INVESTING IN SOCIAL INNOVATION AND TECHNOLOGY IN TANZANIA

HDIF'S REFLECTIONS AND RECOMMENDATIONS 2013-2018
ACKNOWLEDGEMENTS

The Human Development Innovation Fund (HDIF) is a £39.4m UKAid-funded programme managed by Palladium International in partnership with KPMG, Newcastle University, Water, Engineering and Development Centre (WEDC) at Loughborough University and the Institute of Development Studies (IDS). Working in collaboration with Tanzania’s Commission for Science and Technology (COSTECH), HDIF seeks to accelerate the testing and scaling of innovations in health, education, and water, sanitation and hygiene (WASH) in Tanzania. To catalyse the development of new models of service delivery, the use of new technologies, involvement of new providers and establishment of new partnerships, HDIF implements:

- strategies and interventions to strengthen Tanzania’s innovation ecosystem
- grant mechanisms to effectively and efficiently identify, select, and support projects through the innovation fund; and
- activities to strengthen the innovation evidence base in Tanzania and translate findings and lessons learned into policy and practice.

The Commission for Science and Technology (COSTECH) is the government partner to HDIF and a key strategic partner for the project. HDIF and COSTECH work together to realise a shared goal: to accelerate innovation and effective use of technology to increase and improve opportunities for health, education and WASH in Tanzania. Further details can be obtained at www.costech.or.tz.

The UK Department for International Development (DFID) leads the UK’s global efforts to end extreme poverty. It is tackling development challenges in Tanzania through a portfolio of investments including HDIF. Further details can be obtained at www.dfid.gov.uk.

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KEY TO NOTES

GLOSSARY

Several terms are used throughout this report that merit clarification and explanation and are indicated by the pencil symbol and defined on the same page. Glossary sources:

https://dictionary.cambridge.org
https://en.wikipedia.org
www.know-hub.eu
www.businessdictionary.com
https://en.oxforddictionaries.com

REFERENCES

More detail is given on the same page where indicated by the magnifying glass symbol.

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FOREWORD

The introduction of innovations and technologies in resource-restrained communities – from rural Tanzania to my home state of Alabama – presents some of the most compelling investment opportunities to help marginalised people participate in economic, social, and civic development sooner and more equitably. However, in areas where more resources are still required for basic social services (such as, well-equipped and accessible schools and health facilities), the known pitfalls of development can be exacerbated by an investment in innovation.

One of my favourite definitions of innovation was given by Dr Donath Olomi, CEO of the Tanzania Institute of Management and Entrepreneurship Development (IMED), to a group of students as ‘something new to your community that is going somewhere’. From the latest solar-powered water kiosks to drone technologies, new gadgets are exciting, newsworthy, politically valuable, and can create short-term momentum for a community or ecosystem. However, the shiniest new technologies will fail to create lasting social impact if the investor and innovator do not maintain a keen focus on affordability, maintainability, and, what we call ‘enrolment’ (i.e., the willingness and ability of various users to engage, use, and support an innovation).

A drive to deliver results and scale as soon as possible is frequently associated with innovation investments. As we have often seen, a push for early introduction and adoption of technologies into marginalised communities before gaining a basic understanding of users’ needs and desires can lead to increasing the digital divide and further marginalising the most vulnerable in the communities we seek to benefit. And, as with all new approaches, products, and services, we are at risk of running numerous small programmes or businesses with limited scope that test the same or only incrementally better applications of innovations. These may not represent value for money or a clear possibility of financial sustainability and impact at scale, especially when local partners have limited resources to concurrently or rapidly adopt numerous innovations.

HDIF has not found the perfect recipe for these challenges. Thanks in large part to the vision of leaders at the UK Department for International Development (DFID), HDIF’s funder, we have been able to take a more patient, longer-term view on innovation investments by placing more value on individual and institutional behaviour and systems change. For the past five years, this long-term investment strategy has generated numerous failures, successes, debates, and learning. Appreciating that we could have avoided several failures and bolstered our successes if we had access to more localised learning, we humbly share these reflections so that we can grow together and continue to see innovation as a viable way to accelerate human development in Tanzania and across the world.

We welcome your feedback, engagement, and partnership as we seek to empower all people with the opportunity to live to their fullest potential.

David B. McGinty
Director, Social Innovation and Technology, Palladium

“We have been able to take a more patient, longer-term view on innovation investments by placing more value on individual and institutional behaviour and systems change.”
EXECUTIVE SUMMARY

A key goal of the Human Development Innovation Fund (HDIF) programme is to act as a catalyst for change by increasing knowledge and understanding about the complex practice of social innovation in Tanzania that can be used by others. This report aims to do just that and is a curation of our collective understanding of how to improve the use, scale, and adoption of innovation in Tanzania to improve access to basic services and how best to strengthen the innovation ecosystem as a whole.

Given the many challenges and opportunities associated with innovation and the unique focus areas of different organisations, this report is intended to be viewed as a set of opinions that can be used as a guiding resource for innovation funders, policymakers and practitioners. HDIF is a proud champion of some of the most inspiring and creative Tanzanian innovators in the country – individuals and organisations who are committing time, energy, and resources to help address some of the country’s toughest development challenges. Over the past five years, we have had the great fortune of supporting them to bring their ideas to fruition and test out new ways of doing things. Innovation is risky, and whilst there have been some big wins and success stories, there are times where things have not worked out as envisaged – but we have learned a lot in the process. HDIF intends to share what is has learned for others to capitalise on, to help ensure that mistakes are not replicated, that limited resources are used effectively, and to take best practice approaches to scale.

The report is divided into three chapters that share a series of insights and put forward recommendations based on HDIF’s experiences. In particular, the report identifies three key lessons that have helped to shape the programme (see Summary of Recommendations on page 6). Fostering innovation in a rapidly evolving ecosystem such as Tanzania is complex and requires being open to continuously learning and adapting to fluctuations and changes. Chapter 1 looks at what HDIF has learned as a result of being embedded within the rapidly changing innovation ecosystem, and makes recommendations on how best to support the connections and collaborations required for an ecosystem to function effectively. Chapter 2 explores what HDIF has learned about catalysing innovations in an early-stage ecosystem through tailored approaches that respond to the needs of an individual innovation, and that can be adapted at different stages of the innovation journey. Chapter 3 captures HDIF’s approach to fostering a culture of learning across the team, with partners and grantees, to support the adaptations that are necessary within any innovation programme of this scale and ambition.

We urge our partners to reflect on these recommendations and to consider how these can be applied to support social innovation that creates real and lasting change, now and in the future.
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INTRODUCTION

Over the last decade, the Government of the United Republic of Tanzania and its development partners have significantly expanded access to basic social services and progressed the country aggressively towards achieving the Millennium Development Goals (MDGs) and their successors, the Sustainable Development Goals (SDGs). Primary school enrolment has reached 94 per cent, and the proportion enrolled in secondary school is steadily rising; deaths from malaria have halved, HIV prevalence has stabilised, and infant and child mortality rates have declined. Nevertheless, widespread poverty still persists and Tanzania is grappling with the significant challenges associated with delivering services designed to alleviate poverty and support economic empowerment.

In November 2015 during the inauguration of the new Parliament, President John Pombe Magufuli emphasised the urgent need for Tanzania to industrialise in order to create jobs for millions of young Tanzanians and to build a modern economy for the country and its people. For the country’s young people to play a role, however, they need to be equipped with the right skills and entrepreneurship opportunities to help the country to achieve its vision. Yet unemployment rates are high, and limited resources within the education system mean few leave school with the skills that employers are looking for.

Addressing the challenges facing Tanzania is impossible without widened participation in social innovation. To pave the way for this, significant investments in resources that nurture the skill sets of individuals and teams are essential. Furthermore, investment in institutions to drive change at a national level, support for infrastructure and policy are all needed to strengthen the innovation environment. The country has a long and vibrant history of harnessing creativity and entrepreneurialism to propel social impact and progress. With the right support, including both skills and resources, ideas can flourish and grow from basic concepts to innovations at scale.

The innovation ecosystem in Tanzania has developed rapidly over the past five years with increasing numbers of individuals and institutions stepping up and becoming more active, visible and connected than ever before. During this time, the country’s ranking in the Global Innovation Index has climbed 27 positions (from 123 in 2013 to 92 in 2018) – a remarkable achievement for a country lacking a strong innovation environment. New start-ups and hubs are cropping up every day and there is a growing awareness of the role that innovation can play in finding solutions to large and pervasive development challenges. Whilst Tanzania has progressed, the innovation ecosystem is still in its early stage where institutions are constrained by limited resources and competing priorities.

The Human Development Innovation Fund (HDIF) is a programme that aims to accelerate human development through driving innovative solutions to improve the quality, value for money and sustainability of basic services in the education, health, and water, sanitation and hygiene (WASH) sectors. This report shares the lessons we have learned and makes recommendations based on our experiences of identifying and nurturing diverse talent, and supporting a new generation to drive social innovation in Tanzania. We believe these reflections have a broader applicability for funders and policymakers in similar countries.

The report makes a number of practicable and actionable recommendations based on HDIF’s collective insights that aim at removing barriers to scaling innovation. It is not a full innovation ecosystem analysis or a complete compendium of findings and recommendations to build Tanzania’s innovation ecosystem. Instead, it builds a compelling case for various types of investments in innovation and technology in Tanzania if investors and policymakers:

- **Invest in the ecosystem:** Understand the unique actors and networks that rapidly change as they adapt to the evolving innovation ecosystem;
- **Customise approaches to enable innovations:** Provide finance and technical assistance to help tailor mechanisms throughout the innovation process; and
- **Learn, share, and adapt:** Empower an internal and ecosystem culture of learning to strengthen innovators, local institutions, and investors.
1 INVESTING IN THE ECOSYSTEM

RECOMMENDATIONS

- Take a systems approach to designing and implementing innovation investments
- Invest strategically in innovative individuals and networks
- Address the skills gaps that create bottlenecks in the ecosystem and empower youth to be drivers of innovation
- Use universally agreed definitions and jargon-free frameworks and tools to build innovation-related skills
- Design inclusive activities for healthier and more diverse networks.
A nurse in Zanzibar uses a tablet to access medical records via CliniPAK, developed by Vecna Cares.
**UNDERSTANDING THE INNOVATION ECOSYSTEM IN TANZANIA**

Keeping on top of a rapidly evolving and fluid ecosystem can often feel like spinning plates; as the ecosystem evolves and changes, so do the roles of the innovators and enablers within it. The Tanzanian innovation ecosystem is improving but is also fragile – with actors and the linkages between them still mostly in the formative stage. As new players appear, old ones change or disappear overnight only to reappear, sometimes in an entirely new role.

Innovation investors – including bi-lateral donors, foundations, and the private sector – have a part to play in supporting a more robust and interconnected ecosystem, beyond simply protecting and growing their investments. A critical need exists for more investment of resources and skills development support in local network builders (including tastemakers, enablers, hubs, and incubators). Regular, rapid, progressive, and regressive changes in the Tanzanian innovation ecosystem mean that only by being embedded within the ecosystem and fostering stronger networks can investors attempt to understand and influence systemic change.

### 1.1 RECOMMENDATION

**TAKE A SYSTEMS APPROACH TO DESIGNING AND IMPLEMENTING INNOVATION INVESTMENTS**

Well-designed innovation programmes need to consider the structures and gaps that exist in an ecosystem as well as the direct and indirect influences
of different actors – and respond appropriately. Funders are advised to avoid the temptation of adopting a ‘one size fits all approach’ to innovation.

As set out under the ‘Understand the Existing Ecosystem’ from the Principles for Digital Development (PDD), a well-designed ecosystem programme should consider the local structures and existing needs with any replication combined with a plan for adaptation.

During the project’s inception, the team travelled throughout the country and spoke to representatives from the Government, start-ups, civil society, and entrepreneurs to better understand the innovation landscape of Tanzania at the time. The picture they built was of a fragmented, and to some extent, closed ecosystem made up of a multitude of actors certainly unconnected at a national level, but sometimes even locally. This lack of interconnectedness and openness naturally makes collaboration difficult, not helped by the vast size of the country.

HDIF concluded that for Tanzania to become a more attractive and vibrant environment for innovation and technology, it would require stronger systems and networks that would bring the right people and players together to collaborate and combine their different insights, experience, skills, and resources. Furthermore, it recognised that for its investments to succeed, the programme must address some of these challenges.

As a result, the programme was adapted to include ecosystem-building activities that aim to do just that.

Taking a systems approach to ‘ecosystem building’ helped to provide a structure for all ecosystem-strengthening activities moving forward. It enabled HDIF to consider the processes and interactions that it could influence to encourage innovation to take root and grow, and helped to define the audience, the type of events, outreach, media engagement and other engagement activities that HDIF wanted to promote and support.

1.1.1 To fully understand all its constituent parts, funders must embed themselves within the ecosystem and play an active role

Development projects are often preceded by a scoping phase with international experts flying in to investigate the current context, politics, economy, and the various actors. While such political economy exercises are undoubtedly useful, a locally-led analysis facilitated by actors who are already active in the ecosystem is more likely to successfully identify the
necessary connections needed. The fluid nature of the ecosystem means that funders should monitor, analyse, and adapt to the current context on an ongoing basis.

HDIF has combined various approaches to better understand the different actors – including innovators, funders, institutions, and enablers\(^\text{1}\) across sectors and at different levels in Tanzania; as well as the networks, culture, politics, infrastructure, and markets that make up the ecosystem. This has included, for example, acting as the Secretariat for the Development Partners Group for Science, Technology and Innovation\(^\text{2}\) and collaborating closely with the Tanzanian Government and DFID. Connections such as these have kept us tapped into the rapidly evolving innovation scene. This more human-centric approach has been complemented by two national-scale ecosystem mapping activities and sector-specific research exercises\(^\text{3}\) at key points in the programme, and has led to a deeper understanding of the innovation space and firmly established us within the ecosystem.

Informal networks and individuals

In Tanzania, unity and family are paramount. The sharing of scant resources and collaboration between existing friendship groups and networks is common, but less so between networks or communities that are not familiar or known. The systems for sharing information and knowledge within and between institutions are sometimes weak, which can lead to a tendency to operate in silos – a challenge typical in institutions worldwide that can be addressed with the right systems support and expertise.

The influence and potential of informal ‘friend networks’ in Tanzania should not be dismissed. A great example is TAI\(^\text{4}\), which was started by a group of university friends who shared a passion for helping young people to lead development projects in their community. HDIF first worked with this group through Innovation Week in 2017; a key aim of the event is to curate promising organisations like TAI and to provide them with a platform for networking and learning opportunities. The group recently registered as an NGO [non-governmental organisation], and is now putting formal structures in place and winning grants\(^\text{5}\). These community-driven initiatives need to be recognised, nurtured, and supported.

HDIF has found that one of the most impactful approaches to better understand the ever-changing ecosystem landscape is to intentionally engage and collaborate with members of the innovation community. Since 2015, HDIF has hosted two Social Innovation Fellows in its core team: the first being a former hub manager, and the second coming from a media and technology background. This has proved to be a reciprocal learning opportunity: the fellowships have allowed HDIF to work closely with ecosystem champions and to learn from their experience and networks. Meanwhile, the fellowships aim to offer capacity and skills building, and an inside view of the world of donor development programmes.

Nurture new talent by providing a platform and fostering collaborations

It is important for funders to understand the influential role that they play in the ecosystem – by providing funding and resources to a selected few – and not only rely on well-established stakeholders\(^\text{6}\) but aim to diversify their networks. In 2013, as HDIF was getting off the ground, there was a wave of talented women and men with fresh ideas, energy, and vision who were also influential in the ecosystem. HDIF connected with these early champions and supported them where needed, in different ways; as partners during Innovation Week, as grantees, and as subcontractors for programme implementation. This helped to facilitate connections and new collaborations between different groups and supported their access to resources and opportunities. Many of these trailblazers have gone on to lead their own successful initiatives, collaborating with one another and becoming thought leaders.

1.1.2 Prepare for and adapt to regular changes in the political economy

During HDIF’s lifetime, the innovation ecosystem in Tanzania has felt the repercussions of regular changes in the political economy. These types of changes are

\(\text{An enabler is a person who helps to enable innovation or makes something possible.}\)

\(\text{A grant is a sum of money given by the government, a university, or a private organisation to another organisation or person for a particular purpose.}\)

\(\text{Stakeholders are any entity that has an interest, actually or potentially, in being more entrepreneurial in the region. Entrepreneurship stakeholders may include government, schools, universities, the private sector, family businesses, investors, banks, entrepreneurs, social leaders, research centres, the military, labour representatives, students, lawyers, multinationals, private foundations, and international aid agencies.}\)

\(\text{The ecosystem is fluid, multifaceted and ever-changing, requiring that digital development practitioners regularly analyse the context to check their assumptions.}\)

\(\text{The principles for digital development}\)

\(\text{www.tzdpg.or.tz}\)

\(\text{http://innovate.co.tz/wp-content/uploads/2017/02/the-innovation-ecosystem-of-tanzania-compressed.pdf}\)

\(\text{https://www.facebook.com/taitanzania/}\)
inevitable in most ecosystems, although they are also somewhat unpredictable. Rapid scoping activities or ‘temperature checks’ can help to provide insights on the current situation and should be in the toolbox of every programme and donor to be able to respond to changes and to keep relevant.

Any change in government means a change in political priorities. In 2015, President Magufuli came to power supported by a new government that has brought shifting priorities and political dynamics. In June 2016, the United Kingdom held the EU Referendum and is still working out an exit deal. Both have resulted in significant changes, and as a consequence, ministerial delays in disbursements of funding, policy formulation, and new programmes.

Changes in the political economy can impact the momentum or risk-taking of local and international actors, and each stakeholder needs to react to and adapt to the changes. To some extent these are manageable challenges and have presented opportunities for HDIF to learn and adapt to the changing dynamics. Although changes have caused both public and private funding to slow down, the local innovators and stakeholders have kept on moving as best they can. The proliferation of new hubs, and the growth of organisations such as Anza® and Sahara Sparks®, shows a certain potential and resilience in the ecosystem despite obstacles and lack of resources. Funders should recognise this resilience and adapt to the changing landscape to continue adding value.

1.2 Recommendation

Invest strategically in innovative individuals and networks

The scaling of successful innovations relies on connections between the people with ideas and the networks, enablers, and stakeholders with the funds and capacity needed to take it to scale. Funders can strengthen existing networks and support new ones where connections are not naturally there or are weak.

In Tanzania, some networks are well established and active whilst others are still forming and need support and encouragement. HDIF has found value in helping to catalyse connections between innovators in, for example, the education portfolio where no formal network existed, which has led to several value-add collaborations.

1.2.1 Recognise the important role played by hubs, labs, and accelerators in skills development, and invest finances and other resources to promote their sustainability

More cross-sectoral investment and support is necessary to build the capacity of hubs and the activities and services that they provide, including mentoring, technical assistance, business model support as well as facilitating connections to funders and investors. This support should look not only across sectors, but across regions and different types of hubs.

There is a lively scene of hubs, labs, and accelerators – mainly clustered in and around Dar es Salaam and other urban centres – that are key spaces for young people to access skills and entrepreneurship opportunities. At the time of writing, there are about 40 hubs across Tanzania, 21 of which are in the capital.

 Whilst hubs face numerous practical limitations and resource challenges, they play a critical role in ideation, and skills development for talented youth. They engage a wide and varied demographic and serve different communities with varying focus areas and support services. Anza – the Moshi-based business incubator and accelerator – and its physical space Kilihub, offer entrepreneurs both working space and opportunities to organically connect and collaborate to scale up educational outcomes.

Ubongo Learning® has distributed its educational content through an HDIF-supported network of other education grantees and DFID programmes, helping to achieve its aim of bringing edutainment to children across Tanzania. By capitalising on connections that HDIF has helped to foster, combined with their willingness and openness to partnering, the pre-primary edutainment show, Akili and Me and other Ubongo Learning content has been made available on the tablets used in HDIF grantee Silverleaf Academy’s®, pre-primary school and through Equip T®, a DFID-funded programme operating in over 4,000 primary schools throughout the country.

http://anza.co.com/
http://www.saharasparks.com/
https://www.ubongo.org/
https://www.silverleaf.co.tz
http://www.equip-t.org/
A new generation of hubs set up to serve students and staff within universities is emerging, yet these suffer from a resource shortage and lack of linkages to industry and the private sector. Our research with Mawazo Challenge (see page 20) and outreach with Tanzania’s Allied Health Universities has found that while students have no shortage of ideas, many fall short of developing those ideas into workable products or services. Investors should support links between university hubs, the private sector, government, and civil society, and provide investment to build a pipeline of ideas and people needed to feed the ecosystem.

1.2.2 Engage the private sector through targeted activities and incentives
Since HDIF’s original design, a recurring theme has been how to better engage with Tanzania’s private sector which has a major role to play in changing the way social services are delivered. Less risk-averse than the public sector, non-state actors have the liberty to generate and test new ideas, and market-driven incentives to scale up approaches that deliver when commercial viability is proven. Private sector engagement for innovation comes in all manner of shapes and sizes. While some private sector players may prefer to provide support through direct financial investment, others will be seeking the opportunity to support skills and entrepreneurship through their corporate social responsibility (CSR) programmes.

HDIF has attempted to engage with the private sector – in different ways and with different segments of it – with varying degrees of success. HDIF grantees have demonstrated that the key to unlocking private sector support is in identifying areas for shared interest and finding new ways of doing business that combine the opportunity to create social impact whilst still focusing on the ‘bottom line’.

Both Buni and Dar Teknohama Business Incubator (DTBi) were established in COSTECH in 2011, at a time when there weren’t many hubs or incubators in Tanzania and there was a need for that type of support. Today the ecosystem has grown, and the role of government has changed. I would like to see COSTECH have a coordinating role, supporting the hubs and incubators nationally and making sure there are hubs around Tanzania so that all entrepreneurs can find support closer to home. From the entrepreneur point of view, COSTECH should be able, among other things, to help with finding support, being able to direct entrepreneurs to hubs close to them, and also providing information about funding opportunities. We are just starting on that path, supporting universities to open innovation spaces and next we’ll work with districts. It might take some years but we are getting there.

DR AMOS NUNGU,
DIRECTOR GENERAL OF COSTECH

network. Kilihub is home to many nationally well-known and successful start-ups including Micro Health Initiative, Last Mile, and Affordable Computers and Technology for Tanzania (ACCT). It attracts investors from Nairobi and further afield and enjoys multiple income streams, a budget, board, and some full-time employed staff. Other hubs, such as RLabs in Iringa, are more informal, community-driven spaces that focus on upskilling local entrepreneurs to come up with ideas to solve local community problems. This divergent focus makes sense – the environments the hubs operate in are vastly different, as are the local needs.

Innovation can be defined simply as a ‘new idea, device or method’. Innovation can also be viewed as the application of better solutions that meet new requirements, unarticulated needs, or existing market needs. Innovation can take place through the provision of more effective products, processes, services, technologies, or business models that are made available to markets, governments, and society. HDIF uses Doblin’s Ten Types of Innovation (www.doblin.com/ten-types).

14
https://www.kilihub.com/
15 http://www.microhealthinitiative.org/
16 http://lastmilehealth.org/
17 http://www.actt.co.tz/
18 http://teknohama.or.tz/
1.2.3 Create early success stories that can be replicated and scaled in the long term by investing in networks where willing and capable partners already exist

Catalysing innovations in any ecosystem requires a whole range of support for the innovation to take root and for the systems to be in place for it to thrive and scale. During the early stages of an ecosystem, many of the systems, networks, and structures may still be in their infancy, which can create barriers to scale and systematic change. In designing innovation programmes for early-stage ecosystems, investors should provide targeted funding with skills and capacity building, and focus on more developed sector clusters or value chains where there is a groundswell of support. This creates lessons on what works and what does not that can be shared so that others can replicate and adapt successes elsewhere.

HDIF is a broad programme encompassing three development areas with interests in technology applications, skills, and job growth among other cross-cutting issues. When the programme first started, the resources needed to directly influence specific policies, advocacy, or behaviour change in each of these contexts were not available. HDIF identified that the most effective and impactful use of its resources was to create quick wins by focusing resources on generating learnings and raising the profile of existing clusters – within and outside of HDIF's portfolio – that others could learn from, adapt, and replicate, and in doing so influence systemic change.

**AFFORDABLE FINANCING FOR THE PRIVATE HEALTH SECTOR**

Despite the presence of more than 8,000 accredited drug dispensing outlets (ADDOs) and 1,333 private health facilities across Tanzania, credit to the private health sector is estimated to be less than 1 per cent of the total loan portfolio of regulated banks and financial institutions. Yet these private health facilities are an important part of Tanzania's health system, providing frontline health-care in many rural areas. In 2015, the Association of Private Health Facilities in Tanzania (APHFTA) secured grant capital and operating funds from HDIF to trial Afya Microfinance (AmiF), a novel microlending product that aims to improve access to affordable financing in the private health care sector. Group loans were offered to private health facilities, and as a result, these facilities are now able to provide higher-quality care, and are reaping financial benefits for the business owners: 98 per cent of ADDO owners in one region confirmed they have experienced economic benefits at both individual and family level. As a result of developing the product into an attractive financial proposition, APHFTA secured further investment from the Small Entrepreneurs Loan Facility (SELF) by way of debt finance and a grant from Comic Relief to continue the initiative beyond the HDIF grant. The investments have enabled AmiF to open a new branch in the Geita region and expand its operations to other regions of the Lake Zone.

**THE POTENTIAL OF CORPORATE SOCIAL RESPONSIBILITY INVESTMENT**

In recent years, some of the large telecoms companies have started to invest in CSR programmes by homing in on the youth demographic – their main customer base – and building social entrepreneurship skills largely through the development of digital and analogue programmes hosted on their own platforms. For example, Airtel's Fursa programme is enabling young entrepreneurs by providing tools and training whilst Tigo's collaboration with DTBi funds an incubator programme aimed at promoting local talent and generating employment in the country through ICT.

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In order to foster linkages and collaborations and create early success stories, HDIF found it necessary and effective to focus both technical resources and capacity building around clusters and networks. Targeting of funding in this way provided a rich body of learning and knowledge around key thematic areas and sectors to inform investors, funders, and policymakers to support scale-up and adoption of these innovations.

1.3 Recommendation

Address the skills gap that creates bottlenecks in the ecosystem and empower youth to be drivers of innovation

HDIF is not designed to be a pure ‘ecosystem-building’ programme. Instead, large grants to existing organisations with prototyped ideas are at the core. However, for us to actively and deeply engage Tanzanian social entrepreneurs with high potential innovations, we needed to invest in a broad set of traditional and non-traditional education and practical learning and skills. As HDIF began implementation, it was quickly recognised that increasing the range and depth of skills among innovators could significantly strengthen the development of a healthy pipeline of innovations in Tanzania. The subsequent closure of the TANZICT programme in 2016 left a void in the entrepreneurship and skills development space, exacerbating the need for more support. HDIF took the decision to adapt the programme to include a series of ecosystem-building activities to create more opportunities to generate early-stage innovation, skills building and ideation for young people.

1.3.1 Recognise the value of investing in innovations to nurture a broader range of innovation-related skills, entrepreneurship opportunities, and create jobs

Social innovations can do more than just solve human development problems. As well as helping to find solutions, investors in innovation can nurture learning, scaling-up is often the next stage after piloting, and refers to growth or expansion of the business or service, serving larger volumes of clients, possibly also in new market areas.

Gaining a deeper understanding of pioneering pre-paid water solutions

Catholic Relief Services (CRS) and Investing in Children and Societies (ICS) are two NGOs that have improved access and availability of water services and use similar innovations that combine digital technology and water kiosks. Both have worked closely with local water authorities to ensure that the systems were fully integrated and embedded within the local structures which has supported scale. HDIF partnered with DFID Tanzania to support the inclusion of these grantees in a research study – alongside another DFID-funded project, eWater – that compared the three services and provided insights to inform future decisions by the government and donors regarding water service delivery in Tanzania.

The research, due to be published in early 2019, aims to generate learnings to be shared with the government and funders to inform policy around water provision in Tanzania. Early findings have already helped to initiate dialogue with the Ministry of Water and Sanitation around the use and role of pre-paid water systems in Tanzania to support the provision of clean and sustainable water solutions based on initial insights from the research. The inclusion of these early success stories in this research study has effectively created a platform to amplify the success of these innovations to support adoption and scale-up.

Scaling-up

Lab technician tests sputum samples using a TB-detection trained ‘Hero-Rat’.
encourage entrepreneurship, and provide realistic job opportunities. HDIF supports innovations that tackle problems in the health, education, and WASH sectors in Tanzania. Whilst it is not explicit, many of these interventions are also supporting skills development and job creation across a range of sectors and for various groups of people. It is important to value the role of innovation for human development in driving job creation and entrepreneurship opportunities across multiple sectors.

1.3.2 Further invest in traditional and non-traditional media, including digital tools, to help spread new ideas and build a culture of innovation

Due to the size of the country and the infrastructure challenges that many Tanzanians face, engaging with innovation actors that exist beyond the city limits of Dar es Salaam and other urban centres is often challenging.iii

A core aim of the HDIF programme is to create increased dialogue and to generate excitement about innovation within Tanzania at large. HDIF leverages both online platforms and traditional media to showcase stories about the role of innovation in creating social impact through films, success stories, blogs, and newsletters. This has proven to be a relatively low-cost yet powerful way to inspire others and reach new audiences. As a result of these outreach activities, the project’s network has expanded from 3,000 in 2015 to over 6,000 in 2017.

Support innovations that provide access to skills for harder-to-reach audiences

Meanwhile, innovators are seizing the opportunity to extend their reach and connect with customers and clients with ever-increasing inventiveness. Enablers and local start-ups are harnessing technology and digital tools to inspire new innovators and expand skills development opportunities for new and hard-to-reach users.

INNOVATIONS WITH AN ENTREPRENEURSHIP STORY TO TELL

Gongali Model is a business that is bringing clean water to communities in Arusha, Northern Tanzania with a skills and job creation story to tell. Co-founders Dr Askwar Hilonga and Ms Ruth Elineema have purposefully engaged poor women, providing them with opportunities and instilling them with confidence to develop their business skills. These women entrepreneurs are not only learning about selling clean water, but also the underlying skills and acumen that they can apply to other income-earning opportunities.

Other examples include SIMGAS, a company that designs and builds biogas systems in schools as well as training local entrepreneurs to build the systems, and Msabi, which runs a subscription-based system for water point maintenance and trains local entrepreneurs in Ifakara to maintain the pumps.
1.4 RECOMMENDATION

USE UNIVERSALLY AGREED DEFINITIONS AND JARGON-FREE FRAMEWORKS AND TOOLS TO BUILD INNOVATION-RELATED SKILLS

Accessibility is one of the key tenets of people-centred development. Designers of innovation programmes must use simple, inclusive language to identify and connect with innovators. Furthermore, the introduction of accessible frameworks can help innovators and potential innovators to understand the steps for designing, testing, and scaling successful innovations.

Ubunifu, uvumbuzi and ugunduzi are all words used to describe innovation in Tanzania’s national language of Swahili – words that mean creativity, entrepreneurship or discovery. While descriptive, the multiple meanings and applications of the terms related to innovation also created the potential for confusion and miscommunication. To identify and connect with the innovators and potential innovators of Tanzania, HDIF realised it would need to speak in a common language as well as support a more inclusive ecosystem if it was to find plenty of strong, fundable ideas.

HDIF’s grants processes are other examples in which the programme has attempted to use ‘accessible’ frameworks and tools to help support a common language around innovation and reduce confusion. There are many different frameworks for innovation in commercial and social impact contexts. HDIF selected Doblin’s Ten Types of Innovation as it identifies the various types of innovation beyond the development of new products and services. (This is not to say that innovation is not occurring outside of Doblin’s framework, but it is considered as the most universally recognised and comprehensive definition.)

When HDIF conducted the innovation ecosystem mapping, it became clear that innovation meant different things to different people. Over half of the respondents who identified themselves as ‘innovators’ were engaged largely in entrepreneurial ventures rather than in creating actual innovations. As such, HDIF re-classified these respondents as entrepreneurs and introduced a system for reviewing and verifying the data before it was mapped. The aim was not to exclude anyone but to ensure a consistent and common understanding of the innovation ecosystem and the players within it.

1.4.1 Use the Principles for Digital Development as a framework for understanding the factors that drive successful innovations

The Principles for Digital Development (PDD) have been established firmly as global best practice for designing and applying digital technology to solve development challenges. HDIF and other innovation...
projects have increasingly recognised the principles as a well-proven and packaged set of general social innovation design principles for understanding various success factors for scaling digital and non-digital innovations and encouraging a learn-and-adapt approach to working. HDIF applies these principles in its own assessment and adaptation and encourages grantees to apply them throughout their grant cycle to both strengthen their innovation approach and support learning.

The selection of the PDD as a learning framework has helped HDIF to improve its strategies and activities while also sharing learning with external partners and the broader development community. HDIF has not been alone in its promotion of the PDD, and the adoption of them has led to a common ground for collaboration and sharing learnings. DFID became the 100th endorser of the PDD in 2018 and its Digital Services Team is leading integration of the principles across all its programmes, ensuring projects and grantees are compliant. HDIF is sharing learnings around the practical implementation of the principles through its grantees in Tanzania and was cited in DFID's Digital Strategy to showcase grantees that incorporated the principles as best practice. HDIF's adoption of the PDD served as a connecting point with the Digital Impact Alliance (DIAL), with which HDIF partnered to develop and share case studies demonstrating successful practice and learnings. This included a joint workshop in Dar es Salaam in 2017 and publications for the DIAL knowledge management platform.

Grantees and other stakeholders engaged by HDIF have contributed to a surge of awareness and application of the PDD for improved performance and growth of social innovators in Tanzania. For example, the Digital Opportunity Trust (DOT) in Tanzania has developed a training on the PDD for its growing network of schools, youth entrepreneurs, and EdTech social enterprises and now integrates key themes into many of their tools and trainings. Ndoto Hub has translated the PDD into Swahili and uses them as guides in their acceleration programme for women entrepreneurs.

As the use of the PDD grows through their use at donor and innovator level, the evidence-base on their effectiveness as signposts for design in development also continues to grow. HDIF will continue to be an active platform to generate new learning and insight.

1.5 RECOMMENDATION
DESIGN INCLUSIVE ACTIVITIES FOR HEALTHIER AND MORE DIVERSE NETWORKS

The World Bank 2016 report Digital Dividends warned that without a supportive enabling environment, including appropriate education and governance structures, negative consequences of new digital technologies can include the concentration of market power, greater inequality, and excessive government control. Tanzania is no exception. Innovators, digital or otherwise, should adopt an inclusive approach to design to ensure that the needs of those less likely to have access to technology and social media are considered: in particular, women, girls, people with disabilities, the extremely poor, and those living in remote areas.

A social enterprise is an organisation that applies commercial strategies to maximise improvements in financial, social, and environmental wellbeing – this may include maximising social impact alongside profits for external shareholders.

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[https://forum.dial.community/](https://forum.dial.community/)


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Children enjoy watching an episode of Ubongo Learning’s popular edutainment programme ‘Akili and Me’.
Create innovation spaces that are inclusive

In Tanzania, like elsewhere in the world, girls and women typically have less access than boys and men to engage with technology and to be exposed to innovation. HDIF has endeavoured to address these barriers through the programme and the activities it supports. This included developing initiatives to promote more women and girls’ participation in innovation activities. The 2018 Innovation Week specifically invited partners to host events around a gender theme, and HDIF media outreach and marketing activities were tailored to attract young women. As a result, female participation in events during Innovation Week rose from 580 in 2017 to 1,034 in 2018. It was apparent that many young women were interested in participating in Innovation Week but needed to hear that innovation, science, and technology is their space. In addition, purposeful efforts are needed to reduce (or eliminate) barriers to engagement so girls, women, and other marginalised groups can participate in the innovation space.

1.5.1 Openness should be a foundational principle of all innovation programmes

The ‘Use Open Standards, Open Data, Open Source, and Open Innovation’ Principle for Digital Development puts forward: ‘An open approach to digital development can help to increase collaboration in the digital development community and avoid duplicating work that has already been done.’ The transfer and sharing of ideas for collaboration and exchange of skills, expertise, and resources between different actors requires a culture of openness. Building an innovative society requires a culture that supports the sharing of knowledge, and the cross-pollination of ideas between innovators, institutions, and users of innovations.

1.5.2 Encourage innovators and the institutions that support them to bring gender more purposefully into their operations

HDIF’s decision to bring more of a gender lens to the programme was backed by DFID: its 2013 Gender Strategy informed a move to mainstream gender across all programmes. To initiate the process, HDIF began a series of inquiries to understand the relationship between gender and innovation within the work of the grantees. This required a comprehensive approach to understanding gender that shaped all areas of HDIF so it could more purposefully bring gender into its internal operations, the work of its grantees, and the innovation ecosystem in Tanzania. Whilst there are a plethora of gender tools and theories to support development practitioners, there is minimal experience to draw on regarding gender and innovation. HDIF needed to develop a framework that reflected its own learnings and insights, drawing on the experiences of HDIF grantees. HDIF’s gender framework, which draws inspiration from the International Center for Research on Women’s (ICRW) pyramid of innovation and describes how innovation...

THE MAWAZO CHALLENGE

In the design of HDIF’s ecosystem-building activities, we were mindful of the need to ensure an open and inclusive process, so that a variety of voices would be heard. The Mawazo Challenge was designed to help build a stronger innovation pipeline through stimulating ideas, inspiring new innovators, and increasing access to support such as funding and skills development. Its design started with an open ‘ideation’ phase, through a call for ideas that was promoted widely across multiple platforms and through partnering with regional hubs to ensure that we reached young people from different corners of Tanzania. The crowdsourcing process resulted in 140 ideas from all over the country. To maintain a people-led process from start to finish, the three most promising ideas were shared with the public through social media, giving the final vote to the public. The winning idea, to hold a student health innovation competition, was not necessarily the one that most closely resonated with HDIF’s strategy but it was the most popular idea with the online audience that was reached and thus the idea selected for the Challenge.

‘So many appropriate technologies solve women’s problems and need women to take them up! Do not kill your passion, work on it. We are needed.’

RUTH ELINEEMA, CO-FOUNDER OF GONGALI MODEL COMPANY

structions, open-source-and-open-innovation/
could drive positive shifts in the lives of women and girls, can be illustrated as four distinctive but non-linear, overlapping areas of change.

As HDIF started to explore with grantees the intersection of gender and innovation through the lens of the framework, new aspects of grantees’ experiences began to be understood. The learnings that have emerged through this work have informed HDIF’s gender approach and provided valuable insights to inform dialogue and recommendations to policymakers and funders around the promotion of gender equity and girls’ and women’s wellbeing. The framework is a living tool that continues to evolve and adapt as we learn from HDIF’s grantees and partners.

1.5.3 Involve an inclusive group of users in innovation design, testing, and implementation

Employing different perspectives and abilities of various people in the innovation design process has the potential to enrich creativity and increase the chances of innovations that meet the needs of a wider group of users. This ‘design with the user’ approach is an ethos that is endorsed in the Principles for Digital Development where the ‘user’ represents many different people, demographics, and cultures. Without adopting a broad definition of ‘users’ there is the potential for specific groups – particularly those in marginalised communities – to be excluded from the design process, resulting in innovations that do not meet the needs of all customers, clients or users.

For HDIF, gender has been a specific area of focus for inclusion. In Tanzania, like elsewhere, society often adheres to and reinforces traditional gender roles, and women are often under-represented in innovation, science, technology, engineering and mathematics (STEM). The Brookings Institute points to numerous reasons for this trend: social norms and parental expectations that discourage girls from studying science; beliefs around boys being better in mathematics and science than girls; and institutional factors that constrain women’s ability to enter a STEM job to name a few.

This is confirmed by HDIF’s research on Tanzanian hubs that revealed that 80 per cent of those interviewed had fewer female than male members. Many women hub users reported a sense of not belonging to the world of technology and innovation, and that they did not know about, or lacked access to, female role models in the innovation ecosystem. Yet this trend is creating a missed opportunity to capitalise on the ideas, creativity and resourcefulness of women and girls in the innovation process.

Through the 2016 ecosystem mapping research it was evident that many people, especially women, were reluctant to define themselves as innovators, and many women who we spoke to were quick to play down their achievements.

To address the lack of women identifying as innovators, and support a more inclusive innovation ecosystem, HDIF began to champion and support women who are pushing the boundaries of tradition through their work in the innovation and tech space in Tanzania.

In our second year of operation we didn’t just want to create content and content consumers, we wanted to create content creators as well. We did a bit of scoping and realised out-of-school youth want to learn about entrepreneurship, raising capital, and financial management. Most people coming through [the application process] were young women who wanted to be entrepreneurs. They had ideas but had challenges in terms of business skills and in personal development and leadership. To address this need we decided to start a hub only for women, with a focus on agribusiness and renewable energy. Now there’s a call for the second cohort and we are still fine-tuning the programme.
2 CUSTOMISING APPROACHES TO ENABLE INNOVATIONS

RECOMMENDATIONS

- Tailor funding and support mechanisms to meet the needs of industry sub-sectors surrounding specific innovations
- Invest in and encourage collaborative innovations
- Make learning a legitimate, acceptable outcome in an early-stage innovation ecosystem.
A man utilising the improved water services at an R3W prepaid water kiosk in Karatu, a CRS project.
While Tanzania’s early-stage innovation ecosystem is gaining momentum, an infusion of ideas and technologies is still necessary to bridge the gaps between policy and practice. The strengths and support needs of different sectors and sub-sectors within the ecosystem vary hugely and require funders to engage in the ecosystem and to provide a customised mix of advisory services to support innovations and innovators.

In a mature innovation ecosystem, national and regional policies, institutions, actors, and their networks are stable enough to provide quality, transparent, and reliable support, allowing investors to inject a larger portion of their funds into the financial investment instead of providing advisory services. Investors’ financial investments can be more commercial – for example, debt and equity and service contracts instead of grants. Investors can also focus on testing and scaling innovations more than engaging in building the ecosystems – for example, in skills development, ideation, prototyping, networking, and policy influence.

HDIF has learned that supporting Tanzania during its transition from an early-stage to mature ecosystem requires tailored technical assistance to innovators and management at every turn. This can change as an innovation moves through different stages from design and start-up through to scaling and is dependent on specific needs, skills, and resource gaps at any time. It is important to understand the specific nuances of innovations and specific sub-sectors that sit within a sector – such as health or education – in which they operate. Advisory services, and funding values and mechanisms provided by innovation funders must support the testing and scaling of the innovations.

2.1 RECOMMENDATION

TAILOR FUNDING AND SUPPORT MECHANISMS TO MEET THE NEEDS OF INDUSTRY SUB-SECTORS SURROUNDING SPECIFIC INNOVATIONS

Unsurprisingly, the innovation ecosystem in Tanzania is a complex and messy place. Take for example, the significant differences that exist between the sectors involved (such as health, education, and WASH), each with their own levels of investment, numbers of stakeholders, openness of policies for
testing new ideas, and risk tolerance. Against this background, it is critical that investors understand the nuances of the sector it is seeking to work with and the conditions needed to test and scale up the innovation it supports – otherwise known as the ‘enabling environment’ – and to tailor funding and support mechanisms for sub-sectors accordingly.

Recognising these complex sub-ecosystems, HDIF has tailored its support to its innovations and provides more guidance and support to grantees and partners where needed. It is accepted that the development impact of these innovations may not be measurable within the grant period, and the likelihood of adoption is significantly lower. Concurrently, HDIF focuses more on understanding and strengthening the sub-ecosystem, connecting partners, engaging policymakers to lower the risk. The focus on early-stage testing of prototypes requires more flexibility in reporting, has more flexible performance expectations, and assumes more risk. That being said, the potential for transformational impact is high; when adopting a sub-ecosystem approach, it is possible to break down existing barriers, or create a demand where none previously existed.

The importance of understanding sub-ecosystems

HDIF has funded innovations across many sectors and sub-sectors, but the comparison of two examples illustrates the importance of understanding the sub-ecosystem in designing innovation investments. The health sector in Tanzania is a comparatively robust ecosystem for innovation. As a consequence of significant government and donor funding, programmes, and partnerships across the country, investors supporting health innovation are able to concentrate on funding the scaling up of initiatives rather than advisory support. As a consequence, sub-sectors such as mobile technologies for the practice of medicine or public health (mHealth) are thriving.

Compared to those in other sectors that HDIF supports, the programme’s portfolio of ten mHealth innovations are predominantly later-stage innovations that have been tested and are ready to scale. Implemented by more experienced and technically capable partners, their impact has been easier to measure and adoption rates have been higher. In response to this, HDIF’s funding has focused on scaling up, which requires more rigorous reporting, has greater performance expectations, and assumes less risk.

By comparison, HDIF also sought out innovation in the sanitation sector but found very few partners with innovations beyond typical approaches already in use or that had already failed in Tanzania. At the government level, the coordination of innovation and technologies for sanitation is more complex than in mHealth. For example, work in sanitation is, in part, under the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDEC), but also requires engagement with the Ministry of Water and Irrigation, the Ministry of Education, Science and Technology, and PO-RALG (which is responsible for supporting local government authorities (LGAs) in service delivery of sanitation). Cooperation between these government actors is also implemented through various National Sanitation and Hygiene Steering and Technical Committees actively engaging with the National Water Sector Development Programme (WSDP). Navigating this complex system of government partners, obtaining buy-in for testing and scaling specific innovations over time, and providing a clear path for scale and adoption is riskier.

Compared to the mHealth sub-ecosystem, there are significantly fewer qualified, risk-taking partners with innovative ideas and funders willing to invest in early-stage sanitation innovations. Collectively, the existing sanitation interventions tend to be conventional and the few actors who are implementing are often...
risk averse. As a result, HDIF’s portfolio of sanitation innovations is smaller than desired due to the limited availability of viable ideas to fund, and the innovations tend to be at an earlier stage.

2.1.1 Tailor funding and other support to innovations according to their stage of development

‘Diffusion’ is a concept that seeks to explain how, why, and at what rate new ideas and technology spread, laid out in the widely considered *Diffusion of Innovations* by Everett M. Rogers. In part, Rogers categorised ‘adopters’ by five types: innovators, early adopters, early majority, late majority, and laggards. Adopters can be viewed as individuals, organisations, clusters, networks, or even countries. Looking at the stage of adoption has helped HDIF to understand the type of support required to progress various innovations to the next ‘stage’ of innovation; for example, from early adopters to early majorities.

Resourcing innovation requires getting to grips with where the pipeline of ideas and viable innovators is surging and where it needs support. Our experiences of supporting innovations in mHealth and sanitation suggest that investments in sanitation require more engagement with ‘innovators’ and early adopters whereas our best value-for-money investment in mHealth innovations is in enabling already tested innovations to move to a later stage; for example, towards ‘early majority’. By developing an understanding of diffusion – including subsystem differences and stages of adoption – HDIF has been able to adjust how financial and advisory support to its investments portfolio are provided.

2.1.2 Provide contextualised and targeted technical assistance and monitoring to support early-stage innovators

The pathway to scale innovation in any sector or sub-sector is not clear for most early-stage innovations. Often, ideas, pitches, skills, and organisational capacity have to be developed alongside testing and scaling of the innovation to ensure that there is a story to be told which will attract stakeholders (funders, policymakers, partners, and talent) at later stages of diffusion. Using sector expertise and easily accessible frameworks – including the Principles for Digital Development, Rogers’ Diffusion of Innovations, Doblin’s Ten Types of Innovation and many others – has helped HDIF work hand-in-hand with innovators to improve their chances of success. Advisory support has spanned from hands-on financial systems capacity-building to business model enhancement, to linking innovators with funders and policymakers.

2.1.3 Base your level of investment on your appetite for risk and what you want to achieve

Innovation, by its very nature, requires risk-taking and adopting a pioneering and sometimes maverick approach to identifying and backing innovations that may or may not deliver transformative impact. HDIF is exceeding targets: but this does not mean the programme has been straightforward or risk-free. Challenges and risks that could threaten the programme’s success and result in failure include the state of ecosystem development, changes in the Tanzanian Government and its priorities, and global political priority shifts impacting Tanzania.

HDIF’s ability to deliver in the context of these risks has been due to the common understanding shared by DFID and Palladium on the type and extent of impact the project could realistically achieve and the risk profile that is required to reach it, with this ethos and shared vision integrated into HDIF’s team and relationship management with partners.

To avoid an overly conservative implementation, risk-taking was built into the negotiated results of the performance-based contract, to both measure and incentivise risk-taking. A common understanding of risk and intended impact begins with the selection of a suitable contract or agreement type – in this case a performance-based contract rather than a standard grant. By using a performance-based contract mechanism to support the platform, DFID places more accountability and overall risk with Palladium for a high level of performance. With this approach a high percentage of the total contract value is based on a payment-by-results model, limiting Palladium’s incentive to take risks.
HDIF’s performance targets were set high and annually adjusted through an open, two-way (client-to-implementer) review process, and independently evaluated through the programme’s annual review. The type of risk profile established for the project required a high degree of accountability to identify and correct problems as early as possible. The project aimed to meet the need for data on impact, finances, and contract compliance without overburdening innovators with distracting, time-consuming reporting requirements that are not directly related to their day-to-day implementation and adaptation of the model. In this way, the project sought due diligence as a path towards risk awareness, strategic risk-taking, and reasonable risk mitigation as opposed to risk aversion and avoidance.

2.1.4 Provide dedicated relationship management and related resources and ensure support is appropriate, accepted, and translates into results

To provide stage-sensitive, targeted technical assistance, HDIF designed a team that, itself, learned and adapted the skills required to support grantees and the ecosystem. It began with a core team of generalists to ensure the key transactional work was taken care of, complemented by select technical partners to drive grantees further towards their potential impact.

As the project adapted, the role of partners and how they engaged the ecosystem and grantees also changed. The original Challenge Fund design included a very broad role for KPMG – managing the operations of the fund from solicitation of ideas through to award, assessing the business viability of grant applications, and building general business skills among the grantees. The academic partners, the Water, Engineering and Development Centre (WEDC) at Loughborough University and Newcastle University, had a more refined role related to evaluating applications, advising on business plans and the technical aspects of grantees’ interventions. As the programme leapt from the landscape analysis phase during inception to implementation, KPMG’s role was revised to the provision of advisory support around risk management on business processes. Meanwhile, the academic partners took up a more substantive role in HDIF’s learning strategy, capturing...
insights from grantees and contributing to the development of HDIF’s knowledge products.

2.1.5 Aim for positive working relationships with innovators based on trust

As well as being able to thrive in the local ecosystem, grantees also need exposure to cutting-edge global knowledge in social entrepreneurship, impact investing, development sectors (e.g. health, education and WASH), and more. Technical partners and advisors can provide that exposure and foster long-term relationships. Trust between the project and the grantee is necessary for both to feel comfortable proposing and making significant adaptations over time.

HDIF’s relationship approach to grantee management

A grantee’s experience with HDIF is structured as a triangle involving the grantee, the Programme Manager (PM) and Technical Assistant (TA) and characterised by an open-door attitude and select interactions and tools. This triangular structure is itself a learning mechanism, allowing innovators to learn and adapt their model and their need for support and technical assistance; and for the project to learn and adapt the balance between applied and demand-driven support from the PM and TA each grantee required.

Using grantee self-assessment is both an HDIF tool and approach that promotes learning as a priority over simple reporting. The self-assessment tool itself was adapted over time with inputs from the grantees using it. It came to include sections that required honest self-reflection on partner and other stakeholder relationships, the performance of different components of their model, and management and leadership issues.

Providing dedicated resources for relationship management between the innovator and funder has enabled HDIF to be sensitive to the people designing and implementing a model and their specific needs.
PMs and TAs have found several instances in which management and leadership skills needed seasoned guidance and perspective in effectively motivating and coaching the teams involved in all aspects of their model. Moreover, a relationship management approach provides flexibility in grant timeline to allow for the right adaptations to be made well rather than contributing to the stress of compliance to the business plan.

2.2 RECOMMENDATION

INVEST IN AND ENCOURAGE COLLABORATIVE PARTNERSHIPS

Cross-sector collaborative partnerships can bring together diverse expertise across disciplines to meet a common goal. Identifying and engaging the right partners is critical to achieving long-term sustainable change.

HDIF has found that all of its most successful innovations are driven by purposeful partnerships that leverage core competencies and advantages of the partners. Due in part to the early stage of the innovation ecosystem in Tanzania, innovations need a cluster of institutions and leaders to have the capacity, patience, and resources to navigate the route to scale.

The best performing HDIF grantees have clearly defined partnerships governed by agreements or other formal arrangements with roles that align with each partners’ strengths. In contrast, many of the grantees who worked alone, with no partners, were not successful, closed early, or experienced significant challenges in scaling their model.

2.2.1 Design flexible mechanisms that support programme adaptation

The ability for a complex programme like HDIF to adapt is based on in-depth learning and insights combined with donor and implementing partner willingness, support, and investment to make changes that are sometimes significant. Flexibility is also built into HDIF’s log frame, a living document that is reviewed openly and critically on an annual basis without too much rigidity in the review cycle. This has empowered HDIF to implement any required changes quickly. The targets in the logframe
BUILDING PARTNERSHIPS FOR SCALE: THE CASE OF CRS

The Revolutionising Remittance Recovery in Water (R3W) project in the Arusha region, implemented by Catholic Relief Services (CRS), is working in partnership with others to tackle some of the major challenges concerning water delivery. Throughout the R3W project, CRS has improved relationships between different actors and strengthened the water management ecosystem by working collaboratively with partners at the local, regional, and national level. At the local level, CRS is training community-owned water supply organisation (COWSO) staff and kiosk operators to better manage the system and give the village water committees an effective role in decision-making through their membership on the boards of COWSOs.

At the national level, CRS serves on the technical task force group, and shares evidence and learning from the programme that can be used to inform future roll-out and adoption of prepaid water systems. To date, the R3W project has established a system of delivering safe and reliable water to communities through 20 water kiosks that are operated through prepaid cards by water users. Seeing the success of the project, the urban Water and Sanitation Authority of Karatu (KARUWASA) has adopted the system and is in the process of procuring up 14 new water dispensers to take it to scale.

capture the risk-taking principles agreed with DFID whilst holding HDIF to account on programme delivery. During annual reviews of the logframe, DFID and Palladium assess the programme, the broader performance of activities, and evolving relationships. This is an open and transparent process that incorporates feedback between HDIF and Palladium as well as from the consortium partners. These are open and transparent with honest feedback between HDIF and Palladium and include important inputs from consortium partners.

The general openness of DFID and Palladium to adaptive management for a programme as large and complex as HDIF has been essential to the project’s success in providing the same support and encouragement for adaptive learning and management among grantees. By maintaining a shared understanding of risk and using that to inform decisions that relate to the intended impact and primary beneficiaries, DFID and HDIF have been able to adapt the flow and shape of money, resources, and incentives to create an effective catalyst for innovation in Tanzania.

HDIF’s three consecutive rounds of grant awards were adapted based on learning from previous rounds of grant making, other ecosystem-building activities, and changes in the operating environment. HDIF has been creative in seeking feedback from partners and stakeholders across all aspects of a programme’s reach – monitoring and evaluation at grantee level, analysis of data generated by calls for innovation, the changing innovation ecosystem, and directly from grantees and the communities they are reaching and serving. This broad set of insights from experiences in and between the three rounds of grant awards has informed HDIF’s efforts to learn and adapt, designing with the users of the catalyst.

2.3 RECOMMENDATION

MAKE LEARNING A LEGITIMATE, ACCEPTABLE OUTCOME IN AN EARLY-STAGE INNOVATION ECOSYSTEM

Innovation is a practice as much as it is a technology, idea or process. HDIF has striven to integrate adaptive learning and key design principles throughout the programme. This has meant not only assessing and adapting the innovations that are supported among grantees and the way those innovations are sourced, financed, and measured, but also the focus, structure and skills of the team and roles that comprises HDIF.

A key HDIF innovation has been the structure and weighting of the goals the programme has for the whole portfolio and for each grantee within it. HDIF was clear that learning from funding rounds
and innovation models was of equal importance to the success of the innovations it invested in. HDIF grantees are coached towards adoption or market viability of their innovation through adaptations of components, or in some cases the entire model, to improve its development impact performance. It is important to note that a culture of openness and willingness to share learnings amongst the grantees and partners was not adopted overnight. HDIF has had to lead by example and demonstrate how lessons could be viewed as a valued contribution to the ecosystem. Now grantees are increasingly open about sharing lessons learned with HDIF, other grantees, and the wider ecosystem, participating in the annual Innovation Week, contributing to HDIF’s knowledge products, and using other opportunities to disseminate their learnings.

A learning-based grant funding model supports grantees that identify and communicate challenges, and allows room for collaboration between grantees where there is openness and a willingness to share failure. The programme has created tailored tools and processes to manage and monitor progress among grantees and across the portfolio. HDIF collects feedback from grantees and DFID on the types of data and information required to inform decision-making and adapts these with the intention of striking a balance between risk management and the value of learning and adaptation.

Grantees who are prepared and positioned to identify challenges and make significant and sometimes radical changes to their thinking and the model are better placed to succeed. The organisations best prepared and positioned to do this have identified and corrected their misunderstanding of the market and adapted their partnerships accordingly.
3 LEARNING, SHARING, AND ADAPTING

RECOMMENDATIONS

- Set clear targets, timelines, and decision-making processes to facilitate strategic and timely adaptation.
- Invest in systems that support evidence and learning, including flexible and adaptable staffing and financial structures.
Secondary school students test their knowledge using Shule Direct’s Makini SMS.
DIF’s story has been one of adaptation made possible through a strong culture of learning within both HDIF and DFID. This has been further supported by the built-in flexibility to DFID’s programme monitoring and review systems and those within the HDIF programme that have been established to extract data and insights that help to inform critical decisions. At the same time, HDIF works closely with COSTECH – an institution that recognises the importance of building strong systems for knowledge sharing and transfer – to build strong systems internally. By walking the walk and leading by example, the programme aims to inspire a culture of learning amongst its grantees, their partners and the wider ecosystem.

Much of the knowledge generated through the grants has brought value to, and powered other areas of, the programme. Evidence and insights gleaned from the grantees has been used to inform HDIF’s engagements with donors, investors and government representatives to increase understanding and knowledge of human-centered innovations and encourage them to scale up those that are successful. HDIF is exploring the use of learning to support adaptations across the whole programme as it has evolved and the structures and tools that have been used to support it.

### 3.1 Recommendation

**Set Clear Targets, Timelines, and Decision-Making Processes to Facilitate Strategic and Timely Adaptation**

HDIF understands that applying an adaptive programming approach requires more than just a framework for feeding data to programme managers; it requires a clear vision of the programme’s objectives, a curious and supportive
attitude from investors and key stakeholders, structured but flexible systems to capture and apply learning, and a lot of hard work.

HDIF has applied an adaptive approach to many aspects of the programme by empowering staff to adapt their engagement with grantees based on demand; building long-term relationships between grantees and sector experts who can respond to their evolving needs; and increasing resources to respond to shifting priorities and changing strategic direction in response to external influences such as new innovation frameworks and political agendas. The programme’s relationship with DFID has provided legitimacy to the approach, coinciding with the Department’s own move toward integrating adaptive management to its programmes globally.

It has been difficult to read the early-stage ecosystem in Tanzania. Relationships are not always transparent and straightforward, and the landscape is evolving faster than is mappable at reasonable frequency. One way that HDIF has responded is by continuously extracting insights that can build a better understanding of the ecosystem, and disseminating these to HDIF’s already well-established network. This has helped to effect change and support decision-making and adaptation of the wider ecosystem at various key moments in the life of the programme.

### 3.2 Recommendation

**Invest in systems that support evidence and learning, including flexible and adaptable staffing and financial structures**

A systematic process of creating, capturing and sharing programme knowledge has been a critical resource for HDIF.

HDIF’s Learning Strategy began with the need to develop a better understanding of the priorities and knowledge gaps of stakeholders that are positioned to support innovation to thrive in Tanzania – as well as where the impact could be achieved. We did this by scoping out the possible themes and focus areas from within the portfolio. The themes were then mapped against DFID’s priorities and tested with key audiences to ensure that they resonated widely and would generate interest as well as traction.

The evidence and learning from the grant portfolio has helped to inform, adapt, and strengthen other areas of the programme. It has informed HDIF’s point of view, and influenced who HDIF collaborates and engages with through the ecosystem work. The programme has carried out several deep dives into different strategic topics – each time revealing a level

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**KEY HDIF LEARNING ACTIVITIES HAVE INCLUDED:**

- A full Tanzanian innovation landscape analysis completed during the programme’s inception phase specific to each sector for investment. This analysis complemented the work that had been done during DFID’s business case design stage and was followed by deeper sub-sector analyses once HDIF began more targeted funding.

- A portfolio review undertaken through a stakeholder workshop to identify cross-cutting themes (e.g. gender, digital uptake, and youth, jobs and skills) and to develop the priorities and direction of the overall learning agenda of the project.

- Development of the Learning Strategy, informed by HDIF’s learning and clearly linked to HDIF’s overarching programme strategy.

- Development of approaches to assess and learn about gender and innovation through two interrelated lenses; the impact of women and girls on innovation and the impact of innovation on women and girls.

- Adoption of the Principles for Digital Development as a framework and approach for learning about scaling digital technology and three related challenges and themes discovered across the portfolio – enrolment, affordability, and maintainability.

- Discrete sector research to inform recommendations for policymakers and funders in specific areas – for example, the effectiveness of alternative business models for water kiosks (page 16) and the use of technology in secondary schools (page 18).
of insight that has informed the next step. These insights have also accelerated dialogue, created new connections, and increased HDIF’s sphere of influence and support.

The introduction of the Learning Strategy – and the selection of the ‘scaling of digital technology’ and ‘gender’ as themes – has informed the direction of the ecosystem work and helped to foster new partnerships and collaboration.

### 3.2.1 Fund research that creates an evidence base to inform decision-making and supports systems strengthening

In order for funders such as DFID to take an innovation to scale they need to see evidence that it is effective and provides value for money. It is clear that while stakeholders such as donors and government value these insights, many do not have a mandate or sufficient resources to collect this kind of information.

HDIF has worked with its consortium partners to identify research opportunities across the portfolio that can contribute evidence and learning to local and regional discourse on that sub-sector. For example, Newcastle University and HDIF have conducted a study on two HDIF-funded pilot projects focusing on technological resources that support education (‘EdTech’) – one implemented by Camfed and the other by the Christian Social Services Commission (CSSC). This research has helped to generate evidence that is now being disseminated to education policymakers and funders.

### SHARING EVIDENCE TO SUPPORT DECISION-MAKING: THE CASE OF BOTNAR FOUNDATION

Botnar Foundation is a Swiss Foundation that focuses on child health and wellbeing and has recently started exploring the design for a new programme in Tanzania. In November 2017, Deloitte co-hosted a market entry strategy workshop alongside the Embassy of Switzerland on behalf of Botnar Foundation. The workshop brought together stakeholders from the innovation ecosystem to share insights to a potential investment. HDIF was invited to present key learnings and findings from its research on hubs in Tanzania and was able to refer D-Tree and other grantees as possible scaleable investments. HDIF has continued to engage with the Botnar Foundation team on the ground as they scoped out their potential support to hubs and other systems investments as part of a new programme.

As already discussed, establishing learning as a co-equal priority with sustainability made HDIF’s grant mechanism truly adaptive and facilitative of successful growth. The programme has prioritised learning and development internally too: it has monthly ‘Leadership and Insights’ sessions for all staff and a weekly learning session for PMs with a rotating lead who presents new insights that are gathered directly from the programme’s portfolio of grantees and other activities.

CONCLUSION

This report aims to capture what we have learned as a programme through five years of implementation, with many notable successes and more than a few challenges along the way. We have sought to use our insights to inform practical recommendations in order for others to build on what we have learned.

Many of the recommendations put forward in this paper may seem obvious but applying them in practice is likely to be complex. Action is required at multiple levels and stages simultaneously, such as funding to catalyse innovations and ecosystem-building activities that continue to stimulate and build a pipeline of future innovations and innovators. Learning needs to be prioritised and investment is required to generate data and evidence on what works to overcome the barriers to social innovation and to scale up the advances that have been made so far.

The opportunity for stimulating the innovation landscape in Tanzania is beginning to attract several of the most reputable global funders and investors. However, innovation is a cross-cutting issue that does not always fit neatly into a donor programme or fund, and as such can result in fragmented approaches and responses. HDIF calls for more collaboration between partners and a culture of openness to support increased sharing of information and lessons learned – including lessons about failure – for others to learn from.

HDIF and its grantees have successfully catalysed new social innovations and increased access to basic services for men, women and children across Tanzania; this has only been achieved with the support and collaborative efforts of many international and local partners and stakeholders. For these achievements to endure, we urge funders, potential investors, and policy makers to consider our recommendations and act upon them.

HDIF comes to an end in 2021. In the meantime, the programme will continue to play a role in building the evidence base on innovation in Tanzania, and leverage the existing network to share lessons with practitioners and partners in pursuit of our common objectives.

‘Action is required at multiple levels and stages.’

This differs from more traditional innovation concepts such as 'industry clustering', first introduced by Harvard Business School's Professor Michael Porter, which focuses on the development of networks of interrelated organisations or businesses intended to jump-start competitive industries at a regional scale.

Tanzania is a huge country with a population of 55.57 million (2016) spread across 31 regions. Electricity is accessible to only 32.8 per cent of Tanzania's population. While most people in Tanzania are still off-grid, internet penetration is relatively high and social media platforms such as WhatsApp are widely used.