



SUCCESS FACTORS

Agricultural insurance for development
Advancing Climate Risk Insurance plus
(ACRI+)



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Background

In 2014, the Munich Climate Insurance Initiative (MCII) e.V. and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH devised a set of success factors for the implementation of insurance schemes in the agricultural context. They were derived from an analysis of lessons learned based on the practical experiences gathered by both organizations in implementing agricultural insurance. These success factors were peer-reviewed by expert practitioners. In the course of the ACRI+ project (2015-2018), we identified a need to update the original set of success factors by incorporating more recent lessons learned that were gathered through the project as well as by other actors in the field.

The success factors provided below represent a synthesis of a series of knowledge management products in the context of the project and are aimed at a wider audience of stakeholders that wish to apply commercial agricultural insurance concepts in developing country contexts. The success factors are primarily relevant for micro-level insurance, but some aspects are also applicable to meso-level (portfolio) insurance and macro-level insurance.

SUCCESS FACTORS



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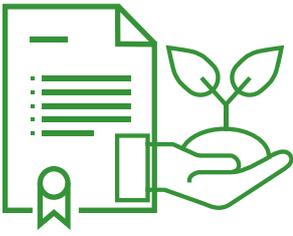
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SUCCESS FACTOR

Linking agricultural insurance to national agendas

Agricultural insurance can be an effective instrument for increasing farmers' resilience and enabling them to grow their businesses. Agricultural insurance has an impact on a broad range of policy objectives – from agricultural production and food security to climate change adaptation, disaster risk management and social protection – while being an instrument of the financial sector. It is therefore important that the development objective and strategy for agricultural insurance is clearly defined and agreed upon by all related government bodies. The development objective for agricultural insurance must be set taking into consideration the national development agenda including related government policies on climate change adaptation, disaster risk management and disaster risk financing. The strategy for establishing a financially sustainable market for agricultural insurance must take into account all other policy interventions that impact on this sector.

To achieve the highest possible and sustainable impact, it is important to embed insurance in comprehensive / integrated risk management strategies that increase resilience of the rural population. Regulatory environments can provide important incentives to include policies and measures for risk reduction and climate change adaptation to reduce the overall exposure of vulnerable farmers. Linkages between agricultural insurance and other measures, including – inter alia – risk assessments, early warning systems, land-use planning, waste management, forest management, irrigation techniques, grain storage, and pest management can be identified and strengthened to increase the effectiveness of the overall risk management effort.

The policy objectives and the government strategy for agricultural insurance need to be built on a broader stakeholder consensus. The consensus-building process requires a formalised setting to ensure that the stakeholders have the mandate to design policy measures for inclusion in the national budget. The process must involve not only the line ministry most closely associated with agricultural insurance, usually the ministry of agriculture, but also the agencies in charge of climate change, social protection, disaster risk management, and rural development. In addition, insurance regulators and supervisors play a critical role in developing a sound and viable market for agricultural insurance.

Key to the successful implementation of the development strategy for agricultural insurance is the setting of realistic targets, and the basis for sound planning is the availability of data. The government must base the development of its policy for agricultural insurance on the analysis of data on farm production, rural incomes, risk exposure of agriculture, weather patterns, and impact of shocks on households. Evidence-based policymaking also requires a sound knowledge of agricultural insurance to avoid unrealistic expectations among farmers, civil society and governments about what insurance can deliver.

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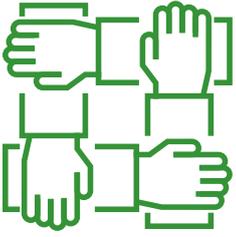
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SUCCESS FACTOR

Public-private cooperation

Insurance companies are core actors in the agricultural insurance market. But without an enabling policy and regulatory framework, and without supporting infrastructure and services, no market can grow. The public sector plays a critical role in creating a conducive environment for the sector to thrive. The following government contributions add most value to the development of the sector and, therefore, provide the best return on investment for public funds: (a) the creation of a conducive policy, legal and regulatory framework; (b) the provision of public goods, in particular providing data or raising insurance awareness; (c) support for risk financing – e.g. by facilitating access to reinsurance or acting as the reinsurer of last resort; and (d) the provision of supporting market infrastructure and services, for example by investing in human resource development, or the strategic use of social safety nets.

The task of creating a conducive policy framework for agricultural insurance is not the domain of government actors alone; it also requires the active engagement of the private sector and civil society. An inclusive process ensures that the vision for the agricultural insurance sector is shared by everyone and that all stakeholders are motivated to participate in its development and contribute with their resources.

A regulatory environment can provide an important supporting function in facilitating the roles of (re)insurance actors, governmental bodies, civil society stakeholders and donors. It is important that all stakeholders have a clear understanding of their respective roles in the market and of what kinds of contributions are expected from them. These roles must be clarified through a public-private dialogue that responds to the needs and concerns of all involved parties.

An important issue is defining the layers of risk that the farmers or value chain actors, insurance companies and government will assume. In general, farmers retain all production risks that can be managed and reduced at the farm level (e.g. through effective pest management) and all risks arising from external events that occur with a high frequency but that have a small impact on their production, such as minor variations in annual rainfall. For all low- to medium-frequency events that impact more severely on production, agricultural insurance transfers the risk to markets. While the medium risk layer is assumed by the local insurance industry, the highest risk layer needs to be reinsured on the international reinsurance market. To ensure that as many farmers as possible have access to affordable insurance, the government can finance catastrophic risk layers or act as a reinsurer of last resort, which includes coverage of events like severe drought. Financing the catastrophic risk layer complements other government interventions for adaptation and disaster risk management (DRM). The rationale for the use of public funds for financing risk layers is that governments have a moral obligation to assist their citizens during disasters; but instead of providing relief on an ad-hoc basis, agricultural insurance provides a transparent and efficient platform to ensure farmers receive financial relief in a timely manner. When the government finances this catastrophic risk layer, insurance becomes more affordable for farmers, which helps to increase outreach.

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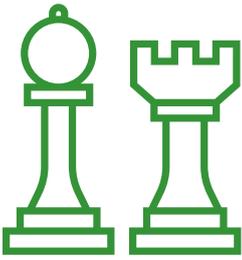
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SUCCESS FACTOR

Competitive markets and a level playing field

Given the developmental impact that agricultural insurance has on the livelihoods of farmers and their families, governments often directly engage in the provision of insurance services. In many countries, public insurance companies play an important role in agricultural insurance. It is key that public insurers apply sound business principles and base their products on actuarial calculations. Subsidizing premiums for farmers through their other lines of business is not a sound business model. If there is a political decision to use government funds to subsidize premiums in order to make insurance more affordable to low-income farmers, these premium subsidies must be provided through the national budget and not through the business operations of the public insurer. The impact of not doing this is that state-owned insurers lose their competitive edge in other lines of business and are not able to carry out their policy objective to deliver quality insurance services to the public. However, minimizing the profit margin when operating in the low to middle income segment in developing countries can help insurers and re-insurers to reach scale and open new markets.

Competitive markets are best geared to respond to farmers' needs and to offer tailor-made insurance products. It is the government's responsibility to ensure a level playing field. This is particularly important in countries where state-owned insurers compete with the private sector. Policymakers and the regulator need to create a framework that provides all market players, public and private, with the same access to infrastructure and services. In countries where premiums are subsidized, all insurance companies must be eligible to participate in the subsidy scheme, provided they fulfil the conditions set by the government (e.g. they target small-scale farmers).

Fair competition is crucial in all aspects of the agricultural insurance market, in particular the access to reinsurance, distribution partners or data. For example, if a distributor has considerable reach and an exclusive sourcing right to the insurance product from one insurer then other insurers cannot join the market. Where exclusive arrangements are set up in pilots it is important to recognize that they may need to be made more accessible to other insurers in the future.

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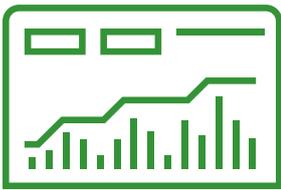
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SUCCESS FACTOR

Business orientation

Agricultural insurance can be offered by the private sector as well as through government programmes such as risk pooling, or as a combination of private and public sector engagements.

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Markets for agricultural insurance grow when insurance companies see this sector as a business opportunity and not as a corporate social responsibility. Treating farmers as customers ensures that their needs are reflected in the design of insurance products and that the insurers will try hard to add value to the products they are offering them.

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The basis for the business-oriented growth of agricultural insurance is senior management commitment, adequate budgets for product development and business roll-out, and a dedicated and knowledgeable workforce. It is essential that the capacity of staff working in local insurance providers is built up with the support of government, international donors or reinsurance partners.

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The insurance premiums have to reflect the risk exposure of the farmer, the cost associated with servicing the client, and all other costs involved in the business, including the cost of finance. Offering products that are correctly priced is the only way to ensure that insurers can run their business profitably and continue to offer insurance to farmers in the long run.

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Insurance is a game of big numbers. To operate successfully, an insurance scheme needs to reach scale to sufficiently spread the risk. Because many insurance companies lack experience in dealing with agricultural insurance, they often approach the market by piloting a product. It is very important for insurers, governments and donor agencies to understand that pilot testing is not a suitable approach for assessing the general viability of an insurance scheme. Pilot tests only cover small geographical areas, run for a limited period, and do not diversify and spread risk sufficiently. As a result, they may have a very high (or very low) claims ratio or considerable volatility of outcomes. The assessment of the viability of an insurance scheme primarily needs to be based on actuarial calculations that factor in long timeframes and larger geographical spreads. However, pilots are a suitable approach for testing the use of new technologies, receiving direct customer feedback on product features and processes, and monitoring the impact of insurance on farmers' livelihoods.

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All the insurers' costs related to their agricultural insurance offer must be reflected in the premiums they charge. There is a tendency among donor agencies to provide insurers with financial support, such as sponsoring farmer interactions and field agents, to cover some of the costs involved in introducing new agricultural insurance products. While this often helps to incentivize insurers entering the market, it also bears the risk that the insurer is not able to continue with the provision of services once the donor support has ended.

The key for success lies in developing a realistic, long-term business plan. Such business plans must set out how the insurer will get its agricultural insurance portfolio to achieve the scale required for it to be sustainable in the long run. Clear business growth targets need to be established that show how the company can move from developing and piloting a product to delivering the service on a large scale. The long-term plan must factor in all limitations present in the market, such as the shortage of distribution partners in certain locations.



SUCCESS FACTOR

Access to data

A sound risk, needs and context assessment based on comprehensive data is crucial for developing a successful insurance product. This allows to identify potential clients, their most pressing risks and needs and can help to identify where an insurance product could fill gaps in existing risk management strategies. Furthermore, a cost-benefit analysis is important to evaluate whether insurance is the right tool in a given context or if other risk management options provide a better return on investment.

In general, agricultural insurance offered by the private sector is a business transaction based on the quantification of risk. The basis for all calculations of risk exposure in agriculture is sound data. Lack of data makes insurance companies shy away from agricultural insurance, either because the uncertainty makes it impossible to calculate risk or because the cost required to generate data makes the business model unviable.

An important contribution that the public sector can make to the development of agricultural insurance is to generate data and make that data available to insurance companies. Insurers should have a right to access data that has been generated with taxpayers' money, such as weather data generated by state meteorological services, historical yield data or past and current crop data. To support this data generation, governments can also provide insurers with access to their infrastructure and human resources (e.g. through a public-private partnership where extension officers from the ministry of agriculture collect farm data). In addition, donor agencies can support the development of agricultural insurance by making data collected within their projects available to insurers.

Providing this data free of charge and easy to access to insurance companies is a smart way for governments to provide fiscal support for agricultural insurance. The government avoids market distortions and encourages a competitive business environment by granting all insurance companies, public and private, equal access to data. The rationale for providing data without charge is that insurance companies incur lower levels of cost when developing products or monitoring the performance of their products and are therefore able to offer lower premiums to farmers. On the other hand, the private sector such as reinsurance companies can make a valuable contribution by offering access to data collected by them and thereby help making access to data a public good.

A key issue is the trustworthiness of data. Private insurers may question the accuracy of data issued by government agencies as they fear political interference (e.g. that figures on agricultural production are inflated to boost investment confidence). In such cases, insurers will be unwilling to pay out compensation that is determined using data generated by government agencies, such as production figures for area-yield index products. For this reason, data generation needs to be transparent and carried out on the basis of verifiable standards. The introduction of additional verification layers (e.g. data audits) helps to further increase confidence in data reliability. Standardized regional or global data collection and processing guidelines and standards can facilitate the use of data sets on weather data, loss data or socio-economic data across different countries or regions.

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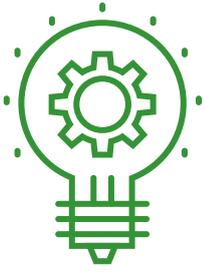
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SUCCESS FACTOR

Efficient distribution channels and innovative technology

The high transaction costs involved in serving low-income clients in developing and emerging market economies is a major deterrent for insurance companies. Challenges that inflate operational costs include data collection, processing and management, premium payment mechanisms, and claim verification and settlement. Innovative technology can support these processes in many ways, for example by facilitating data collection to identify potential clients and by improving the transparency and efficiency of payment systems to reduce costs, prevent fraud and increase the timeliness of payouts.

Innovative products that allow insurers to reduce their operational costs, such as weather-index insurance, provide new market opportunities. However, continued research and development is required to further improve these products and take advantage of emerging technologies, such as satellite-based crop monitoring. Basis risk remains a major challenge and a source of product dissatisfaction among farmers. The success of an agricultural insurance scheme hinges on its capacity to further reduce basis risk.

The use of modern technology in insurance product design is only one aspect of successful insurance schemes. Distribution and administration are two major cost drivers. Any innovations related to making these processes cheaper (e.g. using tablets for data collection and client registration or using mobile money for the payment of compensation) also have a significant impact on the viability of agricultural insurance.

Innovation is not limited to the adoption of modern technologies. Innovative distribution models, such as those using rural cooperatives, financial institutions, contract schemes or input providers as aggregators, show great promise despite their lack of high-tech solutions. Government programmes, such as social protection programmes, can also be means to facilitate large-scale deployment of insurance. Innovative distribution models help to reduce the costs to the insurer and, at the same time, lead to the creation of higher-value bundled products and services for farmers, such as insurance linked to credit or insurance associated with the purchase of agricultural inputs.

While it is true that innovations offer great opportunities to reduce costs and turn affordable agricultural insurance into a profitable business, the limitations of technology need to be recognized. Insurance is a business based on trust. Insurers should therefore ensure sufficient personal interaction with their customers, be it conducted directly or through distribution partners. The direct feedback received from farmers also helps to better calibrate technology so that insurance products more accurately capture production losses.

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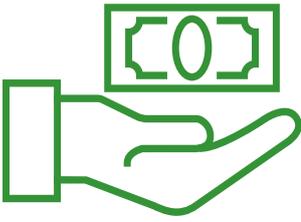
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SUCCESS FACTOR

Affordability and value for the customer

Premium levels are a major determinant for insurance demand among low-income farmers. Premiums must be affordable and provide good value to the customer. The design of products must take into account farmers' income levels and cash flow, as this defines their ability to pay for insurance. The cost of production is another important factor – e.g. it is unlikely that farmers will spend half of their annual investment on an insurance premium. Pre-financing the premium or adapting the premium payment to times when financial liquidity is more favourable (e.g. after the sale of produce) can provide a welcome flexibility that helps farmers in their decision whether to purchase agricultural insurance. Insurers need to carefully consider these aspects when developing products. However, the pricing of products ultimately depends on the risk and cost factors that go into the actuarial calculations. A core parameter for actuarially correct prices is farmers' risk exposure. The product design determines what levels of risk the product assumes: By setting higher levels of risk retention for farmers, insurers can reduce their risk exposure and, thus, offer less expensive products. In this context, linking insurance products with incentives for risk reduction and loss prevention, and investing in capacity development on risk reduction measures can also contribute to reduced risk exposure and eventually to reduced premiums.

An alternative way to reduce insurers' risk exposure is through government support. The catastrophic risk layer is an area where public sector interventions may be justified. Depending on the degree to which the impacts of large-scale catastrophes (i.e. the low-frequency layer, such as extreme drought) are being passed on anecdotally or integrated into their respective risk cultures, farmers might not adequately consider those risks and are therefore unwilling to pay for insurance covering such events. But when the worst happens, the government is required to respond. To address these issues, governments can opt to provide financial support for reinsurance cover or act as reinsurer of last resort. By assuming the catastrophic risk layer, governments help to bring down the cost of agricultural insurance for low-income farmers.

In cases where, despite insurers' and governments' best efforts to reduce risk exposure and cost, premium levels are higher than farmers' willingness-to-pay, premium subsidization can offer a last resort. When taking this option, it is crucial to clearly define the rationale for providing subsidies, set verifiable policy objectives and targets, and put in place a clear exit strategy or long-term financing strategy. Subsidies need to be structured so that they benefit low-income farmers; setting fixed-amount subsidy levels is just one way to do this. Governments should monitor that premium subsidies do not lead to risky and unsustainable farming practices as farmers do not have to bear the full cost of their risk.

Willingness to pay for insurance is also determined by the value the product offers to farmers. The level of cover is a fundamental aspect for farmers – e.g. if a product indemnifies farmers for only a fraction of their actual loss, or even for the investment cost only, they will not be willing to buy insurance. Only a compensation level that has a tangible impact on their household situation provides an argument for farmers to pay premiums.

When designing an insurance product, it is important to not compromise the coverage that the clients need in an attempt to reduce the price. A participatory approach in product design makes sure that the insurance product meets the needs of the target groups and increases ownership of the

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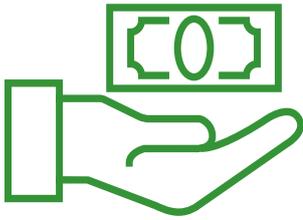
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SUCCESS FACTOR

Affordability and value for the customer

product. Bundled products which combine insurance with access to other services such as credit or agricultural advisory services can also be a way to increase client value.

The take-up of insurance is determined not only by farmers' willingness but also their ability to pay. Farmers incur production costs at the beginning of the growing season for, among other things, inputs or land preparation. Therefore, during this period they often lack the resources required to pay for insurance. Providing farmers with access to financing options for premiums (e.g. through bundling with agricultural credit) can help to increase take-up rates.

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SUCCESS FACTOR

Insurance awareness and consumer protection

The success of agricultural insurance depends on farmers' demand for it. But while there is clearly a need for agricultural insurance, the demand for it among low-income farmers may remain limited. A participatory and inclusive approach can be key to increase client value, and to create trust, ownership, demand and political commitment.

An essential component within any agricultural insurance initiative is to educate farmers about the importance of insurance and how the products help them to overcome difficult times. It is equally important to show farmers the limitations of insurance so as not to create unrealistic expectations. Raising farmers' awareness about insurance in general is a major task, but public-private cooperation provides an effective approach for sharing this burden. For example, joint education campaigns can be run with the insurance regulator and the association of insurers.

Marketing is key to achieving a successful outcome. Individual insurers therefore need to run information campaigns and events to stimulate farmers' interest in insurance. During such marketing events it is critical that insurers provide information on the benefits, cost structures, and consumer rights and responsibilities in a transparent and comprehensible way, as this will build and sustain trust. Government consumer-protection regulations, or standards set by the insurance sector (e.g. codes of ethics) need to provide clear guidance to insurers on client education and information standards.

Building up trust in insurance products and insurance companies is crucial. Negative experiences with insurers can result in low demand for many years. The relevant authorities therefore need to ensure that consumer rights are safeguarded and contractual commitments met by effectively supervising insurers' operations. Claims must also be settled rapidly. Establishing mechanisms for farmers to ask questions and lodge grievances is also important, as they are elements of consumer protection that help to build trust.

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SUCCESS FACTOR

Monitoring for results

An effective monitoring and evaluation (M&E) system is important to ensure the long-term success of an insurance product. Performance should be measured for core indicators such as loss ratio to evaluate the actuarial performance of the product, renewal ratios to measure customer satisfaction, or the growth ratio to measure market penetration. Furthermore, key performance indicators are a source of business intelligence that allow companies to adapt to evolving market realities, while ensuring that the product remains sustainable and relevant to customers.

At the same time, the product should complement the broader development objectives in line with national development agendas. Area covered under insurance and number of farmers (loanee & non loanee) covered by insurance are important statistics for monitoring the national development agenda. Subsidies in insurance premium can accelerate the insurance penetration, however they can also lead to moral hazard and reduced loss prevention and loss reduction measures being applied by farmers if not effectively linked with incentive framework as explained earlier.

Safeguarding sustainability is crucial for the success of insurance schemes. Many schemes are short-lived because they often are not rooted in the needs of potential beneficiaries and/or do not benefit from sufficient financial stability to allow the insurance product to settle in and unfold its full potential. Therefore, it is important to consider a long-term perspective for project planning and financing taking into account that insurance approaches need several years to succeed. An inclusive approach should be promoted, ensuring that insurance products also reach the poor and most vulnerable. They should be tailored to local needs and conditions including the consideration of gender aspects and encouraging good agricultural practice. In addition, the developed insurance schemes should not incentivize environmentally unsustainable practices.

Hence, a success factor for an agricultural insurance system is a robust monitoring of the results and impact of the implemented approach. Therefore, government stakeholders should establish effective M&E systems for government-led insurance schemes, or set robust M&E standards for stakeholders in charge of implementing a given insurance scheme. Managing the results ensures that there is a constant knowledge exchange and important lessons can be used to increase the effectiveness and efficiency of the insurance approach over time. This also contributes to embedding insurance products into a comprehensive risk management to achieve the highest possible impact.

In the context of climate change, agricultural insurance can play an important role in increasing resilience against weather impacts. Internationally launched initiatives such as InsuResilience by the G7 countries and other publicly funded initiatives show that there is a growing international momentum to support insurance approaches, and especially those with a pro-poor focus.

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RECOMMENDED READING

Hess, Ulrich, and Peter Hazell (2016). *Innovations and Emerging Trends in Agricultural Insurance: How can we transfer natural risks out of rural livelihoods to empower and protect people?* Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Eschborn, Germany.

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UNICEF/Vlad Sokhin, back cover.

About ACRI+

ACRI+ is implemented by MCII and GIZ and financed by BMU and is part of the Promoting Integrated Mechanisms for Climate Risk Management and Transfer programme (ICRM), implemented by GIZ.

www.climate-insurance.org/projects/advancing-climate-risk-insurance-acri

About MCII

The Munich Climate Insurance Initiative was initiated as a charitable organisation by representatives of insurers, research institutes and NGOs in April 2005 in response to the growing realization that insurance solutions can play a role in adaptation to climate change, as suggested in the UN Framework Convention on Climate Change and the Kyoto Protocol. This initiative is hosted at the United Nations University Institute for Environment and Human Security (UNU-EHS). As a leading think tank on climate change and insurance, MCII is focused on developing solutions for the risks posed by climate change for the poorest and most vulnerable people in developing countries.

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