

Lessons Learned Overview

The AgResults initiative is releasing a monthly series based on AgResults' lessons learned to-date designing, implementing, and evaluating the impact of pull mechanism projects in developing countries.

The series will highlight in which circumstances pull mechanisms may be more effective than push mechanisms, and unpack insights on key themes within each phase of a pull project.

Pull Mechanism Background

Pull vs. Push

"Pull" and "push" mechanisms are two different approaches to development assistance. Conventional push approaches, such as grants and contracts for research and development, pay for the creation of specific outputs, but may not deliver the desired product or results. One is in essence paying upfront for efforts that might fall short of expectations.

With pull mechanisms, however, one is designing programs that attempt to only pay for results. Pull mechanisms are incentives provided to organizations where private sector activity or investment is inadequate due to market failures. These incentives come in the form of payments, such as Milestone or Grand Prizes. Pull projects only pay for verified outcomes that meet specific, predetermined guidelines.

Pull mechanisms are unique in that they:

- **Pay only for results** – participants competing for prizes, called "Solvers," are only compensated if they meet predetermined results
- **Attract top talent** – prize incentives can draw in unconventional Solvers and bring unique perspectives to pull projects
- **Stimulate investment greater than the prize** – with the right incentives, pulls can catalyze significant investment from the public, private, and / or social sectors that far outweigh the amount of the prize and other project costs
- **Highlight a problem or opportunity** – pull projects tend to attract significant public attention due to their ability to stimulate innovation and nontraditional problem solving
- **Focus participants and inspire risk taking** – Solvers try novel approaches and innovate in order to achieve results

Types of Pull Mechanisms

There are several types of pull mechanisms that are applicable to different situations depending on the challenge being addressed:

Grand Prize

Description: A winner-takes-all contest, where the first participant to achieve the objectives of the competition receives a final payment. These prizes allow Solvers to take varied, innovative approaches with limited direction and oversight by the competition organizer.

Example: [The Ansari XPRIZE](#) provided a USD \$10 million prize award to the first group able to build a reusable spacecraft and successfully send the manned ship into space twice in 14 days.

Milestone Prize

Description: A contest where payments are made at different stages for meeting competition objectives. These pulls provide incremental incentives for participants—particularly smaller organizations—to stay engaged, but require a more prescriptive approach and closer monitoring.

Example: The USAID [Haiti Mobile Money Initiative](#) offered USD \$10 million in awards for first-to-market services and scaled approaches to launch financial services after the 2010 earthquake in Haiti.

Proportional Prize

Description: A contest that pays out Solvers proportional to their achievements. This approach is effective when a number of different innovations could provide a solution to the challenge at hand.

Example: [AgResults](#) provides a proportional prize to Solvers based on sales of on-farm storage devices to smallholder farmers (SHFs) in Kenya. These payments are made at the conclusion of the competition, once results have been verified.

Advance Market Commitment

Description: A pull mechanism that provides payments on a per-unit basis for a specific duration of time or guarantees the size of a future market through economic incentives. In return for financial support and assurances, participants agree to provide a product at a reasonable price to consumers.

Example: The governments of Italy, the U.K, Canada, Russia, and the Gates Foundation launched the [Pneumococcal AMC](#) to incentivize firms to produce affordable vaccines.

Patent Buyouts

Description: Solvers receive payments for developing a new technology or product. Their findings are then broadly disseminated for uptake.

Example: In the mid-19th century, the French government [bought the patent](#) for a groundbreaking photographic process and placed it in the public domain. This resulted in dramatic improvements to the original technology and broad adoption.

AgResults Overview

[AgResults](#) is a USD \$118 million multilateral initiative incentivizing and rewarding high-impact agricultural innovations that promote global food security, health, and nutrition for the benefit of smallholder farmers through pull mechanisms.

The initiative consists of “Pilot projects” in developing countries that seek to:

- Overcome market failures by offering results-based economic incentives to promote the uptake of new agriculture technologies and / or practices (paying for results)
- Test the effectiveness and efficiency of pull mechanisms in comparison to traditional development assistance models—or pushes

AgResults Pilots

- [Nigeria Aflasafe™ Pilot](#) Launched April 2013 – Milestone Prize (USD \$6.8 million)
- [Zambia Biofortified Maize Pilot](#) Launched July 2013 – Advance Market Commitment and Proportional Prize (USD \$3.9 million)
- [Kenya On-Farm Storage Pilot](#) Launched April 2014 – Milestone, Proportional, and Grand Prizes (USD \$7.8 million)
- [Vietnam Greenhouse Gas Emissions Reduction Pilot](#) Launched September 2015 – Grand, Milestone, and Proportional Prizes (USD \$3.6 million)
- [Brucellosis Vaccine Pilot](#) Launch in January 2016 – Grand and Milestone Prizes (USD \$30 million)

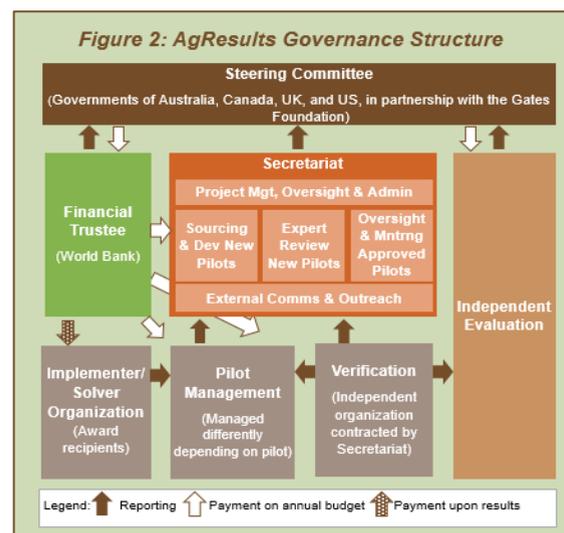
AgResults is funded by the governments of Australia, Canada, the U.K., and the United States, together with the Bill and Melinda Gates Foundation.

AgResults Project Structure

In order to support the successful implementation of its Pilots, AgResults has set up a unique governance structure. The implementation of AgResults is overseen by a Steering Committee, which is comprised of representatives from the initiative’s five

donor agencies and a Trustee. The Steering Committee is responsible for strategic oversight of the initiative, including endorsement of key management decisions, approval of concepts, and the monitoring of Pilots and the initiative as a whole.

AgResults is directly managed by a Secretariat, responsible for Pilot implementation, oversight and monitoring, sourcing new research and development and adopting Pilots, conducting peer review of new Pilots, and outreach and communications. Each Pilot runs with a competitively selected Pilot Manager (PM), who coordinates the project on the ground, Solvers that compete to solve the issues at hand, and Verifiers that confirm Solvers have met the pull’s requirements. Independent Evaluators are responsible for measuring AgResults’ impact.



AgResults’ Pull Approach

In an effort to harness private sector investment and spur innovation in agriculture, AgResults designed Pilot projects utilizing Grand Prizes, Milestone Prizes, Proportional Prizes, and Advance Market Commitments. These pull prizes offer results-based incentives for the uptake of new and existing technologies to address pressing food security, nutrition, and health challenges across the developing world. AgResults chose to design and implement pull financing projects to test the effectiveness of ex-post economic incentives in a developing world context and determine pulls’ advantages and impact in comparison with other development approaches.

AgResults Initiative's Key Actors

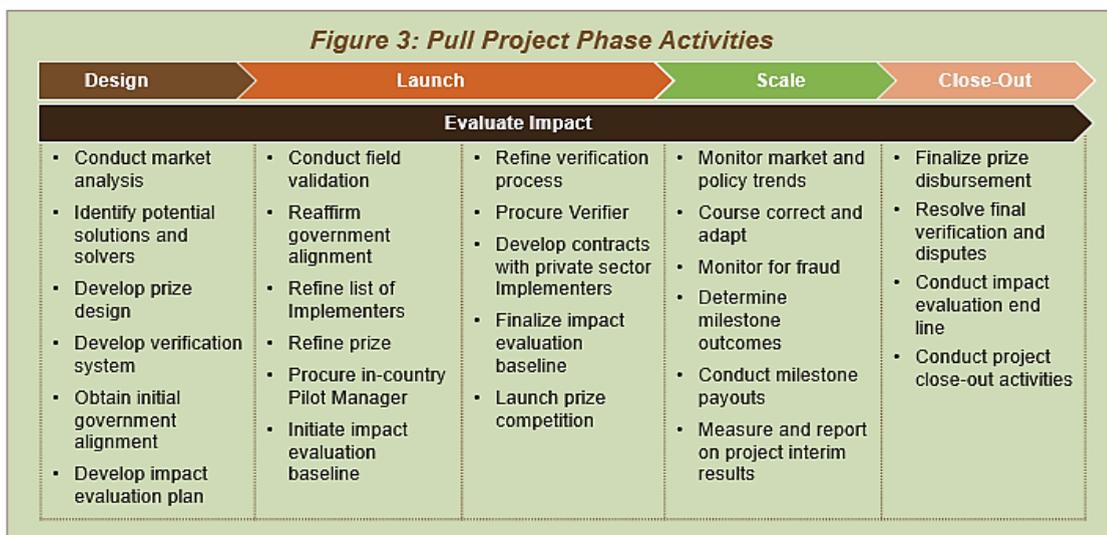
To provide further insights into the structure of the AgResults initiative, a complete list of the AgResults actors, along with their specific roles on the project, is provided below:

- The **Steering Committee (SC)**, comprised of representatives from the governments of Australia, Canada, the U.S., and the U.K. and from the Bill and Melinda Gates foundation, is responsible for strategic oversight and funding of the project. The Steering Committee serves as a decision-making body that is consensus-based. This allows for all of the donors contributing to this USD \$118 million initiative to provide their perspectives and weigh in on strategic choices.
- The **Trustee, the World Bank**, operates the fund where donor contributions to the initiative are pooled. The Trustee ensures that AgResults manages its finances effectively and meets all of its financial obligations.
- **The Secretariat, Deloitte Consulting**, drives the pull project's design, and acts as a program manager responsible for coordinating across, implementing, and overseeing multiple pull projects. The Secretariat provides project management and implementation guidance to the Pilot Manager team and other actors in-country, ensuring that the Pilot adapts to changing circumstances and meets AgResults' objectives.
- **Pilot Managers** manage the implementation and on-the-ground coordination of a Pilot project. For each AgResults Pilot, there is a separate PM team in-country. This team provides local expertise crucial for monitoring and adapting the Pilots as needed.

- The **Implementers / Solvers** are the private sector entities incentivized to solve the issue at hand. These actors receive prize payments, if they meet the competition guidelines.
- The **Verifier** confirms Solvers have met the pull's requirements and that the prize can be paid. Depending on the Pilot, the Verifier can be a testing agency, an audit firm, a survey firm or a combination of these. The Verifier plays a crucial role to detect fraud, corruption, or other behavior that can affect the pull results.
- The **Impact Evaluator, Abt Associates**, is responsible for monitoring and evaluation (M&E) activities and measuring AgResults' impact. The Evaluator assesses whether AgResults' pull approach is effectively creating sustainable markets for welfare-enhancing technologies and reaching poor households.
- The host **Government (National, State, Local)** provides buy-in, alignment with policies, and the required approvals critical to AgResults' implementation in the targeted country.
- **Private Sector Stakeholders and NGOs** can become important partners during implementation, providing subject matter expertise, technical assistance, and implementation support. These groups can also constrain pulls through direct competition with Solvers.

AgResults Pull Project Phases

AgResults Pilots consist of distinct phases, from the initial design of the pull mechanism, to the formal launch, scaling, and close-out of the project. Across phases, an independent Impact Evaluator conducts M&E activities to measure the impact of the pull.



Since its inception in 2013, AgResults has learned valuable lessons, particularly in the design and launch phases, given the current status of its six active Pilots. The following sections provide high-level insights into each phase. Subsequent series will cover the design and launch phases' lessons learned in more depth and share initial findings on the other phases.

Design Phase

Important lessons to consider during the pull design that will be unpacked in subsequent series are:

- Ability to accurately understand the market failure and its interaction with other ongoing programs
- Viability and interest of potential Solvers
- Required incentive structure to motivate Solvers to overcome market barriers
- Ways to address market distortions and constraints that can impede the success of the pull (e.g., mini-push interventions)
- Tradeoff considerations to design a cost-effective and rigorous verification system
- Planning for adaptability

The design phase lays the groundwork for the project and typically lasts four to six months, depending on the complexity of the prize.

In this phase, the **Secretariat** focuses on understanding the existing market failure and clearly outlining the problem definition, identifying potential Solvers and stakeholders, designing the incentive structure, defining the verification system to ascertain results, performing a robust cost analysis, and developing the project business plan.

This phase requires careful analysis of the market environment (including political and regulatory landscape), in-depth research on the issue and the market players, and consultation with technical subject matter and country experts as well as a robust peer review process to design the prize structure of a pull mechanism.

The **Steering Committee** provides strategic guidance on these topics and can tap into their organizational networks to provide invaluable technical expertise, to better understand the market failure and / or other programs that would complement or compete with the prize design. They also approve the final business plan.

Since AgResults' pull mechanisms are mostly private sector driven, there is less involvement from government entities than in push projects.

However, it is still critical to engage government early to get the necessary approvals for the given country and to create and maintain the appropriate policy environment.

Launch Phase

Important lessons to consider during launch that will be unpacked in subsequent series are:

- The PM role – additional criteria to factor in when evaluating and contracting potential PMs for a pull vs. a push project
- The importance of further ground-truthing and potential design adjustments
- Moving Solvers from “interested” to “committed”
- Structuring the relationship between the PM, the Verifier, and Solvers

Launch activities begin once the pull concept is developed and approved by the **Steering Committee**. This phase is particularly important as it lays the foundation for the successful implementation of the program.

The pre-launch, before the project officially kicks off, entails procuring and mobilizing a local **PM** and conducting further ground-truthing of the business plan in order to validate assumptions, make design and verification adjustments as applicable, re-affirm **government** alignment, and confirm **Solvers'** participation.

The **Secretariat** and **PM**, leveraging their local expertise and connections, actively drive this phase and consult with the **Steering Committee** on adjustments needed based on new realities.

Scale Phase

Initial lessons to consider for the scale phase are:

- Changing / increasing Solvers
- Declining incentive scales

The initial years after the launch may see modest results as the Pilot combats initial inertia that may exist, and as **Solvers** adjust their business models and take limited risks.

Growth rates should increase exponentially in outer years, once the model is proven. Depending on the prize design and participation rules, additional or new types of **Solvers** may also enter the competition at this point.

The **Secretariat** and **PM** need to continue to monitor the progress of the project, keeping the **Steering Committee** informed of key changes, emerging risks, and issues in order to course correct and adapt the Pilot as applicable.

AgResults Lessons Learned Series

Volume 1: Pull Mechanism & AgResults Overview

Verification activities, to monitor Pilot progress and ascertain that Solvers' results are accurate and that the rules of the competition are being followed, significantly increase. At this point, adjustments may be needed to keep the system cost-effective, yet efficient. In addition, the volume of results-based payments (should the pull involve periodic or Milestone Prizes) will increase, as should the capacity of the **Secretariat** and **PM**.

Close-Out Phase

Initial lessons to consider for close-out are:

- Public / private / social sectors' role in driving sustainability
- Disposition of assets

At the conclusion of the project, the **Verifier** finalizes its activities. The **Trustee** makes final results-based payments to Solvers, who have met the targets laid out in the incentive structure. Disputes may arise and will need to be resolved by the **Secretariat** and **PM** before the project can close; sufficient time at the end of the project needs to be allotted for these activities. Additionally, the **Secretariat** and **PM** work with the **government** and **Solvers** to confirm that the innovations catalyzed by the project are sustainable. They also compile final results and lessons learned and disseminate them to the **Donors**.

Evaluate Impact

Initial lessons to consider for the impact evaluation are:

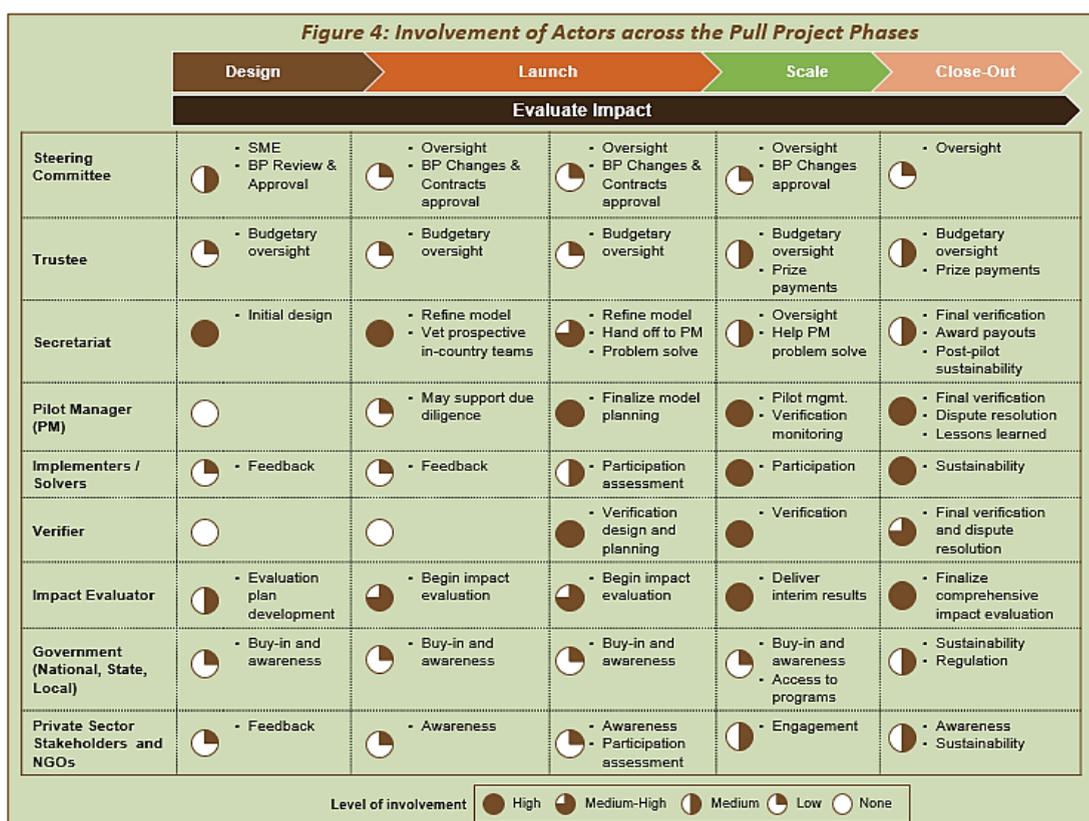
- Effectiveness of the pull project in addressing the market failures and overall project impact

The impact evaluation spans across all other phases. It assesses project outcomes and impact using quantitative and qualitative methodologies to determine whether the pull project can achieve objectives different from, and better than, what would have happened in its absence.

The **Impact Evaluator** should engage early in the design phase to develop a rigorous evaluation plan. An initial qualitative assessment can help gain buy-in and refine questions.

The **Impact Evaluator** typically produces a baseline during launch. It may also release interim M&E results and initial insights from the impact assessment during the launch and scale phases.

During close-out, the **Impact Evaluator** provides an end-line report. Finally, cost-effectiveness analysis, sustainability analysis and lessons learned are valuable assessments the Evaluator can perform post close-out.



Conclusion

Pull projects' complexity require careful project planning, design of prize structures, coordination with teams on the ground during implementation, and flexibility as circumstances change. This article has served as an introduction to the pull mechanisms and Pilot projects developed by AgResults, and will be followed by in-depth analyses of the distinct project phases.

Lessons Learned Series Topic Areas

AgResults will be releasing articles in the coming months exploring the different phases of pull projects. Published articles can be found on the [AgResults website](#).

- **Pull Mechanism & AgResults Overview:** Definition of pull mechanisms, project phases, and the role of ecosystem actors engaged
- **Pull Project Success Factors:** Key factors that are essential for pull projects' success and sustainability
- **Design Phase:** Deep dive on themes such as prize structure, Solver selection, market analysis, etc.
- **Launch Phase:** Design adjustments, overcoming initial market inertia, etc.
- **Scale Phase:** Ability to adapt the Pilot, course corrections, changes in group of Solvers, etc.
- **Close-Out Phase:** Planning for sustainability, key considerations before project close-out
- **Evaluate Impact:** Pull mechanisms' sustainability, impact on markets and poor households, and cost-effectiveness

Lessons Learned Series Topic Areas



Stay tuned for the AgResults Lessons Learned webinar series, coming up in 2016. To sign up to receive updates on upcoming AgResults webinars, events, and publications, follow this [link](#).