

## ► Public-private partnerships to strengthen smallholder resilience

Technical note

October 2026

Smallholder farmers are among the most vulnerable populations on earth, yet fewer than one in five is covered by agricultural insurance. As climate shocks become more frequent and severe, the consequences extend beyond economic loss: food insecurity, asset depletion and debt spirals can persist across seasons and even generations. Purely market-based approaches have failed to reach smallholders at scale, while fully public schemes have often been fiscally costly and operationally weak. Public-private partnerships (PPPs) — arrangements in which governments and private insurers jointly design, finance and deliver agricultural insurance — have emerged as the dominant model in many of the world's largest agricultural insurance markets, and evidence from both established and emerging markets points to PPPs as a reliable mechanism for protecting smallholder farmers.

This note (excerpted from a full paper<sup>1</sup>) draws on structured interviews with 14 organizations and detailed analysis of seven agricultural insurance PPP schemes in Colombia, India, Kenya, Rwanda, Senegal, Uganda and Zambia to determine what makes effective, scalable and inclusive PPPs.

<sup>1</sup> This technical note is excerpted from the paper “Public-private partnerships to strengthen smallholder resilience” authored by Rishi Raithatha, Director at Vark Consulting and Tara James, Climate Risk and Agricultural Insurance Specialist at IFAD. The paper is available at this address: <https://www.ilo.org/publications/public-private-partnerships-strengthen-smallholder-resilience>

## 1. PPP models and roles

The paper outlines three main PPP models currently in use for agricultural insurance. They reflect different distributions of risk, responsibility and finance between public and private actors. In practice, most programmes combine elements of more than one model.

### Premium subsidy schemes with private delivery

This is the most widespread type of PPP worldwide. Governments co-finance a portion of farmers' premiums. They are also responsible for setting eligibility criteria, subsidy rates and providing a stable financial floor. Private insurers design, underwrite and distribute products within the scheme. Input suppliers, seed companies and off-takers act as aggregators and distribution partners.

### Public insurers<sup>2</sup> and co-insurance risk pools

These are PPP structures where a government-backed insurer and multiple private insurers jointly share agricultural risks in a common pool, rather than each insurer running its own separate scheme. Governments establish or anchor a specialized agricultural insurer or co-insurance pool that sets common terms, manages shared risk and attracts private participation. Private insurers co-insure or act as the reinsurer alongside the public insurer, helping to underwrite, price, and distribute policies. Banks and MFIs integrate pool products into their lending and input-finance operations, while brokers act as strategic intermediaries and managers in these arrangements, designing the pool architecture and placing risks. Governments or development partners could co-finance a portion of farmers' premiums, but it is not always the case.

### Bundling with public programmes (inputs, credit or social protection)

Insurance is integrated with existing public delivery channels, such as input distribution, state-backed credit schemes, social protection programmes or extension services. Governments set policy objectives and targeting rules. They may finance all or part of the premiums and provide data and delivery channels. Their roles may include overseeing regulation and consumer protection. Private insurers design and price products tailored to the programme, underwrite and share the agreed layers of risk,

and manage operations. Private sector players (for example, MFIs) distribute the cover, while insurtechs provide digital platforms, remote-sensing data and automated triggers for indices.

## 2. How PPPs work in practice

### Design and governance

#### PPP schemes can be initiated in one of two ways

Design can either be led by the private sector or by the government. Each pathway reflects different priorities. Government-led PPPs often emerge from fiscal or policy objectives. They are likely to have budget lines, clear subsidy rules and national targets. However, where private sector input is weak, they can become politically driven or inefficient. In contrast, private sector-led PPPs often begin as commercially driven or donor-backed pilots focused on operational viability and innovation. Without eventual government policy and financial support, these schemes may struggle to scale or remain overly dependent on donor funding.

#### Scheme initiation can determine the governance model

Each initiation pathway comes with distinct governance challenges and impacts the type of governance approach that is adopted. Initiatives driven by the private sector eventually need durable political commitment from the government. Without this, subsidy flows become unreliable and can affect programme continuity. State-led initiatives face different challenges. They need to build technical capacity among insurers and ensure that competitive selection determines which private actors participate in the partnership.

#### PPP schemes tend to have a central coordinator, but this varies by market

Several schemes have benefited from having a single coordinating authority or dedicated technical unit – typically, a government body. Examples include Rwanda, whose NAIS is coordinated by the Ministry of Agriculture, and Colombia, where Finagro has a dedicated agricultural risk fund management function. Where there is no central body, coordination can fracture across ministries, with each likely to defend its own interests rather than prioritizing programmatic outcomes.

<sup>2</sup> Public insurers are state-owned or state-backed insurance entities that participate in providing insurance alongside private insurers.

## PPPs use varied approaches to risk layering

Many PPPs prioritize risk layering as a key structural choice using different financial instruments for different disaster frequencies and severity. This is an alternative to trying to solve everything with one risk management product or one budget line. The objective across most agricultural insurance PPPs is to spread losses equitably across farmers, insurers, reinsurers or governments. Farmers retain small and more frequent losses, while insurers are used to manage medium-sized losses within defined product triggers. Catastrophic or systemic risk layers are transferred to reinsurance markets or absorbed by the government as the insurer of last resort.

## Operating PPPs

### Farmer targeting and enrolment are important initial activities

The PPPs reviewed used a mix of policy rules (for example, on subsidies), farmer registries and value-chain aggregators to geographically target smallholders. Most farmers are enrolled mainly via cooperatives, financial institutions, input schemes and digital platforms. For most PPPs, this choice is deliberate. By using existing distribution channels, PPPs can reduce acquisition costs, improve eligibility verification and align insurance with broader policy objectives.

## Data access and sharing are key components of all PPPs

Experiences from the markets covered in this study point to a common set of data-sharing principles that make PPPs workable. These include: treat climate and yield data as a public good; build and maintain digital farmer registries; ensure interoperability across public databases; define clear, reciprocal data-sharing rules in the PPP; balance data access with privacy and consent; and invest in local data collection and analytical capacity.

## Use of subsidies varies between PPPs

Subsidies are the main operational drivers behind PPPs. Subsidy flows connect public budgets to insurer balance sheets and farmer protection, allowing PPPs to work in real time. Using law or policy, governments can define which farmers, crops and regions are eligible for subsidies, and the share paid by the state. Premium subsidies in the range of 50-80 per cent are typically required from the onset to achieve meaningful insurance take-up among smallholders. Subsidy rules that are predictable and consistent across years can lead to a more stable PPP scheme. This may lead to more reinsurance capacity and insurer investment in systems and product refinement. Volatile or delayed subsidies can delay insurance activation, expose farmers to uninsured periods and create insurer cash flow challenges. This is an important operational bottleneck for many countries, as budget execution constraints are endemic to most public procurement cycles.



### **Strong coordination is vital**

On the public sector side, agricultural insurance sits at the intersection of agriculture and finance ministries. However, the institutional incentives of each will differ. Coordination within the government can therefore be affected by fragmented inter-ministerial links, even if there is a central coordinator. Formal coordination mechanisms can include a steering committee, an inter-ministerial working group or a dedicated programme management unit. Without one of these, disputes over subsidy allocations, data-sharing obligations and procurement timelines tend to be resolved on an ad hoc basis – often with suboptimal outcomes.

## **3. Lessons for better PPPs**

The analysis in this report shows that PPPs do not succeed simply because the public and private sectors work together. Their success depends on how stakeholders design, finance and support these partnerships.

### **Governance clarity and the presence of a single coordinating authority matter more than model type**

A well-designed PPP model should have roles that are written down, enforced and subject to oversight by a single coordinating entity. The entity should have the authority to resolve disputes. To ensure good governance, there is a need for a formal memorandum of understanding or service-level agreement, in addition to a dedicated coordinating function.

### **Digital infrastructure is a key multiplier**

Farmer registries, e-voucher systems and digital payment platforms do more than reduce transaction costs: they make certain programme designs operationally viable that would otherwise be impossible. Investment in digital infrastructure that is publicly accessible is a prerequisite for ambitious smallholder insurance PPPs.

### **Building domestic insurance and reinsurance capacity will be vital in continuing to advance PPPs**

International reinsurers are dominant in pricing, product terms and risk transfer due to the high percentage of risk that is transferred to them. This means that domestic

insurers and governments often have less control over programme parameters than their governance roles suggest. There is a need to build domestic insurance and reinsurance capacity and negotiate direct data-sharing relationships with reinsurers. This could improve alignment between programme objectives and reinsurer incentives.

### **Development partners are powerful catalysts but require built-in exit plans**

Programmes designed around sustained technical assistance or grant dependency consistently underperform – especially when compared to programmes designed to transition to government and private-sector financing from the outset. The FISP model in Zambia offers a good example of how such a transition can be planned and executed.

### **Multi-year commitments are important**

An important indicator of success is sustained uptake by the target farming population. Premium subsidy programmes are more likely to fail through political disruption rather than due to actuarial problems. PPPs operating under annual budget cycles can face higher risks of disruption than those with multi-year frameworks. In Colombia, for instance, changes to the agricultural insurance subsidy budget – such as in 2018 and 2026 – have led to lower farmer coverage or programmatic delays.<sup>3</sup>

### **Evidence and data are central to sustainability**

Achieving sustainable agricultural insurance requires tracking more than growth in premium volume. It requires data on loss ratios, credit market activation and documented evidence of outcomes for farmer resilience. Programmes that invest in monitoring, evaluation, documentation and communication can create the evidence base that justifies a multi-year government commitment. This can be used to attract private investment on commercial terms.

## **4. Recommendations and conclusion**

Governments and their partners should stabilise the basic foundations, prioritizing multi-year commitments, a single coordinating authority, agreed data-sharing rules and investment in core digital infrastructure. Once foundations are in place, governments and insurers should jointly

<sup>3</sup> Key informant interviews.

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review product terms, subsidy structures and reinsurer engagement to ensure that risk layers, pricing and coverage align with both smallholder inclusion and fiscal sustainability. Sustainable PPPs depend on the systematic collection and use of evidence. Programmes should track a minimum set of indicators, including coverage, loss ratios, fiscal cost per farmer, credit unlocked and proxies for resilience outcomes, and use this data to adjust design and delivery over time. Digital infrastructure should be treated as core element of PPP design: farmer registries, e-voucher platforms and digital payment systems are public goods that make PPPs viable at scale.

No single actor can make agricultural insurance successful alone. Governments must provide the policy direction, public investment and long-term commitment needed to reach vulnerable farmers. Private insurers must bring the technical expertise, operational efficiency and risk management capacity required for sustainable delivery. Development partners play a catalytic but time-limited role, which is most successful where plans are in place to transition to domestic financing from the outset. When these roles are combined effectively, with clarity on how risks, responsibilities and incentives are shared, PPPs can expand protection to millions of smallholder farmers while making public spending more predictable and financially efficient.

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