What we're trying to get better at doing is ensuring that there is a summary of the high-level outcomes of our research, that is then translated into local languages, and can be shared with community members, so that they do feel – they do then see the outcomes of the data that they have the information that they've provided."
>
> (Female, social enterprise, Australia).

The following questions help us in thinking about key issues related to the principles of co-production within the data sharing phase of research.

- Who publishes/presents findings?
- Where and how are findings shared?
- How is the research partnership (including contributions of all partners) acknowledged in public forums and presentations?
- Who has access to the final research outputs and who does not?
- What products are produced and what opportunities exist to develop more accessible and inclusive research products?

Case Study

Creating and disseminating a co-produced special journal issue

One academic we interviewed described the collaborative process of writing, publishing and disseminating a special issue of a journal. It started with initial discussions between the four key stakeholders (an African organisation, African academics, two universities and the publisher). The academic felt that power relations were equitable during these discussions, which focused on identifying what each stakeholder brought the partnership, their objectives, and defining the outcome and its intended relevance to policy, theory, and practice. Many discussions took place to come to a common agreement, and effort was made to ensure stakeholders felt a sense of joint ownership as the work progressed. A practitioner-policy dialogue was organised to explore their experiences and views on challenges and opportunities related to the research topic. This dialogue provided authors with context and data. The decision was made to prioritise African authors (both academics and practitioners) and peer reviewers, in an intentional effort to create space for those traditionally less represented in academic publishing:

> **"It was a painstaking effort if I'm being honest with you to support, to guide young upcoming African writers to publish, to be part of this. It was a conscious effort and a conscious decision."**

Discussions around prioritising African participation were delicate and at times tricky – it took time to allow different voices to be heard and to find a good balance of power:

> **"[W]e wanted Africans to peer-review these articles. We wanted African voices to be heard in the review of these articles."**

From the outset, ensuring widespread access to the publication was a key priority. This was particularly important given how difficult it is for many Africans to access peer-reviewed articles:

> **"Even when those articles are written about them, even when those articles are making recommendations for them, they could not have access to these articles … 'How are we going to be able to access this piece that you're talking about?' These were questions coming from the [name of organisation] colleagues who do not want to participate in this research and at the end of the day, it is going to be dumped at one of the peer-reviewed journals and then we might not even know the extent to which this is contributing to our work or whether we use it to improve our work."**

Access to the articles was achieved, in part, by securing funding to make the publication open access. Importantly, however, those involved also recognised that they were unlikely to reach key stakeholders by asking them to download the special issue, so they printed and distributed over 500 copies to different ministries and organisations across Africa. The articles were also summarised and presented, and shared on various websites to increase reach. The research and recommendations pertained to Africa, and so decision making about dissemination was made at the African level, ensuring it would be appropriate and effective. This example illustrates the importance of engaging partners and stakeholders from the outset, the need to have discussions around power and priorities throughout the co-production process, and the value of developing a plan to disseminate the research in a way that is context appropriate.

Advice on how to co-produce research, from people who have done it

We asked the 32 people we interviewed, all of whom had experience co-producing research, if they had any advice for those about to embark on co-production. They shared a wide range of advice, which we organised thematically and summarised below.

PLAN THE RESEARCH TOGETHER FROM THE OUTSET

While research is often conceptualised and planned by one stakeholder before research partnerships are formed, the most frequent advice participants gave was to plan the research together. One participant highlighted the importance of determining the research agenda with people who are directly affected by or responding to the topic of study. Another participant suggested forming partnerships as soon as the need or intention to conduct research is identified, then seeking funding together.

Planning the research together and having joint decision making and ownership over the budget from the outset can be a very effective way to rebalance power.

Activities that participants identified as being part of this planning process include:

- Determining the objectives and outputs of the research; developing a project; framework and governance structure; developing a theory of change;
- Developing your research methodology and tools;
- Identifying and meeting with stakeholders;
- Agreeing on roles and responsibilities;
- Anticipating risk and challenges and how they can be mitigated.

> 'However much you try and make a co-production, there'll be a point where you're the budget holder and they're not, unless you are actually going to give them the budget. Are you going to give them the budget? Have a think about that. You might want to. That might make it really co-produced. Give them a budget and let them decide how much to pay you. When's that going to happen? I'm talking a lot about money, but money is a cypher for power or a symbol of power and it's a really important one and it's one we don't talk about enough in this context, I think."
>
> (Female, researcher, Europe).

One participant described how they approached this planning phase, emphasising the need to be open and honest, to know your red lines and also what you are prepared to compromise on. Another participant stressed the importance of being aware of challenges that may impact the project (such as a local election, high staff turnover), taking action to overcome them and maintaining focus on the overall objective.

Clearly agreeing on the objectives of the research from the outset (will it have real-world impact, will it result in academic publications, will the data be used to inform humanitarian policy?) is critical, as is identifying how each stakeholder may benefit from their participation (remuneration, resources, networks, etc). One participant suggested going "a step further" and developing practical policy briefs from the research (female, academic, Middle East). Being open and transparent about these issues can help build trust and a solid foundation for a mutually beneficial partnership. The nature of the research and partnership will ultimately determine what is planned and formalised in advance, versus what evolves through the process of co-production. For some partnerships, particularly those involving organisations with rigid branding or a lengthy sign-off processes, it can be helpful to plan in detail from the outset to avoid potential conflict and delays at the end of the project.

DEVOTE AMPLE TIME

Participants emphasised the need to give plenty of time to each phase of co-production: time to develop strong relationships rather than rushing to kickstart a project; extra time in case research is delayed (due to ethics, identification of field sites, etc); and time for reflection and learning. Speaking specifically on research on humanitarian issues, one participant noted that things change very quickly in the field during humanitarian crises, and it is important to take time between big emergencies to agree on general research priorities and start developing partnerships. Another participant noted the complexities of conducting research in areas affected by crisis, and the importance of taking time and working with local people.

> "Especially in field settings like refugee camps – these are very complex places with complex dynamics and power differentials and all kinds of stuff going on, and you cannot just pop in and carry out a quick, ready study. No. That would be the main strategy, is giving yourself more time to figure out. Working with local people very closely and giving them power to make real decisions about how the research should go."
>
> (Female, academic, North America).

BUILD TRUST AND BE INCLUSIVE

Participants identified trust as an essential part of co-production, emphasising that it can be complicated to build, but important for successful co-production. This includes trust between partners that they are each capable of carrying out the agreed work to a good standard.

> "Yes, we want to co-produce this, and yes, everybody is equal in terms of how we make decisions and things, but they realise that we want to move things forward and we've built trust between me and the people involved, so they allow me or give me the permission to go off and put things into action because they trust that I'll do that in the right way. That trust there is really important."
>
> (Female, practitioner, Europe).

Participants also suggested effort to include relevant stakeholders from the outset, and regular communication with them is maintained throughout the project, which can help mitigate the risk that the research is perceived as extractive.

RECOGNISE CAPACITY AND FOSTER CAPACITY STRENGTHENING

Partners will bring different capacities to the table; part of making co-production successful is acknowledging, respecting, and drawing upon these different capacities. Participants noted the importance of respecting local knowledge and capacities, and in supporting the capacity strengthening of capacity at different levels.

CREATE A SENSE OF JOINT OWNERSHIP

Participants noted the importance of ensuring that research partners, particularly those from Southern institutions, feel a sense of ownership over the research and findings, and translating them into policy or practice. One participant emphasised the role of language in this: academic or technical language may be intimidating or off-putting for some partners and participants, as can us-and-them language. Using inclusive, clear language and translation when appropriate can help foster greater dialogue, participation and ownership.

> "It's bringing everyone together. This is for us sometimes more important than the outcome itself."
>
> (Male, NGO, Middle East).

RECOGNISE THAT RELATIONSHIPS AND PROCESS ARE AS IMPORTANT AS THE PRODUCT/OUTCOME

Many participants gave advice related to valuing, prioritising, and nurturing the relationships and partnerships developed through co-production.

They said:

> "Always look at the end product as something that is contributing to your partners … Never see your partners as an instrument."
>
> (Male, NGO, Asia).

> "The process is more important than the product. If you get the process right, you will get a good product and it will be something that people actually need and want and would use. If you focus only on the product, chances are you're going to miss a lot of the opportunities to really do something a lot more useful and transformational."
>
> (Female, NGO, Africa).

> "We have a partner who invests really in us, and looking beyond the study itself, they regard us as potential partners. … Essentially going far above and beyond the core of the study, and thus we value this as a nurturing relationship."
>
> (Male, NGO, Africa).

> "It's just very difficult to underestimate how much investment and partnership you need to do. It's not enough to just rely on good intentions. You have to invest in the partnership and monitor your partnership, to make sure that it continues to be equitable throughout."
>
> (Female, academic, Europe).

EMBRACE THE CHALLENGES, MESSINESS AND JOY

Participants advised those embarking on co-production to embrace the process for what it can be: in turns, challenging, impactful and joyous. They emphasised the humanness of the process, of connecting with research partners, using emotional intelligence, providing practical as well as technical contributions.

They said:

"To me, co-production it's, as I said, very time-intensive, it's not easy, but there's so much it can bring and very rewarding. If there's one lesson, a final lesson to give is really that they shouldn't despair, that's normal. They will get frustrated but it's really worth the effort on both sides."

(Female, academic, Europe).

"Be prepared to take your whole self along, not just your research, yourself. Be willing to use all of your skills and abilities and your emotional intelligence … Do what you can to really equalise the process and be prepared and willing to do that, because that means being open to being challenged. That will happen, doing co-produced research, that will happen. Be prepared for joy and for humour."

(Female, independent researcher, Europe).

"My advice number is, one, really start with humility. Know that we are all learners and that learning take different pace at different parts of the world. That humility will go a long way, and respecting your partners and treating partners really as fellow traveller who will step together. Number two, have spare energy, room and time to engage in real and genuine conversation on the meaning behind the words and numbers. Try to open your mind into different ways, different meanings of truths in the data. Be ready to have different interpretation. Be wise enough to accommodate and listen on different opinions."

(Male, NGO, Asia).

Further resources

The following resources may be helpful if you have decided to conduct co-produced research and are looking for checklists and practical guidance for how to get started.

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