



# THE CLIMATE INFORMATION PRIZE: TEKELEZA (STAGE 2)

FINAL EVALUATION REPORT

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#### **DISCLAIMER**

The views expressed in this report are those of the evaluators. They do not represent those of IMC or of any of the individuals and organisations referred to in the report.

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#### List of acronyms

CA Contribution Analysis

CIP Climate Information Prize

CIS Climate Information Service

CMD County Meteorological Directors

DFID Department for International Development

FGD Focus Group Discussion

I2I Ideas to Impact

KII Key Informant Interview

KMD Kenya Meteorological Department

PEQ Programme Evaluation Question

SEQ Sub-Evaluation Question

ToC Theory of Change

VFM Value for Money

WISER Weather and Climate Information and Services for Africa

#### **Glossary of terms**

Applicant: a solver that has submitted an application in response to the challenge description and criteria

Application: the written proposal and supporting material submitted by a solver to the person seeking the solution in response to the Prize problem statement

Beneficiaries: in this evaluation, reported by participants to have access to the climate information services established. Do not necessarily use them

Climate Adaptation: adjustments in response to actual or expected climate risks, reducing harm or taking advantage of opportunities<sup>1</sup>

Climate Information Service: a service to inform users on climate information and associated advice relevant to that user; in the case of the Climate Information Prize, this is the innovation sought

Climate information: data on temperature, rainfall, wind, soil moisture and ocean conditions, presented in formats that may be used by vulnerable communities in Kenya to make decisions relating to their livelihoods. It ranges from short term weather-related information over days and weeks, to information over longer time spans, as well as information on historical climate patterns<sup>2</sup>

Contribution analysis: a theory-based evaluation approach that provides a systematic way to arrive at credible causal claims about a programme's contribution to change; it involves developing and assessing evidence for a theory of change in order to explore a programme's contribution to observed outcomes

Innovation Prize: an Innovation Prize offers a reward (often financial, but sometimes additional support, such as technical assistance) to whoever can first or most effectively solve or meet a pre-defined challenge.

Innovation: the application of new or improved products, processes, technologies or services that are either new to the world (novel), new to a region or business (imitative) or new to the field of endeavour, that is, repurposed (adaptive)

Open innovation: the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively

Participant: in the context of this evaluation, people or organisations participating in one of the Prizes

Prize Team: The team brought together to support the design, organisation and management of the prize

Scaling: expanding or replicating an innovation in new areas, contexts, or among new stakeholders/ expanding the innovation itself to do or deliver more

Theory of change: in the context of innovation Prizes, this is a detailed description of how and why the Prize is expected to lead to the desired change in a given context

**Unintended consequences:** in the context of this evaluation, things that happen as a result of the Prize there were not planned. These can be positive or negative

Users: those beneficiaries verified by the verification agent as using the one of the climate information services at least once

Value for money: optimal returns on investments to achieve set objectives. Value for Money is high when there is an optimal balance between costs (resources in), productivity (processes leading to delivery of outputs) and the equitable achievement of outcomes

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<sup>&</sup>lt;sup>1</sup> From CIP Glossary of terms: http://www.climateinformationprize.org/wp-content/uploads/2015/11/Glossary-of-Terms.pdf

<sup>&</sup>lt;sup>2</sup> Ibid.

# Executive summary: Using prizes to help Kenyans cope with and adapt to climate change

The Climate Information Prize (CIP) sought to incentivise the development and implementation of innovative Climate Information Services (CISs) for the poorest and most vulnerable people in Kenya.

The CIP was delivered by IMC Worldwide and Cardno as the local implementing agent and was designed by the Institute of Development Studies.

It is one of a number of innovation prizes under <u>Ideas to Impact</u> (I2I) - a UK Department for International Development (DFID)-funded programme. The programme was established to test the value of using innovation prizes to achieve international development outcomes, often to encourage people to act differently over months or years.

An innovation prize offers a reward to whoever can first or most effectively solve or meet a predefined challenge. Two key types of innovation prize include recognition and inducement prizes (see Table 1).

Table 1: Types of innovation prizes and prize effects. Source: Everett et al. (2011)

Prize type	Description
Recognition	Awarded for specific or general achievements made in advance of nominations for the prize being requested
Inducement	Define award criteria in advance to spur innovation towards a predefined goal

As the programme's evaluators, Itad is supporting I2I to understand if such prizes worked as intended, and when and where they could be useful as a funding mechanism for international development, compared to other forms of funding, such as grants.

If you just want to find out what happened when I2I tried using prizes in Kenya to help people cope with and adapt to the climate, then this summary is for you. If you want to know more about the prize and specific details of the evaluation, the introduction in Section 1 will direct you to where you need to look.

#### The challenge: Getting more Kenyans to use climate information

For many people, unexpected shifts in the weather are a topic of conversation. For communities in Kenya who depend on the weather for their livelihoods, changes in rainfall, humidity and temperature can have devastating consequences unless they are able to prepare for them in advance or to tackle them as and when they happen – without negative consequences. So, why aren't more poor and vulnerable people in Kenya using climate data to tackle the impact of climate change? I2I's research prior to designing the CIP uncovered several reasons:



I2I designed the CIP to incentivise people to come up with new ways to solve these demand and supply issues. The Prize was launched with two key aims:

- i. To drive the development of innovative CISs that can be accessed and used by poor and vulnerable individuals and households
- ii. To raise awareness of the importance of climate information for coping with, and adapting to, climate variability and change.

Box 1 summarises the three prizes delivered under CIP.

Box 1: Three prizes working towards one goal

#### The Climate Information Prize: three prizes working towards one goal

The Prize was launched as a two-stage innovation inducement prize. The first stage prize, Wazo ('idea'), encouraged people to come up with ideas for new services. It drew attention to the larger, second stage prize, Tekeleza ('implement'). On the day Wazo was awarded, Tekeleza was launched, seeking a fresh set of applications from and beyond Wazo participants. After applications were submitted, reviewed and accepted, Tekeleza gave participants 15 months to establish and run CISs that met the needs of poor and climate-vulnerable people in Kenya.

Between Tekeleza's launch and the start of the implementation period, I2I used a third prize, Tambua ('recognise'), to maintain interest and motivation. Tambua recognised the achievements of those people and organisations already making climate information accessible and usable in Kenya.

This evaluation focusses on Stage 2 of the CIP: the 'Tekeleza' or 'Climate Implementation Prize', to explore how this Prize has catalysed innovation and associated prize effects, in order to achieve development outcomes.

#### Tekeleza - did the "put it into practice" prize really work?

The Tekeleza Prize was successful in stimulating the development and implementation of a set of CISs. These included both 'imitative' and 'adaptive' innovations (see Box 2). They offer new avenues for people around Kenya to access climate information – a key enabler for building climate resilience among farmers.

We found that users of the innovations felt they were in a better position to plan for weather and climate events because of the services that were created or improved for the Tekeleza Prize. We also identified increased awareness of the value of climate information, among participants and beneficiaries, in particular.

That is not to say the Prize addressed all of the challenges identified in the design stage. For example, only a handful of participants used user-driven processes in their innovation design.

Box 2: I2I's definition of innovation

I2I defines innovations as new processes, technologies and services, or a blend all three, and includes those that are:

- Novel i.e. new to the world.
- Imitative i.e. new to the location or firm
- Adaptive i.e. new to the field of endeavour, or repurposed

While success up to prize award is evidenced, an expert assessment cast doubt on how financially sustainable many of the services are, despite intentions by participants to continue implementing beyond prize award.

#### Did participants identify solutions to the challenge?

#### The prize drove the development of a set of 'imitative' and 'adaptive' CISs

18 eligible submissions were made at the end of the Prize, representing a set of innovative CISs. We found that the prize inspired eight participants to create and launch new (i.e. imitative) CISs, five participants to adapt existing services and motivated a further five to build on their existing CIS activities (for example, reaching more partners, or further promoting their service). Of these 18 submissions, the judges shortlisted nine as finalists, of which seven were awarded a cash prize, ranging from \$35,000-\$200,000.

#### Only a handful of services were developed using user-driven processes

Although several entrants planned to design their services in collaboration with intended users, we found in practice that only five Tekeleza entrants were able to explain how they had consulted directly with communities to design their initiative. Two entrants observed the impact of this gap when they started implementing their innovations and addressed it by providing subsequent training to communities in how to use the services they had established.

## Participants were able to overcome the barriers they faced, despite limited solver support

We uncovered several barriers that affected participation and implementation, including initial limited access to climate information; challenges to stakeholder engagement, limited resources and technical skills, difficulties in delivering Prize requirements and a challenging climatic and political context. However, the success of the Prize overall indicates that, for this Prize, increased solver support was not a necessity for the Prize to work. Participants perceived the solver support that was provided to be valuable to their endeavours, and the majority of participants found ways to overcome the challenges they faced. They also noted several non-financial benefits to their organisation, including networking opportunities, exposure, expansion of their services, and improvement of their business models, among other things.

Nevertheless, eight participants discontinued their participation before the end of the Prize and some participants incurred organisational costs that were not later recovered. Stakeholders identified some further support that could be beneficial to supporting participants and strengthening the outcomes of the Prize. Suggestions included financial support, such as initial seed funding; increased stakeholder engagement and networking opportunities to support access to funding and data; and ongoing support for solvers during Prize process, such as regular workshops, reporting support, mentoring, to help participants improve their technical capacity.

#### Participants intend to continue implementing their initiatives

The majority of participants proposed a set of financial and non-financial sustainability strategies to support their continued CIS implementation. The evidence for financial sustainability at the time of submission was limited, however, we will explore the sustainability pathways and successes of the innovations through a subsequent sustainability assessment in late 2019.

#### How did the innovations benefit users?

#### While more people now have access to climate information, there is a gap in use

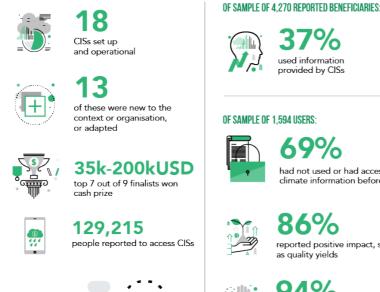
129,215 people were reported by service providers as having access to their CISs, yet the prize verification data revealed that a gap remained between access and use. 37% of the verification survey respondents said they had used one of the services, while the remaining 63% had not. Focus group respondents explained that lack of resources, interest or understanding of the importance of such information meant that some people who could access the CISs, choose not to. They suggested that the rate of uptake could increase over time with increasing awareness, and for services that are observed to be effective and useful by the target beneficiaries. The information that was accessed reached new ears – 69% of those who had used one of the services said they had not had access to this kind of information before 2016 (when Tekeleza launched).

#### The Tekeleza services reached poor and vulnerable communities

Many of the users can be considered particularly vulnerable to climate impacts – based on their household consumption level, gender, level of education and rural locality. Over 50% of the CIS users reported low or extremely low monthly household consumption. Looking across verification and prize participant data we found that 90% of users were based in rural areas, just under 50% were female and 40% of users were educated only to primary level. These findings indicate that the innovations are useful and useable to a range of users – not only those with a certain level of resources, autonomy or education.

#### CIP: What happened, who benefitted?

Figure 1: Key findings



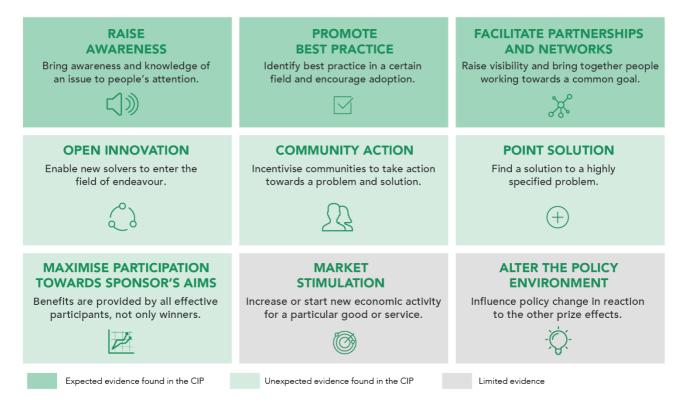


## Amongst the users, almost all feel better able to cope with and adapt to climate impacts

94% of users said they felt better prepared to deal with climate risks. 86% said they had experienced a positive change as a result of using one of the services, including high or quality yields, improved planning, feeling more knowledgeable and adopting good farming methods. The other users either reported no difference (13%) or a negative change (1%) in relation to their experience of using CISs.

#### Did the Prize trigger the intended prize effects?

Figure 2: Summary of I2I prize effects. Source: Adapted from Ward, J. and Dixon, C. (2015)



At the start of the programme, I2I identified a set of effects that can be triggered by the Prize (see Figure 2). The CIP was expected to raise awareness of the value of using climate information, to promote best practice CISs, and to stimulate partnerships and networks. We found that it also achieved some effects that were not specifically targeted by this prize, including open innovation, community action, point solution and maximising participation towards the sponsor's aims.

#### The prize succeeded in raising awareness of both the Prize and the Prize topic

Stakeholders in Kenya have increased awareness of the use of climate information to cope with, and adapt to, climate variability and change. The CIP process has contributed to this raised awareness. It was expected to do this at sector level, using key prize events as an opportunity to raise awareness. More significantly, however, the Prize has raised awareness of individual participants, and, in doing so, of stakeholders on the ground. Beneficiary, and, in some cases, local government, awareness has been raised by the prize participants themselves, through their implementation activities.

We found most evidence for raised awareness among prize participants, of whom 35% had been completely new to climate information before the prize. One finalist explained:

"...the prize...really enhanced our understanding of what climate change is and how climate information impacts people's lives."

#### The prize promoted best practice CISs

The prize promoted best practice for CISs among participants through 'solver support' activities and at sector-level through promoting participants' innovations at Prize events. The award ceremony and communications around that served to promote the 'best in class' by emphasising the winning solutions.

#### The prize facilitated and strengthened partnerships and networks

Participants reported developing partnerships with 95 different institutions throughout the course of the Prize in order to deliver their CISs. Since the award, some finalists have come together to form a consortium to support each other in pursuing their initiatives.

#### The prize also achieved a set of prize effects not explicitly targeted

The CIP also stimulated open innovation, community action, point solution and maximised participation towards the sponsor's aims.

#### Was Tekeleza better than using a grant?

Demonstrating where prizes can help solve development problems is only half of the story for I2I. When a donor is choosing from the funding modalities available to them, they will need to know if and how prizes offer value over a grant or payment-by-results contract, for example.

To investigate Value for Money (VFM), we first did an 'internal' assessment, measuring the VFM of the CIP against the original expectations for the Prize. We then did an 'external' assessment, comparing Tekeleza with a grant-funded technical assistance programme targeting similar outcomes: Phase 1 of the western Kenyan component of the Weather and Climate Information Services for Africa<sup>3</sup> (WISER) programme.

#### Tekeleza met or exceeded the Prize Team's expectations

Our assessment indicates that Tekeleza ran on time, and to budget, *meeting economy expectations*. Based on reported numbers of beneficiaries; use and adaptation outcomes; and evidence for awareness raising, it also *met effectiveness expectations*. The Prize *moderately exceeded efficiency expectations* thanks to triggering a greater number of participants, prizes, partnerships and citations than originally anticipated. We also found evidence that the Prize innovations *moderately exceeded equity expectations*, through their reach of low income, female, low education and rural users.

#### Tekeleza and WISER achieved similar VFM, but in different ways

The VFM analysis did not expose one mechanism as better than the other in achieving intended outcomes. Rather, the two programmes show potential complementarity by addressing the same problem in different ways. Our analysis highlights the different types of value and costs offered by the two programmes. Tekeleza came out as stronger in stimulating innovation and shows the value of a prize for engaging new actors, stimulating innovation and bringing in new ideas, approaches and partnerships to address a defined problem. But this came at a cost to prize participants in terms of time and money. Lack of access to financial resources was reported as a key barrier by participants and the Prize Team.

 $<sup>^3</sup>$  WISER is funded by UK aid and managed by the UK's Met Office  $\underline{\text{https://www.metoffice.gov.uk/about-us/what/working-with-other-organisations/international/projects/wiser/cis-kenya}$ 

WISER had higher administrative costs as a proportion of total costs but had more impact on traditional stakeholders - WISER built capacity and motivation among County Meteorological Directors, for example, and helped to shape a supportive policy environment by supporting the development of county level climate information plans.

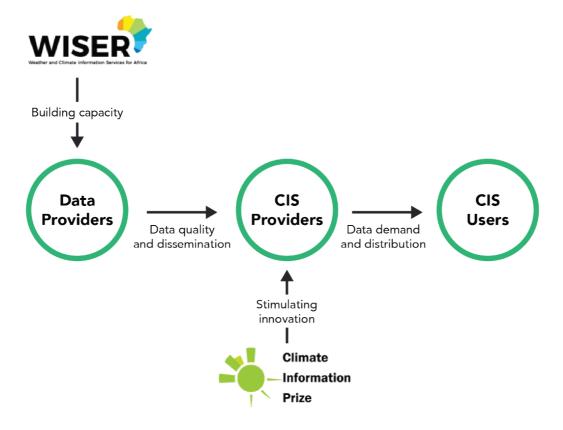
#### The two programmes reached a similar number of beneficiaries

Coincidentally, the two programmes reached a similar number of beneficiaries. However, for CIP the quality of beneficiary reporting varies among participants. For WISER, there is no data available on reach, in terms of equity, and limited evidence of use and impact, the focus being on building capacity at service delivery level.

## Both programmes have raised awareness about climate information, but in different ways.

Effectiveness in increasing awareness of climate information is similarly evident in both programmes, which raised awareness among multiple stakeholder groups. The CIP primarily raised awareness of participants, who also helped raise awareness of their beneficiaries and partners through their CIS activities. While WISER raised awareness of KMD staff and intermediaries, presumably more intensively due to the training and capacity building approach taken, CIP brought in new players, including from the private sector, to find solutions and engage new beneficiaries.

Figure 3: WISER and CIP achieved similar VfM in different, yet complementary, ways, working within the same system.



#### What can be learned from the Tekeleza prize?

At the end of this evaluation report, we propose a set of key recommendations, based on our findings, for consideration by DFID and other donors, Prize Managers and CIS providers, who may be interested in running prizes for development in similar contexts. Here, we share one key lesson for each stakeholder and hope that the questions inspire you to reflect on our findings.

**Prize Managers:** award ceremonies can stir up a lot of interest in a prize and its topic of focus, but this tends to reach a crescendo just at the point when the prize ends. **What activities could you plan for after** the awards are given out to make the most of all the "buzz" generated?

**Donors:** while it may keep prize programme costs lower, there are VFM risks to providing minimal support to solvers during and after the prize. Some of the people we spoke to struggled to participate in Tekeleza due to, for example, lack of access to finance, limited technical skills, and difficulties with stakeholder engagement. **Could you connect a prize to other programmes in your portfolio to give local solvers the technical and financial support they need to participate more effectively?** 

CIS providers: few Tekeleza participants were able to explain how they involved target users in CIS design and development. In some cases, participants then had to provide additional training to help people use their services. How could you bring target users into the design and development process? Are there other service providers you could exchange your learning with so that you all improve your chances of success?

#### What more can we learn about Tekeleza?

Typically, innovation prizes are evaluated shortly after the awards are made, but this only tells us what the prize achieved to that point. To get a better sense of the true value of prizes for development, and especially in the case of the CIP, where eight of the services were start-ups, it is worth going back to see what happened to the Tekeleza participants.

We are keen to see if any participants continued implementing their CISs after the prize award, and if they were able to find a way to make them financially sustainable. We will be exploring the sustainability of CIP nine months after the Prize was awarded and sharing our findings in a short follow-up report.

#### **Section 1: The Tekeleza prize evaluation**

#### Introduction to the Tekeleza evaluation

The Climate Information Prize (CIP) was launched in Kenya in 2015 as a multi-stage innovation inducement prize aiming to promote the design and implementation of demand-led climate information services (CISs), and to raise awareness of the importance of climate information for coping with and adapting to climate variability and change. The CIP is one of a set of prizes being implemented under the UK Department for International Development's (DFIDs) Ideas to Impact (I2I) programme, which seeks to induce innovative solutions to development challenges in Climate Change Adaptation, Energy Access, and Water, Sanitation and Hygiene (WASH); and, in doing so, to test, research and learn about the use of innovation prizes for development.<sup>1</sup>

As the Evaluation and Learning Partner for I2I, Itad are supporting this learning by delivering a set of evaluations across the prizes. The evaluations are designed to explore the process, outputs and outcomes of each prize, to determine whether innovation prizes are suitable for addressing complex development problems. As part of the Learning component of the programme, we will bring the evaluation findings together through a series of learning papers that draw across the evaluations to provide insight into the value and use of innovation prizes for development.

I2I delivers two key types of innovation prize – recognition and inducement prizes (see Table 2). The CIP was a two-stage inducement prize, that aimed to stimulate ideation in the first stage; and induce implementation of those ideas in the second stage – 'Tekeleza' – prize. It included a recognition prize between these two stages, to further motivate potential solvers to participate in the Tekeleza prize.

Prize type	Description
Recognition	Awarded for specific or general achievements made in advance of nominations for the prize being requested
Inducement	Define award criteria in advance to spur innovation towards a predefined goal

I2I has identified a set of nine prize effects that prizes have the potential to achieve. These include raising awareness, promoting best practice, facilitating and strengthening partnerships and networks, maximising participation towards the sponsor's aims, community action, point solution, open innovation, market stimulation and altering the policy environment (see Section 5). We use these effects to further distinguish between I2I's prizes by identifying the specific effects they are expected to cause, in order for the prize to achieve its objectives. For the CIP, these prize effects are raising awareness, promote best practice, and facilitate and strengthen partnerships and networks.

This CIP evaluation is, relatively, one of the larger of the evaluations under I2I.<sup>4</sup> Focussing on the Stage 2 implementation Prize (Tekeleza), it takes a deep dive into the outcomes observed under the Prize to respond to a set of programme-level evaluation questions set by DFID (detailed in Section 3.2). The evaluation explores the story of the CIP, the observed prize effects, the potential for sustainability, the Prize's Value for Money (VFM), unintended consequences and solver support.

<sup>&</sup>lt;sup>4</sup> While none of the I2I evaluations are large as such, the CIP evaluation is lent a relatively greater allocation of resources than the other evaluations under I2I, with approximately 125 days of the Evaluation Team's time allocated to the Stage 2 evaluation. By contrast, approximately 100 days are allocated to the Sanitation Challenge for Ghana (SC4G), 90 days to Adaptation at Scale (A@S), 85 days to Dreampipe (DP) and 20 days each to the Global Light and Energy Access Partnership (LEAP) prize and Off-grid Cold Chain Challenge (OGCCC).

In considering prize effects, we focus particularly on raised awareness, as identified by DFID and the Prize Team as the key intended prize effect for this prize. However, we also note evidence against the other eight prize effects identified under I2I. We will explore the sustainability of the CIP innovations and effects ex-post, through a subsequent sustainability assessment in September 2019, which will be delivered in a separate report.

This evaluation report documents the details of the Prize (Section 2), the evaluation approach (Section 3), findings (Sections 4-9), conclusions (Section 10, lessons (Section 11) and recommendations (Section 12). The primary audience for this report is DFID, the CIP Prize Team and our IMC-led consortium partners; it may also be of interest to the prize participants and wider communities of practice around innovation, climate and development.

#### Section 2: Background to the Prize

#### 2.1 The design and development of the Climate Information Prize

The CIP was developed in response to the realisation that an increasing need for climate information to respond to climate impacts exists alongside a disconnect between the supply and demand of climate information and associated services (IDS, 2014).

Climate information is defined by I2I as "Any information on temperature, rainfall, wind, soil moisture and humidity, whether obtained from local or scientific sources". People who are vulnerable to the impacts of climate change can use climate information to make decisions about how to tackle likely upcoming climate risks. However, to do this, they need to be able to access, understand and use the climate information generated by climate data providers. During I2I's design phase, the Prize Team observed that, despite increasing availability of climate information, it often does not reach the poorest and most vulnerable households in useable ways (IMC, 2016). The Prize was designed to stimulate innovative CISs that would bridge the gap in supply and demand, to support climate vulnerable people in using climate information to improve their livelihoods, as well as cope with, and adapt to, climate variability and change.

Kenya was selected for the CIP due to its high vulnerability to climate change and variability, along with a considerable amount of relevant activity in the country, a large community of small and medium-sized entrepreneurs, and a conducive policy environment.<sup>5,iii</sup> In particular, the Prize Team deemed the latter two characteristics to be important for the Prize to be successful. Reflecting after the Prize, I2I's Prize Expert has highlighted how some of these contextual aspects may have influenced the success of the CIP (see Annex 1).

Targeted at private sector and non-governmental participants, the CIP encouraged prize participants to develop and implement innovations that enabled access and use of climate information for poor and vulnerable groups. Its ambition was to enable learning processes for long-term improvements in CISs for the poorest and most vulnerable, primarily in Kenya, but also with the potential to scale out to other countries and contexts.

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<sup>&</sup>lt;sup>5</sup> E.g. Kenya's National Climate Change Action Plan (2013–2017) emphasises the need for increased use and uptake of climate information.

#### 2.2 Problem statement

The CIP problem statement reflects the challenges related to both supply and demand of CISs in Kenya, as follows:

- Demand side: there is evidence of a poorly articulated or unmet need for CISs in Kenya; this
  reduces the ability of poor and vulnerable communities to anticipate, adapt to or avoid the
  negative impacts of climate change
- **Supply side:** there are barriers to accessing appropriate climate data, including: i. data generation; ii. access to existing data.

#### 2.3 Prize aim

The aim of the CIP was to strengthen the adaptive capacity of poor and vulnerable groups in Kenya through two interrelated goals:

- To drive the development of innovative CISs that can be accessed and used by poor and vulnerable individuals and households
- To raise awareness of the importance of climate information for coping with, and adapting to, climate variability and change.

#### 2.4 Prize mechanism

The CIP was divided into three sets of prizes, intended to stimulate concepts for, interest in and implementation of CISs:

'Ideation' – Climate Ideas Prize (Wazo Prize): this was the first stage prize. It was designed to stimulate interest in climate information and services, encourage different ways of working in designing appropriate solutions and incentivise the formation of partnerships with communities who may not normally benefit from such services

'Recognition' – Climate Innovation Prize (Tambua Prize): this smaller prize was designed to: i. maintain and stimulate interest in climate information in Kenya; ii. sustain interest in the second stage CIP and; iii. identify and highlight existing innovations and enable network and partnership building

'Inducement' – Climate Implementation Prize (Tekeleza Prize): this second stage prize was designed to stimulate innovations that enable access to and use of climate information and associated services that articulate and respond directly to the needs of poor and vulnerable individuals and households.

#### 2.5 Prize timeline

The CIP ran from September 2015 to November 2018. Figure 4 indicates the timeline of key events in the Prize process.

Figure 4: Prize timeline



#### 2.6 Reporting, judging and verification

Participants of the Prize were required to submit a report to the Prize Team each quarter, between February and July 2018. The purpose of this was to monitor and report on their progress in implementing their solution. 18 participants went on to complete the Prize process and submitted a final report in July 2018.

The final submissions made under the Tekeleza Prize went through a three-step judging and verification process that led to the Prize award. The submissions were first subject to an eligibility check by the Prize Team to confirm full completion of the forms. The eligible submissions were then verified and judged. The verification process included independent verification by three different agents, 6 respectively delivering a verification of the CIS users, the CIS quality and the financial sustainability. Each agent wrote a report to share with the Prize Team.

Simultaneously, the submissions were shared with a set of 15 judges who judged their submission online. Each submission was judged by at least five of the judges, according to a set of weighted judging criteria (see Annex 2). The Prize Team shortlisted the submissions according to their final scores. The nine solutions that received a score of over 60% overall was shortlisted as a finalist.

The final step was the live judging, in which the nine finalists presented their innovation to a set of four judges. The judges also had access to the participants submissions and verification reports for their reference. Following the presentations, the four live judges engaged in a discussion to identify the winners and runners up of the Prize, who would receive a cash award. This process was facilitated by the Prize Team.

<sup>&</sup>lt;sup>6</sup> The three independent verification agents included one organisation and two individuals selected based on their expertise following a tendering process by the Prize Team.

<sup>&</sup>lt;sup>7</sup> This included four experts in the field of climate change and climate information, including a Professor in Climate Adaptation, an Independent Consultant, a representative of the Kenya Climate Change Working Group and a Director at the Kenya Meteorological Department.

#### 2.7 Prize award

Of the nine finalists, a set of seven cash awards were awarded to successful participants. The first-place winner was awarded \$200,000; second and third place, \$75,000 each; fourth place, \$50,000; and three runners up were awarded \$35,000 each. The awarded prize projects or innovations are listed in Table 3.8

Table 3: Awarded prize projects/innovations

Award	Organisation and project	Description
First prize	Farmers Pride: Last mile connectivity through agrodealer franchise model	Integrates climate information into existing agriculture solutions distribution enterprise, disseminating climate information through SMS and face-to-face training of farmers on interpretation and response.
Second prize	Ukulima Tech Ltd: Climate Smart Agriculture	Provides farmers with contextualised climate information integrated with advisories to support agricultural production systems through SMS. Sells climate-smart agricultural products and provides face-to-face training on agricultural practices.
Third prize	SmartAg Kenya: SmartAg	Uses web and mobile technologies that provide real-time weather and agronomic data to extension officers and farmers to improve precision farming and allow mitigation of climate risks. Provides a monitoring tool that incorporates weather and agronomy in computing the growth stage of a crop and advises on disease and pests depending on growth stage and prevailing weather.
Fourth prize	Akigakin-Akamu Infoserve Community Based Organisation: Smart Weather Community (m-SWECO)	Provides weather forecasts and advisories to hard-to-reach communities, via SMS and face-to-face, to support risk disaster mitigation and resilience building.
Runner up	African Technology Policy Studies Network (ATPS): Improving Agricultural Productivity and Climate Change Resilience Using LandInfo Mobile App	A mobile app that enables access to climatic and soil information for informed decision making on agricultural production, processing, marketing and utilisation.
Runner up	COSDEP Self Help Group: Climate Information and Awareness to Smallholder Farmers	Builds capacity, provides weather information and agro-advisory services through a mobile phone app, SMS and radio provision; working face-to-face with community volunteers to link information users to data providers.
Runner up	Sustainable Organic Farming and Development Initiatives (SOFDI): Adapting to Climate Change through Farmer Capacity Building	Face-to-face training of farmers in sustainable agriculture, and subsequent dissemination of weather forecasts face to face and through SMS. Supported by teaching weather forecast interpretation in local schools.

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<sup>&</sup>lt;sup>8</sup> See Annex 9 for full list and further details of final submissions

#### **Section 3: Evaluation Approach**

In this section we provide the background and headline methodology for the evaluation. Further detail is provided in Annex 4.

#### 3.1 Focus of the evaluation

This evaluation focusses on Stage 2 of the CIP: the 'Tekeleza', or 'Climate Implementation Prize'. Its purpose is to provide evidence from the CIP to report on the overall success of the Prize against its theory of change (ToC), and to help to answer a set of Programme Evaluation Questions (PEQs), agreed with DFID.<sup>9</sup>

The focus of this Stage 2 evaluation was determined according to the Stage 1 findings, the programme's mid-term review and discussions with DFID and the programme team. Together, we identified the following priorities for the evaluation:

- 1. Prize effects, with a focus on raising awareness
- 2. The **sustainability of prizes**, in terms of the continued implementation and benefits of associated innovations and evidence of prize effects
- 3. The additional **benefits of using a prize modality** as opposed to other funding modalities to achieve development aims
- 4. The unintended consequences of the prize
- 5. The likely necessity or value of **solver support** to ensure the Prize reaches its aims.

This evaluation explores these elements of the Prize in the context of the CIP 'story', as recorded through participant reports and ongoing communications with the Prize Team.

<sup>&</sup>lt;sup>9</sup> The Stage 1 Wazo Prize, and the Tambua Prize are considered in the VFM Section (Section 7). Tambua is not evaluated directly due to its purpose to maintain engagement rather than to produce outcomes, and its implementation ahead of the Stage 2 implementation period. The Stage 1 'Wazo' or 'ideation' Prize, was delivered as an interim evaluation for an internal audience following the Wazo award in April 2016 (see Annex 3 for the headline findings).

#### 3.2 Evaluation Questions

The evaluation will explore the overall success of the prize against the ToC (see Section 3.3), responding to an 'overarching question', using data collected from the prize's monitoring and verification activities. At programme level, five evaluation questions have been identified in response to the priorities outlined in Section 3.1. We have responded to these PEQs through a set of Sub-Evaluation Questions (SEQs), in order to both deliver a prize-level evaluation and to contribute to the programme-level learning that draws from across the prizes. The PEQs and SEQs are provided in Table 4.

Table 4: Evaluation questions

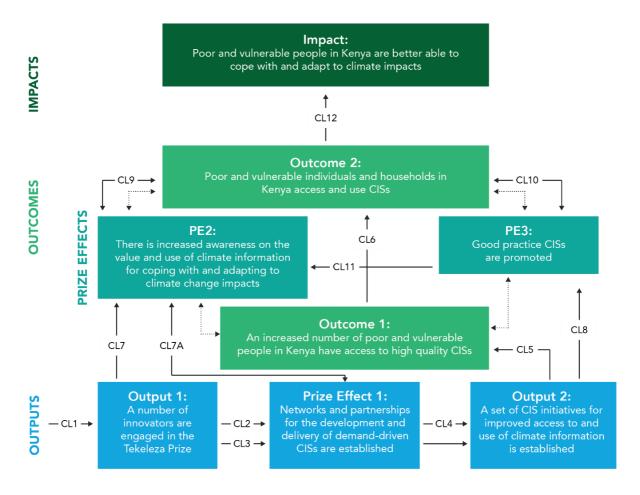
Programme evaluation questions	Sub-evaluation questions
Overarching question: Did the Prize achieve what it set out to achieve?	Overview question: To what extent did the Prize drive the development of innovative CISs that can be accessed and used by poor and vulnerable individuals and households?
<b>PEQ1:</b> How effective has the Prize been at catalysing innovation on the focus problem?	<b>SEQ1:</b> To what extent has awareness of the importance (value and benefit) of using climate information to cope with, and adapt to, climate variability and change, been raised among stakeholders as a result of the Prize process?
<b>PEQ2:</b> To what extent has the effect of the Prize been sustained beyond the point of award?	<b>SEQ2:</b> To what extent have i. CIS innovations; ii. awareness of the value and benefits of climate information, been sustained beyond end of stage 2? [i.e. 9 months]
<b>PEQ3:</b> Does the Prize offer VFM when compared to alternative funding modalities?	SEQ3.1: What is the VFM of the CIP as compared to its original expectations? SEQ3.2: What is the VFM of the CIP compared to WISER (West Kenya component)?
PEQ4: Were there any unintended consequences of the Prize and did they outweigh the benefits?	<b>SEQ4:</b> Which positive or negative unintended consequences has the Prize stimulated? Did the negative consequences outweigh the benefits of the Prize for i. solvers; ii. beneficiaries/user communities?
<b>PEQ5:</b> Is solver support necessary for prizes to be successful?	SEQ5: What is the potential of solver support for reducing barriers to solvers' i. participation in stage 2; ii. delivery of effective CISs?  5.1 If solver support was delivered to prize participants, how did solver support activities reduce barriers to improve solver ability to i. participate in stage 2; ii. deliver effective CISs?  5.2 If solver support was not delivered to prize participants, what solver support activities could have reduced barriers to improve solver ability to i. participate in stage 2; ii. deliver effective CISs?

#### 3.3 Theory of change

The evaluation team worked with the Prize team to develop a ToC for the Tekeleza Prize. This was reviewed and updated periodically throughout the prize process, including after Stage 1, ahead of the evaluation and subsequently to the evaluation. As accurately as possible, this ToC reflects the design of the Prize and the outcomes anticipated. The overview evaluation question seeks to respond to the outputs, outcomes and Prize effects identified in the ToC. The summary ToC is presented in Figure 5, and the full version is shared in Annex 4.

The summary ToC includes outputs in orange, outcomes in yellow, prize effects in dark green and impacts in light green. It moves from outputs (1 to 2) through to outcomes (1 to 2) and finally the expected impact. The Prize effects are less linear, both being stimulated by the process of change, and also driving ongoing change at output and outcome level. The causal links between each output/outcome/prize effect/impact further detail the change process. See the full version of the ToC in Annex 4 for details of the activities, mechanisms and assumptions under each causal link. The narrative behind the ToC is discussed in more detail under PEQ1.

Figure 5: The CIP Tekeleza theory of change



Note: CL = causal link

#### 3.4 Methods used

This evaluation used a theory-based, mixed-methods approach, underpinned by a ToC and employing a contribution analysis and VFM assessment. A summary of the approach for each question is provided in Table 5, and more detail provided in Annex 5.

Table 5: Summary of methods by evaluation question

Evaluation question	Approach	Data sources
Overarching question	Explore secondary data to tell the story of the prize against the <b>theory of change</b> i.e. did the prize achieve what it set out to achieve?	Secondary data: participant submissions, judging and verification reports, Prize Team documentation
SEQ1 'Prize effect'	Contribution analysis: identify the extent to which the Prize raised awareness and test using primary and secondary data sources	Secondary data: participant submissions, judging and verification reports, Prize Team documentation Primary data: KIIs and FGDs
SEQ2 'Sustainability'	Explore through <b>sustainability plans</b> during main evaluation phase, and then follow up after 9 months. Ex-post approach to be finalised after the main evaluation, exploring evidence for sustainability of CISs and associated awareness.	Secondary data: participant submissions, judging and verification reports Primary data: KIIs, FGDs, E- survey
SEQ3 'VFM'	VFM analysis based on '4 E's' to understand 'internal' and 'external' VFM. The comparator selected for the external VFM is the western Kenyan component of DFID's Weather and Climate Information Services for Africa (WISER)	Secondary data: participant submissions, judging and verification reports, Prize Team documentation Primary data: KIIs, FGDs, E- survey, email correspondence
SEQ4 'Unintended consequences'	Identify unintended consequences and explore data to understand how and why they came about	Secondary data: participant submissions, judging and verification reports Primary data: KIIs, FGDs
SEQ5 'Solver support'	Explore barriers for participants and impact of solver support in overcoming these	Secondary data: participant submissions, judging and verification reports, Prize Team documentation Primary data: KIIs, FGDs

#### 3.5 Data collection and analysis

We drew from both primary and secondary data, relying largely on qualitative sources, and quantifying across, where possible, in our analysis. We reviewed participant entries and submissions, judges scoring and commentary, and the verification agent reports; and spoke to total of 35 people and five beneficiary focus groups. A summary of the key data sources used and the timeline of their production is provided in Table 6 and further detailed in Annex 5. The sources used to develop findings are referenced in endnotes throughout the report, with interviews referenced according their unique identification number (e.g. PT 01).

Table 6: Data sources used for the evaluation

Data source	Time produced	Produced/ collected by	Number/ frequency	Content
CIP quarterly reports	Throughout prize process	Cardno and IMC	Quarterly	Update on Prize Team activities, CIS initiatives and logframe progress in each quarter
Participants' final reports	Prize close: 31st July 2018	Prize participants	18 completed reports (1 incomplete)	Description of initiative, approach, beneficiaries, achievements, etc.
Online judging scores	August 2018	Online judges	Set of five scores for each of the 18 submissions	Scores and comments against judging criteria
User verification reports	August – October 2018	User verification agent	18 reports based on CISs of 18 eligible submissions	Includes responses on user demographics and use of CIS from 1,594 beneficiaries across 18 CISs. # of respondent for each CIS varies from n=2 to n= 837
Quality test reports	August – October 2018	Quality verification agent	18 reports based on CISs of 18 eligible submissions	Assessment of usability, accuracy and practicality of the CISs, based on 18 interviews and 13 samples.
Financial verification reports	August – October 2018	Financial verification agent	18 reports based on 18 eligible submissions	Assessment of financial reporting and sustainability based on participant reports and cashflow statements.
WISER documentation	n/a	WISER Team	n/a	Data on WISER Western Kenyan component
Key Informant Interviews	Post-Award: 29 <sup>th</sup> November 2018 – January 2019	Evaluation Team	35 in total	KIIs with 35 people, including Prize Team, participants, judges, verification agents and WISER Team. Questions in Annex 8.
Focus Group Discussions (FGDs)	Post-Award: December 2018	Evaluation Team	5 FGDs	FGDs with beneficiaries of five CISs. Questions in Annex 8.
E-survey	Post award: January 2019	Evaluation Team	10 completed surveys	Resource implications of participating in the Prize.

We coded all interview and focus group transcripts using a coding frame organised around the PEQs. We used this as a tool to extract and triangulate information from different sources in order to develop findings.

#### 3.6 Strength of evidence

We refer to the strength of evidence throughout the report using the terminology defined in Table 7, to denote the level of confidence we have in the evidence base for a particular finding. These strength of evidence terms should be used to guide understanding of the findings presented. The evidence base at outcome and impact level for users of initiatives is largely limited. This is a consequence of limited evaluation resources to reach user level, and limited reliability of the data available i.e. the user verification data and the self-reported data from participants (see notes on secondary data in Annex 5). We note limitations and biases to the evaluation, which have further implications for the strength of evidence, in Annex 5.

Table 7: Strength of evidence guide

Strong	Moderate	Limited	No evidence
Evidence based on multiple and diverse stakeholders and source types	Evidence from multiple sources/stakeholders but with limited diversity OR evidence from diverse but a limited number of sources/ stakeholders	Evidence from one source/stakeholder group with limited numbers of stakeholders in agreement	No evidence found and/or contradicting position among stakeholders

#### **Section 4: Findings**

## Overarching question: Did the Prize achieve what it set out to achieve?

# To what extent did the Prize drive the development of innovative CISs that can be accessed and used by poor and vulnerable individuals and households?

The prize drove the development of a set of 'imitative' and 'adaptive' CISs. Taken together, they have been used by over a third of the people who have access to them. Many of these users can be considered particularly vulnerable to climate impacts – based on their household consumption level, gender, level of education and rural locality.

#### Key findings:

- The Prize drove the development of CISs by 27 participants, of which 18 completed final submissions and seven received cash awards.
- It stimulated 13 new or modified CISs; and motivated action towards greater outreach among five existing CISs.
- The solutions were impactful for those who used them 37% (n=1,594) of beneficiaries surveyed reported having used one of the CISs; 86% of those users experienced a positive change; 94% (n=1,497) of those users felt better prepared to deal with climate risks.
- 63% of beneficiaries did not use the CISs, however focus group respondents indicate the rate of uptake increases for services that are observed to be effective and useful.
- The prize CISs were accessible to poor and vulnerable people in Kenya. Approximately 50% of those who have used one of the CISs have a low monthly household consumption of under KSH 10,000 or approximately USD 100; approximately 50% are female; 40% reported a low level of education.
- Six of the CISs were assessed to be of quality during the quality verification process. These
  represent innovations from two winners, two runners up, one non-winning finalist and one nonfinalist.

#### 4.1 The story of the Prize

Findings against the key components of the ToC tell the story of the Prize (see Table 8), revealing the process that led to the final submissions and awards. They reveal the extent to which the Prize has achieved its primary aim i.e. to catalyse innovation in demand driven CISs that are accessed and used by poor and vulnerable people.

We note an important distinction between *beneficiaries* of the CISs and *users* of the CISs. Beneficiaries are those reported by participants who essentially have access to the CISs; while users are those verified by the verification agent as those among their sample of reported beneficiaries who actually used the CISs. This distinction should be considered when reading the findings.

Table 8: Overview of the story of the Prize against its ToC

Point in ToC	Summary finding
Output 1: A number of innovators are engaged in the Tekeleza Prize	Of 40 entries, 27 participants were accepted to participate in the Tekeleza Prize and attended the orientation workshop. At the end of the Prize period, 19 final submissions were made, with 18 of these assessed to be eligible for judging and verification. These 18 represented eight businesses, six community-based organisations, three non-governmental organisations (NGOs) and one international NGO.
Output 2: A set of CIS initiatives for improved access to and use of climate information is established	18 CISs were established and operational by the end of the Prize process, eight of which were new, five were modified, and five were existing. Of these, seven were awarded a cash prize.
Outcome 1: An increased number of poor and vulnerable people in Kenya have access to high quality CISs	Participants report 129,215 beneficiaries of their CIS initiatives. 91,534 of these are verifiable based on participants reports and user explanation letters.
	Participants report 70% of these beneficiaries to have low (38%) or extremely low (32%) monthly household consumption. <sup>10</sup>
	They report 47% female beneficiaries.
Outcome 2: Poor and vulnerable individuals and households in Kenya access and use CISs	37% (n=1,594) of beneficiaries contacted by the verification agent reported having used information provided by one of the CISs. Of these, 69% had not used or had access to this kind of information before 2016.
	54% of these users reported low (28%) or extremely low (26%) household consumption p/month.
	49% of these users were female; 40% are educated up to primary level only - 38% educated up to primary level, 2% with no education.
Impact: Poor and vulnerable people in Kenya are better able to cope with and adapt to climate impacts	86% of users reported experiencing a positive change as a result of using the CISs, and 94% users reported feeling better prepared to deal with climate risks.
Prize Effect 1: Networks and partnerships for the development and delivery of demand-driven CISs are established	Participants reported partnerships with 95 institutions, including the Kenya Meteorological Department (KMD) and the Ministry of Agriculture at county level. Two participants submitted seven memorandums of understanding. There are emerging efforts by some finalists to form a consortium and one of the winners has recently updated the Prize Team with news of two new partnerships to support him in reaching more users.

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 $<sup>^{10}</sup>$  Based on reporting from 10 participants, and on categorisation of users with under 5,000 KSH monthly household consumption as extreme poor, and 7,501-10,000 KSH as poor.

Prize Effect 2: There is increased awareness on the value and use of climate information for coping with and adapting to climate change impacts	The Prize has raised awareness on climate information, primarily among participants and users (see SEQ1).
Prize Effect 3: Good practice CISs are promoted	The CIP has been cited in 15 external articles. These were press releases about the Prize and associated activities. The award was broadcast on national TV and radio, and on twitter – 25 tweets are estimated to have reached 803,896 people.

These findings indicate that the prize was successful in stimulating action to deliver a set of CISs that were accessible to poor and vulnerable<sup>11</sup> people in Kenya. Of the 18 final participants, nine were selected as finalists and seven were awarded cash Prizes, having been judged to have delivered effective solutions to the Prize problem. Prizes were awarded to innovations that were new, modified due to the Prize and existing previously to the Prize (see Section 4.2.1).

Participants reported a total of 129,215 beneficiaries having access to their CISs. However, there was a disparity in reporting standards and approach among participants. Along with their final submissions, they submitted a list of contacts for their beneficiaries, totalling 24,131 contacts. Those who reported more beneficiaries than contacts they provided were asked to submit a user explanation letter. We were able to verify 91,534 beneficiaries based on user explanation letters and beneficiary contacts details. 77% (18,619 of 24,131) of contacts provided were verified by the verification agent. Of a sample of 10,648, they reached 4,270 contacts, representing a response rate of 40%. This was due to wrong numbers, numbers being out of service, declines and lack of response from the remaining 60%.

The solutions were used by 37% (n=1,594) of the beneficiaries accessed through the user verification survey. They were impactful for those who used them, indicating that **participants were able to interpret**, **package and deliver climate information in a way that's useful to its users**, and therefore has potential to support their adaptive capacity. In the verification survey, 37% of beneficiaries reached reported having used one of the CISs; of those, 94% (n=1,497) feel better prepared to deal with climate risks and 86% have experienced a positive change after using the information. Positive outcomes reported by users included: high or quality yields (reported by 43% of users); better planning (23%); increased knowledge (14%); adoption of good farming methods (12%).

The survey indicates that 63% of beneficiaries reported by participants had not used the CISs introduced to them by the time of final submission. However, focus group discussions suggested that the rate of uptake is likely to increase over time with increasing awareness and for services that are observed to be effective and useful by the target beneficiaries. For the CIP innovations, focus group respondents gave some insight into why some beneficiaries did not use the CISs, explaining that lack of resources, interest or understanding of the importance of such information meant that some people who could access the CISs, choose not to. vii It is fair to expect that not all people introduced to a new information service and/or technology would take it up immediately. For example, in an evaluation of DFID research portals, 26% of people who reported being aware of SciDev.Net had never used it even though they were among the target audience (DFID, 2016). By comparison it was 15% with Google Scholar. While a higher unmet potential for use is indicated in the CIP verification data, focus group respondents also explained that people who are not currently accessing the CISs are becoming increasingly interested in the services as they observe the positive effects they are having, viii suggesting that use may increase with time.

<sup>&</sup>lt;sup>11</sup> Based on gender and education level – no useable age data available

The Prize was expected to encourage demand-led solutions that were developed through user-driven processes, to ensure the solutions delivered would be appropriate for the target users (IMC, 2016).<sup>12</sup>

There is limited evidence that the CISs were developed through direct consultation with communities. Across the innovations, community engagement is varied. Participants with existing community-based initiatives had been working with their target communities before participating in Prize activities and as such are *likely* to understand their needs, including ways of taking up and using information. 14 of 27 initial participants outlined a strategy for involving target users in the development of their initiative in their initial Prize entries.<sup>ix</sup> However, in subsequent interviews, just five participants explained how they had engaged communities in their design process.<sup>x</sup>

Verification agents indicated that the resulting CISs appeared to be supply-driven, explaining, for example, that those using web-based systems may not be suitable for the poorest and most vulnerable.xi Two participants discussed that they learnt along the way what worked for their community, and found they needed to provide training to ensure uptake of their new technology to encourage use.xii Such challenges pose a risk to the reach and sustainability of initiatives that are not able to engage a user base.

There is moderate evidence that the majority of people provided access and use of the CISs were poor and a large proportion could be considered particularly vulnerable, based on their gender, level of education and rural locality. Participants report a high number of poor beneficiaries i.e. 70% of beneficiaries to have low (38%) or extreme low (32%) monthly household consumption, <sup>13</sup> having access to their CISs; while the verification data indicates 54% users with low (28%) or extreme low (26%) household consumption per month. Based on this data, we could theorise that while poor people may have access to the CISs, they are less likely to use the information available. However, the reason for this is not clear and would require further exploration.

The data indicates that the CISs are reaching those who may be more vulnerable to climate impacts. Both participants and verification reports indicate a similar percentage of female beneficiaries and users, reporting 47% beneficiaries and 49% users. The verification data further indicates that 40% of users are educated up to primary level only – 38% educated up to primary level and 2% with no education; and that 90% live in rural locations and 10% live in urban locations. While the participants can target the poorest and most vulnerable people, you would also expect less poor and vulnerable people to use a service if it is useful, so a reaching figure of 100% poor and vulnerable users would not be expected here.

#### Comments on assumptions

We have recorded within the ToC how the assumptions within each causal link have held up against the evaluation evidence. **Most of the assumptions identified in the ToC were confirmed.** Some critical assumptions that were confirmed through the evaluation include:

Participants are able to access sufficient data to establish their initiatives: Though participants reported access to climate information as an initial barrier (see SEQ 5.1), they were able to overcome this throughout the course of the Prize. 16 of 18 final participants reported accessing data from the KMD, either through their website, radio service, or directly from county offices.xiii Participants also

<sup>&</sup>lt;sup>12</sup> i.e. in the Tekeleza Design Document in specifies: "The primary goal is to drive the development of a new approach to designing and providing climate information and services. The prize will encourage prize participants to find new ways of working and adopt new behaviours which include communities from the beginning to provide and enable access to, climate information and associated services that respond directly to the needs from these groups. The process of network building and focus on putting users in control, aims to contribute to more demand-led climate information services, tailored to user needs." (IMC, 2016: 6)

<sup>&</sup>lt;sup>13</sup> Though we recognise many more measures of poverty, the data we have available is on monthly household consumption. We do not have evidence on level of poverty beyond this.

reported a range of other providers that they received supplementary data from including the World Meteorological Organisation, Kenya's National Drought management Authority, WISER and aWhere.

- Communities are interested, motivated and available to engage; are open to new ways of accessing climate information and acting on it; trust the new source of climate information provided by the CISs: 37% of beneficiaries who responded to the user verification survey reported using the CISs developed by participants. Focus group respondents suggested that the rate of uptake is likely to increase over time with increasing awareness and for services that are observed to be effective and useful by the target beneficiaries.
- Information provided is valuable and effective and more valuable and effective than previously available information; people are able to act on the information provided; users use information in a way which enhances their adaptive capacity: in the user verification survey, 94% of users reported feeling better prepared to deal with climate risks and 86% reported experiencing a positive change as a result of using the information. Positive outcomes reported by users included: high or quality yields (reported by 43% of users); better planning (23%); increased knowledge (14%); adoption of good farming methods (12%).xiv
- At least one CIS is verified and judged to be eligible for the award: seven CISs were awarded a cash prize

There are some exceptions to this, where the assumption was not evidenced. These are discussed throughout the report as relevant. They include:

- Innovative individuals and organisations are able to overcome the risk (transaction and opportunity costs) of taking part in the prize: we did not find that they were able to overcome this risk (see SEQ4), however, as they managed to complete the prize, we have amended this assumption to: Innovative individuals and organisations are willing to take on the risk (transaction and opportunity costs) of participating in the prize.
- Investors identify potential returns on their investment; investors invest in CISs; stakeholders with potential to support participant access to finance can be identified and engaged; investors acknowledge and absorb communications from the Prize Team and participants: these were not confirmed. There was little engagement or investment from private investors, but instead some donor funding and personal investment by participants (see SEQ3).
- Participants deliver high-quality, demand-driven CISs; CISs are designed in a way that works with local social institutions, and individuals' perceptions, cognition, beliefs, values and experiences: these were not confirmed for all of the CISs, but for a few.
- CISs have a viable business plan for self-funding and sustainability: this was not confirmed in the financial verification (see SEQ2).

#### 4.2 The Prize innovations

The Prize stimulated the development of CIS innovations among 27 initial participants. 19 final submissions were made, with 18 of these assessed to be eligible for judging and verification.

A CIS is a service to inform users on climate information and associated advice relevant to that user; in the case of the CIP, this is the innovation sought.

The CISs submitted under the Prize are summarised in Annex 9. All were varied in their approach. They offered climate information in the form of weather forecasts which could be weekly, monthly or seasonal weather forecasts, or combinations of those. Some, but not all CISs shared information that participants

downscaled or tailored from national-level data, to offer locally relevant interpretations. A number of the CISs coupled the forecasts with agricultural advisories on what and when to plant, and two of the winning innovations provided access to purchasable inputs to support agricultural activities.

We characterise these innovations by their innovation type, quality, communications approach and geographical reach, each discussed further in this sub-section.

#### 4.2.1 Innovation type

The Prize stimulated 13 'imitative' or 'adaptive' innovations to support access to and use of climate information; and motivated action towards greater outreach among five existing CISs.

121 defines innovations as:

"New processes, technologies and services, or a blend all three, and includes: new to the world (novel), new to a region or business (imitative) or new to the field of endeavour, that is, repurposed (adaptive)."

Of the 18 eligible submissions, eight represent new CISs – either climate information initiatives newly established due to the Prize; or existing initiatives that added a climate information component due to the Prize. The approach of offering climate information alongside advisory services is not *novel*, with programmes and services such as the Trans-African HydroMeteorological Observatory (TAHMO)<sup>14</sup>, WeFarm<sup>15</sup> and WISER<sup>16</sup> in operation in that region of Africa by the time of the Stage 1 Wazo launch. However, for these eight participants, the use of climate information was new to their organisation, and so in the context of I2I's definition, we can consider their innovations to be *imitative*.

The remaining CISs already existed, however five of these *modified* their climate information component to better fit the Prize. For example, two adapted their communications approach and three expanded their climate information component. Though not new to the field of endeavour, these can be considered repurposed or *adaptive* within that organisation.

The other five were existing climate information initiatives with no changes made, but associated participants reported being further motivated by the Prize to deliver their innovation. Of these, two reported that they continued due to the Prize and may otherwise have stopped, one reported using the Prize to share their idea more widely, and one reported being more aggressive in making government and funder connections due to the Prize. The fifth participant did not explain any changes in their approach as a result of the Prize. Based on I2I's definition of innovation, above, the Prize Team suggest that these initiatives can also be considered as *imitative* innovations, additional activities meaning that these existing CISs were likely to reach a new region or business.\*\*

Awards were won across these categories. The eight new initiatives include two winners and one runner up; the five modified initiatives include one winner and one runner up; and the five existing initiatives include one winner and one runner-up.

#### 4.2.2 Quality assessment

Six of the CISs were confidently assessed to be of quality during the quality verification process, despite seven being awarded. These represent innovations from two winners, two runners-up, one non-winning finalist and one non-finalist.

15 https://wefarm.co/

<sup>14</sup> https://tahmo.org/

<sup>&</sup>lt;sup>16</sup> https://www.metoffice.gov.uk/about-us/what/working-with-other-organisations/international/projects/wiser

The quality of each CIS was assessed during the verification process. The quality verification agent accessed samples of the CISs and interviewed the corresponding participant, to assess whether each was useable, accurate and practical to use.<sup>17</sup> Table 9 shows which of these three parameters each CIS was assessed to be positive against.

Table 9: Quality verification of each CIS, according to usability, accuracy and practicality

Participant	Winner	Winner	Winner	Winner	Runner up	Runner up	Runner up	Finalist	Finalist	Non-finalist								
Useable																		
Accurate																		
Practical																		

The quality verification reports confirm the quality of six of the innovations against all three parameters used by the verification agent; these six were assessed to be useable, <sup>18</sup> to provide accurate information and to provide information that could be practically applied. They included innovations from two winners, two runners-up, one non-winning finalist and one non-finalist. While other participants – including the two remaining winners, one runner up, one finalist and one non-finalist – were assessed positively against one or two parameters, seven non-finalists were not assessed positively against any of them.

Table 9 indicates that two winners and one of the runners up received cash awards, despite not having been comprehensively assessed to have developed quality CISs. One issue in the live judging process was that the judges received the participant and verification reports for the nine finalists just one day ahead of live judging due to some last-minute changes.\*\*vi\* However, the live judges were provided a range of evidence, including the final submission and two further verification reports, comments and scores from the online judges, and each finalists' presentation; and considered this against a set of criteria beyond only the quality of the CIS.\*\*vii\* As such, this quality assessment was one in a range of evidence that led to their final decision.

In the **user verification** survey, users surveyed by telephone or face-to-face were asked for their opinion on the CIS's usability and accuracy, and on their overall satisfaction with the CIS. Over 80% of respondents engaged for each CIS reported positively against these three indicators. However, the number of respondents per CIS ranges from two respondents for one CIS, to 837 respondents for another – so we are not able to rely on these results across all innovations.

#### 4.2.3 Communications approach

The innovations used a range of communications approaches, 16 of the 18 eligible submissions using combinations of two or more communications types (see Annex 9). The majority (n=15) of innovations use SMS to disseminate climate information, relating to both weather and agricultural advisories (see Figure 6). In many innovations (n=14) this is accompanied by face-to-face support, training and communications.

<sup>&</sup>lt;sup>17</sup> The data must be used with caution. For the user verification, varying numbers of users per CIS were reached by the survey. This is due to both varying numbers of contacts provided by participants and limited responses to the survey across the different CISs. In the quality verification, three non-finalists did not share samples of their CISs and one non-finalist's CIS was not functional at the time of verification. Similarly, the quality test reports indicate that three of the mobile applications reported by participants were not functional at the time of verification.

<sup>&</sup>lt;sup>18</sup> Based on verification agent assessment of ease of use, user friendliness and ease of interpretation by non-climate experts.

Some of the CISs offer information through mobile phone applications (n=6), websites (n=4) or radio (n=4). Mobile phone applications are still in development by participants using that approach.

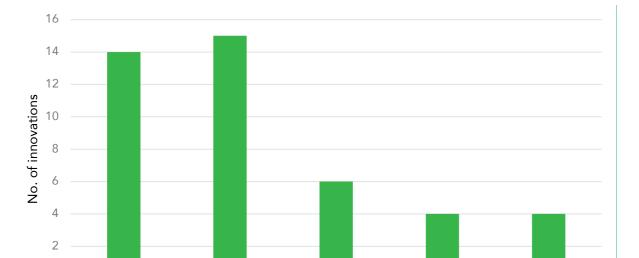


Figure 6: Communications approach used for the CISs

#### 4.2.4 Geographical location of implementation

**SMS** 

Face to face

0

The overall geographical location of implementation of the innovations is depicted in Figure 7. This indicates the diversity of contexts that the innovations were implemented in, covering 22 of 47 Kenyan counties that represent various ecologies and socio-ecological contexts. Ahead of the Stage 1 Wazo Prize, the Prize Team delivered a series of county-level workshops across Kenya, in Isiolo, Turkana, Kisumu and Kakamega, and meetings in Laikipia, Kwale and Mombasa, to promote the Prize. While participants representing a wider geographical spread were initially engaged, not all continued their participation through to final submission.

Mobile app

Website

Radio/TV

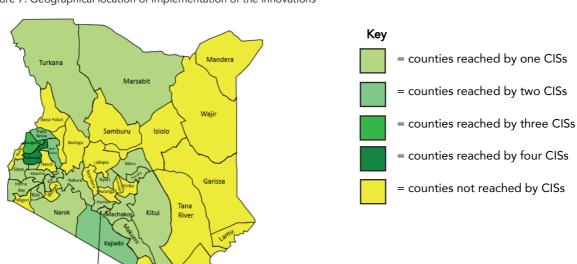


Figure 7: Geographical location of implementation of the innovations

#### **Section 5**

## PEQ1: How effective has the prize been at catalysing innovation on the focus problem?

SEQ1: To what extent has awareness of the importance (value and benefit) of using climate information to cope with, and adapt to, climate variability and change, been raised among stakeholders as a result of the prize process?

Stakeholders in Kenya have increased awareness of the use of climate information to cope with, and adapt to, climate variability and change. The CIP process has contributed to this raised awareness. It was expected to do this at sector level, using key prize events as an opportunity to raise awareness. More significantly, however, the Prize has raised awareness of individual participants, and, in doing so, of stakeholders on the ground. Beneficiary, and, in some cases, local government, awareness has been raised by the prize participants themselves, through their implementation activities. Alongside raising awareness, the CIP has achieved a diverse set of Prize effects, showing evidence for those targeted through the prize design and those that were not explicitly aimed for.

#### Key findings:

- The contribution analysis indicates that the CIP raised awareness of climate information among stakeholders in Kenya.
- The prize process raised awareness about the Prize itself, rather than necessarily about the value and benefit of using climate information to adapt to climate change.
- However, at ground level, the prize has contributed to raised awareness among stakeholders who have been directly involved in the CIS activities. There is strong evidence for this for participants, moderate evidence for beneficiaries and limited evidence for this among local government stakeholders.
- Preceding and contemporary projects and activities have also contributed to this increase in awareness. There is strong evidence for this among participants, and moderate evidence for this among beneficiaries and KMD staff.

At the start of the programme, I2I identified a set of effects that can be triggered by prizes. The CIP was expected to raise awareness of the value of using climate information, to promote best practice CISs, and to stimulate partnerships and networks. Here, we explore the extent to which the CIP raised awareness of the Prize itself as well as the Prize topic. We also discuss the evidence against the remaining I2I prize effects.

#### 5.1 Raising awareness at sector-level

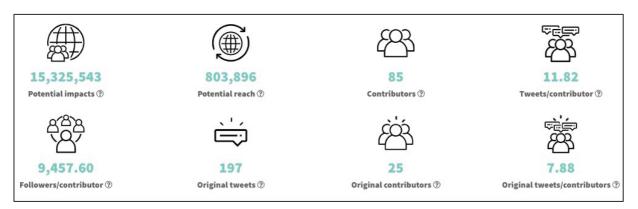
The Prize process raised sector-level awareness about the Prize itself, rather than necessarily about the value and benefit of using climate information to adapt to climate change. The CIP process was intended to raise awareness about the importance of using climate information to cope with, and adapt to, climate variability and change. The Prize events, and communications around these, targeted a wide range of stakeholders at sector level, including the KMD, climate and development practitioners, and prize participants. Through these events, the Prize Team aimed to raise awareness about the Prize and, in so

doing, about the need for locally accessible climate information. However, the impact of these activities on raising awareness of the latter is unclear, as much of the evidence reflects promotion of the Prize itself rather than raised awareness about how and why climate information should be used by poor and vulnerable communities.

The Prize Team delivered four key CIP events: the Wazo Launch, and the Wazo, Tambua and Tekeleza award ceremonies. Accumulatively, these were attended by 384 participants, though some attended more than one event, reducing the number of people engaged overall. Throughout the course of the Prize, the CIP was presented at a further six events, and cited in 15 media articles (see Annex 10). Of these, two events and seven articles were produced during the Tekeleza period (the others being in the earlier stages). The most high-profile of the events was at COP24, where a Prize Team member gave an overview of the CIP and its achievements at a side event organised for another I2I prize. The articles produced were press releases about the Prize events, so likely have raised awareness of the Prize itself among those who read them.

The Tekeleza award was broadcast on national TV and radio, and on Twitter. 25 Twitter users originated 197 tweets which were then retweeted by 808 Twitter users. These tweets are estimated to have reached the Twitter feeds of 803,896 people, with a maximum potential reach of over 15 million people (who follow the 803,896 reached) (see Figure 8). The hashtag for the event ('#TekelezaPrize') was the fifth trending hashtag in Kenya on the day of the award, with 197 original tweets, as compared to 1,142 tweets for the first trending hashtag ('#AWARDat10'),\*\*viii another award event taking place in Kenya that day, organised by African Women in Agricultural Research and Development (AWARD).

Figure 8: Twitter record for #TekelezaPrize



There was excitement around the Prize award, with notable interest in the participants' innovations from KMD, WISER and others, and a buzz among participants who were feeling excited and nervous about the result.\* In interviews, four participants noted that winning an award had given them credibility and that they had been contacted about their CIS following the ceremony.\* The effect of the award event and associated communications will be explored further during the sustainability phase, when the outcomes of these activities will be clearer.

#### 5.2 Raising awareness at innovation level

The contribution analysis focussed on how the CIS innovations had raised awareness among prize participants and beneficiaries. We found that the CIP has contributed to raised awareness among stakeholders who have been directly involved in CIP activities. There is strong evidence for this for participants, moderate evidence for users and also some limited evidence for this among local government stakeholders.

Preceding and simultaneous alternative projects and activities have also contributed to this increase in awareness. There is strong evidence for this among participants, and moderate evidence for this among

users and KMD staff. The majority of beneficiaries reported appear not to have engaged in CIS activities on the ground – something that may point to a lack of awareness, among other things.

Based on these findings, we have constructed the following contribution story:

Stakeholders' awareness of the importance of using climate information for responding to climate impacts is raised, in part, through Prize activities including, for participants, the Prize level activities and resources, including the orientation workshop, the website, events, ongoing communications and their implementation of CIS initiatives; for users, the activities of the CIS initiatives developed under the CIP and their application in practice; and for government stakeholders and data providers at local level, interaction with Prize participants and their CIS initiatives.

The findings of the analysis are summarised in Table 10 and discussed below.

Table 10: Mechanisms contributing to raised awareness

Explanatory mechanism	Statement	Body of evidence	Strength of evidence
Primary explanation <sup>19</sup>	Activities stimulated by the CIP have raised awareness of the value and	35% of <b>participants</b> were new to climate information, including two winners, reporting they learnt about the issue from CIP activities. An additional 50% of participants built on their existing knowledge through CIP activities.	Strong
	benefit of using climate information to cope with, and adapt to, climate	Participants reported increased awareness among their <b>beneficiaries</b> , and two key informants and three focus groups noted increasing demand for climate information, as a result of CIS activities.	Moderate
	variability and change.	69% (n=1,098) of users had not had access to or used this kind of information before. All focus groups reported using the CIS information to inform their agricultural decisions.	
		Eight participants reported their interactions with local <b>government stakeholders</b> through their CIS activities, four of whom reported that this had built government awareness.	Limited
		The Prize Team explained that national level KMD representatives became more engaged throughout the Prize process, and more aware of needs and activities on the ground.xxi	
Rival mechanism <sup>20</sup>	Other programmes and services, external to the CIP, have	65% of <b>participants</b> were not new to climate information. They had gained experience through previous and existing projects, events and training externally to CIP.	Strong

<sup>&</sup>lt;sup>19</sup> For the CIP, the **primary explanation** is the causal mechanism triggered by the prize activities that is expected to lead to the Prize Effect. For the Prize Effect of raising awareness this is a set of causal mechanisms, disaggregated according to whose awareness is being raised (see ToC CL7 and CL11).

<sup>&</sup>lt;sup>20</sup> For the CIP, a **rival mechanism** refers to any other mechanism that contributes significantly to the observed Prize Effect or outcome to explain the observed Prize Effect or outcome

Explanatory mechanism	Statement	Body of evidence	Strength of evidence
	influenced awareness of the use of climate information among some stakeholders in each stakeholder group.	Beneficiaries have had access to alternative sources of climate information, including radio, local government services and their own observations. These sources can contribute to building awareness of beneficiaries, however interviewees noted limitations in their reach and reliability. All focus groups indicated they use a combination of information sources to inform their agriculture activities.	Moderate
		KMD's awareness has developed through their own surveys and advisory sources. Local KMD staff have been engaged in training through the WISER programme, to increase their understanding of how to respond to CI demand from potential users and are now preparing County Climate Information Service Plans.	Moderate
Refuting factor <sup>21</sup>	Users targeted by the CIS had not accessed or used the service.	The user verification reports indicate that 63% of beneficiaries reported did not access the CISs within the Prize period, indicating that some CIS activities on the ground were either not of quality to attract a higher level of potential users, or did not effectively raise awareness to encourage use.	Moderate

#### 5.2.1 Awareness raising among participants

There is strong evidence that the CIP increased participants' awareness of the use of climate information for responding to climate impacts. 35% (7 out of 20) of participants interviewed were new to the issue of climate information before participating in the CIP,xxii indicating that the Prize engaged new actors in addressing the problem. These participants represent three businesses, two non-governmental organisations (NGOs), one community-based organisation (CBO) and one international NGO (INGO). They include the first Prize winner and a runner-up, which indicates that their involvement in the Prize led them to increasing their awareness and understanding sufficiently to establish an initiative that was judged as worthy of a Prize.

The Prize Team emphasised their efforts in raising awareness among participants.xxiii 55% (11 of 20) of participants specified that the Prize had helped them to learn about climate information.xxiv For example, one of the winners who was new to the topic attributes their increased awareness directly to the CIP:

"The CIP website explained what is climate information, before that I didn't even know. And then I started reading materials and became a bit of an expert." (PF03)

All of the participants new to climate information reported learning about climate information through the Tekeleza orientation workshops;\*\*\* with 77% (10 of 13) of participants who were not new to climate

<sup>21</sup> For the CIP, a **refuting factor** is an account from either a primary or secondary data source that directly challenges the contribution of CIP activities to achieving the observed Prize Effect outcome.

information building on their existing knowledge through the workshops.\*\*xvi Five participants explained that they and their teams had learnt about the importance of climate information while delivering their activities under the CIP.\*\*xvii One explained:

"When we started in the prize, we realised climate change affected these issues, so it's really enhanced our understanding of what climate change is and how climate information impacts people's lives." (PF01)

In final submissions, four participants reported raising awareness among their project partners. \*\*xxviii\* 65% (13 of 20) of participants interviewed were not new to climate information. They had experience through previous and existing projects, events and training that had introduced them to climate information before they decided to participate in the Prize. \*\*xxix\* However, the majority of these (10 of 13)

#### 5.2.2 Awareness raising among target beneficiaries

explained that they gained further awareness through the Prize.

There is moderate evidence for an increase in awareness of the importance of using climate information by beneficiaries. This is indicated by participant observations of beneficiary awareness, an increase in demand for climate information by target beneficiaries, and reported access and use of the CISs established under the CIP.

Participants reported increased awareness of their beneficiaries on climate information in their submissions and interviews. 84% (16 of 19) of final participant submissions reported awareness being raised among their beneficiary community. Interviewees corroborated this, explaining that the CIS activities on the ground raised awareness of beneficiaries in understanding the importance of climate information.\*\*\* This does not necessarily stop at direct beneficiaries, but has implications for knowledge being spread through farmer groups as part of participants' CIS models, and through communities more informally, as discussed in a couple of the focus groups.\*\*\*

One participant explained:

"There was a huge change [in community-level understanding of climate information] ...they were able to understand very fast. We had an arrangement where we trained lead farmers – and they would train others – so it worked because they could use their own way of training and use the local language." (PF08)

An increase in demand for climate information by beneficiaries was noted by two interviewees and three of the focus groups.\*\*\* Four of these five stakeholders point to CIS activities as triggering this increasing demand. For example, a KMD official noted increased demand for climate information from potential beneficiaries as a result of their interaction with participants:

"Interest in weather and climate information has increased – I say this because these days we get a lot of requests from people who didn't usually reach out to you. Farmers at community level and even organisations, CBOs at sub-county level, because of the interaction with the [CIP] participants now they are asking what the weather is like. Our colleagues at county level are getting a lot of requests for that information." (DP01)

A further indication of beneficiary understanding the importance of using the climate information to respond to climate impacts is in their access and use of the information received. The user verification data indicates that 37% (n=1,594) of targeted beneficiaries had used the climate information provided to them through the CISs developed. The same data also indicates that 69% (n=1,098) of those users had not used or had access to this type of information before 2016, xxxiii indicating that the CISs triggered by the CIP raised awareness among people not previously exposed. One community member indicated that:

"...with the information on weather, we are proud of it – we have pride in ourselves. We are knowledgeable now; we are well informed." (FG03)

All of the focus groups reported using the information on an ongoing basis to inform their agricultural decisions.\*\*

The participants corroborated this use of information\*\*\*, for example:

"When we started implementing [our CIS] and farmers started realising the benefit of the climate information, a major success was improvement of the skills of farmers and empowered communities; we saw the user community were taking independent measures to align themselves with adaptation strategies even before we told them what to do." (PF05)

There are various other sources of climate information in place in Kenya which have reached some of the beneficiaries of the CIP CISs. One of the reasons Kenya was chosen as the Prize country was that a number of other institutions were present working on the same issue, and that there was therefore interest and scope for the Prize to work.\*\* It is not surprising that these institutions and associated communications have reached some of the same users on the ground. One participant explained that:

"...the community also got to learn about climate information from KMD, IDRC, and other avenues like ADA Consortium." (PS02)

There is moderate evidence that beneficiary communities have had access to alternative sources of climate information, including radio, local government services and their own traditional observations and understanding, previously to the establishment of the CIP CISs. These represent potential alternative avenues to raising awareness among beneficiaries. However, interviewees note a low level of usability and reliability of alternative sources of information.\*\* For example, interviewees noted that the radio forecast is not reliable – it is not effective at reaching its audience and the information is too general with no advice provided on how to apply it, as is a key component of many of the CIP innovations.\*\* The purpose of raising awareness in this context is to encourage behavioural change towards provision and use of climate information among vulnerable communities. Therefore, any efforts to raise awareness of an issue should also seek to inform people of how to take action. This points to a key learning from the CIP process that climate information must be paired with additional services and adequate resources that build the capacity of users to act on the information received.\*\*

Importantly, all of the focus groups indicated that they use a combination of information sources to inform their agriculture activities, rather than relying only on one.xl One focus group member explained:

"Individually, information can be misleading. Combining is safer. If you rely on one it gives you the wrong impression – you might see a cloud and think it's going to rain so you run, and then the rain won't come down, so you have to use all of the information available to you." (FG01)

The evidence suggests CIP had a positive influence on awareness raising among some beneficiaries. However, the user verification reports indicate that 63% of target beneficiaries, for which participants provided contact information, did not use the CISs. Xii This could be considered a 'refuting factor' for CIP's contribution to raising awareness among beneficiaries (though it is not applicable to all beneficiaries, as the above evidence shows). Our focus groups suggested several different reasons for a lack of use among some beneficiaries, including a lack of understanding of the importance of such information among some potential users, who had not internalised the importance of using it. Xiii However, we realise that there may be several reasons why a beneficiary would not use a service available to them – while one reason could be a lack of awareness, the focus group respondents also suggested lack of resources or interest hindered use of the CISs. We could also expect that beneficiaries may, for example, face other constraints, they may have access to other services, which they prefer or are more experienced in using, or they may just need more time to familiarise themselves with the new CIS. For innovations that continue to be implemented beyond Prize award, we would expect to see an upward trajectory in both awareness and in user numbers.

#### 5.2.3 Awareness raising among government stakeholders

There is an indication for increasing awareness among government stakeholders of the need to deliver climate information to users on the ground. This includes some limited evidence that their increased awareness has been supported by the CIP activities. Local government stakeholders were engaged in CIS activities by participants<sup>xiiii</sup> and national-level KMD representatives were engaged in the Prize by the Prize Team.<sup>xiiv</sup> Participants and the Prize Team noted increasing engagement and understanding among these government representatives. A KMD official explained that the CIP has helped them to work with people they hadn't worked with before, becoming "a bridge in the field to help us deliver better CISs." (DP01)

A number of alternative sources have triggered understanding, among KMD staff, of the need to support informed decision making at ground level. A KMD official explained that their own sources and global advisories have influenced their activities and collaborations to help them improve their approach to making climate information accessible and useable at local level.xlv As a partner on the WISER programme, they have provided training to County Meteorological Directors (CMDs) and intermediaries to increase their understanding of how to respond to climate information demand from users.xlvi Some CMDs are now preparing County Climate Information Service Plans as a result of these other influences on the KMD.xlvii While not triggered by CIP, a local expert involved in the Prize suggested that this kind of capacity building among CMDs may have supported participants who collaborated with them.xlviii

# 5.3 Analysis of prize effects

#### Key findings:

- The CIP triggered intended prize effects of raising awareness, promoting best practice and facilitating and strengthening partnerships and networks.
- There is strong evidence that the Prize also stimulated open innovation, community action, point solution and maximising participation towards the sponsor's aims.
- There is limited evidence for market stimulation and policy influence, though these were not intended effects of the Prize.

In advance of launching its first prize, I2I published a set of nine outcomes or effects that prizes can achieve, often in combination (Ward and Dixon, 2015). I2I has reviewed these since then, based on learning to date, to create an updated set of expected effects. Table 11 presents the latest version of the prize effects and records evidence for them from the evaluation. While the evaluation did not set out to collect primary data on each of these, we glean insights from the data that has become available through the course of the evaluation process.

Table 11: Summary of progress in Prize Effects

Prize Effect and definition	Evidence from the CIP
Key intended effects	
Raise Awareness Either brings something to someone's/some people's attention or increases their understanding of something. Often about increasing awareness and knowledge of an issue (especially one that is neglected or previously communicated to that group of people).	The Prize process raised sector-level awareness about the Prize itself, through events, news articles and social media. It has also contributed to raised awareness about the Prize topic among stakeholders who have been directly involved in CIP activities. There is strong evidence for this for participants, moderate evidence for users and also some limited evidence for this among local government stakeholders. Preceding and simultaneous alternative projects and activities have also contributed to this increase in awareness. There is strong evidence for this among participants, and moderate evidence for this among users and KMD staff.
Promote best practice A prize can do this by: identifying best practice in a certain field (through solutions submitted) and encouraging adoption (through publicising the winning solutions) OR making potential solvers aware of current best practice as part of the Prize application process.	The Prize made participants aware of best practice through the eligibility criteria set at the start of the Prize. It promoted best practice at sector-level through participants' innovations. The award ceremony and communications around that served to promote the 'best in class' by emphasising the winning solutions. Particularly high outreach was achieved through Twitter activity at the award event. Participants also developed their own marketing strategies to promote their initiative.
Facilitate and strengthen partnerships and networks Raises visibility and brings those also working in the space to the attention of others, helping to establish new networks and strengthening partnerships towards a common	Participants reported partnerships with 95 institutions; six participants reported a partnership with KMD; three participants reported partnerships with Ministry of Agriculture at county level. Two participants submitted seven MoUs, five were with consortium partners for participant CI projects, the other two are no longer active. There are emerging efforts by some finalists to form a consortium (to be followed up in the

Prize Effect and definition	Evidence from the CIP
goal. Some prizes may require new partnerships through criteria or conditions.	sustainability assessment); and one of the winners has recently updated the Prize Team with news of two new partnerships since prize award.
Effects not explicitly sought for the CI	P
Maximising participation towards the sponsor's aims. Benefits to the sponsor are provided by all effective participants not just by the winners.	Participants who dropped out of the Prize process, and also those who were not awarded, all reported reaching users and establishing partnerships. Discontinuing participants reported 186,281 beneficiaries up to the last quarterly report before the final submission. The vast majority of these were reported by one participant who dropped out of the process just before the final submission date. None of these reported numbers have been verified.
Community action Incentivising communities (broadly defined as people living in the same place/sharing a communal interest), to take action, encouraging ownership of the problem and solution.	The CIP elicited community action through participant activities on the ground. Many of the participants were themselves community-based organisations, and therefore themselves represented their community. Participants worked through intermediaries, who could include community farmer groups, women groups and youth, to extend the reach of their CISs. This represents clear community action on the ground.
Point solution Finding a solution to a problem that has been broken down to a component part. For example, a new product or process. Problem is highly specified	The CIP found multiple solution to a specific component of building adaptive capacity – i.e. climate information provision to communities. It identified seven winning solutions who had developed awardable standards of solutions.
Open innovation Open innovation enables new solvers to enter the field of endeavour. For some prizes this could include local and grassroots innovators, e.g. small community organisations, students, etc.	Seven of the 20 participants interviewed were new to climate information since the beginning of Tekeleza (some had been involved in Wazo). Nine of the 18 participants who submitted a final report had established new CISs. This indicated that the Prize had triggered open innovation.
Market stimulation Helps to increase economic activity in an existing market or starts a new one for a particular good or service through a high value prize that, as a result of all of the other effects, results in a changed market. Can also be to open up a new market.	Some participants charged users small fees for the information they provided. This represents payment for a new service, however there are ethical concerns here (highlighted in PEQ2) and the impacts are not enough to have triggered a widespread change.
Altering the policy environment Raised awareness, market stimulation, etc. can lead to corresponding policy change in reaction to the other prize effects.	CIP did not aim specifically to alter the policy environment, however, two participants reported plans to work with local government to change policy; and one CMD reported using a CIP CIS as an example for information dissemination in the country plan, which he was in the process of writing at the time of interview.

The evidence indicates that the CIP has been successful in achieving its targeted effects of raising awareness, promoting best practice and facilitating and strengthening partnerships and networks. For each of these effects, the Prize has achieved these both through its direct activities: i.e. raising awareness through Prize events; promoting best practice through communications and facilitating and strengthening partnerships and networks through providing linkages between different stakeholders. It has also achieved these indirectly, through the activities of the participants: i.e. raising awareness of the partners and the beneficiaries they have engaged; promoting their CISs through implementation of their marketing strategies; and facilitating and strengthening partnerships and networks by engaging stakeholders throughout the process in order to deliver their CISs – this includes data providers, intermediaries, government and other partners; as well as users.

The CIP has also achieved some additional prize effects. These include open innovation, community action, point solution and maximising participation towards the sponsor's aims. The Prize engaged new solvers in finding solutions for the problem; stimulated action from communities on the ground – in some cases the participants themselves being members of the communities they are representing; identifying and establishing solutions to the specific problem of climate information sharing and uptake; and engaging participants beyond those who received money in delivering the aims of the Prize.

There is limited evidence for market stimulation and policy influence, though these were also not effects explicitly aimed for within this Prize design.

# **Section 6**

# PEQ2: To what extent has the effect of the Prize been sustained beyond the point of award?

# SEQ2: To what extent have i CIS innovations; ii. awareness of the value and benefits of climate information, been sustained beyond end of stage 2?

The majority of participants proposed a set of financial and non-financial sustainability strategies to support their continued CIS implementation. The evidence for financial sustainability at the time of submission was limited, however we will explore the sustainability pathways and successes of the innovations through a subsequent sustainability assessment.

#### **Preliminary findings:**

- Both finalists and non-finalists plan to continue implementing their CISs.
- 16 participants provided business plans in their final submissions, proposing various combinations of financial and non-financial strategies for sustainability.
- Based on the online judging scores, the nine finalists show the most potential for sustainability;
   however, the overall assessment from the verification agent was that there was little evidence for financial sustainability at the point of final submission.

I2I's business case proposed that prizes had the potential to address the 'valley of death' within the innovation process, and that they could overcome commonly identified gaps where an idea or technology often fails and therefore does not move to scale (DFID, 2013). These gaps relate to both the finance and the skills to take the idea to the next stage. CIP was initially envisaged as a mechanism that would incentivise participants to develop a new technology with a corresponding business model to enable them to navigate, and successfully avoid, the valley of death, while also meeting the needs of the poorest and most vulnerable. Without robust evidence for financial sustainability, it would appear that this was not achieved by the time of Prize award, however this will be further explored during the sustainability assessment to understand the progress made since award, and if, indeed, the innovations developed still support the poorest and most vulnerable, while also being sustainable.

# 6.1 Proposed sustainability approaches

Participants, including finalists and non-finalists, plan to continue implementing their CIS.\* In 16 of the 18 eligible submissions, participants have proposed various combinations of financial and non-financial mechanisms to enable them to fund, scale and strengthen their initiatives. The business plans and financial sustainability strategies vary among participants, but some common elements can be identified. The strategies and combinations proposed by different initiatives are provided in Table 12.

Table 12: Sustainability strategies proposed by participants

		al strategies stainability	s for	Non-financial strategies for sustainability				
Initiative	Source external funds	Charge users	Create internal revenue	Growth and expansion of service	Strengthen stakeholder engagement	Establish organisational strategies	Mainstream into existing activities	
1								
2								
3	Local gov.							
4	Unspecified							
5	Unspecified							
6								
7								
8	Grants							
9								
10								
11	Unspecified							
12	Unspecified							
13	Unspecified							
14	Endowment fund							
15	Investors							
16	Private foundation							

#### 6.1.1 Financial sustainability strategies

Strategies for financial sustainability include:

- sourcing external funds e.g. from grants, investors, endowment fund
- charging users for access to climate information, e.g. through SMS fees, user contributions, subscription charges
- generating revenue internally e.g. from selling agricultural produce and products, selling data or providing a platform for advertising companies, or charging for training.

The feasibility of these strategies is unclear as yet. At the time of evaluation, seven participants had no funding and were actively seeking funds and support to continue their CIS, i while nine participants proposed charging users to use their CIS, one explaining that it was a strategy they had learnt from the Prize. iii

Several key informants involved in the Prize advise that payment for services by users provides most potential for sustainability. This approach has some ethical concerns to it, that were noted during the design phase of the Prize, iv in terms of commercialising public information and thereby potentially making it inaccessible to people who are vulnerable to the impacts of climate change. When asked if they would use the service if there were charges for it, one focus group respondent explained:

"It depends on how much the subscription is. If prices go up, we'll use it less. Also, if they improve the information we'd pay more." (FG01)

This view indicates that participants need to carefully consider their user charges to ensure they retain their users.

Creating internal revenue from other means may therefore be a more appropriate way to establish a self-sustainable solution. Participants reported doing this through sale of agricultural yields (heightened through effective use of reliable climate information) and products, and by working with advertisers by either selling user data or integrating adverts into the communications approach. The latter comes with its own ethical concerns, and requires transparency and consent from the users to share their data.

#### 6.1.2 Non-financial sustainability strategies

Non-financial strategies for sustainability include:

- scaling up the CIS, e.g. through expanding the user base or geographical scope
- strengthening stakeholder engagement e.g. through staff and user training, or strengthening collaborations and partnerships
- establishing supportive organisational strategies, e.g. for business development and marketing or action plans
- mainstreaming into existing activities of the organisation or local institutions.

While scaling is a common strategy among nine participants, one finalist was clear they could not scale but they would continue to do what they were doing:

"Yes, I will continue, even this week I was doing it, in terms of extension, I may not be able to move very far on because of funds. I will continue to reach the ones I have got because there is now already information, because there is now a county forum. But I can't afford now to go outside the forum." (PF06)

At a broader level, policy influence was also proposed as a way to support sustainability. Two participants are intending to work to influence local government policy in support of their CIS.

# 6.2 Expert assessment of sustainability plans

Based on the online judging scores, the nine finalists show the most potential for sustainability. Each submission was judged from 1-5 according to five criteria (see Annex 2). Participants scored between 1.4 and 3.9 out of 5, overall, for the sustainability criteria and the nine finalists scored most highly, scoring 2.6 and upwards.

However, the overall financial sustainability assessment from the verification agent is that there was little evidence for financial sustainability at the point of final submission.

The verification agent did not feel the reporting was complete enough or of high enough quality to adequately verify the financial sustainability potential of the initiatives – and felt the participants needed more support to respond to the questions comprehensively. The verification agent identified potential among two initiatives that had developed models for internal revenue generation, not based on user payments and not relying on investment from external parties. Interestingly, one of these is the same initiative that does not feel in the position financially to expand, but will only continue operations as they have during the Prize. With the exception of these examples, the assessment was that the initiatives are not financially sustainable, relying on donor funding or unsecured and unpredictable resources.

Stakeholders involved during the Prize process, including judges, Prize Team and a verification agent, propose that sustainability is likely to be supported by demand driven innovations; diversity in incomes; engaging government support; and minimising complexity e.g. by reducing the number of languages used. Will The pathways and success of the innovations in being sustainable will be explored during the sustainability assessment in September 2019.

## **Section 7**

# PEQ3: Does the prize offer Value for Money when compared to alternative funding modalities?

The CIP achieved good VFM. The VFM of the CIP itself exposed particularly efficient outputs and equitable outcomes. When compared to a grant-funded technical assistance programme, we do not find that one approach clearly provides better VFM than another. Rather, the two programmes show potential complementarity by addressing the same problem in different ways.

The VFM of the CIP is discussed through reflections on two different assessments:

- An 'internal' assessment: measuring the VFM of the CIP against the original expectations for the Prize
- An 'external' assessment: measuring the VFM of the CIP in comparison to an alternative funding mechanism targeting similar outcomes.

We provide a narrative summary of the VFM findings for each part of the VFM assessment. These are invaluable in providing the context for each rating. The ratings should be considered along with the narrative to understand the details of the VFM assessment. An overall numerical VFM rating is not given for either assessment, instead a headline narrative is provided.

# SEQ3.1: What is the VFM of CIP as compared to its original expectations?

#### Key findings:

- The Prize met expectations for economy and effectiveness; while it moderately exceeded expectations at efficiency and equity level.
- There is strong evidence that the prize was launched and ran respecting the original time schedule, and within the original budget.
- There is strong evidence that the prize stimulated and awarded a larger set of CIS initiatives than expected with the inputs invested.
- There is moderate evidence that the prize CISs are accessed and used by target users; and strong evidence that the prize contributed to raised awareness on the value of climate information.
- There is moderate evidence that the prize CISs are accessed and used by the poor and vulnerable, including a high proportion of users with low education and in rural areas. This is notable for a Prize being used to stimulate development outcomes.

In discussing the 'internal' VFM against original expectations, we should highlight that some key changes were made during the Prize period. For example, reducing the Prize purse considerably, in reflection of the likely organisation types the Prize would be awarded to; swapping out the second recognition Prize for an orientation workshop for participants; and tendering a verification process in support of Prize judging. Such changes mean that the assessment of the Prize against its original expectations is sometimes difficult or no longer relevant. The expectations (or 'sub-criteria') have been identified based on what the most relevant expectations were rather than necessarily on the original business case, and the indicators have been developed to best guide a fair assessment of the VFM of the Prize in consideration of these changes.

This section reports the narrative findings of the internal VFM according to each of the VFM categories (i.e. the '4E's'), summarised in Table 13. The specific indicators and associated evidence for each of the VFM categories is provided in Annex 11. We stress the importance of the narrative over the ratings of the VFM.

Table 13: Summary of the VFM for the CIP

What we want to know	Criteria	Overall rating
Economy: Did the prize cost what we expected it to cost?	The prize was launched and ran respecting the original time schedule, and within the original budget	Met expectations
Efficiency: Were prize inputs converted into the expected outputs?	The prize stimulated and awarded a set of CIS initiatives	Moderately exceeded expectations
Effectiveness: Did prize outputs convert to the expected outcomes?	The prize CISs are accessed and used by target users; and the prize raised awareness on climate information	Met expectations
<b>Equity:</b> Were prize outcomes equitable for those intended?	The prize CISs are accessed and used by the poor and vulnerable	Moderately exceeded expectations

# 7.1 The internal Value for Money of the CIP

The VFM analysis indicates that the Prize met expectations at economy and effectiveness level; while it moderately exceeded expectations at efficiency and equity level. At output level, the Prize elicited a greater number of participants, prizes, partnerships and citations than originally expected. In terms of equity, there is moderate evidence that the Prize innovations reached low income, female, low education and rural users.

There is strong evidence for economy and efficiency of the Prize but only moderate evidence for effectiveness and equity. Further evidence is required to more clearly understand reach, engagement and impacts of the CISs with their target users. Given this, the results from the analysis should be reviewed with caution.

### Economy of the CIP

There is strong evidence that the Prize was launched and ran respecting the original time schedule, and within the original budget. While two recognition Prizes were originally planned, the Prize Team felt they had achieved the objectives of maintaining interest and engagement in the Prize through the first recognition Prize, and saw greater value in running an orientation workshop to build participation capacity. The workshop was well received by participants (see SEQ5.1). This moderately exceeds expectations as it shows flexibility in the use of the budget to ensure effective investment of resources. Iix

The Prize was delivered within the revised budget. It was implemented at 1% under implementation budget and 4.7% under the total Prize purse. <sup>22</sup> The decision was made to reduce the Prize Purse, which had an original budget of £1,050,000 and was revised down to £498,000. As the Prize was to be implemented in a developing country context, the Prize Team determined that a lower purse would

<sup>22</sup> While the Tekeleza participants were awarded a total of \$505 it is apparent there were some communication issues; the Prize originally had a budget of £425, which at some point became communicated in dollars rather than pounds, so as \$425. The award of \$505 equates to approximately £380 so the Tekeleza was under awarded as compared to its original Prize budget.

stimulate innovation but reduce the risk of potential harm from transferring large cash amounts to recipients without the institutional set up to absorb it (as, different to grants, grantees would not receive support in spending the funding). The remaining Prize Purse went into the unallocated prize pot to fund new prizes Lake Victoria Challenge and Frontier Technology Livestreaming, both also funded by DFID and implemented by IMC.

#### Efficiency of the CIP

There is strong evidence that the Prize stimulated and awarded a larger set of CIS initiatives than expected with the inputs invested. For efficiency, we provide a monetary indicator for sub-criterion, i.e. cost per output.

We have used the expectations set for CIP by the programme team to develop the efficiency indicators (see IMC, 2017). The majority of these expectations were exceeded, with more applications, prizes, citations and partnerships being evidenced by the end of Stage 2. Significantly, seven prizes, rather than six, were awarded to include a fourth-place prize not originally intended. The live judges made the decision to include a fourth place in response to the diversity of the final innovations presented to them.

The Prize was efficient in promoting best practice and facilitating and strengthening partnerships and networks. The CIP was cited at six events, in 15 articles, and the tweets for the award ceremony were the fifth trending on twitter in Kenya that day. Participants reported 95 partnerships. Of these, two participants submitted seven Memorandums of Understanding between them. The indication that participants will continue implementing their initiative (see SEQ2) implies that the partnerships they have established to deliver their CISs remain active.

There was no specific expectation set for financial leverage, but rather an expectation of £35 million across all Prizes. The programme team realised and reported, before the Prize finished (e.g. see IMC Annual Report 2017), that the programme was unlikely to meet that target. The Prize leveraged investment at 27 pence per pound invested by DFID (see indicator 2.5, see Annex 11); we rate this as meeting expectations as no specified financial expectation was set, but the Prize triggered investment nonetheless.

#### Effectiveness of the CIP

There is moderate evidence that the Prize CISs are accessed and used by target users; and strong evidence that the Prize contributed to raised awareness on the value of climate information. This set of sub-criteria reflect the intended outcomes and impact of the Prize, and the main prize effect, as captured by the ToC. The evidence for the effectiveness indicators is often limited, as the key sources for information are the participants' self-reports and verification agent reports which had some issues with reach to beneficiaries. Nevertheless, they provide an indication of the outcomes the Prize has triggered.

The number of beneficiaries reported by participants almost exactly meets the revised number of target beneficiaries estimated by the Prize Team. The target was revised down from 250,000 to 129,302 after an analysis done by the Prize Team in 2016. There is a risk, however, of participants over reporting due to competition, and an additional risk of misreporting (including over and under reporting) due to ineffective reporting methodologies and a lack of guidance which might usually be expected for a grant or payment by results programme.

In the user verification, 37% of beneficiaries contacted reported using the CISs developed. As demand-led innovations, one might expect a higher rate of uptake than this. However, we established earlier that the innovations do not appear to be all necessarily demand-driven. Again, the evidence here is limited, but based on what is available we propose the figure is fair but moderately less than you might expect. The uptake might increase as need and understanding increases (see Section 4.1). For those that use the CISs, a high rate of positive change is evident. Relatedly, in response to indicator 3.3 (see Annex 11), the

same data set shows that 94% of users feel better prepared to deal with climate risks as a result of using the CISs, representing a positive contribution to supporting user's adaptation capacity.

The contribution analysis evidences that the CIP has contributed to raised awareness among stakeholders (see SEQ 1). There is evidence that it has raised awareness among participants, users on the ground and local government stakeholders.

#### Equity of the CIP

There is moderate evidence that the prize CISs are accessed and used by poor and vulnerable people, including a high proportion of users with low education and in rural areas. Expectations with respect to the equity of CIP stage 2 have been partly set up front, by including in the desired outcomes evidence that the innovations would benefit poor and vulnerable people. However, no specific expectations were set so ratings are based on the evaluations team's assessments considering this is a development prize seeking to support poor and vulnerable people. We have explored data from participants reports and verification agents. It is worthwhile noting that gender was not a specific focus of the programme statement; however, applicants were encouraged to target the most vulnerable, which, by implication, includes women.

We rate the CIP as moderately above expectations for equity – a notable achievement for a Prize being used to stimulate development outcomes. Participants report a high number of poor beneficiaries i.e. 70% of beneficiaries to have low (38%) or extreme low (32%) monthly household consumption, <sup>23</sup> having access to their CISs. While the verification data indicates 54% users with low (28%) or extreme low (26%) household consumption per month. Both sources report just under 50% female reach and use respectively. The verification data indicates 40% of users with up to primary-level education and 90% being based in rural areas.

The available indicator for income from the participant and verification data is on monthly household consumption. Here we have taken up to 5,000 KSH to be extreme poor – this most closely matches the data bands available to the poverty level set by the Kenyan National Bureau of Statistics (approximately 3,800 KSH p/month). We have taken 5,001–10,000 KSH to represent poor.

Further value in using a Prize is found in its potential for triggering a set of 'prize effects'. The effects triggered by CIP are discussed under PEQ1. While other mechanisms can achieve some of these, these effects have been identified as particularly relevant for prizes. For CIP, we find that the Prize has triggered both the intended as well as a number of unintended prize effects.

<sup>&</sup>lt;sup>23</sup> Though we recognise many more measures of poverty, the data we have available is on monthly household consumption. We do not have evidence on level of poverty beyond this.

# SEQ3.2: What is the VFM of CIP compared to WISER (West Kenya component)?

#### Key findings:

- Overall, the CIP has a comparable VFM to WISER. WISER is better able to evidence efficiency and a lower cost per beneficiary than CIP. CIP shows better performance in stimulating innovation.
- WISER had higher administrative costs<sup>24</sup> as a proportion of total costs; whereas CIP had higher Monitoring, Evaluation and Learning and delivery<sup>25</sup> costs as a percentage of total costs. This is expected given the different nature of the programmes: technical assistance (WISER) and Prize (CIP).
- The overall costs for stakeholders external to the programme is higher for CIP than for WISER, due to the investment from external stakeholders to deliver multiple innovations under the CIP.
- CIP participants invested significant time and money into developing and implementing their CISs.
   Access to financial resources was reported as a key barrier by participants and the Prize. This limited participants' CIS activities, and ability to participate in the Prize.
- Inputs were of the appropriate quality and reasonable cost for both programmes, with CIP charging lower administrative fee to DFID.
- CIP is slightly less efficient in engaging and training target stakeholders in improving access to climate information than WISER. WISER was able to deliver training and similarly to engage a large number of stakeholders at a relatively lower cost than CIP.
- Effectiveness in increasing access to and awareness of climate information is similarly evident in both programmes, which reach a similar number of beneficiaries, and raised awareness among multiple stakeholder groups.
- However, the cost per beneficiary is higher for CIP than for WISER, as CIP has a higher programme cost.
- In addressing considerations beyond the 4 E's, the CIP evidences more innovation than WISER. Both programmes are dependent on associated stakeholder behaviour for their success.

#### The 'external' VFM analysis focused on:

- Costs for stakeholders in each programme
- A limited number of indicators for which data is available for both programmes, which can be directly compared to assess the relative economy, efficiency and effectiveness of the two programmes<sup>26</sup>
- Additional funder considerations that may be made when determining the kind of funding modality to invest in to achieve desired outcomes.

 $<sup>^{\</sup>rm 24}$  Including overhead, human resources, office and travel costs.

<sup>&</sup>lt;sup>25</sup> Including prize purse, workshop costs, other delivery costs for CIP; and capacity building and institutional strengthening costs for

<sup>&</sup>lt;sup>26</sup> A VFM Framework for Wiser was introduced but only in April 2017, i.e. after Wiser Western Kenya was concluded, so it did not apply to the Kenyan component. For this reason, no VFM indicators following that approach have been designed for the Kenyan component of the project.

#### 7.2 The external VFM of the CIP

#### 7.2.1 Costs for stakeholders

A key benefit of a prize approach is that it can leverage investment from stakeholders, beyond the donor, to support development and delivery of innovations up until the point of Prize award. However, there is more risk associated with this for prizes run in a developing country context, which are aimed at NGOs and small businesses, such as the I2I prizes. For the I2I Prizes, the necessary investment – of both time and financial resources - is particularly prominent, due to the prize period of 18 months, which is given to allow time to generate outcomes. This has significant implications for stakeholders and for the true cost of a prize as compared to other funding mechanisms. As such, a key point of interest for DFID is in the costs for stakeholders, including participants, data providers and investors, as well as the donor, for delivering the prize outputs. The costs for stakeholders in each programme are detailed in Table 2, Annex 11.

In exploring, first, the costs to DFID for both WISER and CIP, the data indicates proportionally higher administrative investments in WISER (60.5%), compared to CIP (43.8%); and higher delivery (45.7%) costs for CIP, compared to WISER (34.6%). Here administrative costs include overheads, human resources, office and travel costs; while delivery costs include the prize purse, event costs and workshop costs for CIP; and capacity building and institutional strengthening costs for WISER.

The overall costs for stakeholders external to the programme is higher for CIP than for WISER. While WISER required investment in time by intermediaries and KMD staff who were attending their training, CIP required more investment from participants, at least in time and potentially in financial costs; but required much less time from the KMD – instead encouraging relationships to develop independently between KMD and participants (see Table 2, Annex 11).

Participants invested significant time and money into developing and implementing their CISs. Access to financial resources was a key barrier for participants (see SEQs 4 and 5). This limited participants' CIS activities and ability to participate in the Prize. The estimated total cost to 27 participants is £152,550. We have some indicative evidence from 10 participants that they covered approximately 50% of their participation in the Prize through their own resources. This ranges from 27%–100% of costs among the participants that reported this. We have scaled this up to 27 participants<sup>27</sup> to estimate a cost of £152,550 total spend by participants ranging from £0–£22,657 spend per participant – including personal or organisation spend. Remaining costs are covered by grants, loans, Wazo and Tambua prize winnings, users' fees, friends' contributions, community contributions and training and sales of products.

Some participants reported receiving donor funds during the course of the Prize, to implement their activities. A total of £147,081 donor funding was reported by ten participants. This includes a total equivalent of £115,290 reported by eight participants in their cashflow statements, and £31,791 reported by two further participants in the e-survey. Another participant reported receiving a little donor funding but did not specify the amount. Participants revealed that grant funding came from a number of donors, including Slovak Aid, ActionAid Kenya, the African Forum for Agricultural Advisory Services, the Agriculture, Food and Fibre Authority, the African development Bank, Swiss Contact, the Kenya Climate Innovation Center, and the National Environment Trust Fund, among others. Some of this funding e.g. from the African Forum for Agricultural Advisory Services; the Agriculture, Food and Fibre Authority; and the African Development Bank, was already in place but drawn upon for the purposes of the prize; kilii while some, e.g. the funding from Swiss Contact and Slovak Aid, was leveraged as a result of the Prize.

<sup>&</sup>lt;sup>27</sup> One discontinued participant in particular reported high costs for participating in the Prize despite not continuing the process to the end, so we cannot assume no costs for those who discontinued.

<sup>&</sup>lt;sup>28</sup> N.B. there are significant discrepancies in the figures reported within the cashflow statements and the in the e-survey so caution is needed in reading these findings.

Some participants reinvested their prize winnings from the Wazo and Tambua prizes back into their initiatives. However, these winnings were not enough to recover costs. The first place winners of both the Wazo and the Tambua Prizes reported reinvesting their prize winnings into their Stage 2 activities, however both made up additional costs using their own resources.

An estimated 35,280 days in total was invested by participants and their teams. The average team size was six, indicating an average of 1,306 days per participant team over the duration of the Prize. However, the range reported is from 130–2,800 days per team. [The evidence leading to these conclusions is limited, and based on what is possible to extract from participant data including reports, interviews and e-survey responses. The evidence is patchy – it does not come from all participants and participants also reported different quantities in different surveys. Therefore, the results of the participants costs should be regarded very much as an estimate].

Despite this being a key barrier, lack of financial resources did not stop participants from taking part in the Prize, indicating they were willing to take this risk on. None of the discontinuing participants we interviewed pointed to a lack of financial resources as a key factor in their withdrawal from the Prize. Participants found ways to curb or amend their initiatives in response to limited resources. For example, two participants worked with intermediaries to ensure a wider reach and two piggybacked on other meetings to share information.

#### 7.2.2 Value for Money comparison

Overall, the CIP has a comparable VFM to WISER. WISER is better able to evidence efficiency and lower cost per beneficiary than CIP. CIP shows better performance in stimulating innovation. However, both receive fairly similar ratings for each category, each seemingly being effective in achieving their intended objectives, despite through different avenues and funding modalities.

[While reading this section, the limitations with respect to comparing two such different programmes, as explained in Annex 5, should be considered. The same strength of evidence limitations for CIP apply here as in the internal analysis, while the same amount of insight into strength of evidence is not possible for WISER as we were not ourselves involved in the programme or evaluation].

Table 14 summarises the comparative rating of CIP to WISER against the 3E's (excluding equity as data is not available for WISER), the cost-effectiveness assessment and funder considerations. Each is discussed further below.

Table 14: Summary of the VFM comparison between WISER and CIP

Comparison point	Criteria	CI	CIP rating*		WISER rating*				*		
Economy: Getting the best value inputs	Inputs are of the appropriate quality and reasonable cost	1	2	3	4	5	1	2	3	4	5
Efficiency: Maximising the outputs for a given level of inputs	Efficiency in engaging and training target stakeholders in improving access to climate information	1	2	3	4	5	1	2	3	4	5
Effectiveness: Ensuring that the outputs deliver the desired outcomes	Effectiveness in increasing access to and raising awareness of climate information	1	2	3	4	5	1	2	3	4	5
Cost effectiveness: Outcomes relative to inputs invested	Cost-effectiveness of improving access and use of climate information for poor and vulnerable people	1	2	3	4	5	1	2	3	4	5
Funder considerations	Likelihood of programme in delivering against further funder considerations i.e. innovation, impact of external factors, likelihood of achieving longterm results.	1	2	3	4	5	1	2	3	4	5

<sup>\* 1</sup> is the lowest rating and 5 is the highest rating, with evidence from each programme considered in the context of the other as well as its own performance – as such a number of factors are often considered in determining the rating.

## Economy of the CIP compared to WISER

Inputs were of the appropriate quality and reasonable cost for both WISER and CIP, with CIP charging lower administrative costs to DFID. CIP charged lower administrative costs to DFID than WISER. This is low for the sector in general and so moderately exceeds expectations for this sub-criterion. Both programmes evidence input cost savings through leveraging resources from local suppliers, including the local agent for CIP. Similar average fee rates for international team members in each programme were charged (£615 for CIP and £627 for WISER), and each worked through a local agent (i.e. Cardno for CIP; and CARE for WISER), to achieve cost savings.

#### Efficiency of the CIP compared to WISER

CIP is slightly less efficient in engaging and training target stakeholders in improving access to climate information than WISER, though both programmes overall represent efficiency in converting inputs to outputs. WISER was able to deliver training and similarly to engage a large number of stakeholders at a fairly low cost; while CIP engaged less stakeholders at participant and sector level for a higher cost per head. In addition, while WISER delivered training, CIP delivered a less intensive orientation workshop, essentially on-boarding participants to the Prize process. The cost per head for the orientation is based on a fixed number of the 27 eligible participants attending. If the number of attendees was increased the workshop may still have had the same costs and the per head cost would come down. However, the nature of the Prize is such that only eligible participants would have been invited to such an event and so costs are necessarily a product of that. WISER was also significantly more efficient in engaging stakeholders, with more stakeholders engaged in programme activities at a lower cost per head.

Conversely, in terms of stimulating tangible action, CIP achieved a lower cost per initiative than WISER achieved per county plan produced. Here, for CIP, we have not counted innovations of those who discontinued, which have no evidence of being currently operational on the ground. Both the CISs and the county plans serve to support local level access to climate information, however are admittedly a fairly crude comparison, being very different outputs produced at different levels of the system.

#### Effectiveness of the CIP compared to WISER

Effectiveness in increasing access to and awareness of climate information is similarly evident in both programmes. The strength of evidence is more limited for CIP than WISER, as WISER's methodology for accounting for total beneficiary numbers is more clearly explained than the individual methodologies for CIP participants. Coincidentally, the two programmes reached a similar number of beneficiaries. CIP reached a slightly higher number, if figures are taken at face value, though there are some concerns with the reported figures as discussed in Section 5.1. However, for WISER, there are weaknesses in the evidence for how people are using the information they are receiving and how this is impacting on their livelihoods. The use and impact of the CISs is therefore better evidenced in CIP than in WISER (see Section 4.1).

Both programmes have raised awareness about climate information, but in different ways. The CIP raised awareness primarily of participants, who also helped raise awareness of their beneficiaries and partners through their CIS activities. While WISER raised awareness of KMD staff and intermediaries, presumably more intensively due to the training and capacity building approach taken, CIP brought in new players, including from the private sector, to find solutions and engage new beneficiaries.

#### Cost-effectiveness of the CIP as compared to WISER

The CIP has a higher cost per beneficiary than WISER based on the status of each at the end of their main phase.<sup>29</sup> This is calculated by the total programme cost excluding Monitoring, Evaluation and Learning costs, over the number of beneficiaries i.e. those reported to have improved access to climate information as a result of programme activities. [The number of beneficiaries does not include those whose awareness has been raised. This is because raised awareness is a means to improve access and increase use rather than a separate outcome (see ToC), and because, for CIP, this would involve double counting of beneficiaries (as the evidence indicates that awareness is largely raised among beneficiaries (see SEQ1)].

The figures are a static way of representing the performance of each programme, indicating progress at one point in time. With sustained or scaled and effective activity by either programme, the beneficiary figures are likely to increase and correspondingly the cost per beneficiary would decrease. Behind these figures what is really of interest is evidence of use of the information to support adaptation of poor and vulnerable people. CIP evidence provides some indication of this (see Section 4.1), while further insight on both sides would be of great interest in understanding the VFM of each programme in greater depth.

#### 7.2.3 Funder considerations

The value of the programmes in delivering against additional funder considerations, including innovation; dependency of stakeholders' behaviour; and likelihood of achieving long-term results, is varied, with CIP showing greater innovation and both evidencing sustainability issues.

The CIP evidences more innovation than WISER, suggesting that a Prize approach is more effective than a grant-funded technical assistance programme, in stimulating innovation. The CIP created space for

<sup>&</sup>lt;sup>29</sup> For CIP, this includes support up to the Tekeleza award; for WISER, this includes the main phase, not the Bridging Phase.

open innovation, with eight of the initiatives representing imitative innovations and five being adaptive innovations. <sup>30</sup> However, innovation was not a focus for WISER, which was not innovative in its approach beyond training on a new tool. Their use of government systems to build capacity and improve plans may have benefits for stakeholder buy-in, but is not an innovative approach to developing solutions.

Both programmes are dependent on associated stakeholder behaviour for their success. While WISER is highly dependent on government support for implementation and sustainability, with less reliance on intermediaries; the CIP and any prize programme is highly dependent on the participants' continued engagement and motivation, but with less reliance on day-to-day government support – for CIP, this is needed to support data access but, besides that, it can operate independently. The reliance on external stakeholders for any prize or programme will vary from context to context.

The likelihood of achieving results in the longer-term is in question to some extent for both programmes. There are suggestions for WISER that the continued implementation of associated activities is reliant on donor funding or strong government intent and budgetary planning. A planned second phase of WISER that is starting up at the time of writing will support continued activity but does not represent self-sustainability. For CIP, although the financial sustainability of the innovation has been questioned (see SEQ2); the intent is evident among participants. There are early indications of continued activity among prize participants, including a consortium being established among participants and one winner reporting two new formal partnerships. Their perseverance in driving their innovations forward through the Prize period and their observations of the benefits of using climate information may support their continued implementation even now the Prize has finished. This will be returned to, and the VFM assessment updated if required, after the sustainability assessment.

 $<sup>^{30}</sup>$  I2I defines innovations as new processes, technologies and services, or a blend all three, and includes:

<sup>-</sup> New to the world – NOVEL;

<sup>-</sup> New to the location or firm - IMITATIVE;

<sup>-</sup> New to the field of endeavour, i.e. repurposed – ADAPTIVE

## **Section 8**

# PEQ4: Were there any unintended consequences and did they outweigh the benefits?

SEQ4: Which positive or negative unintended consequences has the prize stimulated? Did the negative consequences outweigh the benefits of the prize for i. solvers; ii. beneficiaries/user communities?

There are indications of unintended consequences resulting from the prize, though the evidence base is limited. Some participants incurred organisational costs as a result of participating in the prize, but noted several benefits to their organisation, which may not have been as accessible through a grant or other non-prize modality. Users also incurred costs in some cases, and a small number reported negative consequences as a result of using the CISs. However, there is some interesting evidence for positive social outcomes. Overall, we find that the benefits of the Prize outweigh the negative impacts. Suggestions of both positive and negative consequences for users point to the need for further evidence generation at ground level to understand the true impacts of CISs for users.

#### Key findings:

- There is evidence of positive and negative unintended consequences, however the evidence base is limited, particularly with regard to the unintended benefits that were achieved by the Prize.
- Non-winning participants and, in some cases, communities, invested their own resources into the prize, which were not subsequently recovered through investments, loans, grants or prize winnings. Ten participants reported spending their own money to implement their initiative eight of these not winning a cash prize. Some services charged their users, and at least three initiatives sought community contributions to enable them to deliver their CIS.
- There is evidence that a very small proportion of users (n=13) experienced a negative change as a result of the CIS innovations.
- There is some limited anecdotal evidence for some significant social outcomes among communities as a result of delivering useable, relevant and reliable CISs.

Table 15 summarises the unintended consequences evidenced by the Prize. It indicates whether they can be considered as positive or negative, who they affect and what their level of impact is. Each is discussed in more detail below.

Table 15: Summary of unintended consequences observed as a result of the Prize

Unintended consequence	Description	Positive/ negative	Affecting whom	Level of impact
No financial return on personal investments	Participants contributed their own funds to the Prize, which were not reconciled through subsequent investment, earnings or Prize money.	Negative	Participants; User communities	Moderate – not all participants spent own money, and they gained non-financial benefits from the Prize. User contributions were voluntary and presumably made based on demand for the service.
Negative outcomes as a result of CISs	13 users reported negative change related to: limited access/use of information; and crop yields and damage.	Negative	Users	Low – low number of users reporting this in comparison to beneficial outcomes of CISs (13 total).
Social outcomes	Anecdotal evidence for reduced child marriage, shift away from sex work and improved health.	Positive	User communities	Low – evidence is anecdotal and self-reported only.
Collaboration between participants	Evidence for collaboration between participants to strengthen their initiatives.	Positive	Participants	Low – limited evidence for this, one collaboration no longer active and another currently being established.

# 8.1 Negative unintended consequences

#### 8.1.1 Lack of financial return on organisational investments

Non-winning participants and, in some cases, communities, invested their own resources into the prize, which were not subsequently recovered through investments, loans, grants or prize winnings. One of the benefits of a prize is in engaging people to work towards a solution, and in doing so, to leverage, or self-fund, the necessary resources to cover the costs of participating. This investment of financial resources has issues in the context of small, non-profit organisations who are unlikely to have a reserve of funds to fall back on. We find that participants and, in some cases, user communities, contributed their own funds to the Prize, which were not subsequently recovered.

There is consensus across the Prize Team that access to financial resources was a key barrier for participants, lxvii limiting participants' CIS activities, and ability to participate in the Prize. In interviews, eight participants indicated not having enough funding to cover their implementation plans. Some of these participants changed their implementation plans because of this, either reducing the scope of their plans or finding ways to deliver effectively with the finances they had. For example, two participants decided to work with intermediaries to ensure a wider reach, and another two piggybacked on other meetings to share information.

Ten participants reported spending their own money to implement their initiative — eight of these not winning a cash prize. Some services charged their users, and at least three initiatives sought community contributions to enable them to deliver their CIS. [Inclinity]

The financial data available from participants is varied and incomplete. However, there is indicative data that participants were not able to cover their costs for participating in the prize through investment or grants. The e-survey we conducted to understand costs indicates much variation between participants in terms of costs incurred. Seven participants reported costs ranging from approximately £2,300 to £46,800 per participant. These participants report the largest proportion of the costs, ranging from approximately £1,400 to £23,200, to be covered by their own resources as opposed to grants, loans or other resources. Here, we can take own resources to mean the organisation's resources, rather than necessarily the individuals' personal resources. The strength of this evidence is limited, due to low response rates, conflicting evidence and inconclusive verification data.

We note that not all participants failed to recover their own resources. Two participants reported not spending any money on their initiative. They did however, spend time. Moreover, it seems that at least five of those participants who won a Prize were able to recover their costs, and more, through the cash award received. Table 16 indicates the total costs reported by winning organisations for competing in the Prize against the total award received. For those we have useable data available for, it shows that all who received an award were able to recover their costs, costs amounting to between 4-84% of their prize winnings, depending on what their costs were versus the award they received. This table also shows that the distribution of the prize pot did not correlate to the costs invested.

Table 16: Costs for participating against prize award lxxvi

Award	Total costs reported (USD)	Prize received (USD)	Costs as % of winnings
First place	Inconclusive data	200,000	n/a
Second place	9,853	75,000	13%
Third place	2,956	75,000	4%
Fourth place	8,499	50,000	17%
Runner up	29,559	35,000	84%
Runner up	7,784	35,000	22%
Runner up	Not reported	35,000	n/a

However, the remaining 20 participants who did not win a Prize, needed to have secured or generated funds to cover both the design and implementation of their initiative. This is a key risk of a prize process and expected to an extent – the Prize Team identified the risk of participants not being able to get funding in their risk assessment. While mitigation measures against this risk were proposed i.e. to deliver a capacity building workshop on funding and to put participants in contact with experts to advise them, these activities were not delivered, alongside other solver support activities, due to DFID's aim to deliver the Prize with limited support for participants.

We suspect this had a moderate level of impact – not all participants spent their own money, and they gained non-financial benefits from the Prize. User contributions were voluntary and presumably made based on demand for the service. However, ideally, there would have been more success among participants in finding self-sustainable solutions, or leveraging investment, to ensure they did not incur personal or organisational costs.

#### 8.1.2 Negative outcomes as a result of CIS innovations

There is evidence that a very small proportion of users experienced a negative change as a result of the information they received through the CIS initiatives. This needs further exploration and substantiating to draw any concrete conclusions due to the small numbers represented, as well as limited detail in explanations.

In the user verification surveys, 87% (n=1,165) of users reported experiencing a change as a result of the climate information received. While 86% (n=1,152) of users engaged reported experiencing a positive change as a result of using the CISs, the remaining users, representing 1% (n=13) of users, reported experiencing a negative change.

The users reporting a negative change are represented across 10 of the CISs, including the CISs of seven finalists (six who received awards) and three who submitted but were not selected as finalists. This means the number of users for each initiative who actually reported a negative outcome are minimal. The reasons users provided for the negative change relate to access and use of the information (inaccuracy of the information received from the CIS, ignoring the information provided, lack of understanding of information) and to outcomes (low yields or destruction of crops by floods as a result of acting on information). The verification data does not provide further detail behind these reasons to understand the extent to which these negative experiences are a result of respective CIS activities.

There was also limited evidence of this in FGDs. laxis In one group, users explained they had received inaccurate information and, based on this, planted and received no rains, or planted and received too much rain, in both cases losing all of their stock. Laxis They explained that when this happens it's a loss, people have to start over, and those in a more secure position than others can recover more easily.

## 8.2 Positive unintended consequences

#### 8.2.1 Social outcomes

A number of interesting social outcomes at user level were reported by participants and focus group respondents. These need substantiating but indicate positive unintended consequences of the CIS initiatives. The indication of some significant social outcomes among communities as a result of having useable, relevant and reliable CISs available is particularly interesting and could benefit from further exploration to understand the validity and extent of these claims.

One finalist explained that the potential for reduced child marriage within their user community, due to increased production and related income reducing the need for families to marry off their daughters for the dowry. bxxi Unfortunately, this anecdotal evidence comes from an area that neither the verification or the Evaluation Team were able to visit and so the claims could not be substantiated.

Another participant who submitted a final report but did not reach the final stage explained that the increased prospects of agriculture had impacted on community members who secured income through sex work. They had observed the prospects of income from agriculture now the climate information was available and the participant noted their shift towards an agricultural income: xxxiii

"This group of sex workers, through our work they decided they would do farming – this switch has happened among a number of them. It's not a complete shift, but I'm seeing them doing the farm at least to supplement, they have rented a farm to see if it will work better for them." (PS03)

One focus group explained the health benefit they had experienced since the introduction of the CIS. They explained that the CIS has allowed them to introduce short season plants into their cropping cycle, which supports better weed management and reduced the spread of malaria-carrying mosquitos:

"This information is important because it has changed the health – waterborne diseases and malaria. So, when we start preparing [the land], we stop the mosquitos."

"[The mosquitos] are attracted to the bushes. If you have short season plants you can dig and plant earlier – you don't leave your land to go bushy. Everyone has planted, we have weeded, there is a lot of activity going on and people have more food. You used to find stagnant water but people have directed it to their farms so it decreases mosquito breeding." (Focus Group Participants, FG05)

Again, this suggestion requires further exploration to understand the attribution of the CIS to these changes. Two of the focus group respondents explained that there is more activity in their communities. People are keeping busy because they have information that enables them to maximise use of their land throughout the year.

#### 8.2.2 Collaboration between participants

There is evidence for collaboration between partners, an unexpected and potentially positive outcome of the Prize that deserves recognition. A collaboration was formed for a short time between one participant that discontinued, and one that submitted but did not reach the final. The former provided advice and support for the latter on how to reach the community. Prize Recently, there have been efforts by one of the runners-up to bring together a consortium of the finalists of the Tekeleza prize. Their first meeting was in Nairobi, on 21 February 2019. It is too soon to understand the outcomes of this now, however this is something that the Evaluation Team will explore during the sustainability assessment.

# 8.3 Benefits outweigh negative consequences

While there is limited evidence for these unintended consequences, the evidence available suggests that the benefits of the Prize outweigh the negative impacts. The nine participants that responded to the esurvey indicated that their participation in the Prize had benefitted their organisation through, for example, providing networking opportunities, gaining exposure for their work, engagement with KMD, improving the adaptation capacity of their communities, driving partnerships, expanding their services, improving their information dissemination platforms, improving their business model, and providing employment opportunities. They all felt that their participation in the Prize has improved the quality of their CIS. By providing an open opportunity for people to be involved these benefits are more accessible through a Prize process than a grant process.

A significantly higher rate of users reported positive changes over negative changes. 99% of those who experienced a change reported that this was a positive change; those experiencing a negative change represent a small number of participants. The negative changes experienced by users could have severe implications if they were found to be more widespread than the current available data set indicates. The social outcomes have significant implications for the potential social benefits offered by the CISs. If both could be held equally true, it could be understood that the positive unintended consequences outweigh the negative, when considered as a net impact on society. Suggestions of both positive and negative consequences for users points to the need for further evidence generation at ground level to understand the true impacts of CISs for users.

## **Section 9**

# PEQ5: Is solver support necessary for prizes to be successful?

Participants perceived the solver support provided to be of value to their endeavours. At the end of the Prize, stakeholders identified some further support that could be beneficial to supporting participants and strengthening the outcomes of the Prize. However, the success of the Prize overall indicates that, for this Prize, increased solver support was not a necessity for the Prize to work. Rather, limiting support is likely to encourage participants to identify their own solutions to challenges and to develop innovative means of overcoming barriers.

#### Key findings:

- Key barriers faced by participants included limitations in access to climate information, stakeholder engagement, resources, technical skills, delivering Prize requirements; and challenging contexts.
- The orientation workshop was beneficial in supporting participants' understanding of the prize and their role as participants; limited additional solver support was provided.
- 18 submissions evidence a number of barriers were overcome by participants throughout the prize period i.e. access to data, beneficiary reach, technical skills and delivering Prize requirements.
- Lack of resources remained a key issue.
- Additional support proposed by participants to help overcome barriers includes: ongoing guidance
  and feedback; training on data collection and reporting; financial support; training on business
  management; stakeholder engagement; links to KMD and logistical support.

# SEQ5.1 If solver support was delivered to the prize participants, how did solver support activities reduce barriers to improve solver ability to i. participate in stage 2; ii. deliver effective CISs?

The Prize Team provided some key support to participants during the Prize process. This included, primarily, an orientation workshop delivered at the start of the Tekeleza Prize, with the aim of onboarding participants to the process, by familiarising them with the process and expectations of the Prize.

Additional solver support activities were fairly limited due to DFID's aim to run the Prize with limited support for participants. They included facilitating stakeholder linkages e.g. with KMD, at national and county level; and ongoing communications with participants, including some limited information sharing by email and Twitter, responses to ad hoc requests for technical advice, and communications encouraging report submission. bxxxvi

Despite this support, interviewees noted multiple barriers that had affected their participation in the Prize and implementation of their innovations. These included:

Limited access to useable climate information (i.e. reliable, localised): The key source of climate data was from KMD, who were found not to be very supportive initially, presenting a barrier to direct data access. However, throughout the course of the Prize, participants were largely able to overcome this through, for example, using publicly available data, approaching CMDs, accessing information through third parties or seeking supplementary data from alternative sources. In their final reports, 16 of 18 final participants reported accessing data from the KMD, either through their website, radio service, or directly from county offices. Description Participants also reported a range of other providers they received supplementary data from including the World Meteorological Organisation, Kenya's National Drought management Authority, WISER and aWhere.

- Challenges to stakeholder engagement:<sup>booxix</sup> participants reported issues with partner and user engagement, which affected their ability to deliver effectively. Three participants reported that the partners they were trying to engage were not interested, while, in terms of user engagement, issues related to lack of familiarity with the CISs, communications (particularly illiteracy, translation requirements and mobile phone use and coverage) and location of target users (i.e. across vast areas).
- Limited resources: including time, transport and finance.xc
- Limited technical skills:\*\*ci including understanding climate information and developing new technologies.
- **Difficulties in delivering Prize requirements**: including reporting for the Prize communications and presentation during the judging process\*\*cii (although this was not raised by participants).
- Challenging contextual issues:\*xciii such as climatic conditions on the ground participants reported that their operations were affected by both drought and flood and political activity such as election periods, periods of conflict and insecurity.

Eight participants discontinued their participation before the end of the Prize. Of the four we interviewed, their reasons for discontinuing included a lack of personal time, \*civ\* institutional support (one from their own organisation and one from KMD), \*cv\* and a gap in reaching end users. \*cv\*i\* One participant who discontinued explained that their idea was to create a third-party service, not for the end users but for intermediaries. \*xcv\*i\* As such their innovation would bridge the gap between the data provider and other CIS providers, so it would indirectly support end users, but not target them directly. They did not feel it was appropriate for the Prize context but intend to pick up on it when they have more time. Another explained that they faced challenges with ensuring access and usability for their users. \*xcv\*iii\* This participant also decided they were facing too many gaps to compete in the competition.

However, the fact that 18 final submissions were made and seven prizes were awarded indicated that the majority of participants were able to overcome the barriers they faced throughout the course of the Prize. For example, all 18 submissions that went forward to judging and verification represented access to data, some count of beneficiary reach, and adequate technical skills and understanding of the Prize process to be assessed for the Prize.

The solver support provided to Tekeleza participants i.e. the orientation workshops, provided steering for participants to effectively deliver against prize expectations. The workshops explained what the Prize was, data collection and reporting requirements, advice for successful implementation and guidance on climate information and how to access it. Xcix

The orientation workshop received positive feedback from attendees.<sup>c</sup> In the workshop feedback, all 22 participants who provided feedback said they felt more prepared to implement their initiative after having the training.<sup>ci</sup> In the KIIs, participants noted its value in supporting their understanding of the Prize and their role as participants. In particular they highlighted the value of understanding how to approach implementation, reporting requirements, business management, climate information, stakeholder engagement and how to work with users on the ground.

One finalist explained how the guidance provided during the workshop helped shape their approach on the ground. They explained:

"If they had not asked for user friendly [innovations], we would have disseminated in English. We didn't [previously] see the importance of translating the information into the local language, so it helped us make our initiative more efficient and more effective." (PF05)

Participants also highlighted the value of the workshop in providing the opportunity to learn from other participants, to network and to hear advice from experts who attended as guest speakers.

Issues with beneficiary reach points to limitations in using demand-driven approaches, that would presumably avoid situations of introducing unfamiliar technologies to users in foreign languages, or require a level of literacy among illiterate users. Participants could have benefitted from more support and encouragement in doing this, perhaps prompted through the reporting template.

Participants explained that they were responsive to contextual barriers where possible. Though these were reported, they were not a reason for participants discontinuing their participation.

# SEQ5.2 If solver support was not delivered to prize participants, what solver support activities could have reduced barriers to improve solver ability to i. participate in stage 2; ii. deliver effective CISs?

A lack of resources and particularly financial resources, was a key issue that was not effectively overcome by participants during the Prize process. Participants relied largely on donor funding, use of their own resources or, in some cases, use of community resources. While participants found ways to deliver their CIS despite this, it suggests that further support to participants to help them leverage investment or find self-sustainable pathways could strengthen the initiatives and therefore the value of the Prize.

In both the workshop feedback and the KIIs, participants highlighted that more of the same kind of support would have been beneficial both for their understanding of expectations and technical capacity, as well as to create networking opportunities and know how other participants were tackling shared problems. 10 of 22 participants who provided feedback felt that more time for the workshop would have been beneficial, e.g. to allow them to cover more topics, and to enable greater participation in activities. Seven of 22 left the workshop feeling they still needed more clarity on the data they needed to collect.

The participants highlighted that they could have benefitted from additional support after the workshop, cii including ongoing guidance and feedback from the Prize Team; training on data collection and reporting; financial support, including start-up funding; and for logistical support; linkages to KMD and access to their data; training on business management; and support with engaging potential partners.

A judge agreed that further training was required to level the playing field:

"They could start with some training, because now what comes out is that the ground was not all that level. It tended to favour those who were already doing CIS when the Prize started." (J04)

Similar suggestions for support that could have helped participants overcome the barriers they experienced were given in interviews:

• Financial support: iii participants explained that some initial financial support would have helped them establish their initiative, overcome logistical challenges and enabled their improved stakeholder engagement. The Prize Team suggested investor forums as a key support need. This would require careful consideration, effective stakeholder identification and strong convening power by the Prize Team to get the right people in the room and encourage them to actively invest in the solutions. It also requires capacity building for some of the participants to be able to effectively sell themselves and their innovation in such a forum and identify reliable avenues for healthy returns on investment.

- Stakeholder engagement and networking opportunities: operation particularly with investors, KMD and other entities implementing similar initiatives this is something that the Prize Team had identified as a priority to deliver if they were able to deliver further support.
- Ongoing support for solvers during Prize process: including, for example, regular workshops, reporting support, mentoring/ongoing technical support; with the aim of providing an ongoing steer in the right direction based on reported progress. Some participants highlighted that additional workshops were promised at the start of the Prize but not delivered.
- Logistical support:<sup>cvi</sup> three participants noted that the vastness of their communities was a challenge that could be supported through support for transport to reach dispersed and remote communities.

# **Conclusions**

The Tekeleza Prize was successful in stimulating the development and implementation of a set of CISs. These included both 'imitative' and 'adaptive' innovations.<sup>31</sup> They offer new avenues for people around Kenya to access climate information – a key enabler for building climate resilience among farmers. While the verification assessments did not confidently report high quality of all of the initiatives, the cumulative outcomes of the CISs show success in achieving the intended Prize outcomes for CIP.

Over 50% of the CIS users can be considered as poor, having reported low or extremely low monthly household consumption, and a large proportion of users could be considered particularly vulnerable to climate change. With all CISs being targeted at farmers, we can expect all intended beneficiaries to be at the frontline of climate impacts, however we also found that 90% of users were based in rural areas, just under 50% were female and 40% of users were educated only to primary level. This indicates that the innovations are useful and useable to a range of users – not only those with a certain level of resources, autonomy or education. While the Prize was designed to stimulate innovations for the poorest and most vulnerable, one would expect a useful service to appeal to all who are operating within a given context. Given that, these figures indicate that the targeting, accessibility and utility of CISs has been effective for contributing to development outcomes.

Though a high level of risk for participants is associated with prizes, particularly in terms of financial and opportunity costs, there is little evidence for negative consequences in the existing data set. The participants largely managed to overcome the barriers they faced, despite the limited solver support offered; and while the assumption was originally made (as included in the ToC) that participants would overcome the risk of financial and opportunity costs, it would appear that, when this does not happen, participants are willing to take these risks on. They identified avenues to accessing data, resources and stakeholder buy-in. However, lack of funding remained an issue, with some participants investing large sums of money with no return received at the end of the Prize process. An indicative movement towards charging users for the services poses a future risk, particularly in terms of reducing the equity of the innovations, as evidenced in the internal VFM analysis, by limiting access to the poorest.

The VFM comparison indicates that both a prize and a grant mechanism can offer value in achieving increased access to climate information. The CIP offered more potential for innovation than WISER. It has shown the value of a prize for engaging new actors, stimulating innovation and bringing in new ideas, approaches and partnerships to address a defined problem. WISER, on the other hand, had more impact on government stakeholders – building capacity and motivation among CMDs, for example, and helping to shape a supportive policy environment by supporting the development of county-level climate information plans.

The VFM comparison does not show that one approach is clearly better than the other – but the exercise instead exposed the potential complementarities that the two programmes offer by addressing the problem in different ways. Rather than comparing the two, a more effective course might be to link the two programmes from the beginning to ensure they support and strengthen one another – in this way the WISER and CIP programme could have linked to be considered a 'systems' approach.

Some key considerations in interpreting the VFM findings include the largely adaptive nature of the CIP, the fact that it was a 'first-run' of the Prize and therefore invested into scoping and design to a greater extent than if it was run a second time, and, similarly, the learning-by-doing approach to implementation, which again promoted flexibility in the process and related decision making. These are all positive aspects of the Prize, reflecting well informed prize design followed by responsiveness to necessary change throughout the implementation period. This flexibility means that some of the expectations of the design phase were not upheld through to the end of the Prize, such as the need for user-driven processes in the

<sup>&</sup>lt;sup>31</sup> I2I defines innovations as new processes, technologies and services, or a blend all three, and includes:

<sup>-</sup> New to the world - NOVEL;

<sup>-</sup> New to the location or firm - IMITATIVE;

<sup>-</sup> New to the field of endeavour, or repurposed - ADAPTIVE

design and development of innovations, which became less of an emphasis over the course of the Prize. There is **limited evidence that Prize participants worked closely with user communities to design and develop their innovations** either in the Wazo Prize (see Annex 3) or the Tekeleza Prize. While a set of innovations were developed, there is limited evidence available for a comprehensive understanding of their adequacy and impact for users on the ground.

Participants' ongoing activity in the months following the award is key to understanding the sustainability of the Prize innovations, which itself will point to adequacy and use. While the expert assessment suggests limited potential for financial sustainability among the innovations, emerging evidence from the participants since the Prize award that they are continuing to develop, implement and strengthen their innovations, is promising. If resource barriers can be overcome then the Prize innovations have the potential to be sustained beyond the Prize period. This will also rely on continued demand from users.

The contribution of the Prize to raising awareness among participants, users and others, supports the likelihood of sustainability. The participants, some of whom came into the Prize new to climate information, have seen value in introducing climate information to their initiatives. This goes beyond being eligible to participate in the Prize, to better supporting local farmers and, indeed, increasing the value of their own business endeavours. The Prize events engaged a wider range of stakeholders and, over the course of the Prize, increasingly engaged KMD. Increased awareness among supporting stakeholders can serve to reduce barriers faced by participants, and further supports continued implementation of their innovations. Similarly, continued and successful implementation of the initiatives at ground level may result in increased engagement of a broader spectrum of stakeholders as good practice is promoted and associated impacts are observed.

It is possible, then, that the reach and quality of the innovations could increase if prize participants continue being able to overcome the barriers to implementing the innovations; if they continue to be motivated; continue to build effective partnerships; and if they continue to remain focussed on delivering services that are useable for their target communities. The absence of the need to meet the Prize requirements, however, poses the risk of reducing the impact that the innovations have for development i.e. for supporting the poorest and most vulnerable, and enhancing their adaptive capacity. Instead, different priorities may arise among CIS implementers, which allow them to sustain their initiatives in what is becoming a crowded and potentially competitive market. The sustainability of the Prize outputs and outcomes will be explored nine months from the Prize award.

### Lessons

Based on our findings and conclusions we pose a set of lessons that can be drawn from this evaluation.

#### Prizes can be effective in engaging new actors, with no previous experience of the prize topic

The CIP engaged new actors in solving the prize problem. Seven participants, including the first prize winner, reported being new to the issue of climate information before participating in the CIP. These participants represent three businesses, two non-governmental organisations (NGOs), one community-based organisation (CBO) and one international NGO (INGO). They include the first Prize winner and a runner-up, which indicates that their involvement in the Prize led them to increasing their awareness and understanding sufficiently to establish an initiative that was judged as worthy of a Prize.

#### Prize innovations are more effective in inducing prize effects than the prize process

The prize effects identified under I2I were expected to be triggered by the prize process, rather than individual projects. The CIP sought to raise awareness at sector level of the value of climate information for supporting climate adaptation among the poor and vulnerable. The prize team was limited by what they could share and promote as a result of needing to ensure a fair process. Communications tended to focus on the prize itself rather than the prize topic. However, we noted an increase in understanding of climate information, as a result of prize projects. The potential of individual innovations to contribute to prize effects should not be underestimated. While award ceremonies can generate a lot of interest in a prize and its topic of focus, this tends to reach a peak just at the point when the prize ends, while prize participants are in a position to continue implementing their innovation and in so doing, promote good practice and raise awareness.

#### Solver support is well received by participants, and can enhance both capacity and motivation

While it may keep prize programme costs lower, there are VFM risks to providing minimal support to solvers during and after the prize, not least the loss of promising participants and innovations during the prize process. Some of the people we spoke to struggled to participate in the Tekeleza Prize; for example, the Stage 1 prize winner did not continue to the end of Stage 2, despite being judged to have the most promising concept among Stage 1 participants. Though limited solver support was delivered under the Tekeleza prize, what was delivered was well received. Participants and other stakeholders suggested that additional activities, such as regular workshops, mentoring and ongoing technical support, could have supported their progress. This has potential to further motivate participants to continue implementing, through the non-financial benefits gained. Ongoing communication with participants throughout the prize process appears to be key, for initial engagement, motivation and support, and feedback and transparency post-award.

#### Building connections with similar projects and multi-level stakeholders can support implementation

After facing initial barriers in accessing information, some participants were able to connect with and access data directly from county level meteorological offices. Simultaneously, the WISER programme was working with CMDs to build their capacity and to create county level plans. Connecting with such projects could help with network building and technical support for prize participants; and identifying and supporting network building at sub-national levels may support participants to unlock barriers that they face at national level, to more effectively implement innovations.

#### Understanding prize innovations needs to be coupled with a good understanding of beneficiary impact

Delivering a Prize for development, that is seeking development outcomes, necessitates a responsibility to understand the true value and impact on the ground. The evidence base for this evaluation was much stronger at process level than outcome level, among Prize Team and participants rather than beneficiaries. This did not enable a clear understanding of what happened on the ground – regarding the use of innovations and associated positive and negative impacts.

#### Verification and judging data can improve understanding, transparency and provide post-award support

The engagement of expert judges and verification agents in the prize process provides a key resource that can advise on how innovations can be improved and strengthened. The user verification data represents huge value in understanding ground-level activities and impacts for users. Methodologies should be carefully thought through with verification agents. For example, representative samples should be considered to enable a more accurate determination of the veracity of the self-reported data across the beneficiary population. Further, a more comprehensive understanding could come from continuing surveys with those beneficiaries who reported not using the CISs, to understand what the barriers to use were and to better understand unintended consequences. Judges' assessments can be consolidated to feed back to participants to both justify the decision-making process, and to make the process more transparent.

#### Engaging users in CIS development may increase usability and uptake

During the design phase, the prize team identified a key barrier to access and use to climate information by poor and vulnerable people in designing CISs without considering the needs of user communities. At the end of the Prize few Tekeleza participants were able to explain how they involved target users in CIS design and development. However, such engagement has implications for the usability of the CISs. Engaging communities from the start, and keeping them engaged throughout the process of design and implementation may increase the usability of CISs and therefore their level of impact.

# **Recommendations**

We propose a set of key recommendations, based on our findings, for consideration by DFID and other donors, Prize Managers and CIS providers, seeking to implement prizes for development in similar contexts. We propose these as working recommendations, which will be reviewed, reconsidered and revised after the sustainability assessment is completed.

Ref	Recommendation	Audience
1	Increase opportunities for raising awareness of the Prize and the issue: increasing interest from KMD and WISER representatives during the Prize period (SEQ1), indicates value in sector-level engagement. Taking advantage of the buzz of a final award event is an important opportunity for further engagement and raising awareness of innovations and the focus topic. As opposed to closing activities after Prize award, it is worth planning for some subsequent activities to maximise the excitement around the Prize.	Prize Managers Donors
2	Increase technical support for solvers: participants reported a number of technical barriers (SEQ5.1). However, they greatly appreciated convening opportunities to share ideas and learn from others. Based on this, Prize Managers could consider facilitating learning platforms or face-to-face sharing at regular periods e.g. six months, depending on the duration of the Prize – this could replace reports, which CIP participants struggled with, and might be more appealing, motivating and effective.	Prize Managers Donors
3	Increase financial support for solvers: in response to financial barriers (SEQ5.2), integrate financial training or other targeted financial support into the prize process. For example, the CIP Prize Team advise 'investor forums' to facilitate relationship building between investors and participants. This requires careful consideration, effective stakeholder identification and strong convening power to get the right people in the room and encourage their active investment in solutions.	Prize Managers Donors
	While such support would increase Prize costs, it would have greater benefits for participants (who could acquire re-deployable financial skills, for example) and thereby support the long-term sustainability of CISs.	
4	Be clear and consistent in the support that will be provided: it is important to provide clarity on the support that will be offered from the outset. For example, some participants highlighted that additional workshops were promised at the start of the Prize but not delivered (SEQ5.2). Changes are less ethical in a prize context as people are risking their own resources, based on what has been promised. This includes clarity about the financial reward – how many people will receive it; for what, specifically; and what value.	Prize Managers
5	Identify and coordinate with related initiatives: the VFM analysis revealed the clear linkages between the two DFID-supported programmes with regard to what they were trying to do, and whom they were trying to support (SEQ3). Though WISER representatives became more aware of CIP towards the end of the Prize, they were implemented in parallel. Clearer efforts to link potentially supportive programmes from the offset is likely to enable greater support between programmes, with potential for improved outcomes.	Prize Managers Donors

	Members of the Prize Team have suggested that a Prize might be best used as part of a larger programme, rather than being self-standing. This could strengthen stakeholder engagement, technical support capacity, networks and partnerships, promotion and awareness raising, as well as a better overall impact at system level.	
6	Dedicate more resources to exploring usability of the innovations and impacts on beneficiaries: Possible actions include dedicating resources to more effective reporting by participants e.g. through guidelines and/or capacity building activities; ongoing monitoring by a third party, including for example, site visits; planning in advance and supporting more extensive verification; increasing resources for ground-level evaluation. Some of these approaches are being tested in other Prizes – reflecting on the value of different approaches will provide useful learning here.	Prize Managers Donors CIS providers
7	<b>Provide post-prize support to participants:</b> to support their continued and effective implementation after the Prize has finished. This could include both financial and technical support, for example, linking to investor forums or incubation hubs, and addressing weaknesses in sustainability plans (SEQ2). One participant suggested that the prize money itself should be a grant – the participant wins both the investment and the technical support that comes with a grant process. There was much enthusiasm from participants in receiving such support.	Prize Managers Donors
8	Leverage networking opportunities: these were reported by participants to be particularly useful when facilitated by the Prize Team (see SEQ5.2), however they could also be organised by participants themselves. They provide the opportunity to seek support from fellow participants, solving similar problems. Some participants supported one another during the process, and others are now engaging since the award.	CIS providers
9	Work directly with communities to understand what works for target users: the original intention was that CISs should be demand driven. There is some evidence that the CISs produced under the Prize were not designed and developed in consultation with target users (see Overarching Question), and in some cases participants needed to provide additional training during the Prize process. As identified by the Prize Team in the design stage, bringing users into the process from the outset will support the development off effective approaches that will be useable for the target user group.	CIS providers
10	Record decision making throughout the Prize process: there is much to learn from the Prize process that was not systematically captured throughout the course of the Prize. This includes some key decision-making points related to the recognition prizes, verification, judging and final award. Ongoing decision-making during implementation is a characteristic of an adaptive programme, and provides opportunity for learning and reflection, both during the Prize process, in consideration of ongoing decisions; and afterwards, in consideration of post-award activities or design and implementation of different prizes. Records could be kept, for example, in the form of a project diary, or made through a series of after-action reviews at regular intervals e.g. quarterly. Capturing decision-making on the final award would support transparency, learning and constructive feedback for participants to apply in their pursuit of their initiatives.	Prize Managers

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# **CIP Stage 2 Evaluation Annexes**

# Annex 1: External context influencing the CIP

Reflecting after the Prize, I2I's Prize Expert highlighted some contextual aspects, which may have influenced the success of the CIP:

- Overall context: The Prize Team interviewed a number of key stakeholders in-country prior to designing the CIP and found that the level of existing climate information activity in Kenya would offer an enabling environment for a prize focused on implementation of services rather than simply the development of ideas for solutions. The team's reflection is that in practice, the environment was not as enabling as expected; while interest in climate information services was high, some of the stakeholders interviewed had been over-optimistic about how advanced other related projects would be at the time CIP launched.
- Political: Despite I2I not being able to provide them with institutional financial support, the KMD was interested in the CIP and were keen to engage with the Prize Team. However, the KMD went through a number of organisational and leadership changes while CIP was running and so it came down to specific individuals within KMD to maintain the relationship. The Prize was associated with the UK Aid and KMD brands and the Prize Team felt this may have given the Prize greater credibility among potential participants.
- **Economic:** The Prize Team expected there to be a lot more funding available to prize participants from the Kenyan government, and other donors operating in Kenya, than turned out to be the case.
- Social: Kenya's entrepreneurial culture was a good fit with the risk-taking attitude needed to participate in an innovation inducement prize, however there was some unfamiliarity with prizes as a funding source among development organisations. The Prize Team responded to this by running a multi-stage prize process.
- **Environment:** Kenya experienced a harsh drought and extreme floods during the period when CIP ran, which could have motivated some people to participate.
- Legal and ethical: The Prize Team put a lot of effort into developing Terms & Conditions for the CIP and went into great detail during the initial briefing, but it is not clear how many participants read them in full. While beyond their control, there was a concern among the Prize Team that end-users of the CIP's CISs might make decisions on information provided to them by a participant that could have a negative impact on livelihoods. In response, the CIP team advised participants to use globally recognised information sources to access climate data, before sharing with their end-users.

# **Annex 2: Judging criteria**

The 15 'online judges' for the Tekeleza Prize were given a set of judging criteria against which to score the final 18 eligible submissions to the Tekeleza Prize. These are listed in Table 17, along with their weights and score range. The judging criteria were initially developed by the Prize Team in collaboration with the evaluation team, based on the expectations and aims of the Tekeleza Prize. They were later finalised by the Prize Team, who simplified them for ease of use and application.

Table 17: Judging criteria

Judging criterion	Overall weight	Score range
Adaptation and development benefits		
Relevance of the initiative provided to the target community	10%	1 to 5
Level of user engagement the initiative has achieved in target community	10%	1 to 5
Level of benefit of initiative to women, girls, elderly and disabled	10%	1 to 5
Impact of the initiative on lower income users	10%	1 to 5
Climate data		
Relevance of the type and quality of climate data and information being used	12%	1 to 5
Valid use of climate data and information to support the initiative	12%	1 to 5
Appropriate use of the technology within the initiative	5%	1 to 5
Sustainability		
Appropriate organisation structure and staff	6%	1 to 5
Strategy and financing of the business means it is sustainable going forward	8%	1 to 5
Demonstrated managing and mitigation of risks (adaptive management)	5%	1 to 5
Financial information appropriate for size and scale of initiative	7%	1 to 5
Marketing plan and partner engagement appropriate to the target community	5%	1 to 5
Supplemental Questions		
In your judgement, has the prize had a positive impact on the initiative?	N/A	narrative
Do you feel that the initiative can and should be replicated in another location?	N/A	narrative
Should the initiative be awarded a financial prize? (Yes or No)	N/A	yes or no
TOTAL	100%	

# **Annex 3: Stage 1 (Wazo) Prize evaluation findings**

The stage 1 (interim) evaluation was a narrowly focused<sup>3233</sup> process evaluation that provided learning for the Prize Team and a steer for this Stage 2 evaluation. The evaluation indicated that the Stage 1 process delivered what was required for the first stage of the prize, engaging interest from 515 registrants, leveraging 115 applications and awarding 13 winners. The prize encouraged the development of solutions for delivering climate information to vulnerable individuals and households; it helped to raise awareness of climate information; and stimulated networking activities:

**Engagement of communities:** Winners expressed greater confidence in the demand for climate information and services by user communities than the judges assessed from their applications. However, just 3 of 10 winners interviewed indicated that they had engaged user communities during the design process.

**Raising awareness:** Prize activities have raised awareness in climate information and associated innovations. 7 of 10 winners indicated that their involvement in prize activities has raised awareness, both their own awareness of climate information and related activities, and other people's awareness in their innovation.

**Facilitate networks:** Prize activities have enabled networking. 9 of 10 winners indicated that their involvement in the Wazo Prize has provided them with the opportunity to network with other solvers, experts in the climate information field and other stakeholders. They discussed these opportunities in the context of their potential for future support, inspiration or partnerships.

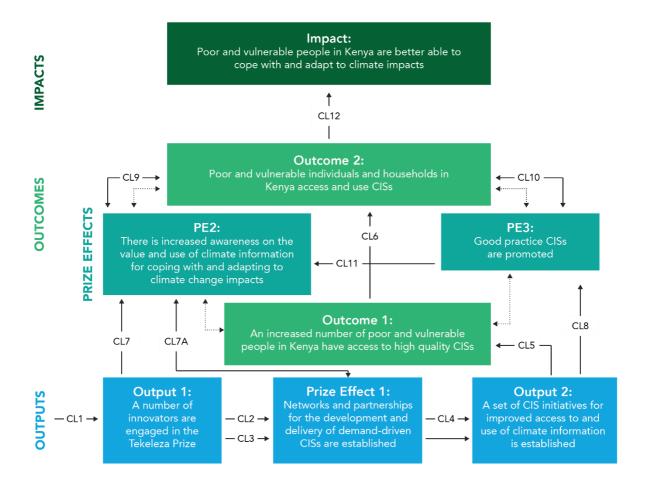
Open innovation: Winners and judges indicated that solutions represented new innovations, including through scaling up or replicating existing solutions. Some winners reported being new to climate information, innovation and/or international development. Others reported having relevant experience; 8 of 10 reported having experience of climate change information; 7 of 10 reported having experience of international development; 3 of 10 reported having experience of innovation prizes. The opportunity of the innovation prize may have stimulated solvers to share and develop their ideas in order to secure the funding to take them further.

70

<sup>&</sup>lt;sup>32</sup> This relied on a fairly small evidence base; the majority of interviews were done remotely and were limited to Prize Team and Stage 1 participants.

# **Annex 4: Theory of change**

The theory of change (ToC) was first developed at the start of the programme and has since gone through several iterations, in consultation with the Prize Team, and in response to ongoing learning and evidence on the Prize process. In preparing for this evaluation, another iteration was completed in October 2018, adapting the ToC to ensure it was fit for purpose for the evaluation, <sup>34</sup> and to more clearly reflect the intended development outcomes rather than focussing on the Prize outputs, as previous iterations had done. The ToC has been updated a further time based on the evaluation evidence, i.e. to indicate which assumptions have been confirmed through the evidence base.



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 $<sup>^{34}</sup>$  To add details and clarification, and more clearly detail the causal linkages.

A number of innovative ideas for demand driven CISs have been developed (i.e Wazo) + Inputs Causal link 1

A number of innovators are engaged in the Tekeleza Prize

Participants are registered to participate in the Prize

#### **Activities**

Prize Team launch and promote the Tekeleza Prize

Prize Team organise and run orientation workshop for Prize participants

#### Stakeholders

Prize Team | Innovators/Particpants

#### **Mechanisms**

Innovators register to participate in the Prize

Registered innovators meet eligibility criteria and are accepted to become participants of the Prize

Innovators participate in orientation workshop

#### **Assumptions**

Prize Team communication strategy is effective in engaging an inclusive range of innovative individuals and organisations (age, gender, industry, employment) (not analysed)

Innovative individuals and organisations are interested in the Prize topic (confirmed)

Innovative individuals and organisations perceive sufficient incentives in participating in the Tekeleza Prize (confirmed)

Innovative individuals and organisations are willing to take on the risk (transaction and opportunity costs) of participating in the prize (amended)

Workshops are effective in helping participants to understand how to participate in the Prize (amended)

A number of innovators are engaged in the Tekeleza Prize

─ Causal link 2

Networks and partnerships for the development and delivery of demanddriven CISs are established

> Prize Effect 3: Networks and partnerships

#### Activities

 $\label{prize-prize-prize} \mbox{Prize Team attend various events to share information about the CIP and applicants.}$ 

Prize Team hold Prize events – i.e. launch and award.

The Prize Team share relevant opportunities for participants via email and occasional newsletters  $\,$ 

#### Stakeholders

Innovators/participants Communities Data providers Investors

#### Mechanisms

Participants engage communities, data providers and investors to plan and establish their proposed CIS  $\,$ 

## Assumptions

Communities are interested, motivated and available to engage (confirmed)

Data providers are receptive to innovators' efforts and communications (confirmed)

Investors identify potential returns on their investment (not confirmed)

There is a supportive political and institutional environment for participants to work within (confirmed)

A number of innovators are engaged in the Tekeleza Prize

Causal link 3

A set of CIS initiatives for improved access to and use of climate information is established

A set of CIS initiatives for the improved use of climate information is established/operational

#### Activities

Prize Team send out quarterly report templates and encourage participants to complete Prize Team continue communications with participants and key stakeholders

#### Stakeholders

Prize Team Innovators/participants Communities Data providers Investors

#### Mechanisms

Innovators work with communities, data providers and investors to establish their proposed  ${\it CIS}$ 

#### **Assumptions**

Participants continue to take on the risk (transaction and opportunity costs) of taking part in the prize (amended)

Participants are able to access sufficient data and funding to establish their initiatives (confirmed)

Innovators are able to establish access to user communities, data and funds (amended)

Participants have the capacity to use/translate/package/interpret climate information to provide high quality services (confirmed)

There is a supportive political and institutional environment for participants to work within (confirmed)

Networks and partnerships for the development and delivery of demand-driven CISs are established Causal link 4

A set of CIS initiatives for improved access to and use of climate information is established

A set of CIS initiatives for the improved use of climate information is established/operational

#### Activities

Prize Team share information on the CIS initiatives with Kenya Climate Information Center (KCIC)  $\,$ 

## Stakeholders

Prize Team Innovators/participants Communities Data providers Investors

#### Mechanisms

Communities, data providers and investors work with participants to plan, establish and deliver CISs [unpack]

#### Assumptions

Stakeholders work together to deliver CISs

Communities are interested, motivated and available to engage (confirmed)

Data providers provide climate information at affordable rate (confirmed)

Investors invest in CISs (not confirmed)

A set of CIS initiatives for improved access to and use of climate information is established

# Causal link 5

Good practice is promoted

An increased number of poor and vulnerable people in Kenya have access to high quality CISs

Poor and vulnerable people in Kenya have access to high quality CIS initiatives

#### Stakeholders

Prize Team Innovators/participants Communities Data providers Investors

#### Activities

Prize Team run and award Recognition Awards to acknowledge existing climate information innovations (including those not related to prizes) to raise awareness of climate information and create a space to build partnerships and attract interest from the investor community

#### **Mechanisms**

Participants continue to implement CISs for poor and vulnerable communities

# Participants have continued interactions with data providers and investors

#### **Assumptions**

Participants perceive sufficient incentives to remain engaged with Prize activities (confirmed)

Participants deliver high-quality, demand-driven CISs (not confirmed)

Participants engage communities who do not already have access to high quality CISs (confirmed)

Communities remain interested, motivated and available to engage (confirmed)

Data providers continue to provide climate information at an affordable rate (confirmed)

Investors continue to invest in CISs (No investors engaged)

There is a supportive political and institutional environment for participants to work within (confirmed)

Information is reaching all social groups, and particularly the most poor and vulnerable – including, women, children, disabled, minorities (reaching women, others unverified)

An increased number of poor and vulnerable people in Kenya have access to high quality CISs Causal link 6

Raised awareness Best practice promoted Poor and vulnerable individuals and households in Kenya access and use CISs

A number of CIS initiatives are awarded the CIP

#### **Stakeholders**

Prize Team Innovators/participants Communities Data providers Investors

#### Activities

No prize team activities

#### Mechanisms

Participants promote the use of their CIS and build capacity of users to apply the information provided

Poor and vulnerable individuals and communities access climate information

Poor and vulnerable individuals and communities apply information to support their livelihoods and safety

#### **Assumptions**

Poor and vulnerable people are aware of the CIS initiatives being implemented (confirmed)

Poor and vulnerable people have the capacity to access the CIS initiatives provided (confirmed)

Poor and vulnerable people see value in using CIS initiatives (confirmed)

Participants have been able to demonstrate the effectiveness of their initiative (confirmed)

CISs are designed in a way that works with local social institutions, and individuals' perceptions, cognition, beliefs, values and experiences (not confirmed)

The CISs generate and articulate context-specific demand and link actors and services (confirmed)

The CISs developed are useable $\star$  - Information is reliable, trusted, timely, relevant – i.e. thereby with potential to support effective adaptation (confirmed – limited qualitative evidence)

CIS providers are trusted and support users to use their initiatives (confirmed)

Users are interested to use CISs, and can overcome associated risks (confirmed)

CIS providers remain incentivised to deliver CISs (TBC)

CIS providers can access finance, data, partnerships and communication channels to sustain their initiatives (TBC)

The political, economic and social context supports continued implementation (TBC)

A number of innovators are engaged in the Tekeleza Prize

Raised awareness Best practice promoted

Causal link 7

There is increased awareness on the value and use of climate information for coping with and adapting to climate change impacts

> Prize effect 1: Raised awareness

#### **Stakeholders**

Prize Team Innovators/participants Communities Data providers Investors

#### **Activities**

Prize Team organise and run orientation workshops for participants and other stakeholders Prize Team communicate about CIP through social media, emails and website

#### **Mechanisms**

Participants participate in orientation workshops, and share learning with their organisations, target users and networks

Target stakeholders engage in launch event and with media communications about the CIP Users access and use CISs to respond to climate impacts

#### Assumptions

Participants perceive workshop content to be interesting and relevant (confirmed)

Communications about the Prize include information about the value and use of climate information for coping with climate change impacts (confirmed)

Target stakeholders (data providers and investors) acknowledge and absorb communications from Prize Team and participants (investors not confirmed)

Users are open to new ways of accessing climate information and acting on it (confirmed)

Users trust the new source of climate information provided by the CISs (confirmed)

Participants have capacity and supportive environment to implement CIS initiatives

There is increased awareness on the value and use of climate information for coping with and adapting to climate change impacts

Causal link 7A

Networks and partnerships for the development and delivery of demand-driven CISs are established

> Prize effect 1: Raised awareness

# **Activities**

N/A

#### Mechanisms

Stakeholders work together to establish and deliver CISs

## **Assumptions**

Stakeholders with potential to support participant access to data and finance can be identified and engaged (finance not confirmed)

Participants have capacity and supportive environment to reach out to other stakeholders Stakeholders see value in engaging in CIS initiatives

## Stakeholders

Innovators/participants Communities Data providers Investors

A set of demand-driven CIS initiatives for improved access to and use of climate information is established Causal link 8

Good practice CISs are promoted

Prize effect 2: Promote good practice

#### Stakeholders

Innovators/participants Communities Data providers Investors

#### Activities

Prize Team share static information on the purpose of the initiative on social media

Prize Team share information about the initiatives on the CIP website

Prize Team share details with interested parties via email

The Prize Team share relevant opportunities for participants via email and occasional newsletters

Verification agents and judges verify and judge CISs

The Prize Team organise, promote and deliver the award ceremony and award the prize

#### Mechanisms

Participants promote their CISs to users, data providers and investors

Participants complete Prize process

Verification agents verify a set of CISs

Judges apply judging criteria to select a short list of winners

A number of CISs are awarded

Key stakeholders engage with winning CISs

Users promote the CISs to their networks

#### Assumptions

CISs in operation represent good practice for CISs [reliable, trusted, timely, relevant] (some, not all)

Participants supply verifiable results for accurate, timely and relevant climate information (some, not all)

Judges and verification agents have appropriate expertise and availability to effectively verify and judge the innovations (confirmed)

At least one CIS is verified and judged to be eligible for the award – prize submissions are verifiable (confirmed)

Participants have been able to successfully demonstrate the effectiveness of their initiatives (some, not all)

Results are verifiable and found to be genuine (some, not all)

Judging criteria sufficiently define 'success of project' (confirmed)

Winning innovations represent good practice for CIS (some, not all)

CISs in operation represent good practice for CISs [reliable, trusted, timely, relevant] (some, not all)

Causal link 9

Poor and vulnerable individuals and households in Kenya access and use CISs

A number of CIS initiatives are awarded the CIP

#### Stakeholders

Innovators/participants Communities Data providers Investors

#### Activities

N/A

#### **Mechanisms**

Participants continue to implement their CISs and promote use among poor and vulnerable communities

Data providers/investors/policy makers continue to/increase their support for CIS delivery

Poor and vulnerable individuals and communities access climate information

Poor and vulnerable individuals and communities apply information to support their livelihoods and safety

#### **Assumptions**

Increased awareness among participants encourages continued implementation (TBC)

Increased awareness among data providers/investors/policy makers encourages their continued support for CIS delivery (TBC)

Increased awareness among users prompts them to access and use the CISs (confirmed)

Users learn about the value of using climate information by accessing and using CISs (confirmed)

CISs are accessible and useable for poor and vulnerable users (confirmed)

Information provided is valuable and effective – and more valuable and effective than previous available information (confirmed)

The capacity and supportive environment to implement CISs has been built (confirmed to some extent)

Stakeholders' awareness of the value of CISs helps them address factors that hinder poor and vulnerable groups to access CISs, providing an opportunity for effecting sustainable change (TBC)

Good practice CISs are promoted

Causal link 10

Poor and vulnerable individuals and households in Kenya can access and use CISs

A number of CIS initiatives are awarded the CIP

# Mechanisms

Activities

N/A

Data providers/investors/policy makers continue to/increase their support for CIS delivery

# Assumptions

Promotion of CISs enables stakeholder engagement in delivery and use (TBC)

# Stakeholders

Innovators/participants Communities Data providers Investors Good practice CISs are promoted

Causal link 11

Poor and vulnerable individuals and households in Kenya can access and use CISs

A number of CIS initiatives are awarded the CIP

#### Stakeholders

Innovators/participants Communities Data providers Investors

#### Activities

The Prize Team organise, promote and deliver the award ceremony Prize Team award the prize

#### **Mechanisms**

Key stakeholders attend CIP events and engage in the information and presentations

## Assumptions

Promotion of good practice CISs influences stakeholders understanding of the value and use of climate information for coping with and adapting to climate change impacts (TBC)

Poor and vulnerable individuals and households in Kenya access and use CISs

Causal link 12

Poor and vulnerable people on Kenya are better able to cope with and adapt to climate impacts

#### **Activities**

None

#### Mechanisms

Participants sustain their intiatives

# Assumptions

Effective and sustainable solutions are possible within the programme context and timeframe (TBC)  $\,$ 

CISs have viable business plan for self funding and sustainability (not confirmed)

Data providers continue to provide access to climate data (TBC)

Investors continue to invest (TBC)

People are able to act on the information provided (confirmed)

Users use information in a way which enhances their adaptive capacity (confirmed)

CIS initiatives are one of a range of activities/opportunities available for climate change adaptation (not analysed)

CIS users know how to interpret and use climate information, including awareness of risks and uncertainty (not analysed)

Available/accessible data is accurate (confirmed)

#### Stakeholders

Innovators/participants
User Communities
Data providers
Investors

# **Annex 5: Methodology**

This evaluation used a theory-based, mixed-methods approach, underpinned by a ToC and employing a contribution analysis and VFM assessment. The methods for the Prize were outlined in the internal CIP Evaluation Methods Note for Stage 2, submitted to DFID 30 January 2018. The Evaluation Team developed and refined the methods outlined in the methods note ahead of implementing the evaluation from the point of award, in November 2018. These changes and developments are indicated here, to provide an account of the methodology used in practice.

# **Evaluation questions**

The programme evaluation questions and sub-evaluation questions responded to in the Tekeleza evaluation are provided in Table 18.

Table 18: Evaluation questions

Programme evaluation questions	Sub-evaluation questions
Overarching question: Did the Prize achieve what it set out to achieve?	To what extent did the Prize drive the development of innovative CISs that can be accessed and used by poor and vulnerable individuals and households?
<b>PEQ1:</b> How effective has the Prize been at catalysing innovation on the focus problem?	<b>SEQ1:</b> To what extent has awareness of the importance (value and benefit) of using climate information to cope with, and adapt to, climate variability and change, been raised among stakeholders as a result of the Prize process?
<b>PEQ2:</b> To what extent has the effect of the Prize been sustained beyond the point of award?	<b>SEQ2:</b> To what extent have i. CIS innovations; ii. awareness of the value and benefits of climate information, been sustained beyond end of stage 2? [i.e. 9 months]
<b>PEQ3:</b> Does the Prize offer VFM when compared to alternative funding modalities?	SEQ3.1: What is the VFM of the CIP as compared to its original expectations?  SEQ3.2: What is the VFM of the CIP compared to WISER (West Kenya component)?
PEQ4: Were there any unintended consequences of the Prize and did they outweigh the benefits?	<b>SEQ4:</b> Which positive or negative unintended consequences has the Prize stimulated? Did the negative consequences outweigh the benefits of the Prize for i. solvers; ii. beneficiaries/user communities?
<b>PEQ5:</b> Is solver support necessary for prizes to be successful?	SEQ5: What is the potential of solver support for reducing barriers to solvers' i. participation in stage 2; ii. delivery of effective CISs?  5.1 If solver support was delivered to prize participants, how did solver support activities reduce barriers to improve solver ability to i. participate in stage 2; ii. deliver effective CISs?  5.2 If solver support was not delivered to prize participants, what solver support activities could have reduced barriers to improve solver ability to i. participate in stage 2; ii. deliver effective CISs?

Ahead of the evaluation, we made some small tweaks to the sub-evaluation questions outlined in the methods notes, as follows:

• **SEQ2:** In the 14<sup>th</sup> Review Point meeting with DFID and the Prize Teams, it was decided to do one sustainability assessment at 9 months, rather than two at 6 months and then 12 months as originally agreed. This is to enable us to pool resources to do a more in-depth assessment at 9 months rather than two light-touch assessments, which may not provide as much insight.

• **SEQ3:** The SEQs have been broadened to look not only at how cost-effective the Prize was, as the questions originally asked, but to look at the VFM of the Prizes with cost effectiveness as part of that. This more clearly responds to PEQ3 and provides a more comprehensive assessment.

## **Evaluation** methods

Here, we outline the evaluation approached used, by question

Overarching question: To what extent did the Prize drive the development of innovative CISs that can be accessed and used by poor and vulnerable individuals and households?

This question aims to tell the story of the Prize against the ToC, using secondary data. Essentially it explores whether the Prize has achieved its primary aim i.e. to catalyse innovation in demand driven CISs that are accessed and used by poor and vulnerable people. Evidence consists of select indicators to provide a headline of the Prize achievements, complimented with narratives. This is based largely on secondary data. The purpose of this is to provide a narrative about the CIP, rather than to be evaluative – the PEQs providing the main evaluation of the Prize.

**Data sources:** Quarterly reports, participant reports, judges' reports, verification agent reports, media articles.

SEQ1: To what extent has awareness of the importance (value and benefit) of using climate information to cope with, and adapt to, climate variability and change, been raised among stakeholders (i.e. climate-vulnerable individuals and households, climate data providers, investors, government actors) as a result of Prize innovations?

We have applied contribution analysis to answer SEQ1 on the target prize effect. Contribution analysis is a theory-based evaluation approach that collects and assesses evidence on a programme's ToC, to explore a programme's contribution to observed effects. Contribution analysis recognises that a programme is one of a number of causes contributing to effects. It provides a framework to assess the extent to which a programme has contributed to these effects, while identifying other contributing factors to the same effects.

While time and resource limitations meant a full contribution analysis was not possible, we have drawn from the methodology to determine a contribution story, based on the Prize ToC, and test this through primary and secondary data collection. With further time and resource, we would be able to complete further iterations of data collection and analysis to further test the contributions stories developed. Adopting terminology adapted from Lemire et. al. (2012),<sup>36</sup> we have identified the primary explanatory mechanism, rival mechanisms and a refuting factor through the contribution analysis. These terms are explained, as and when used, in footnotes. We started by reviewing the ToC and ensuring it was specific enough to be tested. Using the ToC, we then drew up the following contribution story (i.e. primary explanation) to be tested:

Stakeholders' awareness of the importance of climate information for responding to climate impacts is raised through Prize activities including, for participants, the Prize orientation workshop and implementation of CIS initiatives; for users, access and use to CIS initiatives developed under the CIP; and for government stakeholders and data providers, interaction with Prize events, with Prize participants and their CIS initiatives.

<sup>&</sup>lt;sup>36</sup> Lemire, S.T., Nielsen, S.B. and Dybdal, L. (2012). Making Contribution Analysis Work: A Practical Framework for Handling Influencing Factors and Alternative Explanations. Evaluation 18(3): 294–309. DOI: 10.1177/1356389012450654

To support his, we identified that indicators of raised awareness would be different for different stakeholders involved in CIP, i.e.:

For community groups: we explored increasing demand for CISs and use of/access to any other climate information. Need to understand whether users had this awareness before being engaged in CIP – they may have had awareness of the value of climate information but not an attractive means of accessing it.

For data providers: we explored any shifts in data provision/dissemination; explore drivers for this.

**For government:** we tried to understand any shift in policy/strategy/implementation of existing policy and drivers for this.

We identified additional causal explanations that could have worked alongside the contribution story to increase stakeholders' awareness of the importance of using climate information (i.e. rival mechanisms), e.g. other activities, technologies, knowledge sources and experiences accessed by stakeholders that could serve to raise their awareness.

Overall, we are interested in what causal claim the CIP has over any observed changes in awareness of the importance of climate information. We therefore analysed the data collected to understand the extent to which the primary mechanism contributed to raised awareness, the contributory or alternative mechanisms that were evidenced, and what their contribution was to raising awareness. We have updated our contribution story based on that (see Section 5 in main report).

# SEQ2: To what extent have i. CIS innovations; ii. awareness of the value and benefits of climate information, been sustained beyond end of stage 2?

The main evaluation identifies which participants plan to implement beyond prize award, and what their sustainability plans are.

We will conduct the full sustainability assessment of the CIP nine months after award, in September 2019, to explore SEQ2 i.e. To what extent have i. CIS innovations; ii. awareness of the value and benefits of climate information, been sustained beyond end of stage 2? For this, we will largely rely on primary data collection with Prize participants and other key stakeholders. This will start with a scoping review to understand which of the 19 participants who submitted a final report are still implementing their CIS and what they have done in the nine months since the CIP was awarded. We will use the findings of this scoping study to determine a sampling strategy for the sustainability assessment. For example, there may be more value in taking a case study approach to deep dive into a small sample of participants who are still implementing their initiative, rather than a broad overview of all 19 participants. We will reach out to key stakeholders involved in the award ceremony, including senior staff at the Kenya Meteorological Department (KMD) to understand whether changes have been influenced among data providers as a result of CIP activities. The precise approach to the sustainability assessment will be determined in consultation with IMC and DFID, based on discussions on the findings of this report and on any further activities they have delivered related to CIP since the Prize award.

# SEQ3: What is the VFM of CIP and how does it compare to the VFM of an alternative funding modality seeking similar aims?

We developed our VFM approach based on work by Oxford Policy Management (OPM),<sup>37</sup> DFID, and the Independent Commission for Aid Impact (ICAI), and in response to DFID's desire to see a comparison against another funding modality. This resulted in a two-part approach to provide both an 'internal' and an 'external' assessment of the VFM of the CIP:

'internal'	assessment: measuring	the VFM	of the CIP against t	the expectations	for the Prize;

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<sup>&</sup>lt;sup>37</sup> OPM's Approach to VFM

• **'external' assessment:** measuring the VFM of the CIP in comparison to an alternative funding mechanism targeting similar outcomes (see Box 3).

Box 3: The VFM comparator programme

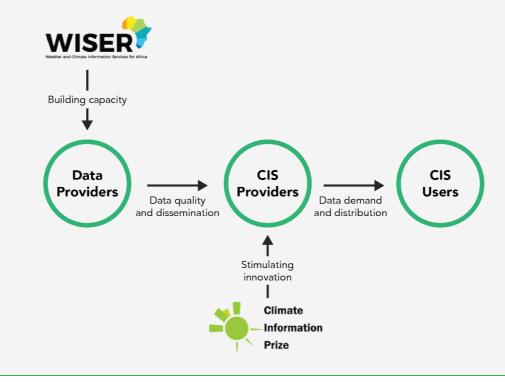
For the 'external' VFM, we compare CIP to the western Kenyan component of DFID's Weather and Climate Information Services for Africa (WISER) programme. The programme was selected based on the following rationale:

- it aimed at achieving similar medium and long-term impact, but using a different funding modality (WISER is a grant-funded technical assistance programme – DFID provide funding for pre-agreed activities rather than financial awards for activities already implemented)
- it has the same geographical focus (Kenya)
- it is already completed, thus providing ex-post data for the comparative analysis.

WISER seeks to support, as one of its key outcomes, tailored, reliable climate information and services available and more accessible to users. Like the CIP, WISER Western Kenya was designed to increase the resilience of the Kenyan population to climate change (the programme impact in the ToC); and intended to do so by increasing awareness of the value of climate information as well as its availability and accessibility (the programme's outcomes). WISER is a technical assistance programme funded through a grant modality. This represents a significant difference to a Prize modality, as it provides funding for agreed activities upfront.

Further differences between the two programmes affect the extent to which the VFM analysis can be taken at face value. Despite having similar top-level outcomes, they seek to achieve these through different pathways, and correspondingly different sets of activities and outputs. They influence the same system, but while WISER intervenes upstream, CIP intervenes downstream – see Figure 9. As such, the two programmes can be considered as complimentary to one another, but not *directly* comparable. These differences are discussed in greater detail in Annex 6.

Figure 9: Entry points of CIP and WISER to influencing access and use to climate information



Both assessments aimed to measure the VFM through measuring economy, efficiency, effectiveness and equity (i.e. the Four E's), which align with the inputs, outpots, outcomes and impacts of a given

programme. The external comparative assessment was not able to make any assessment against equity as there is no equity data available for WISER. The internal and external assessments cannot be combined, but rather provide **two separate measures** of the VFM of the Prize.

For each assessment, we identified each E as a criterion, and provided a definition against it to clarify what each one means in the context of this particular assessment. We identified a set of sub-criteria that responded to each criterion, breaking it down. We then developed indicators to respond to each sub-criterion. For the external assessment, we identified the relevant indicator for the specific project we were referring to. We also explored the input costs for different stakeholders on each project as well as three select 'funder considerations' that funders might use to guide their investment decisions.<sup>38</sup> We used the same process to develop indicators for this.

We collected data against each indicator, drawing from primary and secondary sources. We analysed the data available to provide a rating and corresponding narrative against each indicator (see Box 4). This is averaged to give a final rating for each 'E' and, where applicable, funder considerations. We draw up from the narrative and the ratings to provide an overall assessment for the 'internal' and 'external' VFM. The detailed methods for these assessments are provided in Annex 6.

Box 4: Rating the evidence against VFM indicators

In order to deliver an objective assessment of the VFM, the rating process was completed through collaboration between three members of the evaluation team, rather than having just one person make an assessment. In consideration of the available evidence, each team member independently assigned a VFM rating for each indicator. We then drew up from these ratings to provide a final rating for each indicator.

For the internal analysis, we use a rating scale drawn from DFID's VFM approach as follows:

- 1 = substantially did not meet expectations
- 2 = moderately did not meet expectations
- 3 = met expectations
- 4 = moderately exceeded expectations
- 5 = substantially exceeded expectations

We presented the ratings to the Prize Team who also had a change to verify and comment on the analysis.

For the **external analysis**, we are not comparing against original expectations. Instead, the rating aims to capture the relative performance of one project versus the other. Again, we use a 1-5 rating scale, where 1 is the lowest rating and 5 is the highest rating, but consider the evidence of each programme in the context of the other as well as in the context of its performance – as such, a number of factors were often considered in determining the rating.

SEQ4: Which positive or negative unintended consequences has the prize stimulated? Did the negative consequences outweigh the benefits of the Prize for i. solvers; ii. beneficiaries/user communities?

To identify unintended consequences, we:

• Explored secondary data for potential unintended consequences of the Prize

<sup>&</sup>lt;sup>38</sup> These were drawn from a review of relevant DFID documentation, and selected according to some of the reasoning for selecting and tailoring an innovation Prize programme.

- Explored the unintended consequences identified, plus any additional, through KIIs and FGDs keeping questions open ended to capture new unintended consequences
- Analysed and interpreted the unintended consequences identified, including classifying each as
  positive or negative; understanding who was affected by each, the rate of impact of each [e.g.
  low, moderate, severe]
- Weighed positive against negative bringing in reflections from qualitative data

SEQ5.1 If solver support was delivered to the prize participants, how did solver support activities reduce barriers to improve solver ability to i. participate in stage 2; ii. deliver effective CISs?

SEQ5.2 If solver support was not delivered to prize participants, what solver support activities could have reduced barriers to improve solver ability to i. participate in stage 2; ii. deliver effective CISs?

The approach to responding to this question was fairly straightforward. We:

- Explored data to understand challenges experienced
- Explored data for reflections on solver support provided (e.g. workshop evaluations) and challenges experienced
- Explored data to understand how the solver support helped participants overcome these barriers
- Explored data to understand what solver support stakeholder feel would have been beneficial and how it would help overcome identified barriers

# Data collection and analysis

# Secondary data

We used secondary data collected by the Prize Team throughout the Prize process, and delivered by the participants, verification agents and judges. This included participant entries and submissions, judges scoring and commentary, and the verification agent reports.

We rely on **participant reports**, which are used with the caveat that, as the reports were submitted in a competition context, they are likely to shed a positive light on the participants' activities. As the participants come from different professional backgrounds, their reporting standards are variable – some being more used to this kind of donor-led reporting that is usual in development projects. Nevertheless, these reports provide a key source of information on each innovation that is used throughout the evaluation.

The user verification reports provide a larger data set that enables quantitative assessment of the impact of the CISs at user level. This is a critical data source for understanding the outcomes of the Prize on the ground and is used throughout the analysis. However, a note on the sample is needed, pointing to necessary caution required in reading the findings based on this data source.

The sample was drawn from contact details provided by participants as part of their final submissions. Together, participants provided contact details for a total of 18,619 beneficiaries, ranging from 10 for one CIS to 5357 for another. From these contacts, the verification agent developed a sample for SMS, telephone and face to face interviews, based on the location of the beneficiaries. A total sample of 10,648 was selected, with small samples used for the face to face interviews, selected based on their location in areas the enumerators could easily reach. The inherent biases in this sample frame and sampling approach mean the sample reached by the verification agent cannot be considered to be representative of the total beneficiaries reported by participants (i.e. 129,215 beneficiaries total).

Of the sample of 10,648 beneficiaries, 40% (n=4,270) responded to the survey, due to wrong numbers, numbers being out of service, declines and lack of response from the remaining 60%; and 15% (n=1,594)

of those contacted were identified as users and therefore asked to complete the remainder of the survey. The verification agent did not continue the interview with the 25% who did not report using one of the CISs, meaning there is no data on why these reported beneficiaries were not actively using the CISs developed. The verification data represents significantly different response rates across the different projects, ranging from two respondents for one CIS, to 837 respondents for another. The data available from this source, then, is indicative though not complete or representative of the wider population of reported beneficiaries.

Within these two key secondary data sources, we note an important distinction between *beneficiaries* of the CISs and *users* of the CISs. Beneficiaries are those reported by participants who essentially have access to the CISs but do not necessarily use them; while users are those verified by the verification agent as those among the reported beneficiaries who actually used the CISs. This distinction should be considered when reading the findings.

# Primary data sampling strategy

We used a purposive sampling strategy to define our sample frame, selecting target stakeholder groups as relevant for the evaluation. The key criteria for the sample was:

- 1. stakeholders who were directly involved in the Prize i.e. the implementers, participants, verification agents, judges
- 2. stakeholders who were necessary for the innovations to be successful i.e. data providers, investors, users.

We also spoke with key stakeholders from WISER to support the VFM comparison. For most stakeholder groups we aimed to speak to the entire sample 'population', and while it was not always possible to do this, we spoke to the vast majority of the stakeholder groups targeted.

We spoke to total of 35 people and conducted five focus group discussions (FGDs) with user communities. This represents a lower number to that intended, due to changes from expectations in engaging some stakeholders in the Prize activities (i.e. government stakeholders, investors and data providers); and lack of response or interest from other stakeholder groups in taking part. We highlight the actual sample against the target sample for each stakeholder group in Table 19 and summarise the reasons for changes and differences in the same table. Stakeholder responses are referenced in the endnotes according to the initials of the group throughout the findings according to stakeholder group (i.e. Prize Team = PT).

Table 19: Sample groups engaged in primary data collection

Stakeholder	Sample frame	Target sample	Actual sample	Explanation
Prize Team	4	4	5	Included advisor at Climate and Energy Advisory who was part of the local Prize Team, as well as the programme-level team.
Participants completing	19	19	16	Included 9 finalists and 7 non-finalists. Three remaining participants not available or not interested to take part.
Participants discontinuing	8	8	4	Half not interested to participate in interviews.

Stakeholder	Sample frame	Target sample	Actual sample	Explanation
Verification agents	3	3	3	KIIs used to understand methodology and insight into prize outcomes gained during the verification process.
Online judges	15	10 by e- survey	0	Decided instead to interview live judges and rely on secondary data from online judges due to insight opportunities as Evaluation Team were not able to observe live judging.
Live judges	4	4	2	Only two of four live judges responded to the invitation to interview.
Investors	ТВС	Up to 5	0	National and international-level donors and potential investors were contacted with no response. One interview was set up and later cancelled by the investor. Resources redirected to KIIs with judges.
Data provider	1	Up to 5	2	The data provider was the Kenya Meteorological Department (KMD) for all but one CIS, and was interviewed at national and county level. An additional national-level Director targeted did not respond to invitations. County-level details difficult to get hold of to interview more county-level Directors.
Government	ТВС	Up to 5	0	Prize Team explained that government were not engaged in the end, though this was originally intended. We reached out to those who had been involved in CIP events but had no response. Resources redirected to KIIs with verification agents.
User communities	18	6	5	FGDs conducted with five user communities, on an opportunistic basis. FGDs with users from all finalists were sought.
WISER team	n/a	2	3	Two interviews to gain understanding of the data available.

# Primary data collection tools

Data was collected using key informant interviews (KIIs), FGDs and e-surveys, appropriate to each stakeholder group. The KIIs, FGDs and e-survey were designed to collect data corresponding to the Prize SEQs. The interview guides are provided in Annex 8. We contacted interviewees by phone and email, requesting up to three times per person for an interview. If no response or arrangement was confirmed by that time, we recorded them as non-responsive. Where we found that the stakeholders we intended to talk to were not responsive, we diverted resources to different stakeholder groups – i.e. verification agents and live judges (see Table 19).

Key informant interviews: we conducted KIIs with Prize Team members, participants, verification agents, judges and data providers. These were in the format of semi-structured interviews, allowing us to explore stakeholder experience in detail while also being able to triangulate across responses. We tailored questions for each stakeholder group we interviewed. Wherever possible, we conducted these interviews in person, however, when necessary, we completed some by telephone or Skype, based on interviewees availability and preference.

Focus group discussions: we facilitated FGDs with users of the Prize CISs. We identified and engaged users through the respective participants while in-country. We requested such meetings with all nine finalists, to which five responded positively and supported us in organising the FGD. We aimed for six respondents per group with a mix of genders and ages. In reality the groups were dependent on who was available and willing to give their time for the purpose of the evaluation. Despite there being inherent biases to this approach (see Section 4.7), we considered this the most feasible approach for efficiently and effectively engaging user groups in the FGDs. We facilitated discussions around the core topics relevant for the user groups, i.e. to include awareness raising and impacts of the CISs, including unintended consequences.

**E-survey:** following KIIs and FGDs, we sent an e-survey out to prize participants to explore their individual costs and investments for participating in the Prize. We sought participants' agreement to this during the KIIs. We sent the e-survey to all participants. The response rate was fairly low, with just ten participants responding; and the data was in some cases conflicting with cashflow statements and interview responses. We indicate the limited reliability of the evidence in the findings.

# Data analysis

We coded all interview and FGD transcripts using a coding frame organised around the PEQs. We used this as a tool to extract and triangulate information from different sources in order to develop findings.

We presented the preliminary 'emerging' findings to the Prize Team through a validation workshop on 21 February 2019. The purpose of the workshop was to sense check the findings, and identify gaps and misunderstandings, in order to validate the emerging findings. We did some final data analysis following the workshop, based on the discussions had there, and largely related to the VFM analysis, incorporating some additional data provided by the Prize Team.

## Limitations and biases

We have identified a set of limitations and biases to the evaluation that should be considered when engaging with the evaluation findings. For each, we have made efforts to reduce the impact.

## Limitations

- Resource and time limitations meant we could not undertake a fully iterative process of contribution analysis. Instead we have drawn from contribution analysis to guide our approach, collecting data to strengthen the contribution story as far as resources enable us to. We will strengthen the findings presented in this report by collecting further evidence during the sustainability assessment. We note that, while contribution analysis can increase confidence that the intervention contributed to the outcome, it cannot establish definitive, attributable causal proof.
- In our VFM approach, we compare the CIP against one other, purposively selected programme. This does not, therefore, provide a reliable benchmark, but rather a proxy to help us interpret our findings. We have explored aspects relating to the costs and benefits of the CIP including costs to stakeholders and selected qualitative aims of DFID (i.e. funder considerations), which support our assessment and means we do not solely rely on the comparison with one alternative.

- The difference in approach of WISER and CIP undermines a direct comparison. While they are both seeking similar overall outcomes, WISER aimed to do this by influencing upstream activities through a grant-based technical assistance programme, while CIP sought to impact downstream using a hands-off approach. The analysis provided is therefore indicative but not conclusive.
- Our comparative 'external' VFM analysis relies on data that is available and shareable from the comparator programme. While we were able to collect the data that is available on WISER, our indicator development was restricted to this data; e.g. WISER has no available data on gender or age of their beneficiaries so an equity comparison was not possible. In response, we selected the dimensions for comparison based on data available for both programmes.
- The limited sample sizes for the primary data mean that they do not provide representative results applicable to a broader context. Instead, the data provides unique stakeholder insight and perspectives on the Prize activities. This is unavoidable in the context of the Prize programme; i.e. there are a limited number of stakeholders engaged or knowledgeable about the Prize (e.g. a small number of Prize participants, judges etc.). We aimed to talk to the entire population of each stakeholder group where possible and have systematically triangulated across different sources to increase confidence in our findings. We rely on the verification reports to provide insight from a higher sample number.
- The strength of evidence available for this evaluation is limited in several ways. We have been reliant on self-reported data from participants, with sometimes limited reporting quality; the robustness of the verification data is also questioned due to limited reach of beneficiaries.

#### **Biases**

- Inclusive/omission bias: We believe the stakeholder groups we identified to be comprehensive, and checked this during the interview process by identifying relevant stakeholders to engage as their involvement became apparent. However, it is likely that we were more able to include stakeholders who had more time or interest in data collection activities; and less able to get input from those who were reluctant to take part or whom we had limitations in reaching. To mitigate this bias, we actively sought participation up to three times per person for an interview before recording them as non-responsive. The main risk here is in the omission of the views of four discontinuing participants who were not available to interview; however, beyond this we believe the risk of omission bias is minor.
- Response bias: There is a risk that some stakeholders may see value in telling the evaluation team what they want to hear e.g. in an attempt to paint either them or their project in a more favourable light. Similarly, there may be some respondents who are dissatisfied by the Prize process or outcomes. To avoid misinterpretations, we have triangulated across data sources and respondents to cross-check our findings and explore contrasting responses, and indicated the strength of evidence for each question throughout the report.
- Timing: We conducted the majority of interviews shortly after the prize award. This may have caused biases in responses, due to participant perceptions of the prize judging and award. Again, we have addressed these biases by triangulating across data sources e.g. triangulating the prize winner interviews with judges' perceptions and secondary data on the prize effects. This timing also limited our ability to capture details of the impact of the award ceremony as it was too soon after award for this. Instead, reflections on this will be captured in the sustainability assessment.

# **Annex 6: The VFM comparator**

For CIP, the selected comparator programme was the DFID funded <u>Weather and Climate Information and Services for Africa</u><sup>39</sup> (WISER) programme. This is a grant-based programme with a regional focus. The Met Office has been commissioned by DFID to act as fund manager for the East Africa component of the programme, focussing on the Lake Victoria Basin and surrounding region (Burundi, Ethiopia, Kenya, Rwanda, Tanzania and Uganda). CARE Kenya was selected as the main delivery partner in Kenya.

To answer the question What is the VFM of the CIP compared to alternative funding modalities seeking similar aims?, CIP is compared against Phase 1 of the Western Kenyan component of the WISER programme, which ended in February 2017.<sup>40</sup> More information on the programme is provided in Box 5.

Box 5: The Decentralised Climate Information Services for Decision Making in Western Kenya (WISER Western) project. Source: WISER Western Project Completion Report, WISER Western Briefing Notes

The Decentralised Climate Information Services for Decision Making in Western Kenya (WISER Western Kenya) project is one of the quick start projects supported by the UK Government's Department for International Development (DFID) Weather and Climate Information Services for Africa (WISER) programme. This one-year project, carried out in 2016-17 and coordinated by the Kenya Meteorological Department (KMD), CARE and the Met Office, aimed to support the development of decentralised, standardised climate services within Kenya's Lake Victoria region. Originally focused on the four counties of Kisumu, Trans Nzoia, Kakamega and Siaya, from June 2016 a number of activities were extended to an additional five Lake Victoria counties, Homa Bay, Migori, Vihiga, Busia and Bungoma.

During the first phase of the WISER Western project, work was undertaken to explore how climate information could be more readily mainstreamed into the planning process at the county level. Since 2012, each of Kenya's 47 counties had been tasked with preparing five-yearly County Integrated Development Plans (CIDPs), establishing strategic targets and their implementation. Improving the incorporation of climate information within the plans has become imperative, ensuring that climate-smart investments can be delivered over the short to medium term.

The programme achieved a number of results, including:

- Production of Climate Information Service (CIS) plans for counties in the Lake Victoria region of Kenya. Not only have these helped define the requirements and strategy for delivery of climate and weather information services in the area, but due to their utilizing multi-stakeholder platforms where meteorological services interact with sector departments and community users, they are being used in the development of and making links between county, national and regional strategies for climate change mitigation and adaptation.
- Generation of demand led and downscaled daily, weekly and seasonal forecasts.
   Following extensive consultation with end users to define their requirements, the project has started the delivery of a new set of short-range forecasting products to meet these needs.
- Development of demand led communications. The generation of a new suite of local forecasting and advisory products has been mirrored with the development of novel means of dissemination and interpretation of these products, and the refinement of

<sup>40</sup> In July 2017, the programme received further DFID funding to consolidate and advance the achievements of WISER Phase I. The second phase (namely 'WISER Bridging Project') ended in February 2018. However, due to limitations in data availability, the bridging phase will not be included in the VFM external analysis.

<sup>&</sup>lt;sup>39</sup> http://www.metoffice.gov.uk/about-us/what/international/projects/wiser

- existing ones. This includes radio, SMS, the county pages of the KMD website and the training of networks of climate intermediaries.
- Improved the capacity of nine County Meteorology Directors (CDMs) to develop and deliver locally relevant services, and engage effectively with County Administrations and technical institutions.
- Training of over two thousand CIS intermediaries. 2,470 Climate intermediaries were selected and trained to receive, interpret and disseminate forecasts. Training included sessions on the probabilistic nature of climate information, the value of monthly and weekly sub-seasonal updates to review planning informed by the seasonal forecast, and how forecasts can support a range of decision-making processes.
- Improving the performance and relevance of Community Climate Outlook Forums (CCOFs) through an expansion of the attendees, holding them at more timely periods, and extending the range of advisories delivered with them.

Alongside these outputs the project has also gathered a lot of important transferable learning, particularly around creating a Monitoring, Evaluation & Learning framework which can help to measure the impacts of decentralised climate services.

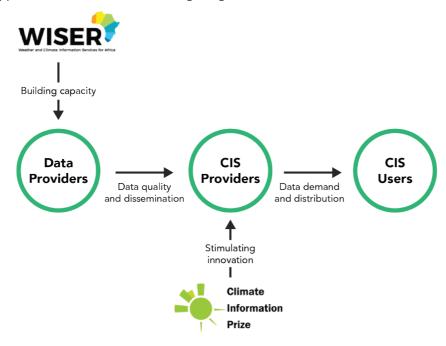
The rationale behind the selection of this programme as a comparator for CIP is that it aimed at achieving similar medium and long-term impact, by the use of similar means (climate information services), it has the same geographical focus (Kenya), and it ended in 2017, so therefore had data available for the comparative analysis. WISER seeks to support, as one of its key outcomes, *tailored*, *reliable climate information and services available and more accessible to users*. Like CIP, WISER Western Kenya was designed to increase the resilience of the Kenyan population to climate change (the programme impact in the ToC); and intended to do so by increasing awareness of the value of climate information as well as its availability and accessibility (the programme's outcomes).

WISER is funded through a grant modality. This represents a significant difference to a Prize modality, providing funding for agreed activities upfront. Prizes, on the other hand, provide funding based on results – they do not guarantee an award to all who participate meaning that potential costs are borne by participants – and in particular those who do not win an award at the end.

However, the two programmes have some important differences. In the case of WISER, the programme had a set of activities and outputs that ex-ante had been selected by the project designers as the most effective ways to achieve the intended outcomes. These activities mainly entailed building the capacity of the institutions responsible for the production, dissemination, and mainstreaming of climate information and services, particularly of the Kenya Meteorological Department (KMD) officers and County Meteorology Directors (CMDs). WISER therefore intervened upstream, at the CIS generation level, to create and improve the quality and sustainability of CISs made available by KMD to counties, and in turn to 2,470 climate intermediary organisations active on a national scale, and support climate information mainstreaming into county development plans.

CIP aimed at encouraging the development of innovative and demand-driven CISs to raise awareness on the value of climate information, and increase climate data accessibility. However, it focussed mainly on increasing downstream access by encouraging innovations that would remove barriers to the usage of climate information – the same information produced by the authorities supported by WISER (Figure 10).

Figure 10: Entry points of CIP and WISER to influencing change



The distinctive features of the two programmes are presented in Table 20, which shows and compares the respective theories of change (ToCs). From the table, the following considerations can be drawn:

- At the impact level, although for both programmes the intended long- and medium-term impacts are about increasing resilience to climate change particularly for the most vulnerable people, WISER objectives are relatively more long-term in nature, and ambitious in scope, aiming at achieving impact at a nation-wide scale.
- CIP being a Prize, it aimed at achieving some distinctive benefits, which included promoting innovation, raising awareness, promoting good practice and encouraging the creation of partnerships and networks in a way that other funding modalities are typically not able to do. Such distinctive benefits are shown in orange, in the table below.
- In green are the distinctive features of a grant-based technical assistance programme such as WISER, whose outputs largely entail interventions upstream, i.e. measures aimed at supporting government and sub-government institutions to produce better climate data and disseminate them efficiently.
- CIP had process-type indicators to measure outputs and activities describing all the key steps necessary to run a Prize. The CIP activities to achieve intermediate outcomes could not be known upfront, the very purpose of the Prize being to encourage participants to find the most appropriate solutions to the statement problem.

Table 20: CIP and WISER ToC

Theory of change	CIP	WISER Kenya
Long-term impact		Lives saved and greater, more stable economic development
Impacts/medium- term impacts	Poor and vulnerable people in Kenya are better able to cope with and adapt to climate impacts	Increased resilience of African population to weather and climate change
		Increased productivity of climate- sensitive sectors and infrastructure
Outcomes	Poor and vulnerable individuals and households in Kenya access and use CISs	Tailored, reliable climate information and services available and more accessible to users
	There is increased awareness on the value and use of climate information for coping with and adapting to climate change impacts	Growing awareness of the value of climate services leading to rising demand
	Good practice CISs are promoted  Networks and partnerships for the development and delivery of demand-driven CISs are established	Increased capacity of users to access and use climate information in decision making  Growing strength and status of NMHSs and capacity of African research community
Intermediate outcomes	An increased number of poor and vulnerable people in Kenya have access to high quality CISs	-
Outputs	A set of CIS initiatives for improved access to and use of climate information is established  A number of innovators are engaged in the Tekeleza Prize	Strengthened enabling environment for the generation, uptake and use of weather and climate services to support development  Clear national and subnational strategies for climate services in East Africa supported by more effective, user-focused NMHS and strengthened systems for engaging and communicating to users  Improved data and infrastructure to support long-term improvements to the generation of climate services  Strengthened global-regional networks to support climate services

		Improved knowledge, products and services underpinned by world-
		leading interdisciplinary research
Main Activities	Organising and running the Prize	Providing capacity building of national and sub-national institutions
	Judging and verifying the Initiatives	(training)
	Awarding the Prize	Coordination with other donors and engagement with national governments and local stakeholders

After a careful review of the two programmes, it became clear that a comparison would pose some challenges, and would need to consider the complementarity of the two (i.e. both work to improve accessibility and usability of climate information to users, while neither works directly with those users), and even the dependency of one's performance to the other's (i.e. data generation affects data access downstream; increased awareness at user level affects demand for reliable climate data). These considerations are important and point to the need to read the findings of the comparative analysis with great care. They also confirm – not surprisingly – how different programmes and funding modalities can be used together rather than alternatively to remove barriers and market failures applying at different levels.

# **Annex 7: VFM approach**

The CIP evaluation seeks to measure the value for money (VFM) of the CIP, to answer the evaluation question: What is the VFM of CIP and how does it compare to the VFM of an alternative funding modality seeking similar aims?

To measure the VFM of CIP, Itad will draw from <u>OPM's Approach to VFM</u> (see Box 6), an approach that builds on the VFM framework used by the UK Government and the Independent Commission for Aid Impact (ICAI) to assess Government-funded programmes and projects.

Box 6: OPM's proposition for VFM (Source: OPM, 2018)

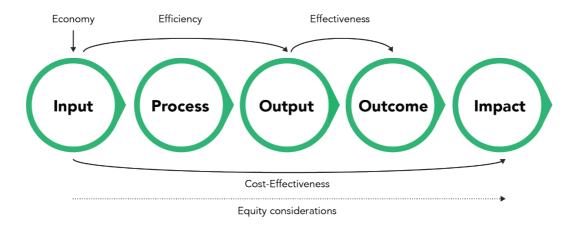
- Using explicit criteria (dimensions of VFM) and standards (levels of performance) to provide a transparent basis for making sound judgements about performance and VFM
- Combining quantitative and qualitative forms of evidence to support a richer and more nuanced understanding than can be gained from the use of indicators alone
- Accommodating economic evaluation (where feasible and appropriate) without limiting the analysis to economic methods and metrics alone
- Incorporating and building on the 'Four E's' approach to VFM assessment which is familiar to international aid donors.

The VFM approach will include two assessments, to provide

- i. an 'internal' assessment of the VFM of CIP itself, measured against the original expectations for the Prize
- ii. an **'external' assessment** of the VFM of CIP in comparison to an alternative funding mechanism seeking similar aims.

Both assessments are largely based on measuring expectations against the 4E's, which align with the inputs, outcomes and impacts of a given programme. See Figure 11. The assessments cannot be combined, but rather will give two separate measures of the VFM of the Prize.

Figure 11: The 4E's framework (Source: DFID How to Note guidance of VFM)



# The internal VFM analysis

The goal of the internal analysis was to assess the VFM the CIP achieved against its original expectations. It drew these expectations from the Tekeleza design report, the I2I annual reports, the logframe, ToC and other available sources. Essentially, it looks at whether the inputs invested led to the outcomes expected. As such, the exercise also contributes to answering the overarching evaluation question for the I2I prize evaluations i.e. did the prize achieve what it set out to achieve?

The internal analysis focussed on those activities, outputs, and outcomes that had set expectations, as well as those that were reasonably (although only implicitly) expected. The indicators used in the analysis are grouped around the 4E's: economy, effectiveness, efficiency and equity. To understand what each of these 4E's means in the context of CIP, we determined criteria for each, based on expectations for each E (see findings).

Where possible we drew from explicitly set expectations to develop each criterion. Where these were not available, we set the criterion based on the ToC i.e. the overall aims for the Prize. We were able to draw from the project objectives to determine the expectations for efficiency. The programme set a number of objectives with respect to the number of ideas and concepts generated, the number of partnerships created, investment leveraged, and media coverage, that have been monitored and reported against throughout implementation (see 2017 Annual Review, page 49).

Drawing on expectations set for the Prize, we developed sub-criteria under each E that represent the expectations for each E. We collected both qualitative and quantitative data against each sub-criterion to rate the extent to which the CIP has met its original expectations. The VFM was rated using DFID's 1 to 5 scoring system where:

- 1 = substantially did not meet expectation
- 2 = moderately did not meet expectation
- 3 = met expectation
- 4 = moderately exceeded expectation
- 5 = substantially exceeded expectation<sup>41</sup>

On assessing the evidence, a rating was independently assigned by the VFM expert, lead evaluator and senior evaluator/project director. The three came together to discuss individual ratings and assign an

 $https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/67344/HTN-Reviewing-Scoring-Projects.pdf\\$ 

<sup>&</sup>lt;sup>41</sup> i.e. as used by DFID:

overall rating for each sub-criterion. This approach was taken to reduce the bias from one individual assigning the rating for each.

We brought together the analysis for each of the 4E's to make a final judgement on the 'internal' VFM of the CIP overall. We consolidated the ratings from individual indicators to provide a rating for each E and, based on the assessment, developed a narrative for the overall VFM.

## The external VFM analysis

The VFM approach for the external or comparative analysis was based on three components:

- 1. Costs for stakeholders, including participants, data providers and investors
- 2. 3Es: economy, efficiency and effectiveness<sup>42</sup>
- 3. Broader funder concerns.

With the support of the Met Office, we reviewed the existing documentation and evidence on WISER<sup>43</sup> to assess data availability and, based on this, designed a set of comparative criteria and corresponding indicators that respond to a set of shared criteria for each component. We identified a long list of potential criteria and indicators and then reduced it down according to the most relevant that data was available for.

In light of the difference between the two programmes and the data availability, the VFM analysis focussed on:

- A limited number of indicators for which data is available for both programmes, which can be directly compared to assess the relative economy, efficiency and effectiveness of the two programmes.<sup>44</sup>
- Additional funder considerations that may be made when determining the kind of funding modality to invest in to achieve desired outcomes.

For the comparative VFM analysis, we used a rating system using a scale of 1-5, where 5 is the most positive and 1 is the least positive score. The scoring was done by taking the following aspects into consideration:

- Existing evidence of the results achieved (e.g. proof of cost-savings achieved during the procurement
- Relative performance of one programme compared to the other, based on qualitative and quantitative

As with the internal analysis, on assessing the evidence, a rating was independently assigned by the VFM expert, lead evaluator and senior evaluator/project director. The three came together to discuss individual ratings for each sub-criterion, and assign an overall rating for each sub-criterion. This approach was taken to reduce the bias from one individual assigning the rating for each. We drew across these analyses to assess the VFM of CIP relative to the WISER programme.

<sup>&</sup>lt;sup>42</sup> No equity data available for WISER.

<sup>&</sup>lt;sup>43</sup> Namely, the Project Completion Report, the executed budget of Phase I of the programme, and WISER briefing notes available at https://www.metoffice.gov.uk/about-us/what/international/projects/wiser/cis-kenya.

<sup>&</sup>lt;sup>44</sup> A VFM Framework for Wiser was introduced but only in April 2017, i.e. after Wiser Western Kenya was concluded, so it did not apply to the Kenyan component. For this reason, no VFM indicators following that approach have been designed for the Kenyan component of the project.

# **Annex 8: Interview guides**

We share here the interview guides for the key stakeholder groups engaged in the evaluation. The interview guides for other key informants such as data providers, judges and verification agents were individually adapted based on these, based on the role of that informant.

We tested each script thorough initial interviews and, in consultation with the research assistant supporting data collection, made changes to questions as appropriate.

At the start of each interview we explained the purpose of the evaluation and final product, and how the data would be used. We sought informed consent from each interviewee before starting the interview. We explained that we would anonymise each interview. Personal details are not shared beyond the evaluation team. All data is managed within the European Union's General Data Protection Regulation (GDPR) requirements.

## Interview guide for participants

#### 1. Reflection on the Prize award

Please could you introduce yourself and your organisation?

How did you hear about the CIP?

Why did you decide the participate?

Did you have any prior experience of innovation Prizes?

Did you have any prior experience of international development?

When did you first establish your CIS?

- If at the start of the Prize, was it established because of the Prize, or had you intended to establish it either way?
- If before the start of the Prize, did you do anything additional to what you were doing before, as part of the Prize?

Did you attend the award ceremony? If so, how was your experience? [probe further depending on response i.e. did you learn anything that you can take away from that?]

## 2. Overall experience of the Prize [PEQ 5]

Looking back over the implementation period, can you recall some key successes from your participation in the Prize? Please explain.

Can you recall any challenges to your participation participating in the Prize? If so, how were you able to overcome these?

Did you receive any support for your participation in the Prize? If so, what kind of support? Who from?

Is there anything else that could have supported your participation? Please explain.

Did you receive any support for implementing your CIS and ensuring it was effective? If so, what kind of support? Who from?

Is there anything else that could have supported your implementation? Please explain.

Did you attend the orientation workshops at the start of the Prize? How did you find the workshops? Were they valuable? In what way?

#### 3. Your participation in climate information activities [PEQ 1]

Were you involved in any climate information activities before participating in the Prize? If so, what were these?

Has your knowledge on climate information changed since the start of the Prize? If so, how?

Have you learnt anything about the use of climate information? If so, what? Where have you learnt this from?

Will you continue to engage in climate information activities now that the prize is finished? Please explain.

## 4. Stakeholder understanding of value of climate information [PEQ 1]

Have you had any interactions with climate-vulnerable individuals and households as a result of your engagement in the Prize? Please explain [e.g. how did you work with them to design and develop your innovation?]

Have you observed any change in your users' understanding of climate information? If so, please explain. Where have they learnt this from?

Have you observed your users applying climate information? If so, how?

Have you had any interactions with:

- climate data providers?
- investors?
- government actors?

...as a result of your engagement in the Prize? Please explain.

Were they familiar with climate information/climate information services when you first approached them? If so, in what way?

Did you observe their awareness on this changing? How? [e.g. Did they change any of their activities relating to climate information?]

What do you think influenced the changes you observed? Please explain.

#### 5. Unexpected outcomes [PEQ 4]

Has your participation in the Prize affected your current and future activities? E.g.:

- Is there anything you have gained from the prize that you will use moving forward? E.g. inspiration/motivation, acknowledgement/visibility, opportunities, connections?
- Is there anything you have lost from participating in the Prize that will affect you going forward? [e.g. money, alternative opportunities]

Did anything unexpected come out of the process? Please explain what and the impact.

What about for your user communities - how have your CIS activities impacted them?

#### 6. Funding your CIS [PEQ 3]

We are interested in understanding the true costs of running a Prize for development, including what the costs were for participants of the Prize. We are looking for some detailed information with regard to time spent, human resources required and financial costs. Are you happy for us to follow up with such questions using an e-survey?

[take notes if any info given now]

#### 7. Sustaining your CIS [PEQ 2]

Do you intend to continue to implement your CIS? If so, what are your plans for this? How will you fund it? If not, why not?

Do you have any final comments?

Any questions?

# Interview guide for discontinuing participants

#### 1. Reflection on the Prize

- 1.1 Please could you introduce yourself and your organisation?
- 1.2 Did you have any prior experience of innovation Prizes?
- 1.3 Did you have any prior experience of international development?
- 1.4 Did you have any previous experience of climate information before participating in the CIP? What was this?
- 1.5 How did you hear about the CIP?
- 1.6 Why did you decide the participate? What were your expectations?
- 1.7 When did you first establish your CIS?
  - If at the start of the prize, was it established because of the Prize, or had you intended to establish it either way?
  - If before the start of the Prize, did you do anything additional to what you were doing before, as part of the Prize?
- 1.8 Have you learnt anything about climate information services since the Prize launch? If so, what? How did you learn this? [NOTE: if not through CIP please explore further].

#### 2. Unexpected outcomes

- 2.1 Do you feel you got any benefit from participating in the prize? Could you tell me more about that please?
- 2.2 Why did you decide to stop participating in the Prize?
- 2.3 Did you experience any challenges in participating? What were these?
- 2.4 How were you able to overcome these?

## 3. Solver support

- 3.1 Did you receive any support for your participation in the Prize? If so, what kind of support? Who from?
- 3.2 Did you attend the orientation workshops? Did you find the workshops valuable? In what way?
- 3.3 How else could you have been supported to participate in the Prize?

#### 4. Funding your participation

- 4.1 Did you incur any costs from participating in the Prize? What were these? [prompt: financial costs, time, resources, etc.]
- 4.2 Did you secure funding to manage these costs? If so, how and who from?
- 4.3 Did you fund your participation in any other way? Please explain.

## 5. Stakeholder understanding of value of climate information

- 5.1 Have you had any interactions with:
  - i. climate-vulnerable individuals and households
  - ii. climate data providers
  - iii. investors
  - iv. government actors

- ...as a result of your engagement in the Prize? Please explain.
- 5.2 Were they familiar with climate information/climate information services? If so, in what way?
- 5.3 Did you observe their awareness changing? How? What was influencing their awareness?

## 6. Implementing your CIS

- 6.1 Is your CIS now established?
- 6.2 Will you continue to implement your CIS? Why have you made that decision? If yes, how will you support the continued implementation (e.g. financially)?
- 6.3 Has your participation in the Prize affected your current and future activities?
  - Is there anything you have gained from the prize that you will use moving forward? E.g. inspiration/motivation, acknowledgement/visibility, opportunities, connections?
  - Is there anything you have lost from participating in the Prize that will affect you going forward? [e.g. money, alternative opportunities].
- 6.5 What have you learnt from participating in the prize? Will you use these lessons in your future activities? How?
- 6.6 What (if anything) would you change about the competition process? Why? Would you participate again in the future if the opportunity arose?

## 7. Final questions

- 7.1 We may need to collect some further pieces of information to support this evaluation. Are you happy for us to contact you by email for this?
- 7.2 Do you have any further comments?
- 7.3 Do you have any questions?

## Interview guide for Prize Team

#### 1. Overall reflections

Do you have any reflections on the award ceremony? How do you think it went?

How about the Prize overall?

What went well? What didn't go so well? What would you do differently next time?

## 2. Participant process

Going back to the beginning of Tekeleza, after the launch, what support were participants given to establish their CISs?

What do you think were the main challenges for participants at this initial stage?

What kind of information did you share with participants? How was this intended to support implementation?

Did you take any steps to ensure the CISs being implemented were demand driven?

What do you think were the key challenges in retaining participation throughout the Prize process? Could these be addressed in any way?

What kind of support would you offer to participants if you were to run the Prize again? Why?

What kind of stakeholders would you target?

What kind of support would you suggest for innovation Prizes for development in general?

## 3. Verification and judging

What did you think of the usability of the final submissions for making a decision on awards?

How did you determine the verification needs? How did you engage the verification agents? What was the process?

Did you have any involvement in determining the methodology? How robust and representative would you say the data is?

Was there a process for validating the verification data? What was this?

How did you determine the judging criteria? i.e. moving from indicator matrix to final criteria.

How did you identify and engage the judges?

What are your reflections on the judging process?

Could you explain to me a little more about what happened on Wednesday and any of the highlights or concerns raised by the judges? – Did you have any concerns about the outcome?

#### 4. PEQ 1

Who/which stakeholders do you feel really engaged in this process? Among who do you think the Prize approach or the buzz of the topic has really had an impression?

There are a lot of other things going on re climate information in Kenya. Which other projects or activities do you think have been influential? For who?

What have you done to connect to other organisations working with climate information? E.g. WISER, etc

Can you identify any indicators of raised awareness on climate change since you started this process?

#### 5. PEQ 2

What are your reflections on the sustainability of the innovations? Do you see potential here?

Some of the finalists were not given high scores for financial sustainability – so how was this considered during the final judging process? What level of importance was it considered to have?

## 6. PEQ 3

Here we will be looking at expectations/targets vs what happened to make a judgement on the VFM of CIP, and at comparator indicators to compare against WISER.

Were there any official expectations set beyond those listed in the annual report?

There is a list of data points we will need for this, which I will follow up with, and for the rest we will draw from the evaluation data, verification data and judging data.

Do you have observations on the value as compared to your experience working on: i. other development projects with different funding mechanisms; ii. other prizes?

## 7. PEQ 4

What are the key outcomes you feel have resulted from the Prize?

Obviously, there was a lot of risk held with the participants due to this prize modality – did you observe any of these risks occurring? Please explain. How were they or could they be mitigated?

Did you observe any outcomes that you hadn't intended to influence?

Did anything occur as a result of the Prize that you didn't expect to happen? Any surprises? Anything unusual?

Who does this affect? How?

Is there anyone you would recommend I talk to with regard to data providers, government, experts, other?

# Focus group discussion guide

- 1. Could you each introduce yourselves, your name and what you do [prompt if needed, e.g. student, occupation/profession, livelihood etc.].
  - Ask more about livelihood responses e.g. what kind of farming, what crops do you grow? How long have you been farming? Is it a farming community? etc.
  - What are the main challenges associated with this?
  - What about weather or climate related challenges?
- 2. How do you inform your activities/make decisions about what you do? E.g. what to plant?
  - What kind of information do you use?
  - [If not already mentioned] Do you use information about weather or climate changes?
  - Where do you get these different types of information from?
  - Where did you learn about each?
  - How long have you had access to each source of information?
- 3. What kind of information is most useful for making decisions related to your livelihood activities? [PEQ 1]
  - Which do you access the most often? Why?
  - How reliable is each source of information? Why do you say this?
  - How do you use the information? Are there any other services you use or actions you take to make decisions or is the information sufficient?
  - Do you use a seasonal/climatic cropping calendar?
  - Do you link up with other advisory services or technical support? E.g. from the CIS or from other services e.g. extension services?
  - Do you use different sources of information at the same time?
- 4. When did you first hear about [local CIS name]?
  - Were you involved in developing it? How?
- 5. Who has access to the service? Why? Is there anyone that cannot access it? Why?
  - Who is it most useful to? Why?
- 6. Do you pay to use it? PEQ 3]
  - How much?
  - Do you make these costs back? How?
- 7. What decisions are you able to make based on this climate information?
- 8. Have you noticed any changes to your day-to-day activities since you have had access to this service? [PEQ 4]

What is this? Positive? Negative?

Who are these changes affecting? How?

9. Will you continue to use this climate information? [PEQ 2]

What would happen if you didn't have this kind of information? What would you use instead? Would this make any difference?

Any final comments/questions?

### E-survey questions

#### 1) Financial costs of the CIS

- 1. What was the total financial cost (in KES) of participating in the prize, including all costs for designing and implementing your CIS for the purposes of the Prize, during the Tekeleza period?
- 2. Of the total costs, please indicate how much (in KES) was from:
- a. your own resources:
- b. grants:
- c. loans:
- d. other (please specify):

### 2) Time and human resources spent on participating in the prize

1. Is the cost of your team included in the figure you gave in answer to Q1?

Y/N

2. How many people were on the team that designed and implemented your CIS?

Number of people on team:

3. Were these people already part of your team before you participated in the Prize?

Already part of team/ New to team as a result of the Prize/ other (please specify)

- 4. Did your participation in the Prize increase the number of hours worked by the team relative to the time spent on your normal organisational operations?
- 5. How many days in total did each person spend designing and implementing the CIS?

Team member 1: Number of days =

6. What is the daily salary for each person on your team working on the CIS?

Team member 1: Daily salary =

#### 3 Effects of participating in the Prize?

- 7. Has participating in the Prize benefitted your organisation? How? Please explain.
- 8. Has participating in the Prize improved the quality of your CIS, or accelerated the design and delivery process? Please explain.

# Annex 9: CIS concepts of 18 eligible submissions

Table 21 lists the 18 CIS projects that were submitted under the CIP, as well as the innovation type, drawing on I2I's definition of innovation, the communication approach used to disseminate information and the geographical focus of each project.

Table 21: Innovations submitted under the CIP

Innovation	Innovation type	Communication approach	Geographic focus		
Adapting to Climate Change through Farmer Capacity Building: Training of farmers in sustainable agriculture, and subsequent dissemination of weather forecasts to actively engage farmers. Supported by teaching weather forecast interpretation in local schools.	Existing initiative; incorporated climate information in response to the Prize – imitative	Face to face; SMS	Kakamega; Vihiga		
Climate Information and Awareness to Smallholder Farmers: Building capacity, providing weather information and agro-advisory services through mobile phones and radio provision; working with community volunteers to link information users to data providers.	Existing initiative; prioritised climate information component in response to the Prize – imitative	Face to face; mobile phone app; SMS; radio	Uasin Gishu		
Climate Information Mobile App (C.I.M.A): Disseminates climate information with associated climate services i.e. 10-day rainfall forecast along with tailored rural advisories on agricultural practices. Mobile application in design.	Existing CIS; added a language translation component as a result of the Prize – modified	Face to face; mobile phone app (under development); SMS	Kiambu; Nairobi; Narok		
Climate Smart Agriculture: Provides farmers with contextualised climate information integrated with advisories to support agricultural production systems. Sells climate-smart agricultural products and provides training on agricultural practices.	Existing initiative; incorporated climate information in response to the Prize – imitative	Face to face; SMS	Machakos		
Community Dialogues on the use of Climate Information: Educates community members on the use of climate information, consulting on climate challenges and co-generating solutions. Through this, aims to empower communities and promote sustainability.	Existing CIS; added community dialogues on climate information as a result of the Prize – modified	Face to face	Kajiado		
<b>Data Logic:</b> A web-based system for collecting climate/weather data from local and global climate information databases, process this data	Existing CIS; modified for Prize requirements	Website; SMS	Bungoma; Kajiado; Kakamega; Kericho;		

and disseminate the information to vulnerable people in remote villages via SMS.	including target		Kisumu; Trans Nzoia
people in remote villages via sivis.	groups and reduced focus to climate only – modified		TTAIIS INZOIA
Dissemination of Climate Information and Associated Services: Offers information on climate, climate risks and market participation of rural banana farmers. Includes a climate-informed crop monitoring and forecasting platform which provides probabilistic information about climate impacts.	Existing initiative; incorporated climate information in response to the Prize – imitative	Face to face; mobile phone app; SMS; TV or radio	Kisii; Nyamira
Enhancing Value Chain Actors Accessibility to Climate Information in Nyeri County: Mobile app giving climate information data to coffee and tea farmers. Builds capacity and creates awareness to value chain actors on climate change causes and risks, including through farmer field schools.	Existing CIS; used Prize as platform to share existing idea – increased outreach	Face to face; website; SMS; WhatsApp	Nyeri
GPOWER: A customised, user-oriented platform that uses SMS to disseminate down-scaled weather forecasts. Provides field training and extension service support to user groups, trained on interpretation and application of the information provided.	Existing initiative; incorporated climate information in response to the Prize – imitative	Face to face, SMS	Homabay
Improving Agricultural Productivity and Climate Change Resilience Using Landinfo Mobile App: Mobile app that enables access to climatic and soil information for informed decision making on agricultural production, processing, marketing and utilization.	Existing CIS; further motivated to establish government and funder connections – increased outreach	Face to face; mobile phone app; website; radio	Bungoma; Kakamega; Meru; Siaya
KARASHA-Mobile Phone Enabled Climate Information Service: Distributes climate and agricultural advisories, downscaling national forecasts to the community level to develop agro-weather advisories for the season using participatory climate scenario planning processes.	Established as a result of the Prize – imitative	SMS	Makueni
Last mile connectivity through agro-dealer franchise model: Integrates climate information into existing agriculture solutions distribution enterprise, disseminating climate information through SMS and training farmers on interpretation and response.	Existing initiative; incorporated climate information in response to the Prize – imitative	Face to face and SMS; mobile app in development	Makueni

Mavuno Digital App: Aims to tailor climate data to local context and deliver information to farmers using weather icons that are easily identifiable in local dialects and support planting decisions. Focus on rainfall conditions and identifying suitable crops.	Existing CIS; continued implementing due to Prize (may have otherwise stopped) – motivated action	Mobile phone app (not yet developed); SMS	Kitui
Mukingi Climate Information Users: Relays seasonal, monthly, weekly and daily probability forecasts to help manage risks of farm investments, coupled with agricultural training such as conservation agriculture and linking community to financial resources.	Existing CIS – motivated continued action	Face to face; SMS; TV or Radio	Kitui
Nakuru County Climate Information Services: Collaborate with community groups, using own monitoring system to contextualise formal climate information and soil and landscape analysis to advise farmers on agricultural decision making. Train students and communities on response to weather conditions.	Existing CIS; scaled up their reach as a result of the Prize – modified	Face to face; SMS	Nakuru
Sensitization of Pastoral Community on Climate Change and Early Warning System: Engages community at public barazas to provide information on drought, in consideration of local knowledge, to prepare pastoralists for drought.	Existing initiative; included climate information component in response to the Prize – imitative	Face to face; TV or radio	Marsabit
Smart Weather Community (m-SWECO): An information innovation that provides timely, reliable, quality and locally consumable weather forecasts and advisories to local population to help with risk disaster mitigation and resilience building.	Existing CIS; modified to fit Prize requirements and scaled up reach – modified	Face to face, SMS	Turkana
SmartAg: Uses web and mobile technologies to provide real-time weather and agronomic data to extension officers and farmers to improve precision farming and allow mitigation of climaterisks. Provides a monitoring tool that incorporates weather and agronomy in computing the growth stage of a crop and advises on disease and pests depending on growth stage and prevailing weather.	Existing CIS; continued due to Prize (may have otherwise stopped) – motivated continued action	Website; SMS	Bungoma; Kakamega; Kitui; Makueni; Tharaka Nithi; Trans Nzoia; Uasin Gishu

# Annex 10: Events and articles on the CIP

Table 22 lists the events and articles citing the CIP.

Table 22: Events and articles citing the CIP

Date	Event/Article	Link	Source
02/02/2015	World Meteorological Organization – Climate Information Participatory Learning Event 1	No link available	n/a
04/09/2015	Article on Daily Nation website	http://www.nation.co.ke/business/see dsofgold/Climate-smart-innovators- wanted-for-Sh100m-prize/- /2301238/2897942/-/s10bymz/- /index.html	Resource Centre - CIP website
04/09/2015	Article on AllAfrica website	http://allafrica.com/stories/201510050 392.html	Resource Centre - CIP website
30/09/2015	Wazo Launch	http://www.climateinformationprize.or g/35828/	News and events – CIP website
02/10/2015	Article on Capital FM Kenya website	http://www.capitalfm.co.ke/news/201 5/10/award-seeks-to-simplify-weather- information/	Resource Centre - CIP website
02/10/2015	Article on 4th Estate Wire website	http://4thestatewire.co.ke/kenya/2026 -uk-department-for-international- development-and-kenya- meteorological-department-launch- climate-information-prize	Resource Centre - CIP website
20/11/2015	2nd Intervarsity Youth Dialogue on Climate Change Processes	No link available	<u>n/a</u>
18/12/2015	Daily Nation YouTube interview	https://www.youtube.com/watch?v=e mBJZYGzMBQ	Resource Centre - CIP website
14/01/2016	Energy Sector Climate Change Mainstreaming Workshop	No link available	n/a
05/02/2016	Article in The Star	http://www.the-star.co.ke/news/2016/02/05/last-chance-to-join-weather-information-competition_c1285683	Resource Centre - CIP website
09/02/2016	Interview on KBC Channel 1 Ecoshow	http://www.climateinformationprize.or g/2016/02/11/cip-live-interview-on- kbc-channel-1/	Resource Centre - CIP website
25- 26/02/2016	Sankalp Africa Summit 2016	http://www.sankalpforum.com/events/ #	Events – Sankalp forum

05/04/2016	Article on 4th Estate Wire website	http://4thestatewire.co.ke/kenya/2097 -first-climate-information-prize- conference-on-innovation-and- resilence#sthash.3DhCZDaR.dpuf	Resource Centre - CIP website
06/04/2016	Wazo Award/Tekeleza launch	http://www.climateinformationprize.or g/climate-information-prize-event/	News and events – CIP website
20/04/2016	Article on Sci Dev Net	http://www.scidev.net/sub-saharan- africa/innovation/news/start-ups- kenya-prizes-address-climate- change.html	Resource Centre - CIP website
27/09/2016	Article on MediaMax	http://www.mediamaxnetwork.co.ke/ people-daily/256710/app-brings- weather-facts-closer-farmers/	Resource Centre - CIP website
30/11/2016	Tambua award	http://www.climateinformationprize.or g/daniel-mbeyas-smartag-innovation- won-first-place-tambua-prize/	News and events – CIP website
20/12/2016	Kenya Environment and Science Journalist Association Meeting	No link available	<u>n/a</u>
07/04/2016	Article on Brits in Kenya "UK Aid funded climate information prize holds first awards event"	http://britsinkenya.com/2016/04/07/u kaid-funded-climate-information-prize- holds-first-awards-event/	IMC QPR 3
01/04/2016	Article on ERA Environment "Climate Information Prize launched in Kenya"	http://www.eraenvironnement.com/cli mate-information-prize-launched-in- kenya/	IMC QPR 3
28/04/2016	Article on Brits in Kenya "UK Aid funded climate information prize showcased in new video"	http://britsinkenya.com/2016/04/28/u kaid-funded-climate-information-prize- showcased-in-new-video/	IMC QPR 3
28/02/2017	Tekeleza application deadline	No link available	n/a
01/04/2017	Article posted in the Daily Nation	Not provided	IMC QPR 6
31/07/2018	Tekeleza submission deadline	No link available	n/a
29/11/2018	Tekeleza award	http://www.climateinformationprize.or g/kenyas-top-7-climate-innovators- awarded-over-500k-for-initiatives-to- increase-resilience/	News and events – CIP website
01/12/2018	COP24 presentation	http://www.imcworldwide.com/news/imc-worldwide-cop24/	IMC website
30.11.2018	Article on Capital FM "Innovative climate information sharing idea wins two Kenyans Sh20mn"	https://www.capitalfm.co.ke/news/201 8/11/innovative-climate-information- sharing-idea-wins-two-kenyans- sh20mn/	Capital FM website [01Feb2019 ]

### **Annex 11: VFM results**

This annex summarises evidence against selected indicators for the VFM analyses. These correspond to the narratives in the main report.

Table 23 summarises evidence against the selected indicators for each of the internal VFM categories. Tables 24 and 25 summarise evidence against the selected indicators for each of the external VFM categories. Each category for both analyses is discussed in the main report.

The ratings for the internal analysis are based on DFID's VFM rating scale where 1 = substantially did not meet expectations; 2 = moderately did not meet expectations; 3 = met expectations; 4 = moderately exceeded expectations; 5 = substantially exceeded expectations.

The ratings given based on this scale should not be considered as a score out of 5 – for some indicators, it is not possible to achieve a 4 or a 5. For example, as a Prize programme, the planned schedule cannot exceed meeting expectations – if a schedule is changed this has implications for participants and so delivering earlier than intended would not be considered above expectations as it might be for other programmes. Where a rating above 3 is not possible, the scale has been 'greyed out'.

For the internal analysis, the strength of evidence (SoE) is indicted using a RAG rating, where Red is limited SoE, amber is moderate SoE, and green is strong SoE.

For the external analysis, we are not comparing against original expectations but rather we are comparing the two programmes against each other with the purpose of understanding the value of different funding modalities for achieving desired outcomes. Ratings are not provided for the input costs in the external analysis. As two very different programmes, ratings are not appropriate here; instead we highlight the varying proportional investments made by the donors, and the investment of external stakeholders in the programme. The ratings for the remaining indicators aim to capture the relative performance of one project versus the other. Again, we use a 1–5 rating scale, where 1 is the lowest rating and 5 is the highest rating, but consider the evidence of each programme in the context of the other as well as in the context of its performance – as such, a number of factors are often considered in determining the rating.

Table 23: Internal VFM indicators and ratings for CIP

Sub criteria/ expectation	Indicator	Summary of evidence	Rat	Rating				
Economy		OVERALL RATING	1	2	3	4	5	
The Tekeleza Prize is launched, closed and awarded as planned	1.1 Date of Tekeleza launch, deadlines and award	Tekeleza was launched, closed and awarded as planned (see timeline)	1	2	3			
Two recognition Prizes are run (Nov 2016, early 2018)	1.2 Date of recognition awards	Tambua was awarded on 30 November 2016. Second recognition Prize cancelled and orientation workshop ran instead	1	2	3	4	5	
The Prize was implemented within budget – £598,586	1.3 Total cost of implementation	£592,300, i.e. £6,286 (1%) below budget. Inc. £105,000 management; £72,000 staff; £300,000 local agent; £25,000 travel; £40,000 tendering; £42,000 verification; £8,300 judges	1	2	3	4	5	
The Prize purse allocated was the amount expected – £498,000	1.4 Total prize purse	<b>£458,528</b> , i.e. £23,424 (4.7%) below budget. Inc. £58,606 Wazo prize; £4,550 Tambua; £395,372 Tekeleza; £16,048 financing fee	1	2	3	4	5	
Efficiency		OVERALL RATING	1	2	3	4	5	
23 innovative applications in Stage 2	2.1 # of eligible applications for Stage 2	27 applications were assessed as eligible  Total prize cost/ number of applications = £39,514	1	2	3	4	5	
6 prizes awarded for Stage 2	2.2 # of awards	7 CIS innovations were awarded Total prize cost/initiatives awarded = £152,410	1	2	3	4	5	
CIP is cited in key debates/articles (Prize effect: promote best practice)	2.3 # of events/ articles citing CIP	The CIP was cited at 6 events, in 15 articles, and the award was fifth trending on Twitter  Total Prize cost/# events, articles = £50,803	1	2	3	4 5		
2 active and innovative partnerships (Prize effect: facilitate and strengthen partnerships and networks)	2.4 # of partnerships established	95 partnerships reported  Total prize cost/ number of partnerships = £11,230	1	2	3	4	5	

Sub criteria/ expectation	Indicator Summary of evidence				Rating				
The Prize has stimulated new investment in CISs <sup>45</sup> 46	2.5 GBP leveraged and contributed by participants	Estimated total of £284,785 investment stimulated. Inc. £132,235 grants; $\sim$ £152,550 participant investment Investment stimulated/Total Prize cost = £0.27	1	2	3	4	5		
Effectiveness		OVERALL RATING	1	2	3	4	5		
129,302 direct beneficiaries can access CISs <sup>47</sup>	3.1 # of beneficiaries	129,215 beneficiaries reported by participants <sup>48</sup>	1	2	3	4	4 5		
CIS beneficiaries use the climate information	3.2 # of beneficiaries using the CISs	37% (n=1,594) of beneficiaries used the CISs; 86% (n=1,152) users experienced a positive outcome	1	2	3	4	5		
CISs support users' climate adaptation	3.3 # of users better prepared for climate risks	94% (n=1,259) of users feel better prepared for climate risks	1	2	3	4	5		
The Prize has raised awareness of climate information (Prize effect: Raise awareness)	3.4 Evidence for raised awareness	The CIP contributed to raised awareness among participants, users, local government (see SEQ1)	1	2	3	4	5		
Equity		OVERALL RATING	1	2	3	4	5		
CISs reach low-income households	4.1 # beneficiaries with low/extreme low household consumption expenditure per month	70% of reported beneficiaries, 54% of verified users have low or extreme low household consumption per month	1	2	3	4	5		
CISs reach 50% female beneficiaries	4.2 # female beneficiaries	47% of reported beneficiaries and 49% of verified users were female	1	2	3	4	5		

<sup>&</sup>lt;sup>46</sup> New investment is defined as:

<sup>-</sup> Research and development spending by firms and organisations

<sup>-</sup> Inward investment to business model competitions

<sup>-</sup> Investment by possible co-sponsors in the prize programme

<sup>-</sup> Subsequent public and private sector investment

<sup>-</sup> Community investment in new innovations (including in-kind contributions)

<sup>&</sup>lt;sup>47</sup> New target set and reported in QPR8, revised down from 250,000 beneficiaries as indicated in the Tekeleza design document - draft

<sup>&</sup>lt;sup>48</sup> A further 186,281 were reported by participants who discontinued, but have not been included in the final beneficiary count, as their innovations were not operating at time of evaluation

Sub criteria/ expectation	Indicator	Summary of evidence	Ra	ting	)			SoE
CISs reach low education beneficiaries	4.3 # beneficiaries with education up to primary level only	40% (n=642) users are educated up to primary level only	1	2	3	4	5	
CISs reach majority rural population	4.4 % rural beneficiaries	90% (n=1,430) of users are from rural areas	1	2	3	4	5	

Table 24: Input costs for stakeholders for WISER and CIP

Cost category	CIP indicator	CIP evidence	WISER Indicator	WISER evidence
Costs to DFID, including:	C1.1 Total Prize cost	£1,192,300	W1.1 Total programme cost	£673,211
Admin costs/total cost	C1.1.1 (Overheads, staff, office and travel costs, tendering and payments to verification agents and judges)/Total Prize cost	<b>43.8%</b> (£521,701/ £1,192,300)	W1.1.1 (Overheads, staff, office and travel costs)/Total programme cost	<b>60.5%</b> (£407,228/ £673,211)
Delivery costs/total cost	C1.1.2 (Prize purse, workshop costs, other delivery costs)/Total Prize cost	<b>45.7%</b> (£545,175/ £1,192,300)	W1.1.2 (Capacity building and institutional strengthening)/Total programme cost	<b>34.6%</b> (£232,978/ £673,211)
Monitoring, Evaluation and Learning (MEL) costs/ total cost	C1.1.3 MEL costs/Total Prize cost	<b>10.5%</b> (£125,635/ £1,192,300)	W1.1.3 MEL costs/Total programme cost	<b>4.9%</b> (£33,004/ £673,211)
Costs to CIS providers	C1.2.1 Costs to participants – including personal or organisational resources	£152,550 estimated cost	W1.2.1 Costs to intermediaries	Evidence not available
	C1.2.2 Time spent by participants	35,280 estimated days	W1.2.2 Time spent by intermediaries	2,470 days
Costs to data providers	C1.3 Costs to KMD staff in time	£696	W1.3 Costs to CMDs and other staff in time	£13,728
Costs to investors	C1.4 Costs to investors	£147,081 in grants	W1.4 n/a	n/a

Table 25: External VFM indicators and ratings for CIP and WISER

Sub-criteria	Indicator	CIP evidence	Ra	iting	<u>,                                     </u>			WISER evidence	Ra	iting	j		
Economy		OVERALL RATING	1	2	3	4	5		1	2	3	4	5
Input costs qualified by cost and quality	Competitive tendering followed for purchase of inputs	£10,327 savings achieved through pro-bono office space and staff time from Cardno	1	2	3	4	5	Savings achieved through office equipment (27% below budget) and SMS provider (20% below usual charge)	1	2	3	4	5
Effective implementors with reasonable costs	Administrative fee charged by delivery partners	3.5% charged by IMC, on local implementing agent and Prize purse	1	2	3	4	5	7% charged by CARE UK 4.5% charged by the Met Office	1	2	3	4	5
Experienced staff with competitive fee rates	Average fee rate for core team members	£615	1	2	3	4	5	£627	1	2	3	4	5
Efficiency		OVERALL RATING	1	2	3	4	5		1	2	3	4	5
Efficiency of programme in training intermediaries	Cost per intermediary in workshop	<b>£261</b> – cost of orientation workshop/27 participants	1	2	3	4	5	<b>£43</b> – cost of training workshop/2,470 intermediaries engaged	1	2	3	4	5
Efficiency of programme in engaging stakeholders	Cost per stakeholder engaged	<b>£184</b> – cost of events/384 participants <sup>49</sup>	1	2	3	4	5	£51 – cost of training and capacity building/2,479 stakeholders	1	2	3	4	5
Efficiency of programme in stimulating action	Cost per service or plan established/improved	£59,270 – programme cost (excl. MEL)/ 18 CISs	1	2	3	4	5	£71,134 – programme cost (excl. MEL)/ 9 county plans produced	1	2	3	4	5
Effectiveness		OVERALL RATING	1	2	3	4	5		1	2	3	4	5

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<sup>&</sup>lt;sup>49</sup> Accounting for number of participants at each event rather than number overall (which would likely be lower).

Sub-criteria	Indicator	CIP evidence	Ra	Rating			WISER evidence	Ra	ating	j			
Effectiveness in increasing access to CI	Number of beneficiaries reached	<b>129,215</b> beneficiaries reported by participants	1	2	3	4	5	121,858 beneficiaries reached	1	2	3	4	5
Effectiveness in raising awareness of CI (Prize effect: Raise awareness)	Evidence of programme raising awareness of CI	Contributed to awareness of participants, users, local gov.	1	2	3	4	5	Raised awareness directly by training intermediaries and local government	1	2	3	4	5
Cost- effectiveness			1	2	3	4	5		1	2	3	4	5
Effectiveness in reaching households	DFID cost per beneficiary reached	<b>£8.25</b> (Total prize cost excl. MEL 1,066,879/ number of beneficiaries – 129,215)	1	2	3	4	5	<b>£5.25</b> (Total programme cost excl. MEL (£640,207)/ number of beneficiaries – 121,858)	1	2	3	4	5
Funder considerations			1	2	3	4	5		1	2	3	4	5
Prospect of encouraging innovation <sup>50</sup>	Evidence of innovative approaches	8 CISs are imitative innovations and 5 are modified due to the Prize	1	2	3	4	5	Some limited imitative innovation through promoting uptake of modern technology by CMDs	1	2	3	4	5
Dependency stakeholders' behaviour for success	Evidence of reliance on context and stakeholders	Support from KMD required to access data; High reliance on sustained participation	1	2	3	4	5	High reliance on support from KMD; also needs buy in from intermediaries	1	2	3	4	5
Likelihood of results (i.e. of achieving long- term impacts)	Evidence for prospect of sustainability	Participants intend to sustain their CISs however feasibility of plans remains to be seen.	1	2	3	4	5	Inconsistent role out of service across counties, reliance on donor funding and lack of resources to continue training	1	2	3	4	5

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<sup>&</sup>lt;sup>50</sup> Innovation is defined as a new process, technologies and services, and offer a blend all three, and includes: New to the world – NOVEL; New to the location or firm – IMITATIVE; New to the field of endeavour, or repurposed – ADAPTIVE

## **Endnotes**

i http://www.ideastoimpact.net/about-us ii http://www.climateinformationprize.org/

iii Internal file: Annexes on climate information and independent review – edit 11 Sept 2015.

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iv User verification reports.
<sup>v</sup> User verification reports
vi User verification reports
vii FG01, FG02, FG03, FG05.
viii FG02, FG03, FG05.
ix Tekeleza entry forms
* PD03, PS01, PS04, PF05, PF08.
xi V01, V02.
xii PF02, PF08.
xiii Final submissions
xiv User verification reports
xv Prize Team comments on draft report
xvi PT02, PT04
xvii J02, J04, PT01, PT02, PT04, PT05
xviii Insight from Twitter analysis by comms team at IMC.
xix DP01, PF03, PF05, PF07, personal observation.
xx PF04, PF07, PF08, PF09.
xxi Discussion with Prize Team at validation workshop.
xxii PD01, PD03, PF03, PF07, PF09, PS01, PS06.
xxiii PT01, PT02, PT03.
xxiv PS01, PD01, PD03, PF01, PF03, PF06, PF07, PF08, PF09, PS06, PS07.
xxv PD01, PD03, PF03, PF07, PF09, PS01, PS06.
xxvi PD02, PF01, PF02, PF05, PF06, PS02, PS03, PS04, PS05, PS07.
xxvii PS02, PS07, PF01, PF03, PF09.
xxviii Tekeleza final submission data
xxix PD01, PD02, PD03, PF01, PF02, PF04, PF05, PF06, PF08, PS02, PS03, PS04, PS05, PS07.
xxx PD03, PF05, PF07, PF08, PS03, PS04, DP01.
xxxi FG01, FG04.
xxxii DP01, J02, FG01, FG03, FG04.
xxxiii User verification reports.
xxxiv FG01, FG02, FG03, FG04, FG05.
*** PS03, PF05, PF06.
xxxxii Annexes on climate information and independent review - Draft, 11 Sept 2015 – unpublished CIP document from
design phase.
xxxiii Participants final submissions, DP01, FG01, FG02, FG03, FG04, FG05, PF03, PF05, PF07, PS02, PS03.
xxxviii FG03.
xxxix FG01, FG04, FG05, PT01, V01.
xl FG01, FG02, FG03, FG04, FG05.
xli User verification reports.
xlii FG03.
xliii PS05, PS07, PF05, PF07.
xliv Discussion with Prize Team at validation workshop.
xlvi DP01, WISER project completion report – unpublished draft shared by team.
xlvii DP01, DP02.
xlviii PT03.
xlix PD01, PF02, PF01, PF06, PF07, PF08, PF09, PS02, PS03, PS04, PS05, PS06, PS07.
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<sup>1</sup> Participant final submissions.
<sup>II</sup> PS02, PS03, PS04, PS05, PS06, PF08, PF09.
lii PF04
iii PT03, J04, V01.
liv Annexes on climate information and independent review – Draft, 11 Sept 2015 – unpublished CIP document from
design phase.
<sup>l</sup>√ V03.
lvi V03.
<sup>Ivii</sup> V03, Financial verification reports
lviii J02, PT03.
lix This change is not clearly documented by the Prize Team, but is based on discussions in the validation workshop.
<sup>lx</sup> Discussions with Prize Team at validation workshop.
lxi Not distinguished by participants.
lxii Cashflow statements, e-survey results
lxiii PF04
lxiv PF01, PF09, Cashflow statements
lxv PD02, E-survey data
lxvi WISER Programme completion report – unpublished draft shared by team.
lxvii PT01, PT02, PT03, PT04, PT05.
lxviii PF02, PF03, PF04, PF09, PS02, PS03, PS05, PS06.
lxix PF02.
lxx PF02, PF04.
lxxi PS05, PS06.
bxii PD02, PF01, PF02, PF06, PS02, PS04, PS06, PS07, two additional participants in e-survey data.
lxxiii PF01, PF07, PS07.
lxxiv E-survey data.
lxxv PS01, PD01
lxxvi E-survey
lxxvii User verification reports
lxxviii User verifications reports
lxxix Noting biases in convening focus groups.
lxxx FG01.
lxxxi PF01, PT01, PT02, PF01 Final report
lxxxii PS03.
lxxxiii FG05.
lxxxiv FG04, FG05.
lxxxv PS03.
bxxvi PF02, PF03, PF04, PF06, PF08, PS01, PS06, PT04, PT05.
bxxxvii PD01, PD02, PD04, PF04, PF05, PF07, PS02, PT01, PT02, PT03, PT04, PT05.
Ixxxviii Final submissions
bxxxix PD02, PF01, PF02, PF04, PF09, PS01, PS03, PS04, PS06, PS07, PT01, PT02, PT04.
« PD01, PD03, PF01, PF02, PF03, PF04, PF06, PF07, PF08, PF09, PS02, PS03, PS05, PS06, PS07, PT01, PT02, PT03,
PT04, PT05.
xci PS01, PT03, PT05.
xcii J04, PT01, PT02, PT05.
xciii PF01, PF09, PS04, PS06.
xciv PD01.
xcv PD03, PD04.
xcvi PD01, PD02.
xcvii PD01.
xcviii PD02.
xcix PT01, PT02, PT04, PT05.
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- ° PD01, PD02, PD03, PD04, PF01, PF02, PF03, PF05, PF06, PF07, PF08, PF09, PS01, PS02, PS03, PS04, PS05, PS06, PS07, PT04.
- ci Workshop evaluation summary
- cii Workshop feedback summary
- ciii PF02, PF06, PF07, PF09, PS01, PS02, PS03, PS06.
- civ J02, PD01, PF03, PF06, PF07, PF08, PS01, PS05, PT03, PT04, V01.
- $^{\text{cv}}$  J04, PD01, PD02, PF03, PF05, PF08, PS01, PS02, PS03, PS05, PS07, PT04, V03.
- cvi PF01, PS03, PS04.











