



CASE STUDY

**Building climate resilience
agro-ecosystems of
smallholder farming**



InsuResilience
Solutions Fund

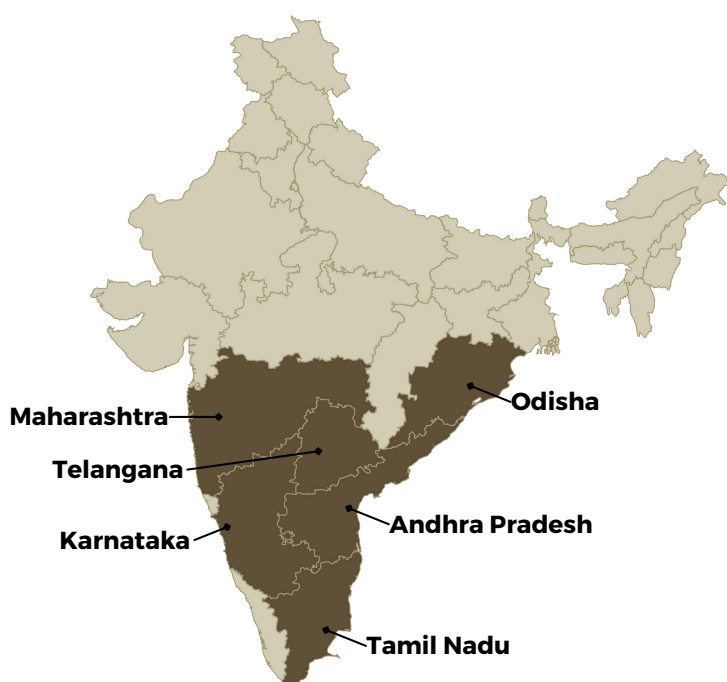
2024



InsuResilience

Solutions Fund

OVERVIEW



The overarching objective is to build climate-resilient agro-ecosystems by enhancing the climate-smart agricultural practices of smallholder farming communities by means of risk management practices, including non-financial advisory services and insurance products that address multiple risks associated with extreme weather events.

PRODUCT CHARACTERISTICS



Target group

Smallholder farmers (field size < 1 ha)
1,250,000 beneficiaries by 2025



Target region

Tamil Nadu, Karnataka, Telanaga, Andhra Pradesh, Odisha and Maharashtra



Insured asset

Agricultural production costs on proportionate basis, dairy animal (including cattle, goats and sheep)



Insured peril / hazard

Drought, excessive rainfall (plus accident and natural deaths for indemnity-based livestock)



Insurance type

Micro-scheme: combination of mutual cover with co-insurance with mainstream company



Partnership

DHAN Foundation & People Mutuals
Federation Mutuals
IBISA

OUTCOMES



- Increased resilience to climate risks through risk transfer mechanisms, such as insurance products, benefiting at least 100,000 Indian farmers across six states in India.
- Enhanced resilience through various on-farm risk management activities and by providing access to risk management advise and data. This has been supported by establishing 100 agri-advisory centers, serving at least 100,000 farmers.
- DHAN community banking program focuses on women's empowerment in rural, tribal, and coastal areas; offers gender-sensitive training and capacity-building for impoverished women.



100K
Beneficiaries



100
Agri-advisory centers



PROJECT SUMMARY

ISF supports the scaling-up and improvement of index-based crop insurance and indemnity-based livestock solutions for vulnerable smallholder farming households across six Indian states, aiming to strengthen their resilience against extreme weather events.

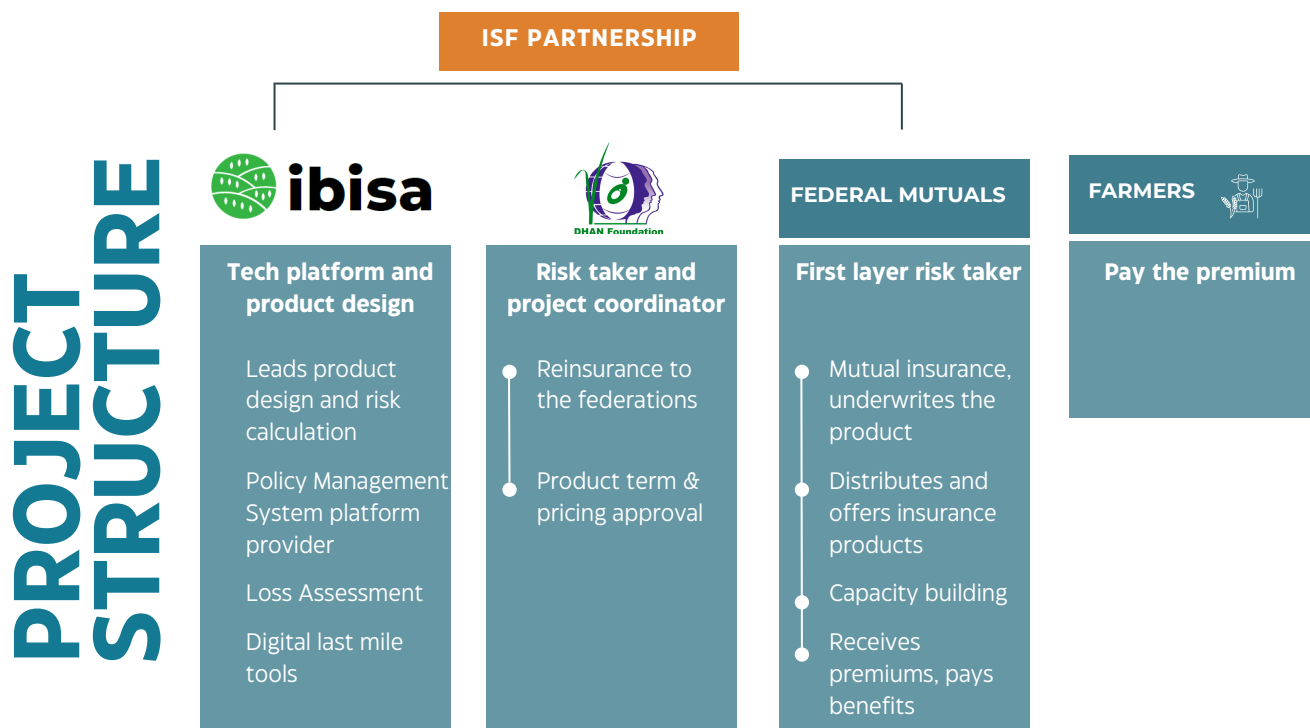
The index-based crop insurance and indemnity-based livestock insurance products were developed and piloted by the Project Partners between 2019 and 2021, progressively covering a growing numbers of farmers. DHAN, People Mutuals and IBISA specifically target poor and vulnerable smallholder farmers cultivating crops and raising livestock that are often excluded from existing safety net programs or insurance products. These insurance offerings are complemented by farm risk management advice. Additionally, the livestock insurance can serve as collateral and by pre-financing premiums via loans, the project enhances farmers' access to finance.

The Project Partners leverage the institutional set up of the Federation Mutuals (FM), which are farmer-owned and governed trusts.

These mutual risk sharing groups adopt a strong demand-driven approach, combining insurance coverage with knowledge transfer and education on smart farming practices , risk mitigation and coping strategies.

FM staff manage onboarding processes (digitally) and premium collection (in cash). For parametric crop insurance, loss assessment is automated following a trigger event, with the IBISA platform generating a ledger for affected Federation Mutuals. The FMs handle pay-outs, register settlements and collect farmer feedback.

For mutual livestock insurance, loss assessment is conducted by a mutual committee. Following a claim, the committee verifies the loss, while the Federation Mutuals manage pay-outs, register settlements and collect feedback from farmers. Such feedback is used to refine and improve the insurance products.





KEY TAKEAWAYS

- ✔ Risk awareness and ownership is critical to enhance resilience of farmers
- ✔ Bundling insurance with advisory services provides significant value added for farmers
- ✔ Risk layering is an important strategy to cover multiple risks but also to introduce coverage for new risks or introducing new financial products for existing risks.
- ✔ Premium support for the most vulnerable may need to be sustained over the long term to ensure continued participation and resilience.
- ✔ Mutuality enhances trust and ownership leading to higher uptake and retention.
- ✔ Leveraging technology enhances transparency, facilitates processes, and reduces cost.

LESSONS LEARNED

WILLINGNESS TO PAY FOR INSURANCE ▼

- ✔ **Strong involvement of farmer's feedback in product design:** Farmers' needs assessments, community consultations, and critical analysis have been integral to designing the livestock and crop insurance products. This participatory approach strengthened trust in the products and project partners, resulting in higher product uptake.
- ✔ **Focus on capacity building activities through Agri-advisory Centres:** Project partners established 100 Agri-advisory Centers (Risk Management Centers, RMCs) to provide financial literacy trainings, conduct field visits, and create multilingual training materials. These efforts ensure effective communication and accessibility for diverse members, leading to:
 - Greater awareness and understanding of the role of insurance in absorbing financial shocks.
 - A notable increase in livestock enrolment, particularly goat coverage with growing acceptance of product.
- ✔ **Value of mutuality:** The mutuality-based approach fosters strong ownership among farmers, enhancing trust in both the partners and the insurance product.
- ✔ **Premium support** enhances the willingness of farmers to purchase insurance.
- ✔ **Timely payouts and various payout ceremonies** have improved the perceived value of the insurance product, further boosting farmers' willingness to pay.

DISTRIBUTION ▼

- ✔ **Self- help groups (SHGs) and community-based organizations (CBOs)** operate on a foundation of trust and solidarity. Members often pool resources, making them ideal for collective insurance purchasing and premium payments.
- ✔ **Cost effectiveness.** SHGs serve as extremely cheap/low cost distribution channels from the providers' perspective. Reduced admin costs and high scalability.
- ✔ **Connectivity.** SHGs and CBOs are deeply embedded in rural and low-income communities, providing access to those populations that are difficult to reach through conventional insurance channels.
- ✔ **Peer Influence.** Members influence each other's decisions, facilitating awareness about insurance and encouraging enrollment.
- ✔ **Consumer protection.** Potential challenges include member expectations, addressing moral hazard, mitigating risk pooling and adverse selection issues, and reducing dependency on donor funding.



PREMIUM SUPPORT

- ✔ **Premium support targets marginal and small farmers** (<2 acres, <5 goats), rainfed and tank fed farmers, families below the poverty line, women farmers and women headed households, destitute individuals, widows, differently abled people; addressing their unique challenges across different locations, The vulnerable target group is identified in different ways - use of data from Reserve Bank further validated via participatory rural appraisal studies, or often members bringing in or vouching for neighbors/friends.
- ✔ **Premium support** of 80% led to 5-10% of the vulnerable target population now enrolled.
- ✔ **Communication.** Through RMCs, beneficiaries were informed of the exact share of their premium subsidized, ensuring transparency.
- ✔ **Ability to pay.** During product iterations, a premium fee of 5% was found to be widely acceptable among the targeted farmers.
- ✔ **Longer term** premium support is needed to ensure continued participation from the most vulnerable groups.

BUNDLING

- ✔ **Pricing challenge.** Establishing appropriate and affordable pricing for bundled products can be a challenge, especially when balancing the coverage of multiple risks while remaining competitive.
- ✔ **Customer Understanding.** Customers, especially in low-income and/or rural areas, may find it difficult to understand the concept of bundling, leading to lower adoption and potential dissatisfaction.
- ✔ **Risk layering.** Besides bundling with advisory, inputs, minimum price support, Dhan also bundles various financial (credit) as well as insurance products, i.e. life and health insurance offered with crop and/or livestock for holistic protection - via the FMs. Farmers' prior positive experience with life/health insurance reportedly makes them more open to try crop/livestock insurance leading to higher adoption rate. Farmers specifically spoke of how receiving payouts in one area increases their understanding and interest in other areas or insurable assets. Many households juggling up to 10 insurance covers through enrollment. Savings groups are essential here as farmers reported paying premium for multiple covers through savings.

TECHNOLOGY

- ✔ **Collaboration** between an Insurtech and SHGs and CBOs creates a strong value proposition by enhancing transparency, reducing costs, facilitating processes, and also enhancing trust and ownership among users.
- ✔ **Land data visualization:** Project partners provided historical data on triggers and events together with a publicly accessible tool that allows farmers to view premium pricing at different trigger levels, which proved to be highly valuable for informed decision-making.
- ✔ **Index design:** Using mm of precipitation as an index for excessive rain/drought is preferred over NDVI (which was used previously) as it is easier to explain to farmers.
- ✔ **Digital onboarding deployed for livestock insurance** is recognised as best practice.

BASIS RISK

- ✔ **Back-testing data and multiple reporting sources** were useful methods to reflect local conditions and reduce basis risk.
- ✔ **Communication and regular meetings** with farmers and education on basis risk increased transparency and trust in the product and project partners.
- ✔ **Product simplification** increased farmers' understanding and trust in the product.
- ✔ Offering a **single, straightforward crop insurance product** was preferred over multiple similar options with differing details, as complex products can reduce understanding and adoption.
- ✔ **Regular monitoring of customer complaints** proved useful for identifying and addressing potential basis risk issues.

ENABLING REGULATION

Mutual insurance in India is “innovative” in the sense of falling outside the realm of typical insurance products and thus is made possible under a regulatory sandbox arrangement. Mutual insurance is allowed to work under certain conditions, (e.g. no-profit model) which Dhan ensures adherence to. Government has an “insurance for all by 2047” vision and is enabling inclusive approaches esp. targeting rural and social sectors.



**InsuResilience
Solutions Fund**

www.insuresilience-solutions-fund.org