RISING TO THE CHALLENGE:

HOW TO GET THE BEST VALUE FROM USING PRIZES TO DRIVE INNOVATION FOR DEVELOPMENT

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DISCLAIMER

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Cover: Sam Owilly won the first-place award of the Wazo Prize, the first stage of the Climate Information Prize in Kenya, with Pawa-Farm, an innovative virtual agro-weather advisory platform that provides farmers with timely and usable weather and climate information. **EXECUTIVE SUMMA**

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ACRONYMS

CBO	Community-based organisation
CCA	Climate change adaptation
CIS	Climate Information Services
DFID	Department for International Development, also known as UK aid
IIP	Innovation Inducement Prize
IMC	IMC Worldwide
LPG	Liquid Petroleum Gas
MMDAs	Metropolitan, Municipal and District Assemblies
NGO	Non-governmental organisation
NRW	Non-revenue water
PS-NSA	Private Sector and Non-State Actor (prize)
SSD	Sanitation Service Delivery programme
ТоС	Theory of Change
UK	United Kingdom (of Great Britain)
US	United States (of America)
VFM	Value for money

GLOSSARY

Comparator project: a project with similar aims to the Ideas to Impact prizes selected as a point of comparison to establish the prizes' comparative value for money.

Final submissions: the reports submitted for judging by Ideas to Impact prize participants.

Ideation prize: A type of innovation inducement prize that works towards innovative ideas or concepts in response to a predefined challenge.

Innovation: defined by Ideas to Impact as 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).

Innovation inducement prize (IIP): Sometimes referred to as simply an 'innovation prize' or 'the prize', an IIP offers a reward to one or more solvers who first or most effectively solve a predefined challenge. The reward is often financial but can also include additional support, such as technical assistance. This type of prize incentivises innovation rather than rewarding past achievement.

Judging criteria: the set of main criteria against which participants' submissions were judged.

Liquid waste management: management of liquid waste (including faecal sludge and excreta).

Prize purse: the total prize money available to participants judged worthy of winning a monetary prize.

Prize team: the in-country and UK-based teams responsible for designing and implementing the Ideas to Impact prizes.

Point Solution: a type of innovation inducement prize that seeks to reach a broad pool of external solvers to find a solution to a problem that has been broken down to a component part, for example, a new product or process.

Recognition prize: an innovation prize (see definition above) that is awarded for specific or general achievements made in advance of nominations for the prize being requested.

Theory of Change: in the context of innovation prizes, this is a detailed description of how and why a prize is expected to lead to the desired change in a given context.

Unintended consequences: things that happen as a result of a prize that were not planned. These can be positive or negative.

Value for money: optimal returns on investments achieving 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.

- Solver support: the support provided to Ideas to Impact prize participants during the prize process.

EXECUTIVE SUMMARY

An innovation inducement prize enables funders to pursue development goals without them having to know in advance which approaches or participants are most likely to succeed. Innovation prizes also often directly engage with the intended beneficiaries or those connected with them, in solving the problems.

At a time when development spending is under increasing pressure to show value for money (VFM), innovation prizes are considered as an appealing alternative to mainstream funding options. While costs are likely to have accrued through prize design and management, no cash payments are made until the prize is successfully awarded. The funder may anticipate obtaining more results than those directly paid for through the prize award.

BOX 1: EVALUATION AND LEARNING OUTPUTS FOR IDEAS TO IMPACT

The package of evaluation and learning outputs for Ideas to Impact

The Ideas to Impact Evaluation and Learning team at Itad have produced a package of papers based on evaluations of Ideas to Impact's prizes, that inform and respond to one another.

This research report, **Rising to the challenge: how to get the best value from using prizes to drive** innovation for development, is our flagship publication, which provides insight into whether innovation prizes work for development, when they offer value over other forms of development funding, and how to get the most value from prizes. This paper brings together learning from the evaluations and follow-up reviews of six Ideas to Impact prizes.

The Evaluating the results of innovation prizes for development: Reflections and recommendations from *practice* paper reflects on our experiences of evaluating the Ideas to Impact prizes and draws out lessons for appropriate and effective approaches to evaluating future prizes for development.

The Evaluating the value for money of Ideas to Impact's innovation inducement prizes paper explores the approach we took to establishing the VFM of the Ideas to Impact prizes within the broader prize evaluations, and provides the detail behind the conclusions we make on the VFM of the Ideas to Impact prizes.

These second and third papers should be considered companion pieces for the first, which provides a broader view of the value and use of prizes to development. All three papers were informed by a literature review published as a discussion paper, Using innovation inducement prizes for development: what more has been learned? The wider Ideas to Impact programme has also produced a handbook on running innovation prizes for development.

The purpose of this report is to answer two questions: do innovation prizes work for development, and if so, when do they offer value over other forms of funding?

To date, few evaluations have been published that would help funders answer these questions for themselves. DFID commissioned the Ideas to Impact programme to fill this gap by testing a range of innovation prizes targeted at different development issues and this report synthesises the findings from the evaluations and follow-up reviews of six of these prizes¹ This report is part of a collection of related learning papers (see Box 1).

DID IDEAS TO IMPACT'S PRIZES WORK?



There are different perspectives on prize success (check next page). In addition to considering success in terms of awards being made and whether the anticipated advantages of using a prize has been realised (e.g. raising awareness of an issue), Ideas to Impact's ultimate focus has been on asking if the prizes contributed to addressing development challenges, through inducing innovation.



Adopting this approach makes possible a more rounded judgement of a prize's success or failure and of when prizes are appropriate for use in development. However, even this can provide an incomplete picture if the evaluation stops at the point of awards being made.



The evaluations of Ideas to Impact's prizes demonstrate that the prizes' ability to contribute to development outcomes after awards have been made is heavily reliant on the actions of external stakeholders, and provide evidence in support of the hypothesis that an enabling environment and situation within a broader ecosystem is key to their effective use.



While all modalities are dependent on the ecosystem in which they operate, grant-based programmes can be more directive than innovation prizes in addressing external constraints, although the (local government focussed) Sanitation Challenge for Ghana demonstrates the potential prizes have for altering the policy

environment. Innovation prizes tend to operate on the assumption that their remit is to incentivise innovation and the wider system will support its uptake, an assumption that holds if there are few barriers or the external environment is ripe for the innovation and this is factored into the problem identification and prize design.

PERSPECTIVES ON PRIZE SUCCESS

Were the prizes awarded?

All six of the Ideas to Impact prizes upon which this report is based can be said to have worked in terms of making awards.

Did the prizes produce the expected advantages (or prize effects)?

Four of the prizes fully met expectations in terms of stated intended prize effects and there are some lessons to be drawn from those that are described as only partially meeting them.

Did the prizes drive innovation?

Ideas to Impact prizes were found to drive innovation through incentivising:

a) development of new technologies, solutions or plans;

b) submission of commercially available or late stage prototype technologies for benchmarking and field testing (to stimulate subsequent innovation);

c) implementation of new services, plans and approaches that would contribute to addressing development challenges.

Did the prizes contribute to addressing development challenges?

By the time of their award, four of the six prizes made the contribution to development that was expected of them at that point to a greater or lesser extent. A fifth prize (Dreampipe II) was found to have made some contribution to its broader goal by the point of its closure, but did not follow the route that the prize was expected to take, while a sixth prize (LPG Cylinder Prize) was unsuccessful due to its dependence on a national policy being implemented which, some time after the prize closed, was still to be implemented.



WHAT ADDED VALUE DID THE **PRIZES OFFER?**

When the Ideas to Impact prizes are compared to other forms of funding, they offer similar levels of overall value for money, albeit obtained through different and complementary means, such as involving a larger number of participating organisations (as solvers).

While innovation prizes can bring several advantages to a funder, their comparative strength lies in their ability to attract a higher number and/or diversity of individuals and organisations to solve a given development problem, often at ground level.

By engaging new and an increased number of actors in generating potential solutions to a development problem, two of the advantages associated with prizes (prize effects) come into play, providing key benefits for development and VFM for funders:



Open innovation - encouraging new solvers to enter the field of endeavour which may include those directly affected by a problem (adding the 'Community Action' effect);

In theory, a prize's strength in incentivising large numbers of actors to produce innovations increases the chance of one or more of those innovations overcoming the 'valleys of death² and getting to scale. The evaluation evidence (collected up to one year after awards were made) was only able to show that innovation prizes can help overcome gaps in the finance and skills at the early stage valley of death, rather than commercialisation.



Maximising participation towards the funder's aims - all who participate effectively (for a period of time), not just the winners, benefit the prize sponsor thereby offering the funder the potential to get results at scale, beyond those paid for through prize money.

ADDRESSING DEVELOPMENT CHALLENGES

The value offered by innovation prizes to a development problem risks being lost after the awards are made unless efforts are made to understand and forge links with those actors who will build on the momentum generated by the prize.

Alternatively, development problems may be best served by combining a prize with other funding modalities, because of the unique value each provides when used appropriately.

For innovation prizes to be most effective in contributing to addressing development challenges, the following conditions need attention:



Ensuring the prize is connected to an enabling environment and ecosystem. Keep in mind the assumptions made about the environment that the prize operates within, such as supportive policies, government champions, etc.; identify which are critical to success, if any can be brought under the prize team's control or if they depend on complementary support (jump to Section 4).



Thinking through prize team design and partner selection. Prize teams need to be able to respond to changes in the wider environment, and your selection of partners can have a strong influence on the prize's success (jump to Section 4). When selecting a national partner, ensure that they have no vested interest in any of the solvers to avoid bias.



Targeting the right participants and supporting them to participate.

Depending on the prize's objectives, such as driving an inclusive approach to innovation, or broadening out innovation to an international solver pool, it will sometimes be necessary to target particular people or organisations and then allocate sufficient communications resources to reach them. In resource-poor situations, this will mean considering appropriate solver support (jump to Section 4).

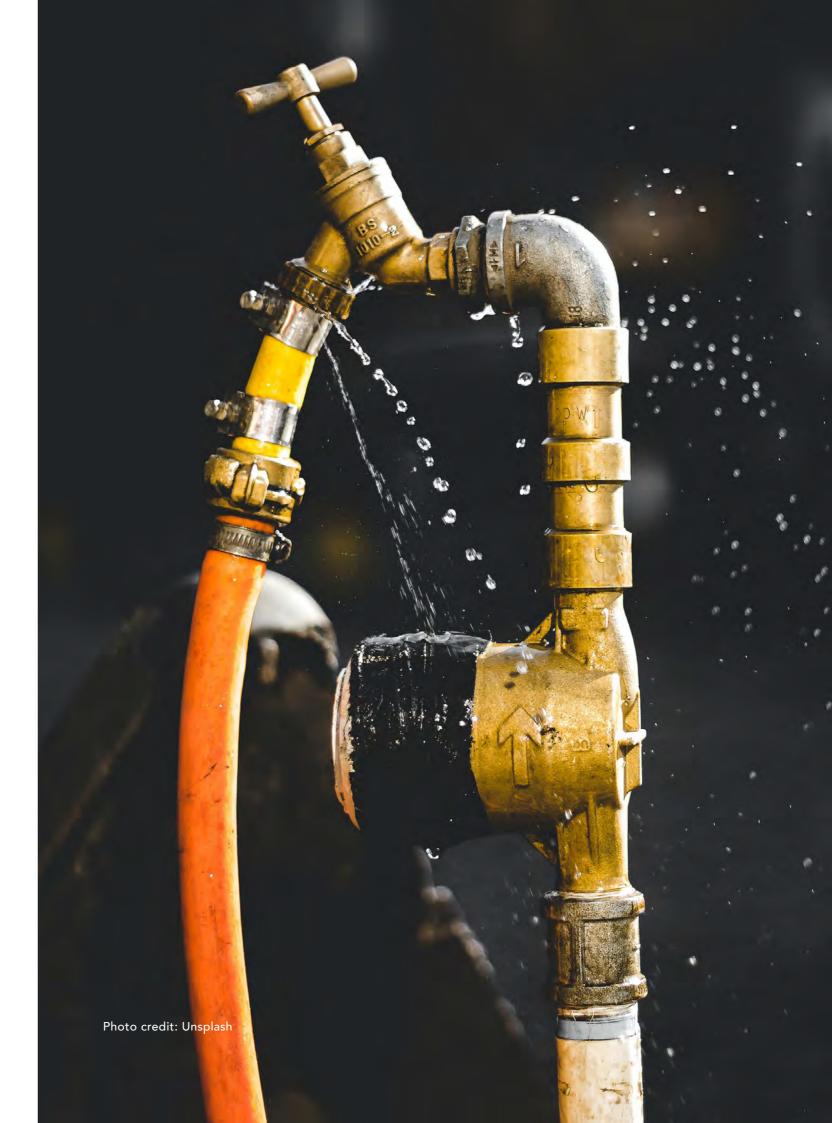


Assessing the risks and ethics of running prizes for development. This includes paying close attention to who is included or excluded from the prize, and the burden on participants, especially in resource-poor contexts (jump to Section 4).



Having reasonable expectations of prize participants. Implementation inducement prizes incentivise people to adopt a new priority or way of working. If the goal is to have many people participate, the prize will need to be designed so the burden of risk is reasonable for target participants (jump to Section 4).

The above set of conditions are not exhaustive and there are other important considerations that need to be kept in mind when designing prizes, setting budgets and recruiting prize teams such as communications, judging and verification, and data collection for monitoring and evaluation.



SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Ideas to Impact's prizes differed from each other in many aspects, including their setting, duration, participants and intended effects.

Given this diversity, and the variety of ways in which they can be said to have worked (or not), what can be said about if and how innovation prizes should be used in development?

Here we summarise our conclusions and associated recommendations (jump to <u>Conclusions and</u> <u>Recommendations</u>), developed in collaboration with DFID, as funders of the Ideas to Impact programme.

INNOVATION INDUCEMENT PRIZES CAN MAKE A USEFUL CONTRIBUTION TO ADDRESSING DEVELOPMENT CHALLENGES BY DRIVING INNOVATION

The comparative assessments of VFM made between prizes and grant-based programmes indicate that innovation prizes should join the existing options funders choose from when considering how to tackle a development issue. Rather than selecting one funding tool over another, our evaluations of Ideas to Impact's prizes provide further support for the hypothesis that prizes are used to their best advantage if they complement other interventions working towards the same development goal, ideally as part of a single programme (Everett et al, 2011).

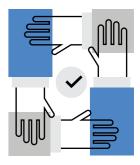
While we have seen evidence of the Ideas to Impact prizes generating several useful effects, they are particularly worth considering when the programme wishes to drive large-scale innovation activity or attract fresh minds to a development problem, which can include the communities that are directly affected.

By increasing the number and diversity of those delivering results (and distributing the risk among more parties), innovation prizes can be more cost-effective in certain settings than other forms of funding. However, this redistribution of risk among prize participants could present an ethical issue which funders and prize teams will need to be mindful of, especially if the prize targets organisations and actors with limited resources.

RECOMMENDATIONS



Innovation prizes should be introduced to programmes where the prize effects can support achievement of the programme's intended outcomes. This will enhance the prize's value for money and the sustainability of any innovation (and other effects) stimulated.



Consider using innovation prizes to drive inclusive innovation while being mindful of the risks that come with this approach. Prizes have the potential to engage a range of solvers including those affected by the development challenge that the prize is seeking to address, but this is not how they are traditionally run so attention will need to be paid to the expectations being made of potential solvers.

THE USE OF PRIZES AND THEIR DESIGN MUST RESPECT THE CONSTRAINTS OF THE EXTERNAL ENVIRONMENT

Although a large-scale innovation prize (such as the XPRIZE and Ideas to Impact's Sanitation Challenge for Ghana) can influence aspects of the external environment, prizes tend to have less scope to influence external factors, compared to a grant-funded project. This needs to inform decisions about when and where to use innovation prizes and how they need to be designed.

The conditions for success, <u>explored in Section 4 of this report</u>, could aid organisations in deciding whether a prize is appropriate for a given situation. Positive signs would include a Theory of Change showing how the prize will build on or complement other interventions aimed at solving the same problem, and if those linkages are not in place, realistic plans for making them.

If success of the prize is dependent on specific participants being involved and the pre-assessment suggests this will not be too much of a burden for them (and will not risk encouraging them to overstretch their resources), this would be another indication that a prize would be a good fit. Conversely, if the signs were that a multi-stage prize would need to provide a high level of support to enable its target participants to stay the course of a lengthy implementation stage, this may be the cue to use a prize initially (attracting many and diverse minds to the problem) followed by another funding option, such as a research grant.

RECOMMENDATIONS



When investigating if an innovation prize should be used in a programme, **refer to the lessons learned by the innovation prize community,** including Ideas to Impact, on the pre-conditions for effective use, e.g. confidence in assumptions made in the prize Theory of Change and acceptable level of support likely to be required by solvers.



Specify how the prize is required to drive innovation to guide appropriate design and implementation. An innovation prize intended to find a technological solution to a closely defined problem will look quite different to one that seeks to incentivise multiple communities to generate and implement approaches to tackle local development challenges.

THE PERIOD AFTER AWARDS HAVE BEEN MADE ARE WHERE A PRIZE'S TRUE VALUE CAN BE ACHIEVED AND JUDGED

Evidence is needed from multiple perspectives (awards made, effects and innovation stimulated, contribution to addressing development challenges, and internal and external VFM) is needed to obtain a true picture of whether a prize has 'worked' for a development funder or not.

The timing of this evaluation needs careful thought as the period shortly after awards are made may be when further contribution to development is delivered.

RECOMMENDATIONS



Evaluations of innovation prizes should include the prize team activity and results achieved in the period after awards were made, in order to assess the value obtained for the funder.



Make resources available for a follow-up evaluation, one year or more after final awards, if the prize's contribution to scaling up innovations needs to be assessed.

INTRODUCTION

Often, we encounter problems we know the solutions to or who to call for help to solve them. But when we are faced with a challenge that is so tangled and stubborn that usual methods on their own fail to get results, we have to consider using something that is less familiar and less predictable to help set things in motion.

Intractable problems abound in development so the Ideas to Impact programme was commissioned by DFID in 2013, to understand the value innovation inducement prizes could bring to solving them. There was a growing interest in prizes both in the UK and the US but little evidence available on prizes' use in development or how funders could get the best value from them.

An innovation inducement prize, referred to simply as an 'innovation prize', offers a reward to one or more solvers who first or most effectively solve a predefined challenge.³ The reward is often financial but can also include additional support, such as technical assistance (including capacity building).

This type of prize identifies award criteria in advance in order to spur innovation towards the predefined goal rather than rewarding past achievement (prizes that do this, such as the Nobel Prize, are those referred to as recognition prizes).⁴ Ideas to Impact takes a broad view of innovation (see Box 2) and thus, the results of a prize could be a technology that is completely new to the world or one that has been adapted for use in a new setting.

Innovation prizes are designed to attract individuals or organisations to produce some form of innovation and submit it for judging against a set of criteria. The funder is not required to identify in advance who these solvers, or prize participants, should be. Indeed, innovation prizes are anticipated to attract those who are new to the funder and/or the development issue (new entrants).

By contrast, a research grant funds an individual or organisation selected by the funder in advance of delivering the work, on the assumption that they will produce the desired new idea or concept.

SECTION 1

Innovation prizes may also include a stage that incentivises participants to implement their new ideas or solutions which requires them to innovate further and typically sees prize participants being judged on the basis of their contribution to addressing a specific development challenge with their innovation.

Innovation prizes, then are a form of payment by results with no cash payments being made until evidence of the results is available. However, the competition element of innovation prizes means there is potential for additional results to be obtained, beyond those that a funder pays for through prize awards.

Prior to the launch of Ideas to Impact, an evidence review commissioned by DFID (Everett et al, 2011) identified the potential benefits that innovation prizes could offer development funders (see Box 3) which come from prizes' specific attributes e.g. the increased media coverage they are likely to generate compared to a grant.



Ideas to Impact understands innovation to be: a new process, technology or service, and often a blend of all three, and includes: new to the world – NOVEL, new to the location or firm – IMITATIVE, and new to the field of endeavour, i.e. repurposed – ADAPTIVE. Based on the existing evidence on the effects that prizes can have, Ideas to Impact's preliminary research uncovered several situations where an innovation prize, in theory, could help make progress in addressing development challenges by driving innovation, for example:⁵

- City authorities in sub-Saharan Africa cannot expand sanitation services quickly enough to match urban growth, and more than half the urban population relies on unimproved sanitation systems (Trémolet, 2015). Could the media buzz and sense of competition of a national governmentsponsored prize unleash innovative and integrated approaches by local government?
- Climate information has the potential to help poor and vulnerable households adapt their farming methods to be more resilient in the face of climate change, but access is often patchy and information services are often not designed to meet users' needs (Marshall and Naess, 2015). Could a prize attract new perspectives to help improve the usability of climate information?

Between 2014 and 2019, the Ideas to Impact programme designed and ran 13 global and country-focussed innovation prizes targeted at a range of problems, from incentivising scaling up of climate change adaptation in Nepal, to finding new ways of financing the reduction of non-revenue water, to stimulating the market for off-grid refrigerators in sub-Saharan Africa.

In each case, the designated prize team developed an innovation prize that was tailored to the context and what was known about the problem. As the following pages illustrate,⁶ a diverse portfolio of prizes emerged from this design process, differing from each other in: the people and organisations targeted as participants, the cash and non-financial incentives offered, the number and duration of prize stages, and the development outcomes that the prizes were designed to serve.

The central concern for Ideas to Impact and the focus of this report is to answer two key questions: do innovation prizes work for development? and if so, when do they offer value over other forms of development funding?

To answer these questions, a set of in-depth evaluations and follow-up reviews were delivered by the Ideas to Impact Evaluation and Learning Team, led by Itad. In this role, Itad has been supporting the Ideas to Impact programme team and funder throughout to understand if these innovation prizes worked as intended, by providing an impartial view of the results obtained.⁷

This research report synthesises the learning obtained from six prizes⁸ including the sustained effects of some of them several months after awards were made, and their value for money (VFM) compared to other funding options.

Some of the prizes were prize schemes, comprising two or more stages, and in these cases the evaluation reports focus on the final stage. Such multi-stage (also known as stage gate [Ballantyne, 2014]) prizes may run over several years and can enable solvers with limited resources who win early stage prizes to remain in the competition.

Early stages are often ideation prizes, a form of inducement prize that awards innovative concepts or proposals in response to a predefined challenge; later stages reward their implementation.

BOX 3: BENEFITS OF INNOVATION PRIZES INCLUDE:

Establishing an important goal without having to choose the approach or the team that is most likely to succeed.

Highlighting excellence that motivates, inspires, and guides others.

Increasing the number and diversity of the individuals, organisations, and teams that are addressing a particular problem or challenge.

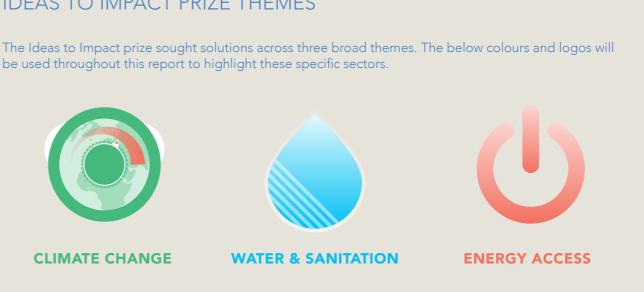
Stimulating private sector investment many times greater than the cash value of the prize.

Drawing attention to a defined programme, activity, or issue of concern. Everett et al (2011)

IDEAS TO IMPACT PRIZE THEMES

be used throughout this report to highlight these specific sectors.





CLIMATE CHANGE

Our review of recent literature about innovation prizes (Roberts et al, 2019) suggests that postaward effects and VFM tend not to be included in prize evaluations and that our findings will be a useful addition to the prize evaluation literature.⁹ Summaries and full reports of the prize evaluations can be found on the UK government website.¹⁰

Section 2 of this report considers if innovation prizes work for development. We define what we mean by 'work' and give examples of where we have seen Ideas to Impact prizes making progress in solving development problems.

Having established what Ideas to Impact prizes have achieved, in Section 3 we discuss where a prize <u>can add value</u> to more established approaches to development.

RISING TO THE CHALLENGE: HOW TO GET THE BEST VALUE FROM USING PRIZES TO DRIVE INNOVATION FOR DEVELOPMENT

In Section 4, our evaluations of Ideas to Impact's prizes suggest that there are some conditions that need to be in place for innovation prizes to be used successfully.

The report ends with our <u>conclusions and some</u> recommendations for funders on how they might make greater and more effective use of innovation prizes for development.



Adaptation at Scale

Problem being addressed Scaling up and out of climate adaptation activities. Model and duraction of each stage (from launch to award)

2-stage prize:

- 1: Hybrid recognition and ideation inducement prize; approx. 7 months.
- 2: implementation inducement prize; approx. 29 months.

Total duration: approx. 36 months.

Objective of the prize (What success would look like)

i. To reward and promote adaptation innovations that link communities with wider networks to bring local adaptation to scale.

participants.

delivered by participants.

Focal Country

Nepal

Climate Information Prize

Problem being addressed Increasing use of climate information by farmers Model and duraction of each stage (from launch to award) 2-stage prize:

1: Business plan (ideation inducement prize); approx. 6 months.

2: implementation inducement prize; approx. 32 months.

Total duration: approx. 38 months.

Objective of the prize (What success would look like)

households

and adapting to, climate variability and change.

delivered by participants.

Focal Country

Kenya

Photo credit: Ben Walker



- ii. To contribute to building or strengthening innovation capabilities among

iii. To ensure that local communities benefit from adaptation innovations

Target Paticipants

Local, national and international non-governmental organisations, community-based organisations

Prize Team

Designed by Ideas to Impact, implemented by IDS-Nepal

- (includes recognition prize to maintain interest and motivation)
- i. To drive the development of innovative Climate Information Services (CISs) that can be accessed and used by poor and vulnerable individuals and
- ii. To raise awareness of the importance of climate information for coping with,
- iii. To ensure that local communities benefit from adaptation innovations

Target Paticipants

Private sector entrepreneurs, non-governmental organisations, community-based organisations

Prize Team

Designed by Ideas to Impact, implemented by Cardno International

Dreampipe II

Problem being addressed

Reduction of non-revenue water

Model and duraction of each stage (from launch to award)

3-stage prize¹¹:

1: Business plan (ideation inducement prize); approx. 7 months.

2: Demonstration project (implementation inducement prize); approx. 12 months.

3: Fully structured deal (inducement prize) [N.B. prize closed after Stage 2]

Total duration: approx. 19 months.

Objective of the prize (What success would look like)

To stimulate workable and replicable ideas that would mobilise finance from non-traditional sources for water utilities to implement non-revenue water reduction activities, by 'de-risking' this prospect.

Focal Country

28 DFID focal countries in South Asia and sub-Saharan Africa

Target Paticipants Water utility experts

& companies, lenders,

financial experts and

innovators

Prize Team Ideas to Impact

Sanitation Challenge for Ghana

Problem being addressed

Improved liquid waste management

Model and duraction of each stage (from launch to award)

2-stage prize:

1: Ideation inducement prize; approx. 4 months.

2: Hybrid implementation inducement and recognition prize; approx. 37 months.

Total duration: approx. 41 months.

Objective of the prize (What success would look like)

i. To incentivise metropolitan, municipal and district assemblies (MMDAs) to prioritise the delivery of improved urban sanitation services, through designing and implementing liquid waste management strategies.

ii. To stimulate participating MMDAs to make progress in implementing their liquid waste management strategies through innovative approaches and improve liquid waste management in urban settings, particularly for the poor.

Focal Country

Target Paticipants

Ghana

Local government authorities

Prize Team Designed and supported by Ideas to Impact, IRC Ghana

and Maple Consult and sponsored by Government of Ghana



Prize

Global LEAP

Refrigerator

Competition

Off-Grid

Problem being addressed

Government

Model and duraction of each stage (from launch to award)

1-stage prize

1: Ideation inducement prize; Total duration: approx. 2 months.

Objective of the prize (What success would look like)

To generate ideas that could be implemented by the Government of Ghana, from a global pool of solvers, on how to maximise the value of gas cylinders recovered as part of a cylinder exchange policy.

Focal Country

Ghana (although unspecified to prize participants)

Problem being addressed

Stimulating market for solar-powered refrigerators

Model and duraction of each stage (from launch to award)

1-stage prize

1: Recognition prizes, based on results of laboratory tests (approx. 10 months) and field testing in Uganda (approx. 6 months).

Total duration: approx. 16 months.

Objective of the prize (What success would look like)

i. To recognise the most energy efficient and highest quality off-grid refrigerators (in lab and field settings).

ii. To catalyse further innovation in the off-grid refrigerator sector.

Focal Country

sub-Saharan Africa (field-tested in Uganda)





Increasing value of Liguid Petroleum Gas (LPG) cylinders recalled by

Target Paticipants

Open to all, worldwide.

Prize Team

Ideas to Impact, using InnoCentive prize platform

Target Paticipants

Prize Team

Led by CLASP, supported by Ideas to Impact

Manufacturers and distributors of off-grid refrigerators

DO INNOVATION PRIZES WORK FOR DEVELOPMENT?

SECTION 2

There is a strong evidence base to support the use of prizes to induce innovation in general (Everett et al, 2011), and they are becoming increasingly popular within the public sector (Roberts et al, 2019). In the UK, for example, the innovation foundation, Nesta, designs and runs "Challenge Prizes" that find solutions to social problems, while the Challenge.gov website demonstrates the large number of prizes organised by the US Government that are open to members of the public to solve.

The rationale for the Ideas to Impact programme was that despite some use of innovation prizes in a development context (by the United Nations Development Programme, UNDP, for example), little was known about their effectiveness¹².

Ideas to Impact set out to understand if and how innovation prizes would work in a development context, and whether they were appropriate for the three thematic areas in which they were tested (water, sanitation and hygiene; energy access; and climate change adaptation).

WHAT DO WE MEAN BY WORK?

The literature on prizes (Roberts et al, 2019) suggests that whether a prize has worked or not its success - can be interpreted in different ways, which can be captured under four perspectives:

- Was the prize awarded?
- Did the prize produce the expected advantages (or prize effects)?
- Did the prize drive innovation?
- Did the prize contribute to addressing development challenges?

WAS THE PRIZE AWARDED?

Prize performance can be measured in terms of the participants and solutions obtained (Conrad et al, 2017). A prize is launched, with specific judging criteria and if these are met, the prize is awarded and therefore, the prize can be said to have worked.

In a situation where the solution is intended to be taken up by the organisation sponsoring the prize (typically in commercial settings), this is a reasonable assumption.

As Table 1 shows, all six of the Ideas to Impact prizes upon which this report is based, can be said to have worked in terms of making awards. As we will see later in this report, the LPG Cylinder Prize awards were made to partial solutions i.e. those that would need to be tested before the Government of Ghana could roll them out.

DID THE PRIZE PRODUCE THE EXPECTED **ADVANTAGES (OR PRIZE EFFECTS)?**

If the rationale behind using an innovation prize to drive innovation, over another form of funding, relates to the relative advantages it is expected to offer the prize sponsor, such as reaching out

leas to Impact Prize	Was the prize awarded?	
daptation at Scale	Yes - 10 prizes awarded for Stage 2, including 1st to 3rd place for two categories of organisations – large and small ¹³ ; and four honorary awards recognising contribution to sector.	
limate Information Prize	Yes – seven prizes awarded including 1st to 4th place and three runners up.	
Drampipe II	Yes – awards were made to eight solvers in Phase 1 and to four solvers in Phase 2. The prize closed early; Phase 3 of the competition was not run.	
Sanitation Challenge for Ghana	Yes - three MMDAs received monetary prizes and 18 MMDAs were awarded honorary prizes under Stage 1. Nine of these went on to win monetary prizes under Stage 2.	
Global LEAP Off-Grid Refrigerator Competition	Yes – eight prizes awarded: honorary prizes to the winner of each of five categories of refrigerator, and cash prizes to the winners of three Innovation Prizes. ¹⁴	
LPG Cylinder Prize	Yes – awards were made to seven participants for partial solutions.	



Figure 1: Ideas to Impact Prize Effects, based on Ward and Dixon (2015)

to new solvers, it is reasonable to judge a prize's success in terms of the extent to which those advantages occurred. In Ideas to Impact, the set of potential gains from using a prize to drive innovation in development is referred to as the "Prize Effects" (see Figure 1).

These effects can be determined by examining what the prize is trying to achieve, typically by developing a prize Theory of Change. From this, the intended prize effects can be identified (recognising that other effects may also happen, as was the case in practice with several of the Ideas to Impact prizes) and then used to inform the prize design.

An innovation prize could be looking for the best solution to a tightly specified problem (the prize effect of Point Solution). The prize would be designed to result in a set of relevant solutions from which the funder would select (and reward) the best.

Alternatively, a funder might seek to incentivise widespread innovation at a community level and the prize would be designed to incentivise as many local organisations as possible to participate.

Their combined innovation efforts would create the effects of Community Action and Maximising Participation Towards the Sponsor's Aims, with the funder obtaining more results than it paid for.

IOTE	FACILITATE PARTNERSHIPS
ACTICE	AND NETWORKS
tice in a certain	Raise visibility and bring together people
age adoption.	working towards a common goal.
TY ACTION	POINT SOLUTION
ties to take action	Find a solution to a highly
m and solution.	specified problem.
XET ATION v economic activity ood or service.	ALTER THE POLICY ENVIRONMENT Influence policy change in reaction to the other prize effects.

Prizes are, of course, not the only mechanism funders can use to generate some of these effects e.g. the communications strategy of a research grant may well have raising awareness of an issue as one of its objectives.

However, as Table 3 shows, a single prize can achieve several of these effects and there are some effects that prizes are particularly well-placed to generate compared to other mechanisms (Open Innovation and Maximising Participation Towards Sponsor's Aims). Section 3 explores this added value prizes offer of bringing in more and diverse implementing entities to solve a given problem, often at a community level.

The spread beginning on page 30 summarises the extent to which the six prizes obtained the expected advantages (the intended prize effects) while driving innovation. Four of the prizes fully met expectations in terms of stated intended prize effects and there are some lessons to be drawn from those that are described as only partially meeting them.

The intended effect of Dreampipe II, was not met fully (according to the wording in the Theory of Change); new financing models were identified but the prize did not demonstrate that these were "feasibly replicable by the same actors and/or others in different geographic areas" (Gould and Brown, 2019).

However, judging the prize on this basis alone would neglect the achievements it made in non-revenue water reduction, the broader development goal. The Dreampipe prize reveals that there is a risk with Point Solution prizes that they will not uncover the desired solution and in some settings, a different approach may be needed.

The Dreampipe II evaluation concluded by suggesting that for this type of complex development problem, it may be more appropriate to: invest in a feasibility study upfront across a number of countries; focus on one or a small number of countries for implementation (rather than having a global remit as Dreampipe II did); and/or start the prize process with a competitive process to secure a start-up grant for solvers. Equally, Ideas to Impact found that these advantages or effects were not enough in themselves, and a prize's ultimate contribution to development may be dependent on external factors.

For example, it is possible to make an award for an idea or innovation (Point Solution), as with the LPG Cylinder Prize, but this may not then go on to have the intended social or environmental benefit due to factors beyond the prize sponsor's control (jump to Section 2).



Elizabeth Onyango, CEO of Kenyan start-up Ukulima Tech, was the second-place winner of the Tekeleza Prize, the final stage of the Climate Information Prize. Her SMS-based platform Climate Smart Agriculture provides farmers with climate data, alerts them on extreme weather events and advises them on harvesting, fertilisers application and seed varieties, to increase their resilience to climate change.

SUMMARY OF EVALUATION FINDINGS AGAINST **EXPECTED PRIZE EFFECTS**

Sanitation Challenge for Ghana	Yes – By attracting local authorities (MMDAs) as participants and engaging national government as a prize sponsor, the prize altered	Adaptation at Scale Promote Best Practice	Yes - The p activities, c individual p
Alter the Policy Environment (primary focus)	the policy environment in Ghana (the primary intended effect of the prize). MMDAs demonstrated an increased focus on sanitation and liquid waste management during the prize's duration, increased their	(primary focus)	networks, action, wit
Raise Awareness	budget allocation to liquid waste management and, in many cases, revised their sanitation-related by-laws.	Facilitate Partnerships and Networks	deliver the
Maximise Participation Toward Sponsor's Aims	Of the secondary intended effects, the prize raised awareness	Raise Awareness	The prize s sector leve change ada
Facilitate Partnerships and	among MMDAs and ministry representatives and generated substantial media coverage (partly led by participants). The prize succeeded in maximising participation with all 17 participating	Community Action	partners ar
Networks	MMDAs making progress in implementing their liquid waste management strategies (not just the nine prize winners).	Alter the Policy Environment	The evalua altering th
Community Action			with local g
Promote Best Practice	Stage 2 of the prize resulted in 31 verifiable private partnerships and agreements. There is also limited evidence that the prize made some		
Market Stimulation	progress on the other secondary intended effects.		
		Climate Information Prize	Yes - The p information implement
Dreampipe II	Partly - While it succeeded in uncovering new models for financing NRW reduction activities in developing countries the Dreampipe II	Raise Awareness (primary focus)	ceremony a
Point Solution (primary focus)	prize did not fully meet its stated expectations in terms of achieving Point Solution as there was insufficient evidence that these models	Promote Best Practice	The prize f
Raise Awareness	would be "feasibly replicable by the same actors and/or others in different geographic areas".	Facilitate Partnerships and Networks	participant prize partic
Facilitate Partnerships and Networks	The prize stimulated water experts and utilities to explore the issue of NRW and how this could be financed and implemented differently (Raise Awareness). Facilitating partnerships and networks was		
	viewed by the prize team as a means to an end; one of the winning	Global LEAP Off-	Yes, on the
	teams, for example, consisted of a new partnership formed in order to participate in the prize.	Grid Refrigerator	Awareness
		Competition	succeeded the potent
		The Ideas to Impact prize did not have a Theory	(SMEs in U
LPG Cylinder Prize	Partly – no full Point Solution (alternatives that could be immediately implemented at scale) was identified through the judging process but	of Change from which intended prize effects could	The learnin widely diss
Point Solution	the prize attracted good quality submissions from people that the	be identified, being part of a broader competition,	of off-grid other solar
(primary focus)	funder DFID would have been unlikely to reach through their usual	whose aim was to stimulate	

Open Innovation

channels of procuring research (Open Innovation).

the market.

eir projects.

succeeded in **raising awareness** of both the prize e.g. at vel through participation in the COP24 event, and of climate daptation approaches among local government, project and community, including training of 1,600 beneficiaries.

ation also found the prize made some progress towards the policy environment through participants engagement government and prize level engagement at ministry level.

Uganda).

ing obtained through the field testing in Uganda has been sseminated and has influenced the approach taken to testing d refrigerators in future Global LEAP competitions, and of r-powered appliances.

prize promoted best practice in scaling adaptation directly through the prize award and indirectly, through project activities. It also facilitated partnerships and , including between participants and stimulated **community** ith prize participants working closely with communities to

prize raised awareness of the importance of climate on, particularly at local level through the projects ted. It **promoted best practice** through the award and associated media and communications, and prize nts' own marketing strategies.

facilitated diverse and multiple partnerships among nts with a combined total of 95 institutions including other ticipants and the Ministry of Agriculture at county level.

ne basis that a Recognition Prize can be used to Raise ss and Promote Best Practice. In this regard, the prize d by raising awareness of the winners and finalists, and of ntial value of off-grid refrigerators among the field testers

DID THE PRIZE DRIVE INNOVATION?

One of the programme evaluation questions asked of all Ideas to Impact prizes is how effective they were at catalysing innovation. Generally, the focus of the question was on innovation observed among prize participants through the course of their participation in the prize.

The Global LEAP Off-Grid Refrigerator Competition however, followed more of a Recognition Prize model, and was therefore anticipated to drive innovation largely after awards had been made.

Table 2 summarises the extent to which Ideas to Impact prizes were found to drive innovation through incentivising:

- development of new technologies, solutions or plans;
- submission of commercially available or late stage prototype technologies for benchmarking and field testing (to stimulate subsequent innovation);
- implementation of new services, plans and approaches that would contribute to addressing development challenges.

TABLE 2: SUMMARY OF EVALUATION FINDINGS ON INNOVATION STIMULATED BY THE IDEAS TO IMPACT PRIZES

Ideas to Impact Prize	Was the prize awarded?	
Adaptation at Scale	Yes - The prize directly led to the launch of five new projects and the addition of new components to 17 existing projects.	
Climate Information Prize	Yes – The prize incentivised eight prize participants to create and launch new (to them, 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).	
Dreampipe II	Yes – Dreampipe II's participants produced new business plans for utilities to reduce NRW in sub- Saharan Africa and went on to implement the associated demonstration projects. The prize was also a catalyst for new and different ways of working.	
Sanitation Challenge for Ghana	Yes - MMDAs used innovative approaches in their Liquid Waste Management strategy implementation compared with the status quo; with most innovation being imitative in nature. There is strong evidence that this was due to the prize.	
Global LEAP Off-Grid Refrigerator Competition	Yes – Innovation was largely anticipated to come after the awards were made i.e. that the provision of third-party test data, benchmarking and involvement in the competition process would be the catalysts for innovation. Three of the seven organisations interviewed in the follow-up review could give examples of how the prize had directly influenced them to adapt their existing product or develop a new one.	
LPG Cylinder Prize	Yes – judges recommended that seven of the 39 shortlisted solutions be awarded prize money, on the basis of having met five criteria, including being innovative. The evaluation noted a tendency among solvers to produce novel innovation; their focus was more on coming up with ideas for what could be done with LPG cylinders, rather than on the basis of what has been done with them in other settings.	

DID THE PRIZE CONTRIBUTE TO ADDRESSING DEVELOPMENT CHALLENGES?

Judging the success or failure of a prize on its contribution to addressing development challenges holds prizes to a higher standard than is common among prizes and their evaluations (based on the findings of Roberts et al, 2019). Even more so if, as was the case with Ideas to Impact, the expectation is that the development outcomes and benefits generated by the prizes will be distributed equitably.¹⁵ The business case produced by DFID for Ideas to Impact brings together both these considerations (the prospect of failure, and success being linked to benefits felt by the poor):

"Based on a conservative assumption, of the 5 prizes: 2 will fail or will not result in any significant addition to the marketplace and therefore opportunities for poor consumers; 2 will result in some innovation, but will not 'take-off'; and 1 will result in a transformational change with significant impacts for poor consumers."

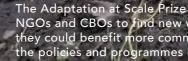
- DFID, 2013

This higher level of scrutiny requires effective monitoring throughout the prize, as well as extensive and comprehensive evaluation, post-prize, that looks beyond participants and the prize process to impacts on the ground including engaging with those reported by participants as being beneficiaries, to understand how prize innovations have impacted them.¹⁶ In a competition setting, information submitted by prize participants on impact requires verification.

As a prize can be expected to produce a portfolio of projects (and may be designed to encourage a high number of projects), this would mean significant investment in monitoring and evaluation. Gök (2013) observes the difficulty and cost of measuring impact in prize competitions and these challenges are discussed further in light of Ideas to Impact experience in prize evaluation, in a companion paper to this report (Gould et al, 2020). However, it is necessary to attempt to answer the question if funders are to be supported in deciding if and when to put development funding into a prize.

While Ideas to Impact prize evaluations collected and analysed evidence on all four perspectives, the programme's ultimate focus was on the question of their contribution to addressing development challenges up to the point of awards being made (jump to Section 2) and for those prizes where time allowed, a few months beyond (jump to Section 2), including against any expectations of equitable distribution of benefits. Adopting this perspective means that if we talk about a prize falling short of expectations, this may be because a prize was not the right modality to use,¹² rather than it having been poorly implemented.

Using a prize to encourage new solvers to work on a problem has the potential to enable those directly affected by a problem to participate in finding a solution.



The Adaptation at Scale Prize in Nepal encouraged local, national and international NGOs and CBOs to find new ways to expand their climate adaptation projects, so they could benefit more communities, and to scale them up, by embedding them in the policies and programmes of governments or other actors, such as NGOs.

DID THE PRIZES MEET THE SHORT-TERM EXPECTATIONS OF DEVELOPMENT CONTRIBUTION?

By the time their awards were being made, Ideas to Impact prizes were anticipated to contribute to addressing development challenges on several fronts. Some of the expectations of each prize were made explicit in programme documentation, for example, the anticipated number of innovations implemented, or the amount of new investment leveraged.

Other expectations were developed during the evaluations of the prizes, based on the prizes' theories of change and assumptions of what would be reasonable expectations for each prize to be able to deliver (Stott and Gould, 2020). Given that the duration of the prizes ranged from just two months to forty-one months, the expectations of what each prize could achieve in terms of activities, outputs and outcomes within their own timeframe varied. The prizes were all successfully launched and awarded and (as summarised in the following pages) by the time of their award, four of the six prizes made the contribution to development that was expected of them at that point to a greater or lesser extent.

A fifth prize (Dreampipe II) was found to have made some contribution to its broader goal by the point of its closure, but did not follow the route that the prize was expected to take, while a sixth prize (LPG Cylinder Prize) was unsuccessful due to its dependence on a national policy being implemented which, some time after the prize closed, was still to be implemented.





Adaptation at Scale

Expected Contribution

To encourage scaling of adaptation activities, that benefit local communities who are vulnerable to climate change impacts.

Did it achieve this?

Yes (to an extent) – the prize engaged participants to scale their adaptation activities to an extent, which appears to have benefitted local communities.¹⁸ Beneficiaries included an estimated over 50% female beneficiaries and also marginalised communities, based on the verified figures, though not all projects reported on this.

The final submissions of the Adaptation at Scale prize represented a diversity of adaptation activities all designed to enable communities to adapt to observed or foreseen climate impacts. These included capacity building, awareness-raising, hard technology construction, insurance schemes and income generation activities. Participants explained that the prize had stimulated them to scale their activities in various ways.

Our evaluation identified that participants increased local collaborations to deliver their climate adaptation activities, particularly with local government (20 participants reported new local government partnerships).

They also leveraged funding to resource their work, from a range of sources, including £108,536 from local government (between nine participants) and £95,873 from the private sector (between two participants). Funding also came directly from the participants through the prize itself, with seven participants investing their Stage 1 winnings into Stage 2.

While the prize projects additionally required investment from participating organisations and the communities they worked with, the returns on this investment for communities included opportunities for income generation, resource access, livelihood improvement, better health, technology access, knowledge, improved land management and vegetable production.

Climate information Prize

Expected Contribution

To increase access and use the climate information among poor and vulnerable people in Kenya, to enhance their associated decision making.

Did it achieve this?

Yes - the prize increased access and use of climate information among farmers in Kenya, who have reported the benefits of this in terms of their agricultural success and preparation for climate risks.¹⁹

The Climate Information Prize stimulated the development of 18 Climate Information Services, eight of which were completely new. Those in existence prior to the prize were expanded as a result – by reaching more beneficiaries, leveraging additional funding or establishing new partnerships for their delivery.

Together, the services increased access to climate information by poor and vulnerable people in Kenya; 129,215 people were reported as having access with over 50% of users reporting low or extremely low monthly household consumption. Surveys used during independent verification of the CISs²⁰ found that 49% of users were female, 40% of users were educated up to primary-level and 90% were based in rural areas.

Amongst those people that used the services, almost all reported feeling better able to cope with and adapt to climate impacts. 94% of users taking part in the independent verification surveys said they felt better prepared to deal with climate risks; and 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.

Our follow up assessment (jump to Section 2), validated our proposition in the final evaluation that use would increase as services were improved, scaled and shown to be effective.

Dreampipe II Expected Contribution

Stimulate workable and replicable ideas that can mobilise finance from non-traditional sources for water utilities in developing countries to implement non-revenue water (NRW) reduction activities.

Did it achieve this?

In part - it did not produce replicable ideas, (hence it closed after Phase 2) but it did mobilise finance from non-traditional sources.

By the end of Phase 2, the six demonstration projects that made it to judging had excellent coverage and led to some reduction in water losses. The estimated 490,000 people 'served' in the geographical areas where NRW reduction was undertaken equates to 96% of the total population targeted.²¹

The evaluation found that the prize either provided added impetus to a previously formed project or incentivised the development of new plans and partnerships. and vegetable production.

Sanitation Challenge for Ghana

Expected Contribution

Participating Metropolitan, Municipal and District Assemblies (MMDAs) advance in implementing liquid waste management strategies through innovative approaches, and improve liquid waste management in urban settings, particularly for the poor.

Did it achieve this?

Yes, the majority of the 15 finalist MMDAs made good progress in their strategy implementation, were innovative compared with the status quo, and engaged with and had a focus on improving sanitation service delivery for the poor. MMDAs engaged community members from poor neighbourhoods and from vulnerable groups as part of their liquid waste management strategy implementation.²²

A summary document of progress reports from the 17 MMDAs that participated in Stage 2 stated that "some community members have started building their own toilets without support, following sensitisation activities", however, this information has not been verified.

The combination of the Sanitation Challenge for Ghana and its sister prize, the private sector and non-state actor prize (PS-NSA), funded by the Bill and Melinda Gates Foundation (see Box 5) stimulated MMDAs to partner with the private sector and non-state actors to implement their strategies.

For example, 31 verifiable private partnerships and agreements are known to have been entered into during the Stage 2 timeframe by 16 of the 17 participating MMDAs. The changing sanitation landscape in Ghana, including an increased focus on urban sanitation and lowincome settlements especially by several other development projects, and the alignment between these changes and the prize's aims, also served to support and further the results seen under the prize.

Global LEAP Off-Grid Refrigerator Competition

Expected Contribution

Stimulating the market for off-grid refrigerators in sub-Saharan Africa, translated into eight intended outcomes e.g. Build business-tobusiness (B2B) partnerships to accelerate distribution (partnerships with distributors and investors).

Did it achieve this?

Yes (to an extent) – the Global LEAP competition combined recognition prizes with an incentives programme that encouraged bulk purchases of shortlisted refrigerators. The competition had a limited effect on sales of participants' appliances, but the laboratory and field test data obtained through running the competition influenced subsequent innovation among some participants. The evaluation concluded that that long-term approaches to supporting companies in this market are needed for the market to grow.

Ideas to Impact's primary contribution to the first Global LEAP Off-Grid Refrigerator Competition was to support the awarding of an innovation prize for Appropriate Design and User Experience based on the data obtained through placing refrigerators shortlisted through laboratory testing, with small businesses in Uganda. The winner of this prize was a different company to that which had won two earlier prizes (that were based solely on laboratory test data).

The evaluation by Nesta (shortly after awards were made) found that the field testing increased perceptions of the value of off-grid refrigerators among the Ugandan businesses involved, with 84% saying they would purchase the off-grid refrigerator they tested and were prepared to pay between \$200 and \$500, compared to the approximately \$100 that earlier research had found among people who had not tested off-grid appliances (Doshi, 2019).

LPG Cylinder Prize

Expected Contribution

To generate ideas that could be implemented immediately by the Government of Ghana, from a global pool of solvers, on how to maximise the value of gas cylinders recovered as part of a cylinder exchange policy.

Did it achieve this?

No. The Government of Ghana (and other stakeholders) was not in a position to implement the winning solutions.

The LPG Cylinder Prize was the first of the Ideas to Impact prizes to be launched and awarded. The prize was run as a rapid Point Solution prize and was delivered through the established InnoCentive prize platform,²³ making it the most similar of Ideas to Impact innovation prizes to those run for commercial purposes.

The prize was based on the strong expectation of the prize team (determined through research prior to prize design) that the Government of Ghana would soon be implementing reforms to LPG and facing an urgent question of how to dispose of millions of old gas cylinders. Any alternatives to smelting would need to be available in advance if they were to be taken up so the prize ran ahead of the reforms being approved.

However, after the Cylinder Prize was awarded, the reforms experienced opposition from incumbent businesses involved in LPG supply and did not go ahead (see Section 4 for more on the role of an enabling environment). To gain maximum value from the prize, the details of the winning solutions were made public by Ideas to Impact.

WHAT HAPPENED AFTER THE **AWARDS WERE MADE?**

Unusually for evaluations of innovation prizes, Ideas to Impact evaluators had the opportunity to return to two prizes (Dreampipe II and Climate Information Prize), up to a year after the final awards had been made, to see whether the changes incentivised by the prizes and noted in the final evaluation reports, continued and whether the next steps in the prizes' theories of change had happened as anticipated.

These follow-up evaluations relied more heavily on self-reported data by prize participants, than the prize evaluations which had access to independently verified data used to inform judging.

Dreampipe II: NRW reduction continues; financing sources not as expected

Despite the incentive of a third stage prize being withdrawn, the evaluation found that, nine months after the prize awarded, NRW reduction activity for some projects had continued beyond the end of Stage 2 – leading to further reduced physical and commercial water loss.

The first-place winner of Dreampipe II had gone on to implement and finance their expansion project as planned, using funding from the same non-traditional, commercial partner as in Stage 2.

While the utilities associated with the other three overall winners have not sought or secured external, non-traditional financing, there is evidence that they have each continued with and, in some cases, expanded their NRW reduction activities.

There is some evidence of the prize's influence on these post-award activities, e.g. one winner using promotion of the results they achieved during the prize and their prize money, to attract performance-based contracts with utilities.

Climate Information Prize: continued results rely on participant motivation and self-sustainable solutions

We found that, a year after the prize closed, many participants had focussed on improving their service before rolling it out further. In addition, the number of people with access to climate information through the Climate Information Prize innovations had nevertheless increased due to continued implementation during this refinement period.

Based on figures reported by the services (not independently verified) this total increase was from 129,215 to 515,133 people having access to the services.²⁴

Though resources remained the key barrier for participants in sustaining and scaling their initiative, some participants were ensuring longer-term financial sustainability through introducing user fees for information and other services.

The sustainability assessment provides strong evidence that prize outcomes and effects can be sustained after a prize closes. This relies on concerted effort and motivation from participating organisations - with the prize influence observed largely at what it has stimulated at project, rather than sector level.

POTENTIAL ONGOING EFFECTS OF OTHER PRIZES

For the other prizes, it was only possible to make an assessment about the likelihood of continued effects.²⁵ As previously observed, the planned energy policy that the LPG Cylinder Prize was designed to support, did not proceed and without a guaranteed supply of cylinders being available, it is not reasonable to expect the solutions awarded through the Cylinder Prize to have been taken up in Ghana.

Adaptation at Scale and Sanitation Challenge for Ghana both made their final awards towards the end of the Ideas to Impact programme so their evaluations looked at the potential ongoing effects of prizes (i.e. the assessment was based on what was put in place by the time of the prize award).

Sanitation Challenge for Ghana: continued efforts will depend on national priorities

We found that, a year after the prize closed, The evaluation found that participants planned many participants had focussed on improving to continue implementing their initiatives their service before rolling it out further. In beyond the prize award. They reported addition, the number of people with access strategies for institutional, financial, social and to climate information through the Climate environmental sustainability of their projects, as part of prize requirements, which reflect the Information Prize innovations had nevertheless increased due to continued implementation potential for ongoing implementation. during this refinement period.

Most significantly, there is evidence of some participants having secured local government support, being in the process of aligning Based on figures reported by the services (not independently verified) this total increase was from 129,215 to 515,133 people having access with government plans, and collaborating with local governments with the intention of to the services. leveraging further funding from government. Though resources remained the key barrier If intended funding is achieved, the prospects for sustainability would be good.

for participants in sustaining and scaling their initiative, some participants were ensuring longer-term financial sustainability through introducing user fees for information and other services.

The sustainability assessment provides strong evidence that prize outcomes and effects can be sustained after a prize closes. This relies on concerted effort and motivation from participating organisations - with the prize influence observed largely at what it has stimulated at project, rather than sector level.

Adaptation at Scale: Participants aligning with government priorities for adaptation

In July 2019, Kumasi Metropolitan Assembly was announced as the first-place winner of the Dignified City Award, the last stage of the Sanitation Challenge for Ghana, in the Metropolitan and Municipal Assembly category. They were awarded for their leadership from the Mayor down to the environmental health officer, innovative partnership with private sector partner Aquaculture and commitment to the whole sanitation value chain.



ANARD CITY

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SUMMARY OF OUR LEARNING

- There are different perspectives on prize success. In addition to ()been on asking if the prizes contributed to development.

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- environment is key to effective use of prizes in development.
- if there are few barriers or the external environment is ripe for and prize design. The value offered by innovation prizes to a development problem is at risk of being lost after the awards are made unless efforts are made to understand and make linkages to generated by the prize.

considering success in terms of awards being made and whether the anticipated advantages of using a prize has been realised (e.g. raising awareness of an issue), Ideas to Impact's ultimate focus has

Adopting this approach makes possible a more rounded judgement of a prize's success or failure and of when prizes are appropriate for use in development. However, even this can provide an incomplete picture if the evaluation stops at the point of awards being made.

The evaluations of Ideas to Impact's prizes indicate that the prizes' ability to contribute to development outcomes after awards have been made, is heavily reliant on the actions of external stakeholders, and provide evidence in support of the hypothesis that an enabling

While all modalities are dependent on the ecosystem in which they operate, grant-based programmes can be more directive than prizes in addressing external constraints. Innovation prizes tend to operate on the assumption that their remit is to incentivise innovation and the wider system will support its uptake, an assumption that holds the innovation and this is factored into the problem identification those actors that will take the next step to build on the momentum

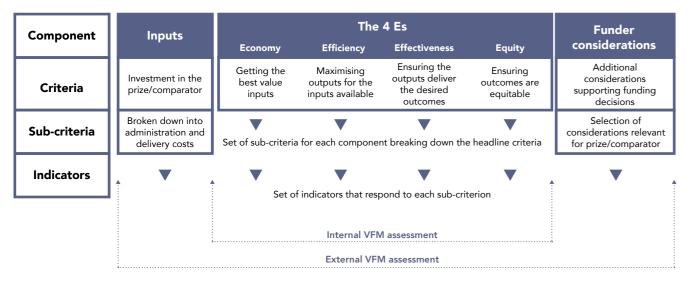
WHEN DOES **A PRIZE ADD** VALUE?

Funders have a range of approaches they can use to finance development programmes, from the tried-and-tested competitive grant, to the newer resultsbased finance models of funding.

What value do innovation prizes offer development funders compared to the existing portfolio of options?

To help answer this question, the Evaluation and Learning Team included a VFM analysis for five of the prizes examined in this report. Figure 2 on the next page illustrates the structure of the VFM assessments, as used in full for three of the prizes.

SECTION 3





This analysis began with an **internal assessment**, measuring the VFM of the prizes against the original expectations of them. For three of the prizes, where a suitable comparator programme was available, some form of **external assessment** was carried out²⁶ measuring the VFM of the prizes in comparison to a selected programme targeting similar outcomes through an alternative funding mechanism, (<u>see p53-55</u>).²⁷

This included an assessment against three 'funder considerations' selected from a list of pressing concerns of funders in identifying an appropriate funding mechanism.

In each case, the analysis concluded that the prize and its comparator offered similar levels of overall VFM to a funder, but that this was obtained through the pursuit of different, complementary, objectives.

For example, the Climate Information Prize showed the usefulness of a prize in engaging new downstream actors, stimulating innovation and bringing in new ideas, approaches and partnerships to address a defined problem; whereas Weather and Climate Information Services for Africa had more impact on traditional upstream stakeholders, building capacity among County Meteorological Directors, for example, and helping to shape a supportive policy environment by supporting the development of county-level climate information plans. The Sanitation Challenge for Ghana's VFM assessment highlights the advantage a prize can have over grant-based programmes in incentivising a greater mass of people to work on a given problem. The difference in scale (17 participating MMDAs for the prize, compared with two MMDAs for the grant-based project) and the difference in approach (self-funding/ self-motivating compared with a more directly supportive approach) is given as the main reason the prize performed comparatively 'better' than SSD on cost-effectiveness (which considers the results in relation to inputs or costs).

From the programme's inception, Ideas to Impact has held the hypothesis that prizes could be better used alongside, rather than instead of, other forms of funding in development, although <u>Section 4</u> explains how putting this into practice has proven difficult.

Investigating the VFM of prizes, compared to other funding options, has strengthened the argument for finding a way to use prizes within a broader programme, rather than in isolation. Rather than asking whether it is better to use a prize or a grant, for example, to address a development challenge, it appears more relevant to establish: what added value prizes bring to a development funder's portfolio and how one gets the most value from them.

Sanitation Challenge for Ghana

Prize type

Innovation inducement prize to improve urban sanitation service delivery

Comparator

Sanitation Service Delivery (SSD) programme (Ghana component only)

Comparator type

Grant-based technical assistance and innovation programme

Funder

The United States Agency for International Development (USAID)

Implementing Agency

Water & Sanitation for the Urban Poor (WSUP) with Population Services International (PSI) as international lead

External VFM outcome

The prize offered overall similar VFM to its comparator, with the prize performing better on some criteria, and the comparator project on others. The prize engaged a larger scale of self-funded and self-motivated organisations, which led to seemingly 'better' results for some criteria.

Climate Prize type **Adaptation Prize type** Information at Scale Innovation inducement prize to develop new services. Prize Comparator Comparator Weather and Climate Information Services for Africa (WISER) Western Kenyan Component **Comparator type Comparator type** Grant-based research project Grant-based technical assistance programme Funder Funder DFID Implementing Agency Implementing Agency Li-Bird CARE Kenya, with the Met Office as international lead **External VFM outcome External VFM outcome** Neither the prize nor the comparator project clearly provides better VFM than the other. Rather, the prize and comparator project show potential complementarity by addressing the same problem through different points its higher level of ambition.

in the system. WISER focussed upstream on data providers particularly officers in the Kenya Meteorological Department (the co-ordinating

Meteorology Directors, while the Climate Information Prize's focus was further downstream, targeting the private sector, social enterprise and NGO/CBO CIS providers (some of whom were new to climate information and/or development) and stimulating them to engage with

organisation of the larger WISER programme) and County

RISING TO THE CHALLENGE: HOW TO GET THE BEST VALUE FROM USING PRIZES TO DRIVE INNOVATION FOR DEVELOPMENT 54

intended CIS users).

Innovation inducement prize to scale CCA activities

Scaling up Climate Smart Agriculture in Nepal (CSA)

The Climate Development Knowledge Network (CDKN)

The prize displays similar VFM compared to its comparator. Though the prize had higher input costs than the comparator, it went further in terms of implementation and beneficiary reach, potentially as a result of In each case, the analysis concluded that the prize and its comparator offered similar levels of overall VFM to a funder, but that this was obtained through the pursuit of different, complementary, objectives.

For example, the Climate Information Prize showed the usefulness of a prize in engaging new downstream actors, stimulating innovation and bringing in new ideas, approaches and partnerships to address a defined problem; whereas Weather and Climate Information Services for Africa had more impact on traditional upstream stakeholders, building capacity among County Meteorological Directors, for example, and helping to shape a supportive policy environment by supporting the development of county-level climate information plans.

The Sanitation Challenge for Ghana's VFM assessment highlights the advantage a prize can have over grant-based programmes in incentivising a greater mass of people to work on a given problem.

The difference in scale (17 participating MMDAs for the prize, compared with two MMDAs for the grant-based project) and the difference in approach (self-funding/self-motivating compared with a more directly supportive approach) is given as the main reason the prize performed comparatively 'better' than SSD on costeffectiveness (which considers the results in relation to inputs or costs).

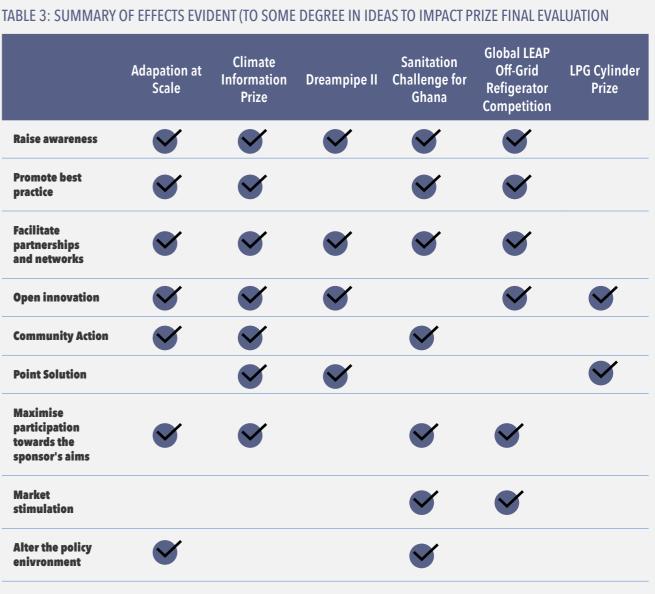
From the programme's inception, Ideas to Impact has held the hypothesis that prizes could be better used alongside, rather than instead of, other forms of funding in development, although Section 4 explains how putting this into practice has proven difficult.

Investigating the VFM of prizes, compared to other funding options, has strengthened the argument for finding a way to use prizes within a broader programme, rather than in isolation. Rather than asking whether it is better to use a prize or a grant, for example, to address a development challenge, it appears more relevant to establish: what added value prizes bring to a development funder's portfolio and how one gets the most value from them.

WHAT ADDED VALUE DOES A **PRIZE OFFER TO FUNDERS?**

For the other prizes, it was only possible to make an assessment about the likelihood of continued effects. As previously observed, the planned energy policy that the LPG Cylinder Prize was designed to support, did not proceed and without a guaranteed supply of cylinders being available, it is not reasonable to expect the solutions awarded through the Cylinder Prize to have been taken up in Ghana.

Adaptation at Scale and Sanitation Challenge for Ghana both made their final awards towards the end of the Ideas to Impact programme so their evaluations looked at the potential ongoing effects of prizes (i.e. the assessment was based on what was put in place by the time of the prize award).



The Ideas to Impact prize evaluations, however, have demonstrated that the most commonly observed prize effects are not necessarily where the greatest added value of innovation prizes lies. The evaluation reports point to some prize effects being more often a means to an end (a necessary element of the prize process) and could be evident in a prize without being one of its primary objectives.

For example, in order to achieve the effect of open innovation, the prize team would be likely to target its communications toward a larger and more diverse audience than for a competitive grant process and may include broadcast media and newspapers. As a by-product, this would raise awareness of the issue the prize was focussing on.

Our detailed VFM analyses (Stott and Gould, 2020), identified that the main advantage prizes offered to funders over their comparators was bringing in either a higher number or greater diversity of implementing entities to solve a given problem, often at ground level.

The Climate Information Prize, for example, outperformed its comparator, Weather and Climate Information Services for Africa, with the diversity of participants it attracted, while Adaptation at Scale exceeded its comparator in terms of reach among beneficiaries (e.g. resulting in 35 participants and an estimated 1,300 beneficiaries receiving training, compared to 350 farmers).

Combining the full set of evaluation findings with the detailed VFM analyses undertaken for four of the prizes, we find that by engaging new and an increased number of actors in solving a problem, two prize effects come into play:

- **open innovation** encouraging new solvers to enter the field of endeavour;
- maximising participation towards the funder's aims – the benefits to the prize sponsor are provided by all effective participants, not just by the winners, thereby offering the funder the potential to get results beyond those paid for through prize money.

Of course, prizes may also divert attention and resources from other problems. This opportunity cost is further explored <u>in Section 4</u> <u>of the guide</u>.

THE VALUE TO FUNDERS OF OPEN INNOVATION: ENCOURAGING NEW SOLVERS TO ENTER THE FIELD OF ENDEAVOUR

Prizes increase the number and diversity of minds that are working on solving a problem and can be an opportunity to engage affected communities (see Box 4). Some of the ethical and practical implications of this shift in the balance of power is explored in <u>Section 4</u>.

For funders lacking direct access to experts to invite to research a problem through a consultancy contract, a prize offers the opportunity to seek ideas and solutions without having to commit to payment until those submissions have been evaluated.

The Climate Information Prize inspired eight of the 18 final participants to create and launch completely new climate information services. These eight participants represent new solvers in the field of climate information. Though some were working to address climate change before the prize, they were not delivering climate information services as part of that work but were motivated to do so by the prize.

As an example, the winning organisation had been delivering an agricultural input franchise ahead of the prize. When they saw the prize call, the organisation decided to introduce a climate information component to this, linking up with relevant expertise. The head of the organisation found this component useful as a marketing tool for the rest of his business, representing value to both the business and the users.

The LPG Cylinder Prize was compared during a simplified VFM analysis to contracting a consultant to research options for recycling LPG cylinders. The evaluation cited a UK Collaborative on Development Sciences (UKCDS) report that development funders were reporting challenges in enabling southern organisations and researchers, and other stakeholders, to engage and participate in calls for research due to barriers not experienced by northern counterparts (UKCDS, 2014).

By contrast, the evaluation found that the LPG Cylinder prize attracted good quality submissions from people that DFID would

have been unlikely to reach through their usual channels of procuring research with 16% of Cylinder Prize applicants based in sub-Saharan Africa and at least 71% of winners being new to development funding.

Finally, despite not being an intended effect for the prize, two of the 10 eligible applicants to the first stage of Dreampipe II were from outside the water/NRW sector: a geographical information systems social enterprise and a startup technology company, while four water utilities (new to financing NRW reduction) were among the applicants, rather than being brought in by another solver.

The Sanitation Challenge for Ghana was the only prize of the six discussed in this report where the benefit of Open Innovation was not seen. This is not surprising given the prize was also the only one targeted at a known population (MMDAs of Ghana) and indeed, only MMDAs were eligible to enter.

The reward to the funder of running the Sanitation Challenge for Ghana was not the diversity of participants it attracted but the number and type of participants who delivered results in a self-funded setting, which goes against the established norm.

BOX 4: PRIZES CAN ENGAGE AFFECTED COMMUNITIES IN PROBLEM-SOLVING

Using a prize to encourage new solvers to work on a problem has the potential to enable those directly affected by a problem to participate in finding a solution. Where this has been observed in evaluations of Ideas to Impact prizes, it is recorded as a form of the prize effect, Community Action.

Adaptation at Scale participants involved communities in their project activities including coordination, meetings, decision-making, funding and leveraging government support, as well as the primary role of implementing activities.

While the Climate Information Prize did not state Community Action as one of its intended prize effects, prize participants worked through intermediaries, including community farmer groups, women groups and youth, to extend the reach of their climate information services and many of the prize participants were community-based organisations, and therefore themselves represented their community.

This shift to community participation in finding a solution to the problem is not a guaranteed consequence of a prize, it depends on the prize design. The 'new entrants' of the LPG Cylinder Prize implemented via the global innovation platform, InnoCentive, for example, included many participants who were distant in geography and experience from the prize's stated focus (LPG cylinder recycling in sub-Saharan Africa).

THE VALUE TO DONORS OF MAXIMISING PARTICIPATION: THE BENEFITS TO THE PRIZE SPONSOR ARE PROVIDED BY ALL EFFECTIVE PARTICIPANTS, NOT JUST BY THE WINNERS.

Prizes offer value by influencing action on the ground and this comes largely from the prize participants (those submitting plans or implementing innovations), rather than activity by the prize team. In theory, prizes can stimulate activity by an unlimited number of prize participants whose cumulative results (and beneficiaries reached) can then be greater than those of projects funded through a grant.

A key advantage of prizes to funders is that, as a form of payment by results, financial awards are made at the end of the prize and only to winning prize participants; additional benefits can therefore come to the funder, from nonwinning (and unfunded) participants.

For Adaptation at Scale, a larger number of prize participants than expected by the Prize Team delivered adaptation projects, formed connections and promoted their work throughout the country. While the level of scale of individual projects was limited, the aggregate effect of all the participating organisations achieved a more significant level of scaling of adaptation in Nepal.

BOX 5: THE 'SISTER' PRIZE TO SANITATION CHALLENGE FOR GHANA

A Bill and Melinda Gates Foundation (BMGF)-funded 'private sector and non-state actor' prize was introduced to stimulate private sector and non-state actors in Ghana to partner with MMDAs participating in Stage 2 of the Sanitation Challenge for Ghana. The aim of these partnerships was to support the implementation of MMDAs' liquid waste management strategies by bringing innovations, expertise and investment.

This 'sister' prize was run as a separate prize process, though it piggybacked on some of the main prize's events, such as workshops for prize participants and the final award ceremony. Eight registered businesses, five NGOs and one CBO competed for a total prize purse of \$225,000. Six of these went on to win monetary prizes for their partnerships with MMDAs. The winners of the prizes all partnered with MMDAs that then went on to win the main Sanitation Challenge for Ghana prizes.

The evaluation of the Sanitation Challenge for Ghana found that MMDAs reached out to prospective partners on the basis of the sister prize to fulfil the expectations under the main prize – both in terms of the expectation to involve private sector and non-state actors, but also to enable them to make progress in implementing their strategies, focus on the poor and engage with communities.

In some cases, the partnerships were new. In at least one case, a partnership that was already in place was formalised, with the sister prize acting as an incentive for the private sector/non-state actor.

The Sanitation Challenge for Ghana evaluation concluded that prizes can be an effective use of development money to achieve large-scale results with limited inputs from the prize sponsor. The experience of that prize showed that, if the right incentivisation structure is in place, results can be achieved by a multitude of actors, with no upfront funding and minimal solver support from the prize sponsor.

This can lead to better VFM in terms of efficiency, effectiveness and cost effectiveness, and a greater level of ownership by participants, in comparison to more traditional grant-funded technical support programmes. The Sanitation Challenge for Ghana also showed that prizes can stimulate new ways of working for prize participants, while its sister prize (PS-NSA) funded by the Bill and Melinda Gates Foundation (see Box 5) helped bring together MMDAs with private sector and non-state actors.

In the Climate Information Prize, though seven participants were awarded, 18 participants implemented their climate information services (CISs) until the end of the prize; and a total of 27 participants delivered altogether. While participants reported a total of 129,215 beneficiaries having access to their CISs, those who discontinued before the end of the prize reported providing climate information to an aggregate reported 186,281 beneficiaries between them.

Though this number is based on participants' reported figures and as such unverified (as those who discontinued were not involved in the verification process), it indicates a significant number of additional people are likely to have been reached by participants, showing that the prize stimulated further contribution to the funder's aims beyond the achievements of finalists and awardees.

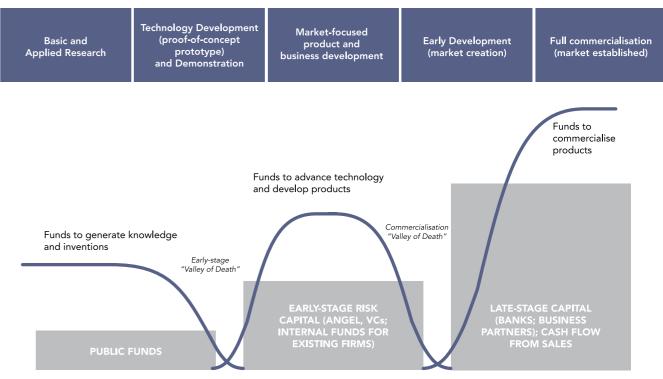
POTENTIAL OF INNOVATION PRIZES TO WORK AT SCALE

The business case for Ideas to Impact (DFID, 2013), proposed that prizes had the potential to overcome the 'valleys of death' within the innovation process where an idea or technology often fails and therefore does not move to scale, due to gaps in the finance and skills needed to take an idea to the next stage. This model is illustrated in Figure 3.

As we have seen, the evaluations found that innovation prizes can attract more parties to participate effectively in the prize than are awarded prize money and this theoretically increases the chances of one or more innovations stimulated by the prize, getting to scale. There is limited evidence available, however, on how effective Ideas to Impact prizes were at achieving this in practice, partly due to the stage at which innovations were at the time of the final prize evaluations.

The follow-up evaluation of the Climate Information Prize (Section 2), one year on from the final awards being made, examined in some detail what happened next to the winning and runner-up services and the likelihood of them getting to scale.

We found that several participants had further developed their initiatives, and while they generally had not yet secured significant sustainable financial input, many were moving towards the commercialisation of their product through user fees.



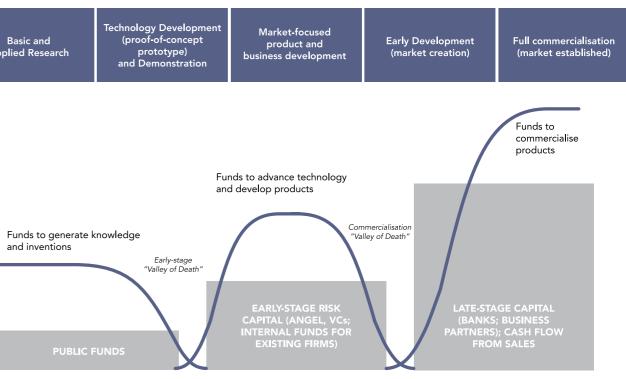


Figure 3: The Innovation Valleys of Death (Source: XPRIZE Foundation, 2012)

From this, the evaluation concluded that prize participants had overcome the early-stage valley of death: winning participants had a proof of concept, having implemented their CIS for 18 months and received a cash sum, which they could use to take their innovation further.

The evidence, however, indicates that participants had not yet successfully navigated the commercialisation valley of death.

SUMMARY OF OUR LEARNING

- When the Ideas to Impact prizes are compared to other forms of ()obtained through different (and complementary) means, such as involving a larger number of participating organisations.
 - has strengthened the argument for finding a way to use prizes within a broader programme, rather than in isolation.

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- While innovation prizes can bring several advantages to a funder, their comparative strength lies in their ability to attract a higher given development problem, often at ground level.
- By engaging new and an increased number of actors in solving a problem, two of the advantages associated with prizes (prize effects) in particular come into play that provide key benefits for development and VFM for funders:

 - \bullet winners.

In theory, a prize's strength in incentivising large numbers of actors to produce innovations increases the chance of one or more of those innovations overcoming the 'valleys of death' and getting to scale. The evaluation evidence (collected up to one year after awards were made) was only able to show that innovation prizes can help overcome gaps in the finance and skills at the early stage valley of death, rather than commercialisation.

funding, they offer similar levels of overall value for money, albeit

Investigating the VFM of prizes, compared to other funding options,

number and/or diversity of individuals and organisations to solve a

• open innovation – encouraging new solvers to enter the field of endeavour which may include those directly affected by a problem (adding the 'Community Action' effect);

maximising participation towards the funder's aims – the benefits to the prize sponsor are provided by all who participate effectively (for a period of time), not just by the

HOW TO GET THE MOST VALUE FROM INNOVATION PRIZES

SECTION 4

We have already observed that out of several advantages that the Ideas to Impact prizes offer, there is the added value of attracting many and new actors to contribute to solving development problems.

The prizes' evaluations also hold insights into what can limit or enhance that value.

In this section, we draw out some of Ideas to Impact's lessons on the use of prizes to drive innovation and contribute to addressing development challenges and in particular, the conditions which, if considered during prize design and implementation, can maximise value.

We find that for innovation inducement prizes to be most effective in contributing to development outcomes, the following conditions need attention:



Ensuring the prize is connected to an enabling environment and ecosystem.

Keep in mind the assumptions made about the environment that the prize operates within such as supportive policies, government champions, etc.; identify which are critical to success, if any can be brought under the control of the prize team or if they depend on complementary support (jump to later in section 4)



Thinking through prize team design and partner selection. Prize teams need to be able to respond to changes in the wider environment, and the selection of partners can have a strong influence

on the prize's success (jump to later in section 4).

Targeting the right participants and supporting them to participate. Depending on the prize's objectives, such as driving an inclusive approach to innovation, or broadening out innovation to an international solver pool, it will sometimes be necessary to target particular people or organisations and then allocate sufficient communication resources to reach them. In resource-poor situations, this will mean considering appropriate solver support (jump to later in section 4).



Assessing the risks and ethics of running prizes for development. This includes paying close attention to who is included or excluded from the prize, and the burden on participants, especially given resource-poor contexts (jump to later in section 4).



Having reasonable expectations of prize participants.

In driving innovation, implementation inducement prizes incentivise people to adopt a new priority or way of working. If the goal is to have many people participate, the prize will need to be designed so the burden of risk is reasonable for target prize participants (jump to later in section 4).

We also found that the relationship between the geographical focus of the prize, the location of its target solvers and the prize team appears to play a role in a prize's success.

The two prizes that most fully met expectations in terms of contributing to addressing development challenges by the time of their awards (Climate Information Prize and Sanitation Challenge for Ghana), operated in a single country, rather than being run externally for the benefit of one or more countries.

These conditions (left) are not exhaustive and there are other important considerations that need to be kept in mind when designing prizes, setting budgets and recruiting prize teams such as communications, judging and verification, and data collection for monitoring and evaluation.²⁸

ENSURING THE PRIZE IS CONNECTED TO AN ENABLING ENVIRONMENT AND ECOSYSTEM

The effects that can arise from using prizes to drive innovation, such as raising awareness of an issue, have already been discussed, but to obtain value from using prizes, the prize sponsor needs to be confident that those effects, if realised, will contribute to the hoped-for development impact.

This assurance comes, partly, from mapping out what else is happening in this area and understanding how the prize builds on or complements other interventions aimed at solving the same problem. If those linkages are not in place, then part of the role of the prize team will be to make linkages to those actors that will take the next step (jump to later in section 4). The Ideas to Impact-supported prize, the Lake Kivu Challenge, shows how a prize can be used to bring together the stakeholders needed to ensure innovation is taken up (see Box 6). At the design stage then, it is important to articulate the assumptions made about the enabling environment, the ecosystem in which the prize operates, and the wider system of support available to participants (see Box 7 for examples from Ideas to Impact prizes' theories of change). These assumptions are critical to knowing whether a prize will be successful in stimulating innovation and ultimately lead to a social change or impact.

Ideas to Impact endeavoured to run prizes only where an enabling environment for innovation had been identified through desk-based and in-country research, where appropriate. However, these assumptions have not always held. For example, in Kenya, where the Climate Information Prize ran, a greater level of alignment with the Kenyan Meteorological Department at prize-level was planned than was achieved.

BOX 6: INNOVATION PRIZES CAN ENHANCE THE ENABLING ENVIRONMENT

Rwanda was the first country in the world to have commercial services based on using unmanned aircraft systems (commonly known as drones). Against this backdrop, the Lake Kivu Challenge ran three competitions that aimed to drive innovation in the use of drones in the Lake Kivu Region of Rwanda and demonstrate the potential drones offer to an African market.

While manufacturers and operators of drones were targeted as prize participants (the prize aim being to identify contractors to provide delivery and mapping services around Lake Kivu), the prize served to bring together all the stakeholders that were needed to get drone use to scale (national government, regulators, contractors, users and providers).

The national government expanded its understanding of the potential applications of drones, beyond blood delivery, and for the whole country. The prize also had a positive influence on the wider enabling environment for effective use of drones in Africa. To support the competition, a new set of regulations and knowledge from around the world needed to be introduced to Rwanda, which is now seen as a world leader in drones.

See: <u>https://www.africandroneforum.org/competitions/</u>

BOX 7: EXAMPLES OF ASSUMPTIONS FROM IDEAS TO IMPACT PRIZES' THEORIES OF CHANGE

Participants are able to access sufficient data and funding to establish their initiatives (Climate Information Prize).

Winners from Phase 2 are able to link up with appropriate financiers and convince them to participate in funding the expansion project (Dreampipe II).

MMDAs [prize participants] have access to technical assistance from appropriate organisations and individuals (Sanitation Challenge for Ghana).

Local government policy is designed to support vulnerable communities (Adaptation at Scale). Other external environmental factors remain constant e.g. there are no new natural disasters, economic

Other external environmental factors remain constant crises, etc. (LPG Cylinder Prize).

Participants therefore relied upon brokering the relationship they needed to access information themselves. Kenyan Meteorological Department participation did, however, pick up towards the end of the prize period, when representatives became involved in the judging process for the prize.

Some of those steps or assumptions in a Theory of Change can be brought under the control of the prize sponsor through elements of the prize design. It is the rationale behind the provision of non-financial support to participants, for example, such as allowing paper-based applications to be submitted, rather than online.

Another option is to use multi-stage prizes; the approach taken by four Ideas to Impact prizes. Stage 1 of the Climate Information Prize, for example, ensured that there were good quality ideas for climate information services in place before the Stage 2 prize incentivised their implementation as well as inviting new participants to enrol. Similarly, participation in Stage 2 of the Sanitation Challenge for Ghana was contingent on an MMDA winning an honorary or monetary award for their strategy developed in Stage 1.

The Global LEAP Off-Grid Refrigerator Competition was unusual among the prizes in Ideas to Impact's portfolio, as links to other funding were part of its design; prize winners and finalists were promoted to potential investors and were eligible to take part in an incentives scheme designed to help stimulate the market by subsidising the cost of the refrigerators.

THINKING THROUGH PRIZE TEAM DESIGN AND PARTNER SELECTION

Evaluations of the Ideas to Impact prizes, showed that the individuals and organisations involved in running a prize, and the freedom they had to monitor progress, make changes, and leverage their networks to ensure key participants remained engaged, had a strong influence on the prize's success.

Ideas to Impact prize teams had the flexibility to make changes to the design of prizes at various stages of implementation; from introducing new categories of prizes once more was known about the participants (see Box 8) to redesigning and relaunching a whole prize scheme based on learning from the results of Stage 1 of the first iteration (Dreampipe I and II).

The partners that the prize team works with can be an asset that reduces the need for support to participants. In the case of Sanitation Challenge for Ghana, the prize team carried out fewer workshops and visits to participants than originally planned, yet 16 of 17 local government authorities that started Stage 2 of the prize, continued to the end and the backing of the Government of Ghana was a compelling motivator for these participants.

We already mentioned the importance of locating prizes in an enabling environment and being clear on which organisations will drive the next steps after the prizes have been awarded. Ideas to Impact demonstrated that the selection of implementing partners can be part of that enabling environment.

With the Adaption at Scale prize and Sanitation Challenge for Ghana, for example, Ideas to Impact partnered with local organisations who were already working on the issues targeted by the prize. These implementing partners were therefore in a better position to use their networks to enhance the success of the prize.

The value of working with partners who are already embedded in the system may also come after the prize has been awarded as it will be in those organisations' interests to maintain the momentum created by the prize. For example, the local implementing team for Adaption at Scale presented the prize at a national government conference since the award. While it is too early to see more evidence of this happening through the Ideas to Impact prize evaluations, the indications are that prizes that follow this model will benefit in the same way.

BOX 8: ADAPTING AWARDS BASED ON NEW INFORMATION

As the Adaptation at Scale prize team observed the composition of its participants it made changes to the prizes on offer, in an effort to level the playing field. The prize team decided not to run a possible recognition prize in favour of awarding more prizes at the end of Stage 2. Two sets of 1st-3rd place were awarded and two honorary awards given out, to two categories of participants:

- large organisations including international and national NGOs, and large private sector organisations.
- small organisations, including local NGOs and CBOs, and small private sector organisations.

Based on monitoring information, the prize team also increased efforts to reach potential participants and introduced visits to participating organisations during Stage 2 of the prize.



TARGETING THE RIGHT PARTICIPANTS AND SUPPORTING THEM TO PARTICIPATE

As argued above, one of the key ways in which prizes offer value to development is by attracting new organisations or individuals to focus their efforts on a field of interest to the prize sponsor (open innovation). To maximise this effect, an innovation prize can in theory be open to whoever wishes to enter, as was the case with the LPG Cylinder Prize, which followed most closely the 'classic' innovation prize design and attracted participants from a wide range of countries and occupations.

This was appropriate to an ideation prize aiming to obtain as many different ideas as possible. However, the other Ideas to Impact prizes relied on a particular type of person or organisation taking part in order to achieve its desired contribution to development and we suggest that this is likely to be a typical feature of prizes in development.

A prize can focus on attracting an international, regional or national set of solvers, or alternatively drive inclusive innovation and an important part of prize design is being clear on which is desired. For a prize focussed on testing and benchmarking existing technologies (e.g. the Global LEAP Off-Grid Refrigerator Competition) this might mean seeking to attract organisations already active in the market, while not excluding those unknown to the funder.

Alternatively, a prize that seeks to incentivise the widespread adoption of innovation in a country, would need to attract organisations that are likely to be able to develop appropriate solutions and drive their adoption locally (inclusive innovation), for example local government (the Sanitation Challenge for Ghana) or community-based organisations (Adaptation at Scale). Whichever targeting strategy is adopted, assumptions in the prizes' theories of change highlight the anticipated influence of effective communications on the success of the prize e.g. "[Climate Information Prize] prize team communication strategy is effective in engaging an inclusive range of innovative individuals and organisations (age, gender, industry, employment)" (Stott and Brown, 2019).

Therefore, it is necessary to allocate sufficient resources and design appropriate strategies for communications to make enough of the target solvers aware of the prize.

Some of these requirements were translated into eligibility criteria, for example, entry to Stage 2 of Dreampipe II and the Climate Information Prize was limited to organisations rather than individuals. Sanitation Challenge for Ghana was more narrowly focussed, being only open to the MMDAs in Ghana. In other cases, the efforts of the prize team showed that a certain mix of participants was desirable, such as encouraging women-led organisations to enter Adaptation at Scale and the Climate Information Prize.

Where a prize relies on certain types of organisations taking part, it is important during the design stage to analyse if the prize will be appropriate for resource-poor organisations who are more familiar with the requirements of traditional funding. This may be particularly relevant if the effect of Community Action is intended (i.e. when the intention is to shift the solving of a problem into the hands of affected communities). The evaluations of Ideas to Impact prizes provided evidence of some organisations struggling with making sense of Terms and Conditions and dealing with a different way of reporting. Well-funded organisations may be able to hire people to produce the reports needed to participate in a prize – as was found to be the case in Adaptation at Scale – but this may be too much of a burden for smaller organisations, especially those with less experience of prizes, or even results-based financing.

In this situation, the role of solver support needs to be considered. While all six prizes were able to make awards, the level of support provided to solvers varied by joint decision between the prize team and the prize sponsor, DFID. The prizes open to a global pool of potential participants (Dreampipe II, Global LEAP Off-Grid Refrigerator Competition and LPG Cylinder Prize) limited their support to responding to questions and problems relating to the prize process, although Dreampipe provided feedback to participants of Stage 2 on their submissions from Phase 1, and the Global LEAP prize covered the costs of shipping appliances to the test sites in the Netherlands and Uganda.

The prizes that targeted public sector and nonstate organisations in developing countries, provided more support to their participants by comparison. This support sometimes took the form of concessions e.g. allowing applications to be submitted in a different language and by post rather than online.

Within the CCA prizes, for example, the Climate Information Prize limited solver support to an initial orientation workshop at the start of Stage 2, essentially an onboarding exercise; while Adaptation at Scale provided both orientation and a subsequent training workshop, followed later in the prize process by a 'Learning and Encouragement' site visit to each participating stakeholder, and ongoing communications throughout the prize.

Through providing a more extensive range of solver support to participants, the Adaptation at Scale prize aimed to support ongoing participation and to level the playing field by strengthening the adaptation innovation capabilities of participants. The prize team did this by focussing on the competencies needed to problem solve, create and apply adaptation innovations effectively. The evaluation for Adaptation at Scale found that ongoing support from the prize team was beneficial in engaging, encouraging and motivating participation; and building participants' understanding of the prize problem.

However, with participants being experienced in climate change adaptation activities, some were already familiar with the concept of scalingup and scaling-out of adaptation. As such, the support provided had a different level of impact on each participant and the extent to which the support enabled their participation.

ASSESSING THE RISKS AND ETHICS OF RUNNING PRIZES FOR DEVELOPMENT

We anticipate that prize sponsors and those implementing innovation prizes will be familiar with undertaking risk assessments, but some issues are particularly relevant when using prizes for development and will need to be considered in advance if prizes are to be used effectively and ethically.

For example, the inherent bias in the information submitted to the prize team by prize participants who are competing for a financial award presents the challenge (and resource requirement) of obtaining verified data on local delivery and impact. While this is not unique to prizes (results-based finance programmes also require independent verification), the challenge can be magnified by the nature of prizes, which in other ways is its added value. That is in attracting a larger number of independent implementing organisations and projects than those that accompany other funding mechanisms.

The main issue of concern, for those unfamiliar with prizes, is that in transferring the risk from funder to prize participants, this risk is often distributed among organisations and actors that have limited resources.

Some of the risks that come with prizes can be mitigated through prize design, but it is important that funders understand that others may need to be embraced if innovation prizes are to be adopted as a funding modality and position themselves to allow for failure. Using prizes on their own may be beyond the comfort zone of some organisations. This learning points to being selective in when to use prizes alone, using them alongside other interventions and having a portfolio approach to funding that includes some of the 'safer bets', which may offer smaller returns but at a lower risk.

ENGAGING PRIZE PARTICIPANTS THAT ARE RESOURCE POOR

Using an innovation inducement prize for development prompts a need to consider the costs that are borne by stakeholders (outside the investment costs of the prize sponsor) and the ethics of incentivising certain target prize participants to incur them.

One of the main ways in which prizes add value is in maximising the number of people who take part and contribute to the sponsor's aims. This creates a tension between ensuring participants feel at ease withdrawing from the process if the risk becomes too much for them, versus the desire to encourage as many participants as possible to proceed.

Innovation prizes are a novelty in development, and the Ideas to Impact evaluations found that many prize participants had not taken part in one prior to their engagement with Ideas to Impact. This lack of experience could lead to the prize participants that are being targeted taking on a greater task than they are able to resource.

Participants of the Adaptation at Scale prize reported challenges in terms of the time commitment required to participate in the prize, including implementation time, workshops, reporting and supporting team visits, all of which needed to be done with no resources provided to support this.

If the organisation participating has limited resources, there is a chance that the risk or costs get passed on to other stakeholders. Although the cash award of Stage 1 of the Adaptation at Scale prize was intended to act as seed funding for Stage 2, some participants reported relying on financial and in-kind contributions from communities, to deliver their projects, including land, labour and time. While this is not uncommon, two participants reported that their participation in the prize negatively affected their relationship with the communities they worked with due to raising expectations and losing trust.

While further research at ground level would be required to understand the implications in detail, a way of mitigating this risk is to examine what support might be necessary to keep the target participants involved in the prize and reduce their need to call on the resources of communities or individuals.

ATTEMPTING TO LEVEL THE PLAYING FIELD

Being focussed on MMDAs, the Sanitation Challenge for Ghana was in the fortunate position of knowing the composition of its target participant population from the outset.

The prize was launched with two categories for different types of MMDAs and the judging progress was based on where each local authority was starting from and against the context in which it was operating, rather than setting one MMDA's achievements against another's.

By contrast (and more typically of innovation prizes), Adaptation at Scale introduced elements later in the prize process as its participants became clear. Organisations were invited to participate in Stage 2, but these new entrants lacked the financial awards that Stage 1 winners had received which was effectively used by them as 'seed' money. In Stage 2, changes were made to how entrants were categorised based on size of organisation, as an attempt to make the judging fairer.

As the evaluation discovered, this levelling needs careful handling and communication to avoid discontent among participants moved into a category of organisations that appear to them as tougher competition. A lesson learned by Ideas to Impact is to consider, early in the design phase, how to level the playing field between participants, looking beyond surface-level indicators. Communications about how this will be done should then be made to participants, clearly and early on. A cut-off point could be introduced after which no further changes can be made to the judging process.

UNINTENDED NEGATIVE CONSEQUENCES

Innovation prizes are designed to incentivise attention and activity to be focussed onto a specific problem, as selected by the organisation orchestrating the prize. In the context of competing demands for resources, there is a risk that prize participants will reallocate funds from other areas of work (and development priorities) in order to fund their efforts under the prize.

Evidence from the prize evaluations demonstrate this diversion of resources occurring in some cases,²² which reinforces the necessity to work with key local stakeholders (e.g. the national government, as in the case of the Sanitation Challenge for Ghana) when setting the focus and scope of the prize to ensure it is aligned with local needs and priorities.

Prizes, as competitions with predefined criteria, risk incentivising participants to adopt undesirable behaviours in pursuit of those criteria. For example, the evaluation of the Sanitation Challenge for Ghana found some evidence that while the prize stimulated a focus by MMDAs on considering the potential for environmental harm in their management of liquid waste, there was the potential for environmental harm from the activities of a small subset of MMDAs (both during and beyond the prize).

It is unclear whether the incidence of environmental harm increased as a result of MMDA activities under the prize, or MMDAs' awareness of this increased, through the broadening of activities to cover the full sanitation value chain, or both.

One MMDA interviewed after leaving the prize, reported that the prize brought about a "real

awakening" on the need to handle liquid waste properly. Another finalist MMDA reported that they had taken steps to minimise environmental harm. The prize team suggested that all participating MMDAs were challenged during the live judging process on this issue and then started to acquire/repurpose land for waste disposal under the prize.

There is insufficient evidence of the scale and impact of this issue to establish whether any negative effects were outweighed by the benefits, for both the MMDAs and their end beneficiaries. However, this example from the Sanitation Challenge for Ghana highlights that prizes can result in unintended consequences that can be both positive and negative, and can affect different actors in different ways.

The evaluation advised that prize managers should attempt to identify and understand any potential negative consequences of the prize as it unfolds, including the downstream impacts of these on beneficiaries, and then take appropriate action to minimise the effects on both prize participants and wider stakeholders.

While prizes are unlikely to have the resources to monitor and evaluate individual projects implemented by solvers in any detail, they should seek to include and make the most of any field visits undertaken.

These risks can be further mitigated to a certain extent through careful selection of pre-announced judging criteria and communications with participants, however the risk (and reward) of inviting the 'unknown' and using open competition to incentivise change is part and parcel of innovation prizes, which again makes the case for their judicious use in a portfolio of approaches.

HAVING REASONABLE EXPECTATIONS OF PRIZE PARTICIPANTS

The distinctions between novel, imitative and adaptive innovation³⁰ are straightforward to identify in the innovation driven by Ideas to Impact's ideation prizes e.g. the LPG Cylinder Prize or Stage 1 of the Climate Information Prize.

Within its implementation inducement prizes, e.g. Stage 2 of the Sanitation Challenge for Ghana, however, Ideas to Impact's focus has been on driving innovation in behaviour, incentivising prize participants to do something new (if only new to them) for the duration of the prize, although in several cases the hope has been that this new behaviour or focus would continue after the prizes were awarded.

The prizes' evaluations have shown the importance of establishing how significant the change is that is expected of potential prize participants. The greater the change, the higher the risks, both for the participant and for the success of the prize. While prize participants typically accept a set of Terms and Conditions before proceeding, participation in a prize is not bound by a contract.

Participants will weigh up the costs and benefits throughout the prize process and can withdraw at any time if the risk seems too great for them. For prizes whose contribution to addressing development challenges depends on maximum participation from specific types of individuals or organisations, the prize can fail if too many target participants assess the risks of taking part to outweigh the potential rewards.

From our analysis of the Ideas to Impact prizes, the changes (innovations in behaviour) encouraged were either or both of the following:

- Participants were asked to work in a new way e.g. the rationale for the Climate Information Prize was that climate information services are currently designed without considering the needs of user communities.
- Participants were asked to prioritise a new issue e.g. Dreampipe II incentivised attention to be focussed on financing the reduction of non-revenue water.

The matrix in Figure 4 uses these two directions of change to indicate how the level of risk increases for participants the further they move away from their starting point. A recognition prize targets participants in the bottom left hand box of the matrix, as this type of prize rewards people who are already demonstrating the desired behaviour in the desired focal area.

By contrast, inducement prizes incentivise people to adopt slightly or very different priorities and/ or ways of working to their status quo. Adaptation at Scale, for example, potentially required prize participants to move in both directions. It did not require participants to have done any prior work on climate change adaptation and they were encouraged to adopt what was likely to be a new way of working (scaling up and/or out).

In this model, the degree of change (and associated risk of failure) has been assigned a score, ranging from 1 to 9 which increases as the prize participant moves further away from their familiar priorities and ways of working.

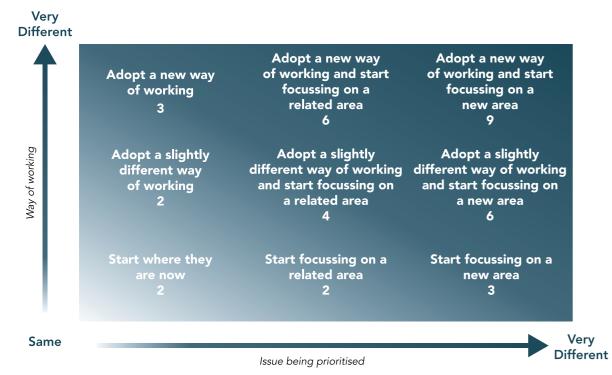


Figure 4: Degree of change matrix

However, this simple matrix is too crude a tool to use on its own. An additional dimension to bear in mind is that taking part in an innovation prize, with its associated requirements and risks, may itself be new to participants, as was the case with many of Ideas to Impact prizes and their participants.

Equally some individuals and organisations may be prepared to take greater risks based on their attitude and capacity to absorb failure. The level of risk that the required shift represents will depend on the types of participant targeted, being typically greater, for example, if the participants are individuals or resourcepoor organisations.

Sanitation Challenge for Ghana targeted local government who had a budget line for liquid waste management (the focus area of the prize) whereas Dreampipe II targeted individuals and organisations (including water consultancies and water utilities of varying size). But it would be a mistake to treat each of these target groups as homogenous.

The environment in which individual local governments operate, the capacity of not-forprofit organisations, the size and leadership style of a private sector actor, country culture, and prior experience of prizes all need to be considered when assessing the appropriateness of a prize for that group and when designing incentives and determining solver support.

What this matrix highlights, is the careful calibration and insight that is required to design a prize which asks enough of potential participants to achieve the necessary shift in behaviour that the prize Theory of Change depends upon, without asking too much to deter them from participating, counterbalancing this ask by a sufficiently attractive reward.

The difference in starting points among target prize participants can be taken into account by the judging criteria. The Sanitation Challenge for Ghana recognised this by looking at progress made by MMDAs compared to their individual starting points, as well as comparing overall progress across MMDAs. However, setting higher expectations than will be achieved, is perhaps necessary to induce innovation and avoid rewarding those who are already excelling in that area or the 'usual suspects' (Marshall and Naess, 2015).





CONCLUSIONS AND RECOMMENDATIONS

Ideas to Impact's prizes differed from each other in many aspects, including their setting, duration, participants and intended effects. Given this diversity, and the variety of ways in which they can be said to have worked (or not), what can be said about 'if' and 'how' innovation prizes should be used in development?

This section presents our conclusions and associated recommendations, developed in collaboration with DFID, as funders of the Ideas to Impact programme.

SECTION 5

INNOVATION INDUCEMENT PRIZES CAN MAKE A USEFUL CONTRIBUTION TO ADDRESSING DEVELOPMENT CHALLENGES BY DRIVING INNOVATION

From the prize evaluations where some form of comparative assessment of VFM was made, we have discovered that Ideas to Impact prizes were able to hold their own against grant-based research, innovation and technical assistance programmes. It follows then, that innovation prizes should join the existing options funders choose from when considering how to tackle a development issue where innovation is required.

Rather than selecting one funding tool over another, our evaluations of Ideas to Impact's prizes provide further support for the hypothesis that prizes are used to their best advantage if they complement other interventions working towards the same development goal, ideally as part of a single programme (Everett et al, 2011). This embedded approach to using prizes could also result in some cost savings e.g. monitoring.

When should prizes be brought into that mix of complementary interventions? While we have seen evidence of Ideas to Impact prizes generating several useful effects, they are particularly worth considering when the programme wishes to drive large-scale or widespread innovation or attract fresh minds to a development problem, which can include the communities that are directly affected. By increasing the number and diversity of those delivering results (and distributing the risk among more parties), innovation prizes can be more cost-effective in certain settings than other forms of funding. However, this redistribution of risk among prize participants could present an ethical issue of which funders and Prize Teams will need to be mindful, especially if the prize will be targeting organisations and actors with limited resources.

RECOMMENDATIONS

Funders should include innovation prizes in their list of options for funding programmes that seek to drive innovation for development, particularly when the innovation is on a large-scale or widespread, or the programme needs to attract new minds to a development problem.



Innovation prizes should be introduced to programmes where the prize effects can support achievement of the programme's intended outcomes. This will enhance the prize's value for money and the sustainability of any innovation (and other effects) stimulated.

Consider using innovation prizes to drive inclusive innovation while being mindful of the risks that come with this approach. Prizes have the potential to engage a range of solvers including those affected by the development challenge that the prize is seeking to address, but this is not how they are traditionally run so attention will need to be paid to the expectations being made of potential solvers.

THE USE OF PRIZES AND THEIR DESIGN MUST RESPECT THE CONSTRAINTS OF THE EXTERNAL ENVIRONMENT

Although a large-scale innovation prize (such as the XPRIZE and Ideas to Impact's Sanitation Challenge for Ghana) can influence aspects of the external environment, prizes tend to have less scope to influence external factors, compared to a grant-funded project. This needs to inform decisions about when and where to use innovation prizes and how they need to be designed.

What tools can organisations use to help them decide whether to use an innovation prize? Alongside other advice available from Ideas to Impact on prize design,³¹ the conditions explored in Section 4 provide a useful steer. Positive signs would include a Theory of Change showing how the innovation stimulated and adopted as a consequence of the prize will build on or complement other interventions aimed at solving the same problem, and if those linkages are not in place, realistic plans for making them. If success of the prize is dependent on the participation of specific groups and a pre-assessment suggests this will not be too much of a burden for them (and is unlikely to encourage them to overstretch their resources), this would be another indication that a prize would be a good fit.

Conversely, if the signs were that an innovation prize with a lengthy implementation stage would need to provide a high level of support to enable its target participants to stay the course, this may be the cue to instead use an innovation prize as an initial shorter stage (attracting many and diverse minds to the problem) to be followed by another funding option, such as a research grant.

Several attempts have been made at producing a typology of innovation prizes, but as Roberts et al (2019) concluded in their literature review for Ideas to Impact, for every set of prize categories that exist, an innovation prize can be found that does not fit. This reflects the flexibility offered by innovation prizes; different elements can be introduced and adapted in response to what is known about the location and sector into which a prize is to be introduced. Using the primary intended effect of the prize as the starting point, the Ideas to Impact prize evaluations suggest some implications for prize deployment:

Stimulating a market: Use a prize to drive innovation towards a tightly focussed problem (point solution) but be aware that the resulting technologies will not solve the problem on their own. You will need to combine the prize with a follow-on component such as financial incentives to drive uptake, or additional funding to support further research and development.

Altering the policy environment: Deliver the prize in partnership with the country's national government and other influential stakeholders, rather than relying on assumptions about policy plans, willingness to focus on an issue, or capacity to make changes in response to the results of the prize. Government endorsement is particularly valuable if the prize aims to stimulate innovation within the public sector.

Raising Awareness or Promoting Best Practice:

Run and design the prize in partnership with an organisation that is well-networked within the sector and the geographical area where the prize is focussing. This will support effective promotion of the prize to appropriate potential participants and engagement with the sector stakeholders that are necessary to sustain the momentum achieved by the prize.

Generally, prize design is not as simple as the above might suggest. Innovation prizes are the product of a range of design decisions including number of stages, their type and duration; judging criteria; communications approach; financial and non-financial incentives; level of support provided, etc. This highlights the necessity to draw on expert advice when using prizes for the first time.

RECOMMENDATIONS



When investigating if an innovation prize should be used in a programme, refer to the lessons learned by the innovation prize community, including Ideas to Impact,³² on the pre-conditions for effective use, e.g. confidence in assumptions made in the prize Theory of Change, and acceptable level of support likely to be required by solvers.



Specify how the prize is required to drive innovation to guide appropriate design and implementation. An innovation prize intended to find a technological solution to a closely defined problem will look quite different to one that seeks to incentivise multiple communities to generate and implement approaches to tackle local development challenges.

THE PERIOD AFTER AWARDS HAVE BEEN MADE IS WHERE A PRIZE'S TRUE VALUE CAN BE ACHIEVED AND JUDGED

The point at which innovation prize awards have been announced, when the prize 'buzz' is at its peak, is a prime time when additional activities that boost innovation could reap rewards, e.g. communicating about prize participants and their innovations, incubation (e.g. for scaling), leveraging funding opportunities, convening a community of practice, with prize participants at the core.

This represents a relatively small investment by the funder for potentially large returns from boosting (at least the awarded) innovations. This investment would also mitigate the risk that the innovations shift away from serving the poor and vulnerable once the prize incentive is removed.

Ideas to Impact has demonstrated that prizes have the potential to sustain their effects some time after awards have been made, but their ability to achieve their potential during this period is heavily reliant on the actions of external stakeholders in the "award ceremony aftermath". Without continued involvement from the prize team or its partners, post-award, sustainability relies on continued motivation and buy-in from participants.

While this sustained engagement may be more likely among participants who made it to the end of a lengthy prize, there is a risk that enthusiasm will dwindle or enabling forces in the environment will alter (e.g. changes in government priorities and policies).

This report has also shown how the period after awards have been made can be a critical point at which to look again at the contribution a prize has made; an evaluation immediately after awards are given out may be too soon to get the full story.

To get a true picture of whether a prize has 'worked' for its funder or not, the evaluation needs to bring in evidence from multiple perspectives (awards made, effects and innovation stimulated, contribution to addressing development challenges, and internal and external VFM).

This more rounded view can be helpful in identifying learning about what worked and why; if a prize falls short of expectations it may be because the prize was not the right modality, for example, rather than it having been poorly implemented. Independent verification, while necessary for making awards, is often a big investment but Ideas to Impact has found it can be a key source of evidence for evaluations.

Using independent verification more purposefully as a mechanism for collecting evaluative evidence of results obtained during the prize process would free up evaluation resources to focus more on investigating the contribution the prize has made to addressing development challenges, especially in the post-award period.

RECOMMENDATIONS



for the funder.



Aim for complementary approaches to prize evaluation and verification for example, using verification to produce the baseline for a subsequent survey by the evaluation team thus enabling the evaluation to focus more on prize outcomes and the post-award period.



Make resources available for a follow-up evaluation, one year or more after final awards, if the prize's contribution to getting innovations to scale needs to be assessed.

Evaluations of innovation prizes should include the prize team activity and results achieved in the period after awards were made, in order to assess the value obtained

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CEO and founder of Farmers Pride, Samuel Munguti, was the first-prize winner of the Tekeleza Prize, the final stage of the Climate Information Prize in Kenya. His initiative, Last Mile Connectivity through Agro-dealers Franchise Model, Village Youth Agents and Mobile Technology, provides smallholder farmers with training, quality farm inputs and climate information services at affordable prices through an innovative franchise model of agro-dealers.

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ENDNOTES

1 As the evaluation and learning partner for the prize programme, Itad, has been supporting the Ideas to Impact programme team and funder throughout to understand if these innovation prizes worked as intended, by providing an impartial view of the results obtained. The evaluation and learning team also fed into prize design in the early stages of the programme, through provision of initial evaluation findings and facilitation of Theory of Change processes.

2 The stages in the innovation process where an idea or technology often fails and therefore does not move to scale, due to gaps in the finance and skills needed to take an idea to the next stage (see Section 3.1).

3 This is a definition used by Ideas to Impact; several other definitions and names for prizes exist including 'Challenge Prize' defined as rewarding whoever can first or most effectively meet a defined challenge (Ballantyne, 2014). See Roberts et al (2019) for a summary of innovation prize terminology and definitions.

4 In general, the type of innovation prizes used by Ideas to Impact have been inducement prizes although recognition prizes have been used in some situations.

5 See also Collings (2015) for research on the energy access sector, although, apart from the LPG Cylinder Prize, scoping of potential prizes led Ideas to Impact to choose instead to run prizes focussing on off-grid refrigeration and cold storage, in collaboration with Global LEAP.

6 This table summarises the six prizes whose final evaluation or follow-up review reports are the source material for this paper. Ideas to Impact also ran the Global LEAP Off-Grid Cold Chain Challenge (but its review report was not available at the time of drafting this report) and supported the Lake Kivu Challenge (Drones) which falls outside of this evaluation (see Box 6).

7 The evaluation and learning team also fed into prize design in the early stages of the programme, through provision of initial evaluation findings and facilitation of Theory of Change processes.

8 Interim evaluations were carried out at the end of Stage 1 of multi-stage prizes and the findings reported internally to inform the design of subsequent stages and later running prizes.

9 The review concluded that whilst the discourse about the value of prizes (assumptions about how they could be used for development) was quite prevalent within the literature on prizes, there was little specific evidence of impact. The evaluations that were available tended to be ex ante.

10 <u>www.gov.uk/dfid-research-outputs</u>

11 Dreampipe was initially designed as a two-stage prize, but after the stage 1 ideation prize, the prize was redesigned and relaunched as a standalone three-stage prize, Dreampipe II, which closed early at the end of stage 2.

12 Five years after Ideas to Impact was launched, a literature review by the programme Evaluation and Learning Team (Roberts et al, 2019) reported that few evaluations of innovation inducement prizes were available for inclusion in the review.

13 The Prize was expected to engage participants from women-led organisations. Of the four women-led groups engaged for Stage 2, one made a final submission but was not awarded a prize. As these women-led organisations were CBOs, Prize Team members pointed to resource limitations as the key factor hindering their continued engagement.

14 When nominating their products, prize participants were asked what percentage of women were represented in the team submitting the nomination. Ten organisations had 0-20% of women working in their teams, 16 organisations had between 21-40%, and two had between 41-60%.

15 Stage 2 participants of Sanitation Challenge for Ghana, for example, were judged on: Delivery of strategy with a focus on poor neighbourhoods and/or households (15% of the marks), engagement of the community members from poor neighbourhoods in Sanitation Challenge for Ghana implementation (5% of marks), and engagement with youth, elderly persons (65 years and above), girls and people with disabilities (5% of marks).

16 Robust impact measurement against a counterfactual was not within the scope of Ideas to Impact's evaluations. See Gould et al (2020) for reflections on the challenges of using counterfactuals in prize evaluations.

17 Chapter 1 of Innovation Prizes for Development: a practical handbook for using prizes to help solve development challenges (Ideas to Impact, forthcoming), guides the reader through the process of deciding whether a prize is the most appropriate choice bearing in mind the problem that needs solving, the setting the prize will operate in and the resources available.

18 Though more evidence at ground level is needed to understand the full extent of this.

19 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.

20 Data on the impact of services on users was obtained through self-report. Independent verification of the CIS users was carried out by three independent agents contracted by the prize team through a tendering process. The agents' reports included survey responses on CIS user demographics and use of services from 1,594 beneficiaries across 18 CISs. The number of respondents for each CIS ranged from n=2 to n=837.

21 VFM against Equity for Dreampipe II was not assessed in the prize's evaluation as the solutions supported by the prize under Phases 1 and 2 intentionally did not have to consider distributional impacts; equity considerations would have become an explicit requirement in Phase 3.

22 The vulnerable were defined by the prize as youth, elderly persons (65 years and above), girls and people with disabilities. 11 out of 15 MMDAs were rated satisfactory for their engagement with youth/girls/ the elderly and people with disabilities – but only one of these was rated above satisfactory. The other four MMDAs were rated as fair.

23 <u>https://www.innocentive.com/</u>

A follow-up report goes into detail on the different approaches participants are taking to generating revenue and the effects this has had on user numbers (Stott and Brown, 2020).

25 While the Itad follow-up review of the Global LEAP Off-Grid Refrigeration Competition looked at what happened next to the winners and finalists (building on the evaluation carried out by Nesta), it could not examine how sustained the prize effects were as these were not directly evaluated by Nesta, and so its findings have not been brought into this section.

A follow-up report goes into detail on the different approaches participants are taking to generating revenue and the effects this has had on user numbers (Stott and Brown, 2020).

26 The approach and headline results of these assessments are presented in greater detail in the Ideas to Impact research article 'Judging the value for money of Ideas to Impact innovation prizes' (Stott and Gould, 2020).

27 The Dreampipe II evaluation included an internal VFM assessment only, due to the lack of a suitable comparator for an external assessment. A simplified external assessment was also carried out for the LPG Cylinder Prize using the costs of a typical call for research i.e. against a theoretical comparator; this predates the VFM approach presented in the Ideas to Impact research article (Stott and Gould, 2020).

28 Ideas to Impact's learning on the practice of designing and implementing prizes for development is published in a handbook (Ideas to Impact, 2020).

29 Four participants of the Adaptation at Scale prize, for example, reported using their own resources to enable their participation, including investing funds, time and human resources that would otherwise have been used elsewhere, while the evaluation of the Sanitation Challenge for Ghana found that MMDAs reallocated funds (and other resources) away from other departments/causes to fund their sanitation efforts under the prize.

30 As made within the definition of innovation used by Ideas to Impact (New processes, technologies and services, or a blend of 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).

31 For example, 'Innovation Prizes for Development: a practical handbook for using prizes to help solve development challenges' (Ideas to Impact, 2020)

32 'Innovation Prizes for Development: a practical handbook for using prizes to help solve development challenges' (Ideas to Impact, 2020)







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