access to insurance initiative

How agricultural insurance can improve food security – and why regulation matters

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Adverse weather events cause heavy losses to farmers every year and contribute to rural poverty. Smallholder farmers and rural communities cannot manage these risks by themselves as the costs are too high. What they need is access to adequate financial instruments. Index-based agricultural insurance has the potential to offer a promising solution and contribute to food security, however most products are still in pilot stages and barriers need to be overcome before it becomes more widely available. An area that has not received much attention yet is the essential role that regulation and supervision plays in supporting and enabling wider access to index-based agricultural insurance products. In order to protect consumers and to contribute to market development regulation and supervision are key. This paper provides an overview of the benefits of agricultural insurance, explains why regulation matters and highlights some of the challenges faced by supervisors when seeking to regulate (index-based) agricultural insurance.

Introduction

With almost three-quarters of the poor living in rural areas and most of them farming, agriculture is a key source of income and driver of economic development[1].

Smallholder farmers have to cope with a variety of risks, many of them beyond their control. **Adverse weather events** such as drought, excessive rainfall and storms cause heavy losses to farmers every year. If such an event happens **farmers might lose the basis of their livelihoods** and even those who have escaped poverty may find themselves being dragged back into it.

Managing risks that affect many people at one time (covariate risks) is generally very challenging and costly. **Smallholder farmers and rural communities cannot manage these risks by themselves without adequate financial instruments**[2].

Adverse weather events (and the absence of instruments to manage these risks) already **contribute to ongoing poverty** in many agricultural households. With an increase in the frequency and severity of extreme weather events **due to climate change the situation is to become more severe** with potentially disastrous effects on agricultural productivity.

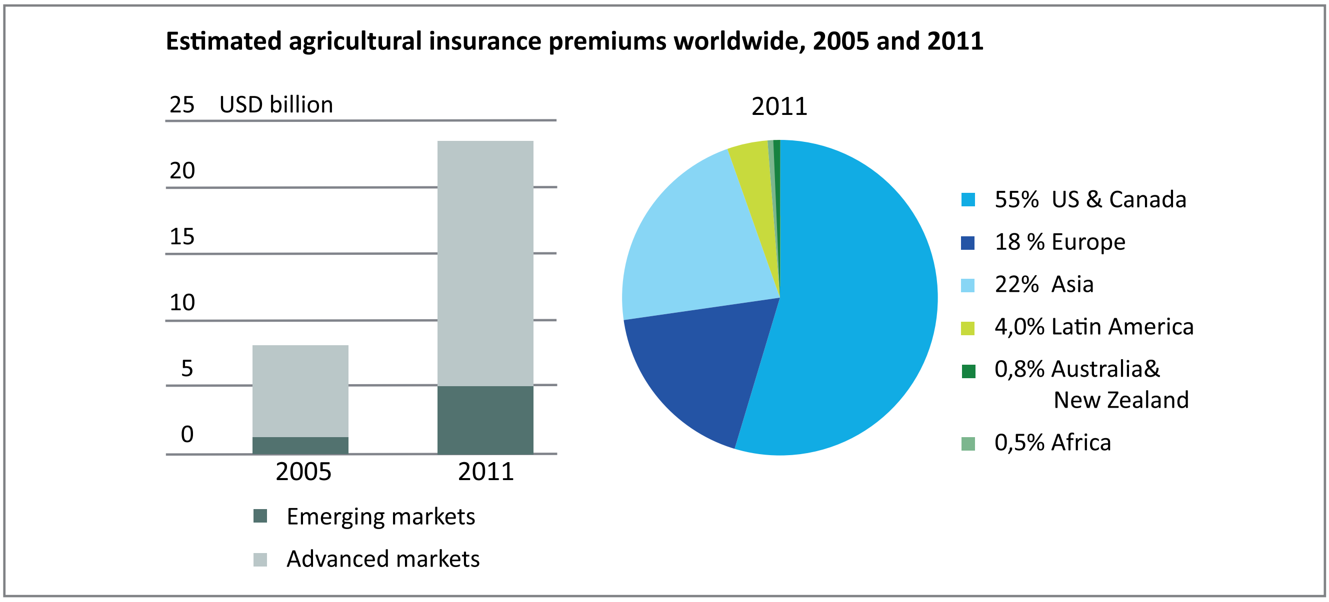
It is therefore **urgent to take action**. UN member states have in the **UN 2030 Agenda for Sustainable Development** agreed to end hunger and double agricultural productivity by 2030. They also want to “build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters”. The **G-7** committed to provide **insurance against climate hazards** for up to an additional 400 million poor people by 2020.

Agricultural insurance can improve food security

Insurance is an important **risk management tool**. Agricultural insurance can protect farmers in the agricultural sector by covering losses from adverse weather events. This can help farmers to **maintain their income level** and to continue farming even if a harvest is lost. Agricultural insurance can also assist farmers to **access credit markets**, which can provide financing for food production and act as a catalyst for economic growth for example by enabling farmers to buy new equipment, fertiliser and more or better seed thus increase their output. Insurance also has the potential to **change behaviour** by reducing uncertainty and putting a price on risk[3]. For example, traditionally farmers might have planted

1 World Bank. 2015. *World Development Indicators.* http://data.worldbank.org/topic/agriculture-and-rural-development
2 IFAD. 2010. *The Potential for Scale and Sustainability in Weather Index Insurance*. http://www.ifad.org/ruralfinance/pub/weather.pdf

3 McPherson, L. forthcoming. Agricultural Insurance - A Discussion Paper examining the regulatory and supervisory challenges particularly in index-based insurance. GIZ.



Source: Swiss Re. 2013.
http://www.swissre.com/media/news_releases/nr_20130116_improving food_security.html

3 or 4 different crop varieties to guard against the risk of adverse weather or disease affecting their entire crop; now with the security of insurance; farmers can instead focus on just one crop and benefit from economies of scale. Overall, small farmers and SME's that are able to better manage their risks are better able to **contribute to food security** of the population.

Globally, agricultural insurance premiums grew rapidly over the past decade, from USD 7 billion in 2005 to USD 23.5 billion in 2011. However, in developing regions, in particular in Africa and Latin America, there is still a **low penetration of agricultural insurance** and people have to live and operate without the security of insurance. In order for agricultural insurance to grow in emerging markets it **requires enabling government policies, supportive infrastructure, innovative products, new distribution channels and advanced technology**[4].

How agricultural insurance works

Traditional agricultural insurance pays the insured for the actual loss or damage incurred. However, traditional insurance is expensive, too expensive for most smallholder farmers and thus **non-existent in most rural areas**. This is due to the high administrative costs associated with assessing the risk, selling the product and, in the event of a claim, inspecting the loss.

Over the past decade, more and more **index-based insurance products** have been developed. These products use an index, such as rainfall, temperature, area crop yield or other objective indices to pay claims. So there is no need to inspect the loss. Products are often distributed on a group basis. For example: if the rain as measured at a weather station or by satellite exceeds a certain threshold, all farmers of a certain region receive a payout from the insurer. Initial development costs are often high but as the cost for processing claims is much lower, the product has the potential to be much cheaper and payouts can be made faster.

These lower administrative costs have helped support **considerable growth** in index-based insurance over the past decade. However, in most countries products are **still in pilot stages**.

A **key risk** of index-based insurance is the possibility that the pay-out does not reflect the actual loss experienced by the policyholder (so called **basis risk**). This means that the insurance may not pay out even if a farmer experienced a loss (e.g. if the amount of rainfall at the farm was different from the weather station or the index was not carefully designed). For rural farmers who are typically less financially literate this increases the risk of misunderstandings; and potential for abuse, therefore **increasing the need for consumer protection**[5].

4 Swiss Re. 2013. New Swiss Re sigma study puts the spotlight on the role that insurance can play in improving food security for over 850 million people globally. http://www.swissre.com/media/news_releases/nr_20130116_improving_food_security.html

5 McPherson, L. forthcoming. Agricultural Insurance - A Discussion Paper examining the regulatory and supervisory challenges particularly in index-based insurance. GIZ.

So the bottom line is: while traditional agricultural insurance is underdeveloped in emerging countries, as premiums are too high, **index-based insurance has the potential to offer a promising solution**.

Why insurance regulation matters

Regulation and supervision are vital in order to **protect consumers** and to **enable and support market development** because:

- insurance is an intangible product therefore trust in the system is essential for **building consumer confidence** and encouraging take up;
- many smallholder farmers may not have previously been exposed to insurance, and are typically less financially literate, therefore more in need of protection from unfair business practices and of support to ensure index-based insurance products provide them with value for money;
- regulation **determines who can (or cannot) enter and operate in the market**; therefore if insurance supervisors do not feel able to adequately understand and protect consumers they might not allow the introduction of new index-based insurance products in their jurisdiction;
- compliance requirements have a big impact on the cost of doing business and as a result **influence insurers' willingness and ability to operate in the low-income market**;
- this in turn also has a knock-on impact on the **final cost of the product to the consumers**; and
- insurance supervisors can enforce the mandatory provision of certain types of insurance; thereby dramatically increasing the take up. This not only helps to ensure a **safety net** is provided to consumers but is also a useful tool to educate **the consumer on the value of the product** through their first-hand experience.

In many countries, there are **no insurance providers that are able or willing to drive innovative market development**. And in some, there simply is not enough of an **understanding of the benefit of insurance** by potential beneficiaries to prompt the development of a market or mistrust in providers. Particularly in these markets, **policy, regulation and supervision are critical** for enhancing access to insurance.

Challenges in regulating index-based insurance

Regulating index-based agricultural insurance is a new field. The International Association of Insurance Supervisors (IAIS) has **no guidance** yet on index-insurance and **only very few countries have experience** with it. What is particularly tricky is that index-insurance does not pay out against actual losses so that the legal and the regulatory frameworks of **some countries do not allow index-based products yet**. Supervisors and regulators thus need to work on possible solutions. A **close coordination with other policy fields**, in particular the agricultural policy and securities sector, is important.[6]

Index-based agricultural insurance is **technically complex**. Insurance regulators and supervisors can **assist the development of the market** for agricultural insurance, however they **must understand the risks** associated with agricultural insurance and **impact** it can have on policyholders. Designing a good index depends on the quality of available data and technical knowledge to set the parameters right. Poorly designed policies will result in products with a high basis risk and farmers

6 Access to Insurance Initiative. 2014. 4^{th} *Consultation Call on Agricultural Insurance*. https://a2ii.org/fileadmin/file_storage/Documents/4_Consultation_Call_low.pdf.

not receiving a payout even though they experienced a loss. **Consumers must understand the way an index works** in order to take informed decisions. There is a need for **transparency** and **simple language** together with measures of **consumer education** to make sure policyholders are protected.[7]

While donor organisations in the past often focused on piloting index-based insurance and making it work technically, regulation has received far less attention.

The Access to Insurance Initiative is supporting insurance supervisors and regulators in this new field by organising platforms for peer exchange and knowledge sharing, publishing papers to help further supervisory thinking on the issue and supporting the IAIS work on the development of global guidance for supervisors in this innovative field.

Conclusion

Agricultural insurance is an **important risk-management tool** for farmers and can **contribute to the food security** of the population. While traditional insurance is too expensive for most smallholder farmers, **index-based agricultural insurance has the potential to offer a promising solution** with lower premiums and faster payouts. However, key barriers to wider access and availability still need to be addressed and most products are still in pilot stage.

Good regulation and supervision has the potential to overcome many of these barriers and enable greater availability of good value index insurance products for smallholder farmers. It has, however, received little attention in the past. Only few countries have experience in regulating technically complex index-based agricultural insurance. Therefore **supervisors and regulators need more support** including the opportunity to exchange with peers to learn from others' experiences and work on possible solutions. When starting pilot projects, supervisors need to be involved from the very beginning.

Further Reading

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7 Society of Actuaries. 2015. *Agricultural Insurance – More room to grow?* The Actuary 12 (12). http://tinyurl.com/nrqfytx.

*The **Access to Insurance Initiative** is a global partnership with the mission to inspire and support supervisors to promote inclusive and responsible insurance, thereby reducing vulnerability. The Initiative is the implementation partner of the global standard setting body for insurance, the International Association of Insurance Supervisors (IAIS) on access to insurance. Our partnership triggers the reforms in regulation and supervision required for the development of inclusive insurance markets.*

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