

Finance Case Study

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Executive Summary

Humanitarian needs have increased over the past few decades and are projected to increase dramatically in the coming years. The world that is emerging is urban, increasingly buffeted by the effects of climate change. The old paradigm of state vs. state conflict no longer covers the rise in non-state actors bringing instability and conflict to every continent. Generations are growing up and having their own children in the same refugee and IDP (Internally Displaced People) camps they were born in.

Funding for humanitarian response is lagging behind the rising needs. The current ways of working are becoming outmoded in many ways, adding further strain to the system. This report seeks to understand how products, processes, services and organisations that are seeking to make positive changes are being funded and supported.

There have been innovations that have emerged in the past decades which start to meet these new challenges. The rise of cash transfers, the use of social media and the change in the treatment of acute malnutrition to name just a few. These three innovations alone have saved the lives and livelihoods of hundreds of thousands, if not millions of people. In order to be fit for purpose, the humanitarian challenges of today and the future require the humanitarian system to increase the number and impact of such innovations.

In the past five years there has been a growing movement of support for innovation within the sector. In a few donors and a number of implementing agencies and private sector organisations humanitarian innovation funds have been developed, jobs, teams and labs created, and innovations piloted. These steps have been small, when set against the size of the system, but they have been significant. These initial steps need to be followed with a second wave of financial and non-financial support if the current humanitarian system is to be able to respond to the increasing number of lives and livelihoods that will be impacted by disasters in the coming years and decades.

This *Finance for Humanitarian Innovation* report is one of five topic-specific studies conducted as part of the Humanitarian Innovation Ecosystem Mapping Project being carried out by CENTRIM of the University of Brighton on behalf of DFID. The overarching goal of the project is to map and assess the drivers, elements and process of innovation within the humanitarian sector, using an ecosystem framework and analytical approach derived from the field of innovation management.

The other case studies focus on the shelter; cash based programming, WASH and health sectors. The aim of these studies was to provide an, in-depth and comparative look at the nature and character of innovation within each sector and to situate these against our evolving interpretation of the Humanitarian Innovation Ecosystem. This innovation finance study seeks to understand the level of financing and support for innovation across the humanitarian system.

Through nearly 40 interviews, reviews of data from the other studies and secondary data

analysis, we have been able to piece together a sense of what is happening regarding financing of humanitarian innovation. The key finding is that the humanitarian system has made a start in funding innovation, but that it is still a long way from where it needs to be. Our research leads us to estimate that, although growing, funding for humanitarian innovation is low. We estimate that innovation funding by OECD DAC members is around US\$37.5 million per year, the equivalent of 0.27% of their humanitarian response funding in 2013. This percentage would be exceptionally low in an industry that had little material consequence, such as paper milling. In an industry seeking to save and support millions of lives and livelihoods in the face of disaster, it is not exceptionally low; it is breathtakingly low.

The structure of the report looks at the methodology, concepts and frameworks, before moving on to an overview of the sector. In the overview section, there is an outline of the financing by actor group, followed by comparisons with the private sector and social innovation sector. In the next section we provide an analysis of different actors in order to give a flavour of what is happening in the sector. We then identify 14 challenges that are impeding greater investment and support for innovation. These include:

The Principal-Agent Feedback Loop Challenge: <i>Dealing with deficiencies of the supply led, intermediated humanitarian system</i>	The Funding Challenge: <i>Current funding levels for innovation are too low, by any industry standard.</i>	The Financial Phases Challenge: <i>Funding phases need to be expanded in order to enable better risk management.</i>
The Monitoring and Evaluation Challenge: <i>The lack of evidence, and the need for consistent approaches and frameworks are stifling investment.</i>	The Support Challenge: <i>Finances are not enough. A deeper support ecosystem for innovations needs to be invested in.</i>	The Business Model Challenge: <i>Many innovations lack sustainable business models that are economically viable.</i>
The Dominant Design Challenge: <i>There is an inhibition in investing in scaling innovations due to fears of backing a 'loser'.</i>	The Compounded Risk Challenge: <i>The system has multiple levels of risk aversion that are compounding each other.</i>	The Rules Challenge: <i>There are a number of rules and policies that stifle innovation, such as anti-collaborative procurement rules.</i>
The Forward Commitment Challenge: <i>Agreed projections of rising humanitarian need are not being translated into commensurate forward planning and purchasing.</i>	The Barriers to Entry Challenge: <i>The sector is dominated by incumbents. New entrants find it difficult to break in.</i>	The Adoption Challenge: <i>Implementing agencies are poor at adopting innovations from each other, creating duplication and stifling scaling.</i>
The Competency Challenge: <i>The field of humanitarian innovation is new. There is a need to build system wide competencies.</i>	The Transparency Challenge: <i>Visibility into the spending on innovation across the system is opaque, impacting decision making and coherence.</i>	

The report follows these challenges with recommendations targeted at the actor groups; donors, private sector and the UN, INGOs and Red Cross Movement.

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Acronyms

ALNAP	Active Learning Network for Accountability and Performance
CENTRIM	Centre for Research in Innovation Management, Brighton University
CSR	Corporate Social Responsibility
DFAT	Australian Government's Department for Foreign Affairs and Trade
DFID	United Kingdom Department for International Development
DIV	Development Innovation Ventures
ECHO	European Commission Humanitarian Office
ELRHA	Enhancing Learning and Research for Humanitarian Action
HIF	Humanitarian Innovation Fund
ICT	Information Communication Technology
INGO	International Non-Governmental Organisation
IPO	Initial Public Offering of a company's shares to the public
IT	Information Technology
M&E	Monitoring and Evaluation
NGO	Non-Governmental Organisation
OECD DAC	Organisation of Economic Co-operation and Development Assistance Committee
QCRI	Qatari Computer Research Institute

R&D	Research and Development
SIDA	Swedish International Development Agency
UN	United Nations
UNICEF	United Nations Children's Fund
UNHCR	United Nations High Commissioner for Refugees
UN OCHA	United Nations Office for the Coordination of Humanitarian Affairs
UN WFP	United Nations World Food Programme
USAID	United States Agency for International Development
VFM	Value for Money – the economy, efficiency, effectiveness and equity of humanitarian or development programmes
WASH	Water, Sanitation and Hygiene

Introduction

This paper builds upon the initial literature review, interview survey and models developed in the previous papers of this study series.¹ In addition to this, the researchers used a mix of targeted sampling and 'snowballing' within those samples to identify key informants with which to carry out key informant semi-structured interviews. This methodology led to interviews with nearly 40 people from the target groups of Institutional Donors, INGOs, UN, Academia and the Private Sector (core business and foundations).

The data collected by the other four case studies from this series was also reviewed for both triangulation purposes and to fill in gaps or add more information from the sectors. Although a good number of interviews were carried out across the targeted samples, this is not, nor could be, fully comprehensive. In addition to the interviews, secondary research was carried out to identify funding channels and trends. The study did collect sufficient data from enough of the key funders and implementers of humanitarian innovation to be able to create a complete map of humanitarian innovation financing. Although the researchers could not access information on all the funding of humanitarian innovation, it did uncover enough information to be able to estimate the value of financing being directed explicitly at innovation by the key donors.

Concepts and Frameworks

In starting to map the dynamics of the humanitarian innovation ecosystem, the CENTRIM project identified a series of components which need to be explored more thoroughly in order to understand why the humanitarian innovation ecosystem currently operates as it does. The idea is that this is a necessary precursor for understanding how the innovation system might be strengthened. These components included the following 'R's':

- Resources: what resources - finance, time, knowledge, and technologies - are available for humanitarian innovation, and how are these deployed?
- Roles: who plays what roles in innovation efforts and processes? Are there observable patterns? What, specifically, are the roles of innovators, end-users, front-line workers, brokers, researchers, private sector and non-traditional actors?
- Relationships: what kinds of relationships and networks exist between actors in the innovation ecosystem (competitive, collaborative, contractual, commercial, etc.), and how do these shape innovation efforts?
- Rules: what formal and informal rules pertain to humanitarian work and humanitarian innovation specifically, and how do they serve to shape roles, determine relationships, resource allocations, and shape innovation processes?
- Routines: what are the specific ways in which innovation processes work in the sector, and how well do these work? What are the dynamics of these routines - e.g. linear, predictable; non-linear, unpredictable?

¹ See Bessant, J., Ramalingam, B., Rush, H., Marshall, N., Hoffman, K., Gray, B. (2014) Innovation Management, Innovation Ecosystems and Humanitarian Innovation.

- Restrictions: What are the limitations placed on innovation processes?
- Results: how do innovation results get determined, and by whom, and how does this impact on the success or otherwise of innovations?

The R's are a useful categorisation for understanding the innovation ecosystem as a whole. As this study is primarily looking at one of those R's, 'Resources,' it cannot be easily structured into this approach as the other case studies in this series can. However, in order to enable the reader to have consistency if they are reading across the case study series, the findings across the R's are in Annex 2.

In understanding aspects The CENTRIM work has also utilised the principles and methods of system dynamics to develop a model of how the innovation ecosystem maps onto the innovation process (see figure 1).

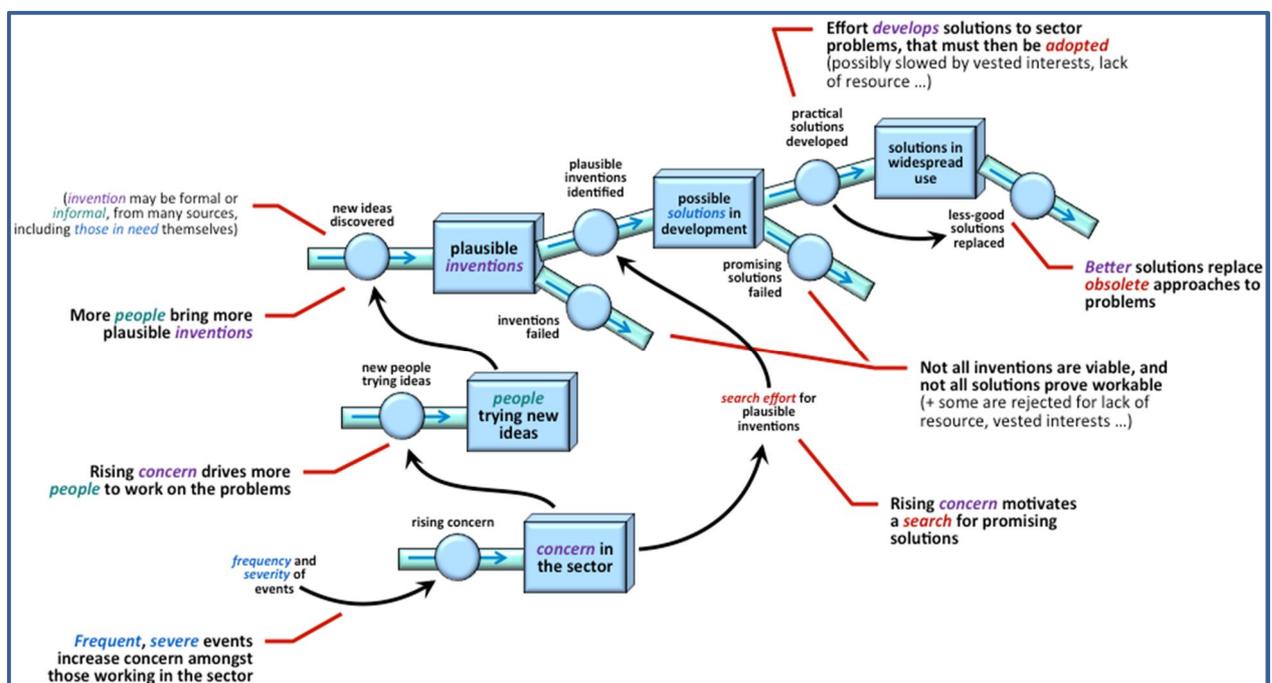


Figure 1: The Humanitarian Innovation Ecosystem

Overview of the Sector

Comparison of the Private Sector and Humanitarian Sector Innovation Ecosystems

This study is designed to assess the level of funding and support being targeted at innovation in the humanitarian sector. However, the fundamental structure, conduct and performance of the humanitarian sector is critical in understanding how the innovation ecosystem and its funding is developing. Therefore, a comparison with how the innovation ecosystem in the private sector has developed is a useful comparator for understanding the functioning of the Humanitarian Innovation Ecosystem.

This is key for three reasons. First, because there are some profound and particularly

influential differences between the evolution and *context* for innovation in the humanitarian sector and the evolution and *context* for innovation within the private sector. Second, because we (the CENTRIM project team) have a strong mix of experience and understanding across the two sectors. And third because many of those observing, analysing and seeking to intervene to strengthen innovation in the humanitarian sector consciously or subconsciously look to the market economy innovation ecosystem as the standard the humanitarian innovation ecosystem should aspire to.

Innovation in the Private Sector

We know from economic theory that consciously pursued improvement in the range and quality of goods and services are an important, long term, source of economic growth and the material improvement of the general population across market economies. Greater and effective investment of finance by companies who manage innovation well typically rewards them with growing sales and market share because more customers get greater satisfaction from their products than those of their competitors. Along with these come the benefits for successful innovative companies in the guise of better margins and higher profits. The pursuit of an *economic rent* from innovation is, of course, a key feature of market economies.

But the aspect we want our readers to bear in mind is that people or other businesses as customers are getting what they want and need from the differentiated and better products being offered in the marketplace. This is because effort and finance is deliberately and strategically invested in innovation by companies and supported in various other ways by public policy to promote economic growth. This is applied to both incremental innovation as well as the *destructive creativity* of disruptive innovation.

However, investment by individual companies in innovation is not sufficient in and of itself. Laws (such as patent law), government policies and regulation, joint ventures, private equity, incubators, accelerators and other parts of the ecosystem need to be functioning to enable innovation to thrive. This ecosystem relies on effective feedback loops between the innovating company and their customers. Whether it is in meeting existing demand in a better way, or creating new demand, through a *blue ocean strategy approach*,² feedback from the customer segment the business is targeting is critical for innovation and value creation. Much of the recent literature on innovation has started to elaborate on how crucial dynamic 'real-time' customer feedback is to the innovation processes itself. The idea of failing fast is actually about learning quickly, and that learning comes primarily from early market testing of the product or service.³

This 'front end' of innovation requires private and public sector financiers of innovation to directly and indirectly support the development of an ever more diversified innovation ecosystem and associated production supply chains. Underpinning this process, these same investors in innovation ecosystems and value chains embedded in the private sector have developed the knowledge base and analytical tools to continuously learn. Where there is

² See Kim, C. W. & Mauborgne, R. (2005) *Blue Ocean Strategy: How to create uncontested market space and make the competition irrelevant*, Harvard Business School Press, Harvard.

³ See Reiss, E. (2011) *The Lean Start Up*, Penguin, and Osterwalder, A. et. al. (2014) *Value Proposition Design: How to create products and services your customers want*, Wiley & Sons, New Jersey.

significant transparency in the market, comparisons can be made between innovations and their comparative advantage. This will be based upon market analysis, competitor analysis, the viability of the business models and the competence of the team behind the innovation.

Different elements of these systems gradually emerged over time after a long and steady period of comparative experimentation by the financiers of innovation. There developed an accumulation of a successful track record by the individual executors of innovation, the emergence of complementary elements and facilitating connections between them in the innovation ecosystems, and the accompanying production and distribution supply chains. Driving all of this evolution was and is a fairly coherent, largely inferred but nevertheless strategically focused set of signals, incentives, delivery systems and interventions; all aimed at responding to market signals and demands. While the private sector has played the most significant role in financing innovation, the public sector has a significant role to play as supporters of national systems of innovation. This is particularly the case in two areas, firstly, in the structuring of markets through legal frameworks, policies and regulations, and secondly in financial incentives such as subsidies, tax-breaks and direct investment into the innovation ecosystems.

Innovation in the Humanitarian Sector

Against this backdrop, the context informing the financing of innovation in the humanitarian sector is clearly quite different. For one thing, the explicit channelling of finance towards the support of innovation is relatively new and not the result of the slow development of a sector wide shared appreciation of the importance of innovation. Moreover, whilst there is no denying that acknowledgement is paid by a number of players to the importance of innovation for the humanitarian sector, our interviews suggest that those who truly understand innovation systems and are supporting the growth of donor funding in this area are a relatively small circle of innovators and early adopters (to use innovation diffusion terminology); there is still a way to go before innovation is seen core to humanitarian action.

Financing by Actor Group

Innovation financing as a stand-alone category is still in its infancy, stimulated amongst other things by ALNAPs 2009 study,⁴ the UK Governments Humanitarian Emergency Response Review,⁵ and in no small part by pro-private sector and market solution governments coming into power across many OECD DAC donor countries in the period around the global financial crisis. These elements brought together an acknowledgement of the need to innovate in order to find new solutions to chronic and growing humanitarian needs with constrained budgets (many countries have slashed their aid budgets in response to the Global Financial Crisis), and a confidence in the private sector and market solutions to provide much needed capability for this innovation to occur.

Although this change is still coming into reality, there are still relatively few explicit humanitarian innovation funding streams. Many funders of humanitarian action do not have

⁴ Ramalingam, B., Scriven, K. & Foley, C. (2009) 'Innovations in international humanitarian action,' *ALNAP 8th Review of Humanitarian Action*, ALNAP, London

⁵ See

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/67579/HERR.pdf
accessed 29.01.15

funding envelopes specifically slated for innovation. Many donors are trying to understand what their approach should be, while others are further along, with some learnings already being incorporated into their approach.

Traditional Donors

Traditional donor funding that is being used for innovation can be categorised into three types; explicit, implicit and invisible.

Explicit

Amongst the OECD DAC donor's there are varying levels of funding and support for innovation. The foremost donors of innovation by are DFID and USAID; however, some of the less well-known donors such as Luxembourg are investing too.

A trend of donors crowding together for innovation investment is starting to emerge. The HIF (Humanitarian Innovation Fund) has been an initial attempt at this, with funding from the UK DFID and Swedish SIDA. The largest and latest attempt to do this has been the establishment of the Global Innovation Fund a \$200 million⁶ initiative by USAID, DFID, SIDA, Omidyar Network, and Australia's DFAT, aimed at development innovations but open to humanitarian innovations. A number of other funds are just coming online as this paper was being researched, such as Australia's DFAT Innovation Xchange. Like the Innovation Xchange and the new Global Innovation Fund, many of the new innovation funds are primarily focused on development innovations, rather than specific humanitarian innovation. Although there are funds that humanitarian innovators can access coming online, the overall funding pool is still comparatively low.

It is worth noting the nature of the funds that are developing in this category. Most follow a three-step innovation funding process (more of which below). There is also a trend amongst donors and some UN agencies to refer to their innovation support in terms of Research & Development. There appears to be a dominant academic based paradigm emerging,⁷ with budgets for innovation often being housed in the technical and research sections of donors, and an increasing focus on evidence of impact for the innovations. The new innovation funds are starting to be administered from this angle. This may be appropriate, as the more entrepreneurial approaches to innovation (such as focusing on market inefficiencies to create new value) are difficult in the humanitarian sector due to its many barriers to entry, poor feedback loops, constrained choice by disaster affected people with limited purchasing power and the fact that the market has dominant incumbents. All of which mean that although the market is inefficient, the lack of transparency, misaligned incentives and the oligopolistic nature of the incumbents⁸ make viable business models to exploit these inefficiencies difficult to develop. It means that there appears to be a bias towards funding R&D based (and often) sector focused innovation funds emerging over other types of innovation approaches. In a forthcoming Deloitte study on Innovation Knowledge Bases,⁹ three potential models are

⁶ GIF (Global Innovation Fund) is still in the process of fundraising, but is anticipating income of around US\$40 million per annum over the next five years.

⁷ It is of note that four of the six of the GIF's current Board are working in or are seconded from academia.

⁸ A point brought up in UN OCHAs recent innovation report Betts and Bloom (2014)..

⁹ Deloitte *Promoting Humanitarian Innovation Exchanges – Developing Models for Humanitarian Innovation Knowledge Bases*..

identified: research oriented, solution driven and experiential. This should provide a useful framework for future discussions on the humanitarian innovation ecosystem. At this time, the model that is emerging across the system is the research-oriented model. The research-oriented model is a valid model for supporting an innovation ecosystem, but it would be worth the key players in the ecosystem discussing the likely path dependent outcomes that might emerge if this model becomes the dominant one in the sector.

Implicit Funding

A number of traditional donors provide funds that are not specifically designed for innovation, but are in some cases leveraged for this purpose by implementers. The majority of these funding envelopes are either in the form of framework agreements with NGOs, UN agencies or the Red Cross Movement from traditional donors, or *capacity building* grants. Framework agreements are usually in the form of multi-year block grants that provide the recipient a certain amount of flexibility and fungibility with the funds. Such flexible funding has enabled more progressive organisations to fund innovative work. There were a number of interviewees who pointed to this type of funding as being critical in enabling sustained innovation journeys.

The other type of implicit funding envelopes are those that support *capacity building* within organisations and networks for them to be better prepared to respond to disasters. An example of this is ECHO's Enhanced Response Capacity Fund envelope that has 15 million Euros, which could be used for innovation, but is not specifically designed as such funding. It is difficult to quantify the amounts of funding from these mechanisms that are supporting innovation, but respondents estimated that it was less than 10% of this funding in most cases.

Invisible

A significant amount of innovation is funded through individual line items in sector and/or geographic focused grants. An example of this is the digitisation of Design, Monitoring and Evaluation (DME) processes. Vendors of these innovative tools, such as Smap and mFieldWork¹⁰ have managed to earn enough income from the DME line items in project budgets at the local level from NGOs such as Danish Church Aid and World Vision. This type of innovation is often small scale, and at the *margins* of implementing agencies. What it does do is provide enough funds to test out different approaches.

Coordination

A number of traditional humanitarian donors are attempting to collaborate and work on both understanding and shaping the humanitarian innovation ecosystem. Pooled funding for challenges and innovation funds are increasing. Donors and other innovation funders are talking to each other regarding the humanitarian innovation ecosystem and the humanitarian system itself, grappling with their roles as conveners and catalysts of innovation. These on-going discussions are seeking to not only inform donor policy and practice, but to inform the wider humanitarian debate and dialogue that is occurring through the World Humanitarian Summit, particularly its work stream on innovation.

Levels of Funding from Traditional Donors

Overall the amount of funding from traditional institutional donors for innovation is growing, but it is still a very small fraction of funding that is going into humanitarian responses by these

¹⁰ Smap can be found at www.smap.com.au and mFieldWork at www.mfieldwork.com.

donors. With a few notable exceptions, innovation funding is way below what would be expected in private sector industries. In 2013 overall humanitarian response funding from OECD DAC donors was US\$14.1 billion.¹¹ In interviews and research we covered eight of the nine OECD DAC donors that our research identified as having financially supported innovation.¹² Using a model that accounted for **all explicit** humanitarian innovation funding and accounted for **10% of implicit** humanitarian innovation funding, such as 'capacity building' or 'framework agreement' grants,¹³ we uncovered \$30 million of funds for innovation in 2014. If we are generous, and estimate that we missed a further 25% of explicit and implicit innovation funding from the other OECD DAC donors, the total estimated funding for humanitarian innovation would stand at around US\$37.5 million, the equivalent of 0.27% of OECD DAC humanitarian funding in 2013.

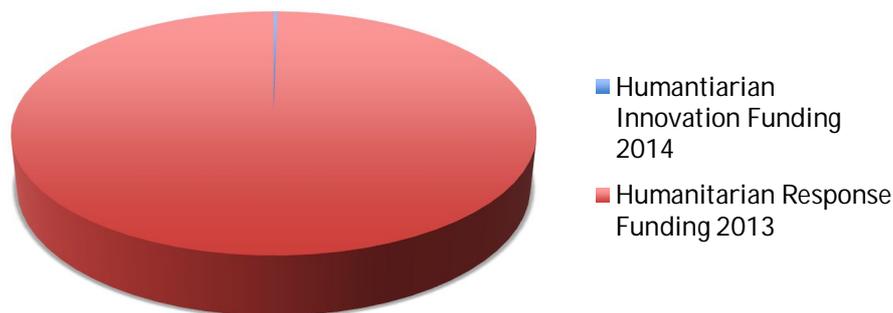


Figure 2 is a graphic representation of the estimated OECD DAC donors' balance of funding between humanitarian response and innovation to improve the lives of at disaster-affected communities.

Figure 2: OECD DAC Humanitarian Response Funding in 2013 vis-à-vis estimated OECD DAC Humanitarian Innovation Funding 2014

Even if we argue that we have under-estimated this funding, it is clear that even with new funding pots coming on-stream, there is still a long way to go to meet the bare minimum of funding for innovation that would be expected in a healthy industry.

Private Sector and Foundations

Foundations and the private sector are in many ways at the forefront of humanitarian innovation. Whether it is start-ups and small businesses that are primarily focused on the humanitarian sector or large corporations who see it as a way to use their core competencies for disaster relief, the private sector is heavily involved. Foundations that are set up by private sector companies behave like their founders firms in most cases and a number are investing in innovation in the humanitarian sector. There is a typical continuum that most of these businesses and foundations can be mapped against in their humanitarian engagement (see figure 3)

¹¹ Source: Global Humanitarian Assistance Report 2014. <http://www.globalhumanitarianassistance.org/wp-content/uploads/2014/09/GHA-Report-2014-interactive.pdf> accessed 27/12/14.

¹² Humanitarian donors interviewed were from UK, USA, Australia, Sweden, Luxembourg, Canada, Norway, EC

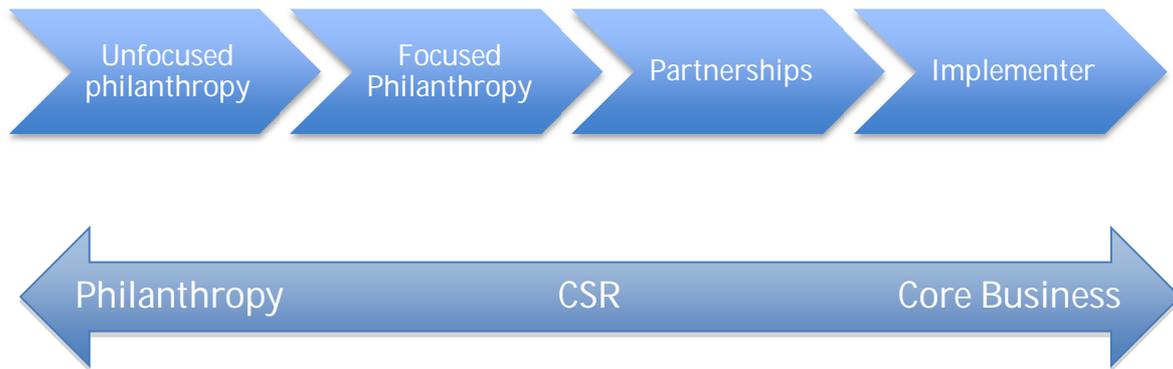


Figure 3: Corporate and Foundation Engagement Continuum

Unfocused philanthropy is where innovations are funded almost by happenstance. They are innovation projects that seem to be responding to a need, with little foresight or strategy. Focused philanthropy is still usually embedded within a firm's CSR (Corporate Social Responsibility) department, but is focused on a particular area, or has some form of programme strategy. In better examples of this type of support, the focus is on providing support, either financial or as services-in-kind to an area that is a core competency for the business. Deloitte's Humanitarian Innovation Programme, where services-in-kind corresponding with their core competencies is offered to organisations who win their innovation challenge is an example of this (see below).

Once the business steps over the threshold into partnerships, then it starts to really focus on its core competencies and takes a more activist approach to its support for innovation in the humanitarian sector. An example of this is the IKEA Foundations work with UNHCR (see below). Such partnerships however are difficult. Many private sector actors find it frustrating working with NGOs and the UN, citing, decision-making issues, fitful engagement (as staff regularly *disappear* to respond when there is a major emergency), different cultures and ways of doing business. This frustration has led to a number of foundations and businesses to focus on implementing their own humanitarian innovations. Google's crisis team is an example of a business moving into direct implementation of humanitarian projects. With products such as people finder, Google.org is itself becoming a humanitarian player, investing in its own innovations for disaster response.

Many private sector organisations and foundations are on a journey through the continuum, from unfocused philanthropy, towards partnering and even implementing. This is providing fresh thinking and stimulating innovation in the sector. However, there are some idiosyncrasies with the private sector's engagement. They are not traditional humanitarian actors, and so are not concerned with the norms of the humanitarian sector, leading to both positive outcomes for humanitarian action and some negative ones. When it comes to the financing and support of humanitarian innovation, the clearest downside is the reticence of many private sector funders and implementers of innovation to publish the amount they invest in humanitarian innovation and programmes. This lack of transparency could become a significant issue in understanding how well humanitarian needs are being met in the future if private sector investment into

humanitarian action continues to increase. It also means that it is impossible to track the levels of investment into humanitarian innovation, as many of the key funders will not state publicly what they invest.

What is clear is that the private sectors skills, experience and finances are being eagerly sought after by many of the traditional humanitarian players. It is probable that the percentage split of funding for humanitarian innovation vis-à-vis for direct humanitarian response would appear to be more biased towards innovation in the private sector, than it is for OECD DAC donors.

NGOs & Red Cross Movement

Tracking the financing of innovation in NGOs and the Red Cross Movement is exceptionally difficult. Internal tracking of expenditure on innovation at a global level is weak within these agencies. Primarily this is because most are families of partners, rather than unified entities and for many, their accounting coding does not include innovation as a code category. A number of the large INGOs are seeking to create more unified structures, but there is still weak visibility into aggregated spend on things like innovation. Very few NGOs have sufficient unrestricted funds from the public to be able to invest significantly in innovation, but they are accessing funding and support from donors, foundations and corporations for it. A number have set up innovation hubs with dedicated staff to support innovation at the global and in some cases regional levels.

Funding is housed in varying parts of the organisations, with some at national level entities and others in a pooled fund within the global family. Where funds are set aside, they are often generic funds that can be accessed by the NGOs development, advocacy and humanitarian programmes. For example, Save the Children do not have their own global level fund, but entities within them have funds, e.g. Swedish SIDA support innovation for the Swedish Save the Children, while Save the Children Australia have their own fund of around one million Australian dollars per annum for new or innovative work in their partner country offices. Oxfam have taken a more centralised approach of a focused innovation spend on a core competency; investing nearly half a million pounds in 12 WASH innovation pilots.¹⁴

UN Agencies

UN agencies that have a significant focus on humanitarian action, such as UNOCHA, UNHCR, UNWFP and UNICEF have taken significant steps towards investing, promoting and supporting innovation within their own organisations. Many have developed strategic partnerships with private sector funders and supporters specifically focused on their innovation work. They have all developed budget lines, staffing and programmes for innovation in the past 2-4 years.

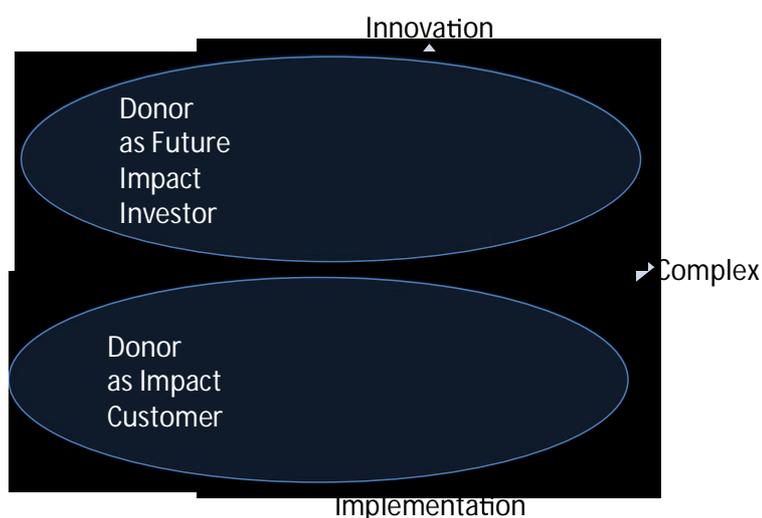
Most of the agencies now have their own innovation funds, which they have specifically fundraised for. These funds are generally between \$1-5 million per annum with the bulk of the funding coming from their private sector partners. The funds are almost exclusively for innovations that are developed within the organisation. UNICEF and UNWFP are in similar positions, with serious investment from primarily private sector partners and fundraising plans to raise more in place. There is clearly learning occurring between UN bodies, and some, such as UNICEF are starting to bring existing partners into their innovation funding rounds.

¹⁴ See WASH case study.

The picture overall for financing across the key humanitarian actors is patchy and opaque. However, explicit and dedicated funding for humanitarian innovation is growing. There are some institutional donors who are providing this funding, but there is clearly a significant amount coming from the private sector too. A number of themes and areas for further exploration and thinking have emerged.

Innovation Donors: Investors or Customers?

The push for VFM (Value for Money) and evidence based programming has meant that most donors are moving towards being what can be termed as *customers of impact*. They are essentially attempting to pay for the *impact* of goods and services for disaster affected communities where those communities lack the consumer or citizen power to procure or advocate effectively for them; and where the state, civil society and market are unable to provide them without outside financial assistance or support. This donor behaviour is not the same as investment behaviour, and is more appropriate where the solutions are mature and the cost and methodology for value (impact) creation are well known. Figure 4 below shows the distinctions.



Where the solution has been tried and tested, and there is a significant evidence base, comparators within a VFM framework can apply. In this case the donor can behave to some extent like a customer, who has a strong understanding of the impact *value* they are purchasing. However, in the top two quadrants, the value is to some degree unknown. There isn't an existing evidence base to be able to adequately measure the value (impact) as a customer.

Figure 4: Investor/Customer Matrix

In this instance, the donor needs to take a more investment view that is weighing up the risk vs. potential future impact value. Both of these approaches however, are still inefficient in delivering *value* for the disaster-affected communities. The affected communities only provide weak signal inputs regarding the *value* of goods and services through evaluations (which are necessarily distant lag indicators), Real Time Evaluations (which are at least *in project* lag indicators) and (where they exist) humanitarian accountability mechanisms. In such an environment, there are incredibly weak and distorted feedback mechanisms that are then intermediated by *professionals* (driven by both normative and subjective considerations) to determine the utility value – to beneficiaries as well as to other members of the humanitarian ecosystem - of the impact of interventions. It is a classic principal-agent problem that the whole humanitarian system struggles with.

If these then are the issues faced by the ecosystem for implementing known solutions, the

problems are exacerbated when it comes to humanitarian innovation. The further back the funder invests in the innovation cycle, just as in the private sector, the greater the risks taken by the investor on the value the innovation will generate. Unfortunately the situation does not significantly improve where the innovation's target market are the implementing agencies themselves. Due to the lack of transparency in the market, the weak signals from affected communities receiving aid, the oligopolistic nature of the implementing agency market, and the need to convince funders (who are behaving as impact customers) that they are providing value for money mean that there are compounding misaligned incentives for humanitarian organisations to innovate or adopt innovations from other humanitarian organisations or businesses.

Timing and Planning for Innovation

The nature of humanitarian work means that demand for products and services is naturally lumpy, as it corresponds with disasters and funding envelopes. This has two significant impacts. The first is that any collaboration with individuals in humanitarian organisations by outside businesses or organisations trying to innovate is often waylaid when key staff 'disappear' to respond to emergencies, often leaving innovation projects hanging in thin air. The second is that the nature of disaster response means that although all the predictions point to increasing levels of disasters and material damage emanating from them there are actually no mechanisms for effective forward purchasing commitments for innovations, as most humanitarian funding is provided in short 1 year (or less) funding envelopes. This is a huge disincentive to investment in innovations by would be innovators, as the risk level and opportunity cost stemming from this are high. Coherent thinking in the sector could address this, but it requires different behaviours and revising traditional ways of carrying out business such as donor funding timelines and procurement systems rules.

Financing Structure

It is useful to understand what types of financing options there are for innovations in the humanitarian sector. Financing of new innovations and businesses in the private sector has become increasingly nuanced. There are different types of funding, available for private sector actors (primarily debt and equity). There are also numerous financing stages that enable investors to marry risk profiles to the types of funding stage in a more intelligent and appropriate way than is currently available in the humanitarian sector. Using the example of private sector equity investment in new enterprises as a comparator is a useful one.

	Private sector Funding Phase/Risk level (failure rate) ¹⁵	Description
1	Bootstrap/90%	Funding from personal savings or loans from friends and family
2	Seed Funding/85%	Small amount of capital for idea development and some testing. Investment for some salaries.
3	Start-up financing/80%	Funding to complete market research and product development and build the team.
4	Level 1/Series A/65%	First stage full production funding
5	Level 2/Series B/50%	Expansion financing – Working capital for the expansion of the company.
6	Level 3/Series C/ Mezzanine/35%	Further financing for expansion, while there is still likely to be little profit.
7	Bridge financing/20%	Financing in preparation for IPO.
8	IPO (Initial Public Offering)	The sale of company shares to the public to create new finance and pay back investors/loans.
Other types of non-debt funding		
9	Government funding options e.g. R&D tax credits	Many government attempts to stimulate innovation through grants, tax breaks or other incentives.
10	Crowd funding	This option is a growing model that can in some cases be a donation, but is increasingly becoming an investment for profit. This is often early stage financing.

Table 1: Equity and other non-debt funding phases in the private sector

As table 1 for private sector equity shows, there are numerous funding phases each with their own risk profile. There is an indicative failure rate highlighted in the table. These phases mean that although it is difficult to jump these gaps for start-ups, it is achievable, as risk is managed progressively for the innovation/business itself and by investors across their portfolio. It is worth noting that some new businesses will have gone through between 5 and 7 equity-financing phases (some even make it to IPO) without turning a profit.

¹⁵ The authors are using the term phases to describe different investment stages to try to avoid confusion with the stages of innovation. The failure rate is indicative.

	'Humanitarian Funding Phase/risk level (failure rate)¹⁶	Comment
1	Bootstrap/90%	Larger humanitarian actors have deeper pockets to achieve this, although there are start-ups who are functioning on founder <i>bootstrap</i> capital
2	Small grants for ideas/prototyped/80%	Examples are the proposed START Networks BETA/Lab, and HIFs small grant facility.
3	Medium grants for pilots/60%	HIF's large grant facility and GIFs <i>test</i> stage
4	Large grants for <i>scaling</i> /10%	Larger scaling grants such as GIFs <i>scale</i> stage and DIVs Stage 3
Other types of competitive funding opportunities		
5	Directed Innovation Funding	These are often in the form of challenge grants (see below), and are directed at a particular problem.
6	Challenge Grants	Challenge grants have quickly become the modus operandi of many donors where they are targeting a particular problem, e.g. DFIDs Girls Education challenge and HIFs WASH challenges. These challenges can range from small investments of a few thousand dollars, to over a million dollars.

Table 2: Financing stages for innovation in the Humanitarian sector

There is an issue of scaling in the sector for innovations that is linked to the limited number of financing phases as shown in table 2 above. The funding phases are modelled on the simple innovation stages, rather than on a sliding scale of risk and what finances are required to keep the innovation moving forward, as in the private sector; i.e. there are not enough stage gates where fresh finances can be brought in as risk incrementally reduces. There are instead large jumps between each *stage* of innovation that have unrealistic expectations on the reduction of risk (through the provision of evidence of impact/progress) between those stages. This is particularly the case between stages 2 and 3. The best example of this (although it is an innovation fund focused primarily on development investment) is USAID DIV. They have a longer track record than most of humanitarian and development innovation focused funding. After 4 years of funding innovations, their portfolio mix was 60% of awards for *Stage 1: Proof of Concept*, 39% for *Stage 2: Testing at Scale* and 1% for *Stage 3: Widespread Implementation*.¹⁷ When DIV did put a specific call for humanitarian innovations for stages 2 and 3 their success rate was even lower, with none being funded, as it was felt there weren't any of sufficient quality. Their portfolio is indicative of the imbalance in the current financing portfolios of innovation financiers in the sector.

¹⁶ Indicative failure rate.

¹⁷ USAID DIV website <http://www.usaid.gov/div/about> accessed 22nd January 2015.

What we can clearly see from table 2 is that there are still limited phases of humanitarian innovation funding. Innovation funders need to tackle the issue of increasing the phases of financing available in order to create more incremental drop off rates in risk levels and evidence requirements. The indicative failure rates show how big the current jumps are, leading to large valleys of death, particularly between pilot and scaling stages.

In addition to the need to increase the number of financing phases, there is a clear gap between the expectations of funders and the evidence and quality of design being provided by innovators to meet those expectations. The answer to this will be some movement from both sides. Support for the development of good standards of M&E in innovation for innovators is key. This evidence gap that needs to be bridged in order for more innovation funds to be attracted into supporting innovation. Many agencies are grappling with this already, but support should be sought and provided for it. The communication of monitoring and evaluation approaches as well as results from the use of such tools also needs to be developed. This needs to be done in a way that is nuanced as shown above, because being a *future impact investor* is different than being a *proven impact customer*. Until this work is carried out, it will be difficult to make informed decisions on which organisations and companies, and which models of innovation are producing effective solutions. In a sector like the humanitarian one that correctly places such great importance on risk management when it comes to spending precious resources, the lack of compelling evidence of impact is a valid reason not to invest in innovation. The key is finding ways to navigate this journey.

In addition to not having consistent and well-tested evaluation and evidence building methodologies for innovations, very few donors, implementers or private sector organisations had evaluated their wider innovation funding and support approaches. This is due to the fact that many are less than a couple of years old. Interviewees consistently stated that it was too early to tell how successful their investments were, with many still trying to work out what their monitoring and evaluation framework should be. The sector is still in the early stages of that process and it will take time for the right methods and approaches for developing the layers of performance measurements needed to judge the impact of different approaches.

Social Impact Investing

There appears to be little cross over between humanitarian innovation financing and the social investment finance revolution that is currently underway. The analogous field of social innovation is being drawn on by some humanitarian actors, but the financing tools are not sufficiently transitioning across the sector boundaries currently. There are significant lessons to be learnt about financing and valuing innovation for social impact, the tools and mechanisms for this, as well as the way that the key decisions at a government level in a number of countries is starting to structure the market in this way (e.g. the creation of new types of legal entity, such as Community Interest Companies and financing tools such as Social Impact Bonds). There has been significant thought and action on structuring markets in a number of developed countries to enable social entrepreneurship. Lessons from this area should be absorbed and adapted by the humanitarian sector, to see how new approaches have enabled numerous social ventures to enter traditional state and third sector dominated social impact markets”.

This area can be a rich field of potential learning for the humanitarian sector, so we have created an annex with key references at the end of this study. They are some of the most comprehensive, descriptive and analytical reports on the overlapping topics of social finance; funding scale ups in social innovation, impact investing and social impact bonds (with an admittedly UK bias). We are not suggesting that the social finance experiments underway or being proposed hold a magic key for increasing the quantity, quality and diversity of funding humanitarian innovation. Indeed many analyses of the performance to date of the social finance sector itself point out that there are many problems with the social finance model, philosophy, structure and impact. But we do feel that this learning and debate could provide invaluable lessons for those seeking to improve the humanitarian innovation financing system.

Not only does this sector provide insights into investing finances into social impact, but also on other support mechanisms brought in from the private sector, such as incubators and accelerators. It also shows the impact of governments in structuring markets to enable and foster social innovation.

Support types

There are a small number of support types available to humanitarian innovators. Some are through services in kind such as Deloitte's innovation support, which is outlined later in this study. Most of this type of support is provided by private sector actors bilaterally to humanitarian organisations they have partnerships with. These partnerships often involve other types of support such as finance and sharing *know-how*. A key example of this is the IKEA foundations support for UNHCRs innovation work which is also expanded on below. It is encouraging to see these types of support growing, but the number and types of support are still insufficient to create a healthy innovation ecosystem.

Indeed, more open channels for this type of support are missing. There have been a few calls for proposals where mentoring by groups such as the Ashoka or Skoll foundations have been part of the package. However, these have been just a handful of such offers with funding calls over the past 4-5 years. More striking still is the lack of the types of concentrated support for humanitarian innovation that can be found in the private sector such as incubators and accelerators. Although there are a few of these types of models being explored in the development sphere, there is nothing of significance like this for humanitarian focused innovations or new businesses. There are some social innovation or tech hubs that have supported products of use for humanitarians such as the ihub in Nairobi which has fostered innovations like Ushahidi and Brck. However, they are not focused on humanitarian innovation, nor funded by humanitarian funders. The Start Network in the UK is launching an incubator, but this is initially envisaged as a service for its network members; all established humanitarian NGOs.

Areas where there are gaps or limited support systems within the sector are:

1. Incubators
2. Accelerators
3. Mentoring programmes
4. Business model and marketing support

5. Knowledge management and collaboration forums
6. Partnership brokering
7. Training and education

Successful financing of innovations requires a healthy, holistic innovation ecosystem to exist to support those innovations. The progress being made in increasing financing for innovations, needs to be matched by investment in the ecosystem to support innovations.

Mini Case Studies

In this section of the report we highlight some useful examples of different models of support and financing that have and are being provided to humanitarian innovation.

The Partnership Model - IKEA Foundation

The recent emergence of the Ikea Foundation as a corporate innovator supporting innovation capacities and culture in an humanitarian institutional setting is an example of what Aniyisa Thomas of the Fritz Institute calls *Single-Company Integrative Partnership*. These partnerships feature a process of sustained and structured co-operation between an aid institution and a large, often multinational corporation that leads to organisational improvements to the aid organisations delivery of humanitarian assistance.¹⁸ Below we briefly highlight just two of a number of dimensions of this on-going initiative that we will explore in greater detail in the final report.

Firstly, Ikea Foundation's announcement of its flat-pack design for a semi-permanent family shelter in 2013 attracted a lot of attention. This effort, still in the design and development stage has drawn on the company's core capabilities. It has cost it relatively little (approximately \$5 million to date) but could have widespread applicability in long-term refugee and IDP shelter situations. This initiative has not been immune to criticism, particularly by those who see effective shelter solutions for refugees and displaced people as being contingent on participatory processes and local end-to-end construction.¹⁹ Acknowledging these criticisms, it will be crucial to track whether such collaborations on innovation at scale will deliver the value that the use of corporate money and technical ingenuity combined with humanitarian experience seems to promise.

A second quite different dimension of the Ikea Foundations advocacy of innovation comes from its partnership with UNHCR in an institution change programme specifically designed to place innovation at the heart of the UNHCR's delivery of its humanitarian mission. The effort has been under way since 2011 and has gone forward on the basis of an Ikea Foundation annual investment of money and skills that easily dwarf the annual spend of most donors on innovation in the humanitarian sector, not only in terms of monetary value, but also in the holistic nature of the support.

Over this time period, the UNHCR has, from the perspective of the Ikea Foundation, moved from

¹⁸ Thomas A.S. and Fritz, L.C. 2006 'Disaster Relief Inc.' *Harvard Business Review*.

¹⁹ For a deeper view into the shelter ecosystem see Gray, B. & Bailey, S. (2015).

a situation where innovation was little understood as a humanitarian concept worthy of note, to a situation where its pursuit is now a core objective with a designated budget. The change strategy deployed and funded by Ikea Foundation has been built around UNHCR staff, grouped into innovation units and identified for both their innovative ideas and professional and personal commitment to developing them. They are supported by training, mentorship and financial and non-financial resources provided by the Ikea Foundation.

The Pooled Funding Model - Humanitarian Innovation Fund (HIF)

The HIF can be seen as the leader in humanitarian innovation financing. The initial funding from DFID of £900,000 (over a couple of years) has increased to an overall budget of £2 million per annum, while both the Canadian and Swedish Government's have also contributed to this pooled innovation fund. Its initial supporting mechanism, which is still its core support model, is to launch open calls for innovation. There is no requirement for applicants to focus on a particular problem or sector.

There are three funding stages to these open calls. The first stage is to fund idea exploration, research and prototype development. The second stage funding is provided for piloting through their large grant facility. The final stage funding is again a small grant, and is for the dissemination and communication for innovations. The HIF has a target for the success/failure ratio of the innovations it funds through these mechanisms, which is the start of a portfolio management approach.

In the past few years the fund has increased the scope of its work to become more directive with a WASH challenge fund. This challenge fund work-stream set out to clearly identify what the issues were in WASH²⁰ and then launched two challenges. An *Open Innovation Challenge* through Innocentive that looks at the relatively *easier* problems to solve, and a facilitated *Accelerated Innovation* approach that has sought to broker multi-sector partnerships to develop and implement solutions for defined, more *difficult* challenges within the WASH sector. As the forefront donor on humanitarian innovation, the HIF has a small fund and team, but is certainly delivering value for the sector in early stage innovation. Its progression into a more facilitative role is evidence of a clear need for this function within the humanitarian sector.

The Services-in-Kind Model - Deloitte

Deloitte take a different approach to the support of humanitarian innovation. Their approach is not to provide financing, rather to provide pro-bono consultancy support to projects. This approach started out in an untargeted way at first, but after a number of years they set up a programme in 2012 called the Humanitarian Innovation Programme. It was felt that their support needed to move beyond responding to ad-hoc requests following on from disasters. Deloitte decided that it would be far more strategic to work with the sector by donating its core competencies.

The Humanitarian Innovation Programme now holds an annual open competition for humanitarian organisations. They can bid for Deloitte consultancy time for innovative projects

²⁰ Bastable A. & Russell, L. (2013) *Gap Analysis in Emergency Water, Sanitation and Hygiene Promotion*, Humanitarian Innovation Fund.
http://www.humanitarianinnovation.org/sites/default/files/hif_wash_gap_analysis_1.pdf

that have a clear impact and are scalable. The first round was in August 2013, with support provided for the International Organization for Migrations work on information management and Atrocity Watch's reporting tool. It is a three-stage application process and winners are provided with a team of consultants to work on their project for between 3-6 months. Deloitte see this programme as one that will evolve and are currently working through how best to measure its impact. The value of the challenge prizes are not made publicly available. This is a clear indication of a company investing in innovation in a way that matches with their core competencies, aligning the value they can bring with their business capabilities.

The Venturing Model - Qatar Computer Research Institute

Qatar Computer Research Institute (QCRI) is a national research institute, established by Qatar Foundation in 2010 as part of its contribution to achieving the Qatar 2030 national vision. This vision aims to see the Qatari economy transform into a knowledge-based society, on which advances in innovation, technology, human and societal development play a foundational role.

As part of the Foundation, QCRI's focus is to drive and leverage advanced computing to make a positive impact on individuals, communities and society. The Institute has team of about 20 people whose work is driven by better understanding social phenomena through the analysis of social media, and in using social media data to fuel time-critical applications. Eight of these staff are looking at research and development of information technology for humanitarian action. This group seeks to identify information and computational problems of humanitarian organisations and then develop solutions for them.

The focus of the research program is from end to end of the innovation cycle; from problem identification, through R&D, to creating minimum viable products. Where the Institute is unique is in its hands-on approach as well as its venturing model that seeks to create start-ups based on the humanitarian technologies that it has developed, into successful stand-alone entities. The aim is that while products and platforms are spun-off for commercial purposes, they will be made available as free open source services to the humanitarian sector. As with a number of investments into humanitarian innovation, the QCRI is still in its first innovation cycle period, and so the outcomes are still to be fully evaluated.²¹

The Issue Focused Model – Luxembourg Development Cooperation and Humanitarian Department

The Luxembourg approach began with a field request for a communication platform to support the efforts of response teams. The Luxembourg Government Humanitarian Agency in 2011 started at the beginning by financing the development of what became a consortium of Luxembourg based IT companies, satellite providers etc. to develop, via close working with the end-user agencies inside and outside of Luxembourg, an innovative satellite based telecommunication system. Support was provided through the pilot and proof of concept stages and finally into field implementation under real conditions in 2014.

²¹ As with a number of other foundations and corporates, the funding put towards humanitarian innovation is not released into the public domain

Luxembourg supported the development of a network of further idea and application development relationships with independent and agency experts and with expert users – like WFP - who lead the emergency telecommunication cluster. This created a dynamic innovation process, supported in some cases by existing actors from the wider Luxembourg innovation ecosystem, and sometimes from new concentrations of expertise whose emergence was cultivated by the agency. The whole process is on-going to this day and is generating and then diffusing a continual stream of apps, website development and other tools as part of an ecosystem coalesced and focussed on solving issues of communications in emergencies. Luxembourg have invested between 3.5m to 4.5m Euros a year which constitutes between 10 and 12 per cent of their entire annual humanitarian spend in the period 2011-2014. This is by far the largest percentage spend on innovation of all the humanitarian donors researched for this report. This large investment is also a good example of investing in the whole innovation ecosystem around a problem.

Innovations Strategy and Portfolio Management Model – DFID

In many ways USAID and DFID are the furthest ahead in their support of innovation in the development and humanitarian fields. DFID have had innovation as a central pillar of their humanitarian strategy since the Humanitarian Emergency Response Review (HERR) in 2011. This review pointed to a need for innovation to meet the global humanitarian challenges. From this review an innovation strategy was designed. This strategy delivers coherence to the innovation funding and work of DFID that is missing in nearly all the other OECD DAC donors. The strategy set out a portfolio of funding approaches and programmes such as the HIF and the education open innovation challenge through the DFID Amplify programme.²² Funding has generally followed strategic focus sectors such as WASH, Energy and Education.

Not only is DFID funding innovations, but it is making a conscious effort to understand and explore the innovation ecosystem. DFID's budget commitment to humanitarian evidence and innovation is \$73.6 million over nine years. This is a substantial amount compared to all of the other donors spoken to in this study.

Conclusions

It is clear therefore that innovation is gaining a foothold within the humanitarian sector, but this foothold is still tenuous. This is due to it still being a relatively immature concept and practice in the sector and the subsequent lack of evidence of impact from this. For the humanitarian innovation ecosystem, the following conclusions can be drawn:

The Principal-Agent Feedback Loop challenge

The humanitarian innovation ecosystem faces the same fundamental challenge that the humanitarian sector faces as a whole. It is a supply driven system rather than demand led one, and it is intermediated in a principal agent model. This means that the end beneficiary feedback and *demand* is not sought, nor responded to, in a way that drives the system. This leads to

²² The Amplify Refugee Education Challenge is a collaboration between DFID, Open IDEO, IDEO.ORG, UNHCR and UNICEF using an open innovation model to crowdsource ideas and solutions. See <https://openideo.com/content/about-amplify>

difficulties in measuring performance, of interventions and players. These systemic challenges are impacting the ability of the system to develop a healthy and effective innovation ecosystem, particularly where it comes to financing innovation.

The Funding Challenge

Measured against any healthy industry, the current explicit investment in innovation in the humanitarian system is woefully inadequate. Our estimation is that explicit and implicit innovation funding is in the region of \$37.5 million by OECD DAC donors.²³ This is 0.27% of their humanitarian response funding commitments, and is 0.17% of the \$22 Billion provided globally for humanitarian response in 2013. Funding needs to be doubled at a bare minimum. A target of around 1.5% of all humanitarian spending being invested in innovations and building the humanitarian innovation ecosystem, the equivalent of \$300-\$350 million per annum should be an achievable target. This is a modest percentage for an industry that is facing the pressures that the humanitarian industry is facing.²⁴

The Financial Phases challenge

Due to the imperfections in the *market*, and the non-financial nature of the value created by the innovations in the sector, establishing what constitutes a good investment can be particularly tricky. As highlighted above, there are insufficient funding stages to manage the gradual building of evidence of success regarding an innovation. Too much pressure is being put on pilot programmes to deliver sufficient evidence of success to justify moving on to the next phase of accessing significant scaling money, as the funding phases are currently structured. The innovation examples of cash-transfer programming²⁵ and Community Managed Acute Malnutrition clearly show that scaling of innovations in the humanitarian sector is a long process.

In essence, the current scaling funding phase is too much of a blunt instrument. More nuanced approaches are needed. By introducing more funding phases with their own stage gates, funders can reduce the perceived risk of making large single stage investments to scale innovations. It also allows more time for building up the evidence base and to carry out greater testing.²⁶ Taking such an approach will enable donors to work with and support innovators to develop better indicators, risk and evaluation frameworks that would be part of the innovation scaling process, and not as the separate pass/fail test that it can sometimes be, creating the current 'valley of death' between a pilot programme and a scaling effort.²⁷

The Maturity Challenge

This is the biggest challenge in many ways. Most explicit innovation funds have only been in existence for 3-5 years, with a number still coming on stream. Significant progress has been made from a standing start, but the approaches of these funds and the learning from them is just

²³ Accessing financial numbers for non-traditional donors and private sector was not possible.

²⁴ The upcoming Deloitte study on R&D investment would benchmark 1.5% as a medium level intensity for R&D expenditure in an industry. Deloitte (2015).

²⁵ For more information on cash-transfer programmes see this papers partner case study on Cash-transfer programming Bessant, J. (2015) *Case Study: Cash Based Programming (CBP) in the Food Assistance Sector*.

²⁶ For a description of 'scale up' up and 'scale out' of innovations, see McLure, D. & Gray, I. (2014) *Scaling: Innovations Missing Middle* <http://www.worldhumanitariansummit.org/node/472051>

²⁷ For practical approaches to managing scaling see the upcoming paper by McLure, D. & Gray, I. (2015) *Managing the Scaling Journey in the Humanitarian and Development Sectors*.

beginning. There appears to be two main types of funding emerging; challenge funding, directed at specific problems, using more open to more closed approaches within them and open funds that are not directed at all. Most explicit innovation funds are taking a simple three-stage process. Some of the issues faced in both financing innovation and supporting the ecosystem as a whole are just functions of time. Innovation ecosystems take years and decades to build, the few innovations that have made it to scale in the past couple of decades have taken over a decade to do so. Patience is needed in building the ecosystem and investing in innovations themselves. Expectations on what investment in the innovation ecosystem can deliver in the short-term must be tempered.

The Monitoring and Evaluation Challenge

There is clearly a gap between the requirements of funders for evidence and innovators abilities to provide this, particularly at the pilot to scaling stage gate. Support is required to develop M&E models and approaches and for training for humanitarians. Using existing tools and approaches for 'known value' products and services are insufficient on their own. There needs to be common approaches developed and agreed that can cover the nuances of innovations where the *value* is often unknown or uncertain to varying levels through the innovations stages.

The Support Challenge

Providing funds is insufficient on its own. To truly see ideas to solve problems develop and mature into a widely recognised and used solution, there are multiple types and levels of support needed. Mapping the ecosystem for each innovation is key. Funders of innovation need to ensure that they are moving beyond simply providing financing for innovations, but are also providing financing for the ecosystem around them. Examples of this are outlined above, including, incubators, accelerators, policy frameworks, mentoring programmes, business model and marketing support, research institutions, knowledge management and collaboration forums, education, training and cross-sector partnership brokering.

The Business Model Challenge

Many of the innovations developed have little commercial value and therefore have little chance of creating a sustainable business model outside of targeted humanitarian donors and agencies paying for them. An example is those innovations designed to absorb externalities currently borne by disaster-affected communities. Another is enabling innovations that require *platform* or *infrastructure* development. In both these instances, the innovations are sector *agnostic* and therefore do not fit in to the more sector focused innovation funding envelopes easily. Funders need to be mindful of the critical role of enabling platforms and infrastructure for innovations to occur. Focusing exclusively on specific sector problems could lead to duplication of such infrastructure and platforms, rather than the development of common systems (e.g. Mpesa) that can be leveraged for multiple sectors.

The Dominant Design Challenge

When it comes to scaling innovations, the amount of investment required can paralyse decision-making. This is rooted in wanting to *back* solutions that will have the greatest impact, and not be left funding an innovation that doesn't work, or even if it does, might not be adopted. Similar to the development of the two video format standards in the 1970s and 80s where VHS won out to be the dominant design (despite Beta-max being the more superior quality) there will be technologies (in the widest sense of the word) that will be *winners* and technologies that will be

losers.²⁸ In the case of humanitarian innovations, the key factor that donors are rightly seeking to judge an innovation on the outcomes it delivers for disaster affected people. However, there are constraints on 'picking winners.' Often the funder lacks the knowledge and expertise to identify whether the innovation is technically *sound*. Even if the technology is technically sound there is often a lack of evidence as to whether it will deliver the promised outcomes (as highlighted above). For many innovations there are also a lack of comparators to judge the performance against. Finally, there is the question of whether the solution will be able to scale and be adopted. Faced with such uncertainty the risk level becomes intolerably high for a positive decision by many funders.

The Compound Risk Challenge

The largest funders of innovation are the OECD DAC donors. As government institutions they are naturally cautious in investing public funds and need to prove that they are doing so in a prudent manner. The challenge of choosing the wrong solution is a strong inhibitor for these funders as they do not want to be seen to be wasting taxpayers' money. This caution is reflected in the implementing agencies as well, as they need to justify expenditure to their constituents. Added to this is the perception that poor decisions can lead to increased humanitarian suffering. These two concerns in addition to the factors outlined in the previous challenge area compound each other, leading to risk aversion through nearly all the traditional actors in the system.

The Rules Challenge

Internal donor and implementing agency coherence can be an issue. Donors and implementing agencies are attempting to foster collaborative innovation, where they are part of the value creation. If their procedures are constraining this, such as a traditional procurement process based on lowest cost considerations and using a competitive tendering process, it can stifle innovation. This barrier is at its most critical in the later stages of the innovation journey, where the initial innovation seed funding does not have a commensurate *innovation positive* funding stream to graduate to. In these cases innovations can grind to a halt as for them to truly scale they need to be able to effectively access more traditional funding envelopes.

The Forward Commitments and Procurement Challenge

The humanitarian sector has a conundrum in the fact that nearly all projections for the coming decades show rising humanitarian needs and disaster impact. Crudely, this is essentially a rising demand curve for goods and services by disaster-affected communities. The key issue is that many of these affected communities will have insufficient resources to be able to make this demand effective by a) holding their Governments to account effectively and b) having the necessary finances to purchase goods and services they desperately need. Yet, although there is a general consensus on this rise in humanitarian needs in the coming decades, there is not a commensurate focus on forward planning and investment.

This means that medium to long-term future commitments to purchase goods and services by humanitarian funders on behalf of disaster affected communities does not occur. This is a significant barrier to innovation, as although there are now innovation funds to develop products, there are not transparent or *planned* forward purchasing commitments that would make a significant enough *market* to commercially justify a number of innovation investments.

²⁸ For more on dominant design, see Utterback, J. M & Abernathy, W. J., (1975).

For example, if donors were to agree on the output specifications²⁹ of a WASH solution, and not just provide innovation funds, but also commit to:

- a) Only providing funds for implementing agencies for WASH who used products that met these specifications
- b) Committed to providing an amount of funds to purchase a minimum set volume over a medium term period (with a potential projected unit cost value to this).

This would help create the market for WASH products that met these specifications, thereby reduce the risk levels for innovators and entrepreneurs to meet the challenge. This approach would also significantly reduce the opportunity cost of investment for innovators. This is difficult where demand for goods and services will be *lumpy* with spikes after large scale disasters, and with specifications often context specific, but a long-term approach can smooth some of these issues.

Finally, creating coherence between the innovation funding pots and the more general humanitarian response funding pots, so that mature innovations have a sustainable funding stream to graduate into from the scaling funding pot is a critical first step in this process. This, linked to aligning other internal processes, such as procurement (as identified above) are tangible steps that can provide smoother transitions for innovations.

The Barriers to Entry Challenge

A number of the innovation funds still do not fund private sector actors directly, and if they do, often have restrictive implicit or explicit supplier regulations attached, such as the company needing to have been trading for more than three years. Such approaches are maintaining significant barriers to entry for new businesses entering the humanitarian sector. The humanitarian system is a fairly *closed system* and therefore attempts to open it up to new entrants should be encouraged.

The Adoption Challenge

Due to the misaligned incentives issue outlined above, there are significant issues of adoption resistance between implementing agencies of each other's innovations. For innovations that are truly transformational to emerge from the ecosystem, this challenge must be addressed. Unfortunately the current focus, particularly by the private sector and foundations, of investing in the innovation capacity in individual agencies means that there is likely to be false ceiling for the scaling and ultimate impact of innovations that are developed this way. Current conduct in the market is biased against adopting outside innovations, meaning that scaling opportunities are severely curtailed across agencies. Thought needs to be given to addressing these barriers through incentives, rule setting and investment in partnerships and joint ventures.

The Competency Challenge

Innovation is a new discipline in the sector. There has been some recruitment of talent from outside the sector that has helped, as well as the new funding and narrative around innovation enabling *legitimacy* of some of the innovators at the margins of agencies. However, time and again in our interviews, those at the forefront cited what a steep learning curve it had been to

²⁹ Output specifications are the standards and value that the innovation delivers, rather than the design specifications which are more prescriptive.

develop both innovations and innovation capability within agencies. The hard won learning that is being generated needs to be codified, with relevant training and support provided for agencies, businesses and individuals tasked with leading, managing and implementing innovation journeys in their organisations, government departments and businesses. Funding for improving the competency and capacity of individuals and organisations needs to be high on the agenda of those seeking to improve the innovation capability in the system.

The Transparency Challenge

Finding financial information for this study has not been easy. The lack of transparency in the different sectors engaged in humanitarian action (government, NGO, UN, private sector) was revealing. For some traditional donors obtaining information was relatively easy if they developed an innovation strategy and created a ring-fenced innovation fund/s. Where this hadn't happened, it was much more difficult to establish figures. The UN actors appear to have a more coherent strategy and mechanisms for innovation than many of their partners, and so, correspondingly, their investment was easier to track than their NGO partners. Each UN agency was receiving significant support from private sector partners, and this funding information was readily accessible.

A lot of innovation that is occurring in the sector is at small scale and is not visible. Often funded through line items in more traditional project budgets. This is a conundrum, for as the accountability, transparency and value for money pressures increase, these avenues of *under the radar* flexible funding are starting to disappear. The private sector and foundations interviewed took a more commercial attitude to their investments, and were by and large unwilling to divulge them, making a true assessment of the full investment in humanitarian innovation impossible to ascertain.

Recommendations

The fact that this report exists at all is testament to the progress that has been made in pushing the idea of innovation in the humanitarian sector. Large strides have been made in the past five years with dedicated innovation strategies, funding pots, budget lines, staff, labs, and partnerships emerging in a number of key humanitarian actors. From a virtual standing start, there is now an emerging innovation ecosystem developing. Those who have pioneered this work should be applauded.

The following recommendations are designed with the intent of trying to provoke questions and thinking regarding what the next stage of the development of this emerging humanitarian innovation ecosystem and its financing can and should look like.

Institutional Donors

- 1) Structure the market: For both the wider humanitarian sector and the innovation ecosystem that is reliant on its functioning, there is a clear need for humanitarian donors to think differently about how they are incentivising the market. Porter in his work on competitive strategy uses a model called *structure, conduct and performance*.³⁰ Donors have significant influence over

³⁰ See Porter, M. E. (1980) *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, Free Press, New York.

the structure the humanitarian sector (by who they fund, how they fund, the requirements they set, the output and impact they stipulate etc.), which in turn drives conduct in the industry. This conduct ultimately dictates the performance of the humanitarian actors in the system. The challenges outlined above show some of the areas where proactive donor action to structure the market and incentivise the innovation ecosystem could drive changes in conduct and performance of humanitarian agencies.

- 2) Increase funding: Innovation funding is less than 0.27% of total humanitarian funding. This is insufficient by any industry standard. Disaster affected communities deserve better solutions to the hazards they face. Therefore it is incumbent upon all involved in humanitarian action that better solutions are invested in. We would recommend a target of 1.5% of humanitarian response funding being allocated to supporting humanitarian innovation.
- 2) Facilitate new entrants: By structuring the market, changing some of the eligibility rules, investing in incubators and accelerators and committing to forward purchasing and revising procurement guidelines, donors can create an enabling environment for new entrants, large and small alike to bring new innovations into the sector.
- 4) Significant steps have been taken to introduce innovation funding. However, more nuanced behaviour must follow; of being *investors* and not *customers*. Funding innovation is an investment in potential future impact, not in impact whose value is already known. Understanding investment decision-making criteria across industries would help this.
- 5) Provide more financing phases: More phases of funding are needed in order to enable the *scaling up* and *scaling out* of innovations through taking a more incremental approach to reducing risk.
- 6) Invest in the development of M&E frameworks, evidence building, risk and portfolio management for both yourselves and implementers.
- 7) Invest in enabling innovations for impact and enabling infrastructure for innovation
- 8) Reconsider planned reductions in flexible funding frameworks: Donors should reconsider the trend of moving away from flexible/core funding framework agreements with implementing agencies. Their long term and fungible nature enables good agencies to use it for sustained innovation journeys.

Private Sector and Foundations

- 1) Think beyond single partnerships to ecosystem building: Invest in bilateral partnerships if you want to support limited scale, i.e. solutions that a single agency will implement. Invest in joint ventures and multi-stakeholder partnerships if you are seeking large-scale transformations.
- 3) Consider the need for accountability and transparency for your investment: Whenever possible be open about your investments into humanitarian work, as this enables more coherency and better coordination of resources for the benefit of disaster affected communities.

- 4) Stick to what you know: bring your core competencies and invest in innovation in-line with them.
- 5) Continue to invest and engage in humanitarian innovation. The value you are creating is appreciated by those within the sector.
- 6) Work with humanitarian actors with experience to contextualise your rich innovation knowledge to the peculiarities of humanitarian action.

The Three Pillars: UN, NGOs and Red Cross Movement

- 1) Invest your innovation money in line with your strategy and core competencies.
- 2) Collaborate more: seek to work on joint problems with other humanitarian actors and private sector to ensure greater chances of success.
- 3) Look to increasing your absorption and scaling capabilities: your role is not just to develop new innovations, but also to absorb and implement innovations that are invented in your peer agencies. By opening up to each other's innovations you will be able to take innovations to scale and have a greater impact on disaster affected communities lives.
- 4) Look at joint ventures and acquisitions and investing in external innovations: Look to not only collaborate with peers, but build joint ventures and even acquire small start-ups; both private and third sector ones. Open up your innovation funds to smaller more nimble partners.
- 5) Ask the hard questions. Go beyond investing in incremental innovations and seek to be disruptive, even if it means risking your organisations existence in its current form.

Annex 1: Social Impact Innovation and Investing References

New sources of financing for social innovation

- [Nesta report, Understanding Alternative Finance](#)
- The [portfolio](#) of Big Society Capital
- [List of funds available for social entrepreneurs](#)
- Select Accelerator and Challenge Funds: [Bethnal Green Ventures](#), [Resonance](#), [Big Issue Invest Challenge](#)
- Government [Enterprise Investment scheme](#) .
- [EU Social Value Act](#) .

Barriers to and enabling of scaling social innovation

- [Enabling grassroots charities to tackle poverty](#) - CSJ report
- [Making it Big](#)- Nesta report and the launch of [their innovation growth lab](#)
- [How to grow social innovation](#) - Young Foundation
- [Social innovation- a matter of scale](#) - McKinsey
- [Policy guide to scaling social innovation](#) - Schwab Foundation
- [Scaling social innovation startups](#) - UN innovation lab
- [SSIR, scale and early stage impact investing](#)
- [The impact investing funding gap](#), from the perspective of Colalife
- [Skoll Forum](#) article on crowding the market

Social Investment/ impact bond commentary

- Recent [Pioneers Post debate on social investment](#)
- [Overview of UK Govn role](#),
- Select set of existing Social Impact Bonds
 - [Family Assistance SIB in Cuyahoga County](#),
 - [Financing homelessness SIBs](#) (Social Finance US, Massachusetts)
 - [Girls Education DIB in India](#)
 - [MDRC Recidivism in New York](#)
 - [Recidivism in Chile](#)
 - [Utah, early childhood education](#), Goldmansachs, United Way
 - [Teen pregnancy](#), Colombia, Instiglio
 - [Diabetes, Mexico](#), Instiglio
 - [Employment, NY](#), Social Finance US

Impact Investing

- [The future on impact investing](#)
- [Trouble with impact investing](#)

Annex 2: Findings related to the Humanitarian Innovation Ecosystem Models

When looking across the evidence and mapping them on to the models outlined earlier in this paper, there are some key observations.

Resources

Resources for innovation are starting to flow; there is an increase in types of funding and support. Learning needs to be intentionally carried out across the different funding and support types, particularly once more consistent use of monitoring and evaluation occurs. However, it is evident that innovation resourcing is still at an embryonic level in terms of scale and maturity. The overall portfolio in the industry is imbalanced still, and the issue of investment to take innovations to scale needs to be addressed. Not only is the investment imbalanced, but also the stages of finance need to be expanded to enable an easier path to scaling promising innovations.

It is also notable that the percentage split of funding is considerably different to the rest of humanitarian action, with the private sector providing a greater proportion of the funding compared to the overall proportion of their funding for the sector as a whole. Funding from government donors is almost exclusively through cash grants. The private sector, are providing a broader mix, with large corporations providing finances, people, know-how, access to production capabilities and core competencies for humanitarian organisations.

Roles

Institutional donors – need to behave more like investors and less like customers. They need to exercise their ability to structure the sector to change its conduct and performance. They also need to look at other gaps in the ecosystem to fund, e.g. incubators and accelerators.

Private sector funders – There are private sector innovators themselves who also apply their own capabilities to humanitarian focused innovation. They are providing a variety of support to humanitarian organisations, and in some cases developing their own products. There are also start-ups, who are trying to become new entrants, often to provide more efficient or effective services to part of the humanitarian value chain.

Implementing agencies - Large implementing agencies across the three main pillars of the humanitarian system; UN, NGOs and the Red Cross Movement are primarily directing their innovation funding towards themselves and their own innovations. There is a significant challenge for these organisations to start to understand and implement their roles and responsibilities to be adopters of innovations, rather than just producers of innovations. There will be serious problems in scaling promising pilot innovations into transformational sector wide innovations, if there is not a significant change in the behaviour of these actors.

Relationships

Relationships are key, particularly in the models that are more partnership focused in delivering resources from the private sector into humanitarian organisations.

Rules

The dominant norms and rules are still being set, but there is a danger that they are being set in a way that is favouring incumbents and existing models of measuring impact. Donors, and larger corporations and foundations should assess both their innovation and wider humanitarian funding and evaluate the *rules* they are setting that provide incentives for the sector that influence (in some cases dictate) conduct and performance.

Routines

There is a mix of types of funding emerging, directed and non-directed funds, challenge prizes, partnerships; that are starting to develop new routines and approaches. What is concerning is the lack of continuity in some of these funds, and the trend of scaling back some of the established routines that have enabled innovation. In particular the scaling back of framework agreements that provide flexible funding for implementing agencies. These have the potential to address a number of the challenges identified in enabling innovation to provide scalable solutions, yet are under threat in a number of donor countries.

A new routine that is emerging is some blurring of the lines for innovation funding between development and humanitarian. This is a welcome development that could see some of the artificial barriers between these two areas addressed.

The challenge for widespread innovation however, remains the routines of short term funding for humanitarian crisis in general. Field led innovations that are not able to tap into the small amount of dedicated innovation funds are likely to flounder once the short spike in funding they have been able to use from an emergency or a short-term grant has dissipated.

Results

It is really too early to make definitive judgements about the results of innovation focussed financing in the humanitarian sector. However, there is a real need for more investment and thinking into how performance should be measured and the monitoring and evaluation frameworks in place to do this. Transposing un-modified DME frameworks from *business as usual* programming is inappropriate.

Restrictions

There is not yet a comprehensive enough funding landscape for humanitarian innovation, nor enough other support infrastructure in place yet.

There is clearly a concern in some parts of the sector, regarding the need to develop new approaches to humanitarian challenges. This has led to the funding of new ideas. At the sector level, there have been concerns that have been specifically identified for challenges, such as in the WASH sector³¹ or in Girls Education. There are discreet funding stages in explicit innovation funding pots that map onto the system with prototype funding for idea discover, pilot funding for possible solutions and scaling funding to make solutions widespread.

³¹ For more information see Rush, H. and Marshall, N. (2015) *Case Study: Innovation in Water, Sanitation and Hygiene*, CENTRIM, University of Brighton.

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