

THE COMMON STAKE IN INDEX INSURANCE QUALITY

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Persistent Challenges







Persistent Barriers to Success & Scaling



Financial literacy



Marketing



Farmer trust in product/institution



High costs and/or low value for costs

Poor product performance (ability to detect losses)









Marketing & Distribution Innovations Cannot Address Some Key Constraints

Emerging marketing innovations can explain HOW a product works, but not IF it will work as intended and truly provide value for money.







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Challenges to Index Insurance Uptake

Hidden traits limit farmer ability to detect quality.

It is impossible for farmers to know product quality and value by simply examining the contract materials.

- Asymmetric information may limit demand even for high-quality products. Without credible information on hidden traits, farmers remain suspicious of quality and demand remains low.
- Payouts may increase sales, which requires sales as a precondition.
 The biggest increases in demand often come after payouts are experienced and observed (learning through experience).
- <u>But agricultural insurance takes a long time to provide experiential learning opportunities.</u> For new technologies where the benefits come irregularly, it may take a long time for consumers to become convinced of the quality, implying that demand will emerge very slowly if experience is relied upon too much.









The Common Stake in Quality







Farmers

If products fail to protect farmers, a bad situation is made worse as they experience significant losses while also being out the price of the premium.

False positives also have negative impacts on farmers, as false positives can increase premiums significantly and price farmers out.



Customer Understanding

- Farmers have no reliable, independent indicators of safety
- Product simplification for marketing may potentially lower the value for clients

Customer Demand

- Customers are averse to the combined risk of both a shock and risk of product failure
- With few products on the market, farmers do not benefit from commercial competition







Private Sector

Companies & Products

- Reputational risk (for all products)
- Potential distribution/bundling partners may also lose customers
- When false negatives occur, there may be missed opportunities to demonstrate value and increase sales
- When false positives occur, it can lead to unnecessary premium increases that further suppress demand

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<u>Market</u>

- Limited incentives for quality (it can often be more costly to design quality products; low competition)
- Potential unfair competition from inferior products
- Market may be ruined for future high-quality products

The Ex Gratia Problem

- May impede client understanding
- May drive companies out
- When companies leave markets right after payments are made, there are further deteriorations on trust in companies and in products







Insurance Regulators

Index insurance is now, after much-needed debate in many places, increasingly considered in the purview of insurance regulators.

Consumer Protection

- "Product safety" is not always clearly or comprehensively defined for all factors of quality
- Challenging to approve and to monitor products
- Often limited on-staff specialized technical capacity
- Capacity development efforts may be stymied by small staffs and/or high turnover

Market Developement

- Tension between allowing creativity and innovation while protecting both consumers and businesses
- Unfair competition/poor products can limit market development
- Possible inconsistencies in standards & expectations for companies across markets may make it hard to transfer successful products across markets







Government

- Subsidies and competing budget demands
- With low-quality products, unclear who truly benefits (who or what is being subsidized?)
- Difficulty comparing investment options (both growth opportunities and DRF)



Donors

- Dollar for dollar, risk financing may be more effective than emergency disaster response, but only if products protect
- High-impact development efforts can lift people out of poverty only to have a shock push them back down
- Low quality insurance products are essentially taking limited funds from farmers, the crisis only deepens as a result
- Difficulty comparing investment options (both growth opportunities and DRF)









Certification to Bridge the Gap







Industry-Led Certification Standards



While assessing the fire risks for the 1893 World's Fair in Chicago an electrical engineer proposed an idea to create a testing laboratory.

The initial funding came from an underwriters association and an insurance union, demonstrating a private-sector led commitment to safety standards. The organization eventually became Underwriters Laboratories (UL).

UL now sets and tests quality standards for billions of products worldwide to protect both industry and consumers.









Quality Index Insurance Certification (QUIIC)

- UC Davis is partnering with the Nairobi-based Regional Center for Mapping of Resources for Development (RCMRD) to refine, measure and certify index insurance quality in East Africa (pilot).
- QUIIC pairs insurance index and household data with statistical and economic quality measurement tools to certify that an index insurance product will *at a minimum* not cause harm
- Certification provides analytical capacity that is often lacking in institutions.
- Certified products can include QUIIC branding in its marketing efforts.
- Independent, rigorous analysis can provide information to enable all stakeholders to make better decisions for themselves / their organizations, about increasingly complex products.
- Lessons from other agricultural inputs (fertilizer) suggests that credible, independent verification of quality for unobservable characteristics can dramatically increase farmer willingness-to-pay.







What QUIIC does

- Tests whether, based on the price and performance, farmers – at a minimum – will not be worse off by purchasing
- Identifies opportunities for design improvements and cost reduction that can be integrated in product design and re-tested
- Allows stakeholders to determine the best way to use certification in their work (how they interpret and apply certification)

What it does not do

Does not consider:

- Timeliness of payouts
- Method of payment
- Timing of sales
- Proof of insurance / documentation
- Requirements for agent training and sales quality control
- Other implementation issues

QUIIC certification also does not indicate that a farmer "should" buy the contract. Many other factors (such as individual preferences) can and should influence whether purchase is the right decision for them.







Requirements

- Historical index values
- Historical yield data (can be collected if not already available)
- Program costs (direct costs + reinsurance)
- Expected premiums (program costs + markup)
- Expected payouts

Possible Outcomes

- Can be accepted as certifiable; can be marketed with QUIIC branding
- Cannot be certified as meeting minimum quality standards; then:
 - Certifying institution may identify opportunities to reduce costs in implementation such that it may meet standards
 - Certifying institution may identify innovative contract designs to improve product performance
- Can be tested again for certification after alterations are made











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Opportunities for innovation

Enhance contract design

Use alternative indices, drawing on crop models and data that better capture crop growth, loss and failure

Reduce idiosyncratic risk, such as within insurance zone variation, possibly by forming different insurance zones

For satellite-based indices, enhance signal-to-noise ratio by using crop masks with finer-resolution data

Consider an audit protocol to address

Strategically reduce costly field visits using, for example, low-cost phenocams, enhanced field-sampling protocols with satellite imagery or conditional audits

Improve risk quantification, for example, use crop models to generate longer time series for past risk and/or improved projections for future risk



For more on the technical components of the certification, please see the presentation from ICII 2020 (on 3 November 2020), Session 7.







Stakeholder Panel

- <u>Private Sector</u>: Hassan Bashir
 Founder of Takaful Insurance of Africa Limited, Kenya
- <u>Insurance Regulator</u>: Cynthia Ayero Inspection Officer, Insurance Regulatory Authority, Uganda
- **Government**: Tom Dienya

Crops Insurance officer, Area Yield Index Insurance Program, Kenya

<u>Donor</u>: Jenn Cissé
 Senior Research Manager, Munich Climate Insurance Initiative, Germany







