1. Introduction

The problem: hazards

In northern Kenya and Southern Ethiopia, as in many arid or semi-arid regions, drought and extended dry seasons are the main natural hazards for pastoralists, who often depend completely on livestock for their livelihoods. The drought in 2011 at the Horn of Africa affected around 13 million people and killed millions of animals. For Kenya alone, the costs of this event have been estimated to surpass USD 12 billion. Although the country has suffered from 28 severe droughts in the last century, it still relies completely on traditional risk management strategies such as fodder storage, livestock sales and herd splitting. Risk transfer mechanisms like insurance are only marginally used.
A promising solution: index-based insurance

Insurance products designed to protect against natural hazard-related risks in developing countries provide a potential solution for pastoralists. From a development perspective, drought insurance is an effective mechanism to transfer the residual risk which cannot be mitigated or managed by the pastoralists through improved management practices. The private sector sees a business potential in insuring frontier markets. However, traditional, indemnity-based agricultural insurance products for smallholder farmers and pastoralists in rural areas are not economically interesting. Claims are settled individually based on on-site inspections, which are costly. This has changed with the introduction of parametric or index-based insurance products. These reduce transaction costs by replacing farm visits with the use of proxies such as rainfall or vegetation data collected through satellite imagery or other technical means to assess livestock viability. Moreover, objectively measurable proxies can increase trust in insurance and detach pay-outs from the practice of individual farmers or pastoralist, effectively mitigating moral hazard.

The challenge: uptake

Despite the promotion of resilience for weather-dependent rural livelihood, uptake of index-based insurance products by pastoralists has been disappointing thus far. Reaching and convincing potential clients is a serious challenge. After millions of dollars put into the development of insurance products across a number of projects, viable insurance products are available. Yet, the hurdle of finding clients for the products has to be overcome.

Considering that there are no alternatives to insurance in the situation of extreme weather events, identifying and addressing the causes for low uptake is key. Development agencies have to broaden their focus from technical aspects of the index to include questions of distribution, the modalities of deal execution, and customer education. Taking the example of livestock insurance in northern Kenya, this policy brief analyzes the challenge of uptake of new insurance schemes using the innovation diffusion theory.

2. Identifying the root causes of low-uptake

The IBLI program pioneered by the Kenyan Livestock Research Center analyses remote sensing data using the normalized difference vegetation index (NDVI) to establish whether the area being observed contains live green vegetation or not. The insured pastoralist receives payouts if the established threshold is not met in a given year.

Even after more than 5 years, uptake is below 10% of the target population due to several challenges faced by IBLI promoters during the initial implementation. From a business perspective, insurers and reinsurers had few incentives to design and market IBLI-products. Establishing a demand among customers with little financial literacy and experience with insurance and even less with index-based insurance products is very costly. In addition, the implementation of insurance schemes currently mainly takes place through public-private partnerships (PPPs). Often, such cooperation is perceived to be complicated in practice by both the private and public sectors. Despite the rhetoric of coop-
eration, many decision-makers still prefer to avoid collaborations with other sectors, due to a lack of mutual understanding and the awareness of previous failed partnerships.

3. The way forward: Insights from innovations diffusion theory

More systematic insights can be gained from an innovation diffusion theory perspective. Innovation theory shows that a handful of progressive and curious innovators and early adopters tries out innovative technologies. They are open-minded and willing to test new solutions even if they are not perfect. This might hold for the current IBLI customers. Yet, moving beyond the early adopters requires overcoming a chasm before reaching a major part of the population (figure 2).

If this chasm cannot be crossed, the product will ultimately fail. This is why pilots are often successful and scaling often fails. A product must be designed not only for the early adopters but also for the needs and expectations of the whole target group.

Innovation diffusion research has identified four criteria that are critical to bridge the chasm: ‘compatibility’, ‘complexity’, ‘trialability’ and ‘visibility’. Applied to the case of IBLI, incorporating those criteria into product design and the distribution can foster product uptake:

• **Make the product culturally and financially compatible:** an innovation must be perceived as consistent with the existing values, experiences and needs of potential adopters, and ideally involves users in the design process. For the case of IBLI, previous negative experiences of pastoralists with conventional insurance models or vendors of other products could be addressed more proactively. This could for instance be done through the involvement of existing and accepted local actors (e.g. agrodealers) in the communication and distribution. In addition, risk aversion and limited household budgets led to the situation that mostly better-off families purchased an insurance product. Pricing and payment modalities according to the local context is thus crucial.

• **Reduce complexity:** a product should not be perceived as complicated. The client should fully understand the personal benefit, not so much how it works technically. Pastoralists often can’t read maps and have even more difficulties to understand satellite images. In addition, insurance products require a certain level of financial literacy, which played a major role in hindering IBLI uptake. Simplifying communication or insuring pastoralists through typically financially more literate existing aggregators might be avenues to consider.

• **Customers should be able to try out the product:** insuring livestock is costly. IBLI policies have to be purchased for at least one season. To minimize the perceived investment risk for pastoralists, they can initially insure only a part of their herds. Furthermore, discount coupons or bundling insurance with veterinary products might lower the entry barrier for pastoralists.

• **Make results visible:** typically, the marketing efforts concentrate around sales. Yet, communicating the benefits of insurance at the time of payout is as important. This can also include exchanging experiences and information between insured pastoralists, building on the idea of user communities. It is important to educate the customers against the notion that the lack of a pay-out in one year is not to be considered as a loss, since insurance is about stability and a long-term benefit.
Communicate the relative advantage: the potential advantages of a new product have to be explicitly compared to alternative solutions. In some regions, the current alternatives for pastoralists include humanitarian aid, which is free for the beneficiaries. Promoters of IBLI and humanitarian agencies should rethink and innovate for these different modalities to complement and not to compete with each other.

4. Strategic implications

Insights from the theory of innovation diffusion on the design and delivery process of insurance products in general as well as the case of IBLI in particular have higher-level strategic implications for how donors should approach the introduction of insurance solutions as viable elements for disaster risk reduction.

The introduction of insurance products requires serious implementation research. To date, the largest part of the funds and efforts goes into the technical design of index products. This has to change. Product design and deal execution from the perspective of prospective clients not only needs more attention but has to become an area of applied research and development of its own, on equal footing with developing remote sensing algorithms. Currently, a small group of players is typically in charge of distribution. This needs to be revisited. Understanding the existing transactional networks, trust relationships and incentives has to become the starting point to identify promising partners.

Such an approach to product design and distribution also requires a new set of skills to be involved in insurance initiatives: not only technical experts from agriculture, remote sensing and insurance actuaries but also social scientists and distribution specialists. Insurance projects need to allocate sufficient funding, time and expertise to come up with solutions that can bridge the chasm and reach the majority.

References:


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