

Innovative Insurance Products for the Adaptation to Climate Change Project (IIPACC) Ghana

Project Description

Ghana is very vulnerable to climate change. By 2100, the mean daily temperature is expected to increase by three degrees Celsius and rainfall to decline between 9% and 27%; with increasing seasonal and spatial variations. As a consequence the frequency and intensity of droughts, floods, and other extreme weather events will increase. In addition, fertile and arable land will be lost. This is will lead to significant reductions in incomes and surging financial risks in agriculture.

To support Ghana to tackle the socio-economic costs and risks associated with climate change, the project “Innovative insurance products for the adaptation to climate change” (IIPACC) commissioned by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and implemented by German Technical Cooperation (GTZ) in cooperation with the National Insurance Commission and the Ministry of Finance and Economic Planning, aims at developing and introducing climate-relevant insurance products in selected value chains. To this end, the project will closely collaborate with regulatory and supervisory authorities, insurance companies and their associations as well as with the target group.

The results of the interventions will improve income and food security, supply of credit, and employment opportunities for the rural population in Ghana. Furthermore, it will contribute to attracting foreign direct investment in the selected value chains and to opening up international markets. Through the application of this innovative approach, the project is an important pilot for the whole of Africa and beyond. The lessons learned will be systematically collected and shared to facilitate the transfer of the approach to other countries.

Partner Institutions

- National Insurance Commission (NIC): The NIC is the regulator and supervisor of the Ghanaian insurance sector and has the mandate to support the development of the insurance industry.
- Ministry of Finance and Economic Planning (MoFEP): The activities of the project will be part of the work plan of the relevant sector strategies spearheaded by MoFEP; these are in particular the Government of Ghana’s Financial Sector Strategic Plan as well as the Rural and Agricultural Finance Programme.

- Ministry of Food and Agriculture (MoFA). MoFA supports the implementation of the Food and Agriculture Sector Development Policy and has extensive experience in the area of value chain development.
- Furthermore, the project collaborates with insurance companies, including Star Microinsurance and MicroEnsure that have already articulated a concrete interest in the project. A joint fact finding mission with MicroEnsure has already taken place. Further potential partners are GLICO Insurance, Donewell Insurance and Vanguard. Further, preliminary talks have taken place with Munich Re. Other partners include microfinance institutions (such as Opportunity International) and selected rural banks as well as selected sector institutions, including the Ghana Insurance College, Ghana Insurers' Association and local farmer organisations. The Ghana Meteorological Services Department will become an important partner in assessing the relevant climate data and potentially setting up the necessary meteorological infrastructure.

Objectives

Overall objective: The insurance sector in Ghana offers innovative and demand-oriented as well as economically sustainable insurance products against financial risks caused by extreme weather events and other forms of climate change.

Further objectives:

- The regulations of the new Ghanaian Insurance Law cover insurance products against financial risks caused by extreme weather events and other forms of climate change.
- Insurance companies, microfinance institutions and their clients understand the benefits, the costs, and the risks of innovative insurance products for the adaptation to climate change.
- The foundation is laid for the development of further insurance products for the adaptation to climate change through investments in the meteorological infrastructure as well as improved data collection and analysis.

Activities

- Analysis of the regulatory environment for climate-relevant insurance products. Subsequently, provision of advisory and training services to the National Insurance Commission for the revision of regulations and licensing procedures for insurance companies and products as well as for a review of the supervisory system.
- Analysis of the meteorological infrastructure. Subsequently, provision of advisory and training services to the Ghana Meteorological Services Department in the area of collecting and analysing of meteorological data for insurance-related purposes. If

necessary, pilot investments in the construction or further development of weather stations and other meteorological infrastructure.

- Analysis of climate conditions and weather dependencies of various agricultural products as well as quantification of damages resulting from extreme weather events through a feasibility study. Subsequently, selection of adequate value chains for the intervention.
- Detailed market research to determine the supply and demand for innovative insurance products for the adaptation to climate change. Subsequently, support development of at least two insurance products and relevant market development strategies (including cooperating with reinsurance companies and microfinance institutions).
- Facilitate business-to-business linkages between Ghanaian companies and international reinsurance companies as well as microfinance institutions
- Development of materials to improve financial literacy (videos, radio spots, brochures and posters) and to educate the public in general and farmers in particular on the benefits, costs and risks of climate-relevant insurance products.
- Support a regional exchange of experiences on innovative insurance products for the adaptation to climate change in Sub-Saharan Africa and beyond (in particular in the context of south-south cooperation with China, India and others).

Timeline and Budget

The project started at the end of December 2009 and will come to an end in June 2013.

The funds provided by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety will be disbursed as follow:

	EUR	Percent
2009 (Dec.)	55,185	2.45
2010	656,294	29.17
2011	594,143	26.41
2012	632,296	28.10
2013 (Jan.- Jun)	311,417	13.84
Total	2,250,000	100.00

Contribution to Economic Development and Poverty Reduction

Access to modern risk management instruments can enhance the social security of the population in general and farmers – the main target group – in particular. The protection against financial risks caused by random, non-influenceable events reduces the risks to drift into poverty through no fault of their own. Improving social security in such a manner

increases incentives to save and invest and to engage entrepreneurial activities for long-term benefits. Furthermore, it enhances the efficient use of resources by providing an alternative to inefficient risk-coping strategies (such as extreme diversifications of income sources). This allows farmers to invest in the irrigation of agricultural land and in perennial crops (such as mango, citrus fruits, cocoa, and rubber). This will lead to positive income and employment effects for the rural population.

Furthermore, agricultural insurance are an important link between different production stages of value chains and foster their development and stabilisation. In particular, the investment risks of the (international) lead investor declines, which can attract foreign direct investment and open up international markets for the rural population. In addition, insurance products help to cushion economic shocks for agricultural businesses. In the case of the occurrence of such a shock, insurance products will prevent that

- land and other production factors have to be sold
- loans cannot be serviced
- employees have to be laid off
- necessary expenses of those affected have to be cut (e.g. for health and food)
- children (in particular girls) are taken out of school to save tuition fees and to help to generate income

Agricultural microinsurance as explored by this project will reduce the credit default risks and therefore contribute to the stability of the financial system. In particular, microfinance institutions have a stronger incentive to provide credit to farmers. Microinsurance products for agriculture are often described as the missing link between enhancing the access to and reducing the costs of credit for agricultural businesses.

Potential for Scaling-Up

The project is designed to provide initial funding for the further market development of agricultural microinsurance in Ghana. After a successful piloting of the approach, other insurance companies are likely to come into the market and offer insurance products to reduce financial risks caused by extreme weather events and other consequences of climate change. Furthermore, the lessons learned can inform similar projects in other countries with similar climate conditions and agricultural value chains. To this end, the project will proactively collect and share lessons learned and facilitate a regional exchange of ideas. A potential transfer of the approach to other countries will be further enhanced by involving international (re-)insurance companies (in particular Swiss Re and Munich Re).

The National Insurance Commission, the Ministry of Finance and Economic Planning and the Ministry of Food and Agriculture are interested in the expansion of the pilot project and in the development of an enabling environment for agricultural insurances. In addition, there is the

chance in Ghana to integrate the specifics of agricultural microinsurance products into the development of the new insurance law, which can provide an enabling regulatory environment for further market development and scaling-up.

Innovative Approach and Closing of Knowledge Gap

Microinsurance products for correlated risks are a priority on the political agenda in many countries. However, the development of such products is in a very early stage and the lessons learned stem mostly from emerging Asian and Latin-American countries, such as India and Mexico. Apart from a few number of highly subsidised research projects, there are only very few successful pilot projects aiming at to the development of a commercially sustainable market for climate-relevant insurance products in Sub-Saharan Africa. In particular, there are no such products available in Ghana.

The project adopts a – in Africa unique – holistic approach and involves all relevant actors in the insurance sector (i.e. regulatory and supervisory institutions, research institutions, sector associations, training providers, product developers and suppliers, distribution channels and customers). Public-private dialogue as facilitated by the project will help to overcome structural obstacles for microinsurance for the adaptation to climate change and will help to avoid isolated applications.

Therefore, the project is highly innovative for Ghana and beyond. A structured collection and dissemination of lessons learned as will be conducted by this project will help to close the knowledge gap in this area.

Link to other Development Projects

Insurance products to facilitate the adaptation to climate change are high on the political agenda of the National Insurance Commission, the Ministry of Finance and Economic Planning, and the Ministry of Food and Agriculture. This topic is not yet part of the relevant sector plans of the Government of Ghana due to its highly innovative character. The Ministry of Finance and Economic Planning has however announced to incorporate this issue in the currently ongoing revision of its sector strategy. The project will work closely with the GTZ-supported “Programme for Sustainable Economic Development” (PSED) and the “Market-oriented Agriculture Programme” (MOAP). PSED already works with the National Insurance Commission on the regulation of microinsurance products and will incorporate the specifics of agricultural microinsurance in its work. PSED is also active in the area of microfinance by providing technical and financial assistance to rural banks and by supporting activities in the area of financial literacy. These experiences will help this project to develop sensible strategies to educate the public and raise awareness for agricultural microinsurance. The Market-oriented Agriculture Programme on the other hand has close relations with the

Ministry of Food and Agriculture and has access to more than 3500 farmers and their associations in four regions of Ghana. These contacts can help the project to develop and pilot climate-relevant insurance products. MOAP also supports the development of selected value chains, in particular pineapple, citrus fruits, mango, and chilli and supports the mainstreaming of the value chain approach within the Ministry of Food and Agriculture. These value chains will be interesting cases to study for the project and might offer the potential to pilot developed insurance products. The project is also currently in discussions with Munich Re to initiate a public-private partnership, which will offer the possibility for the Ghanaian insurance industry to cooperate closely with an international reinsurance provider on this issue. A potential cooperation with the planned “Rural and Agricultural Finance Programme” of the International Fund for Agricultural Development will be explored. Besides these, the project will cooperate with the GTZ-supported project on insurance instruments to adapt to climate change in China; the project “Alliance for Financial Inclusion”; the G8 partnership initiative “Making Finance Work for Africa” and the new “Access to Insurance Initiative” of the International Association of Insurance Supervisors.

Risk of Market Distortions and Subsidies

There is a general commercial risk that the price for the developed agricultural insurance products is too high for a pro-poor market development. Without subsidies, there is the risk that only a small portion of the target group (such as export-oriented agriculture or only particular value chains) will be able to afford a market-based protection against climate risks. Furthermore, there is the risk that only certain distribution channels (such as protecting agricultural loans through microfinance institutions) are economically viable.

However, offering subsidies to combat these challenges poses the risk of market distortions. Therefore, the project intends – in close collaboration with its partners – to gradually increase the complexity of the piloted insurance products, distribution channels and target groups. In addition, an open-minded conversation with the Ministry of Finance and Economic Planning and the Ministry of Food and Agriculture on the (potentially temporary) public provision of subsidies of selected distribution channels and target groups needs to be held. This approach has already been adopted in other countries (including USA and Mexico). Existing research on this topic tends to advocate for the adoption of smart subsidies (for example provision of technical assistance, funding of meteorological infrastructure, easing access to international reinsurance markets), which can substantially reduce the risk of market distortions. However, international experience in this regard is mixed. Therefore, the project intends to pro-actively and openly assess new developments in this area to ensure that market distortions are minimised as much as possible.

Furthermore, the project will have to start working closely with selected companies based on their capacity and willingness to invest in agricultural microinsurance. To minimize potential market distortions, the project will be open to all insurance companies in Ghana and developed concepts will be open-sourced and therefore available to all interested parties. This will further reduce the risk of market distortions.

Division of Labour between Project, Public Sector and Private Sector

Insurance products for the adaptation to climate change are highly innovative. So far, markets for agricultural microinsurance are almost non-existent in the developing world. As the functioning of such scheme is still being investigated (through projects such as this one), the risks associated with the development of these products for private insurance companies are high and the necessary skills to develop such products do not exist in Ghana. Furthermore, the development of potentially necessary meteorological infrastructure is expensive. Hence, the private sector will not be able to develop such products without any external assistance. The project will collaborate with local and international private insurance companies right from the start and will potentially embark on public-private partnerships (PPP) to ensure that the private sector can get actively engaged in the project.

The public sector in Ghana on the other hand has no experience with agricultural microinsurance. The GTZ-supported project will develop the capacity of the National Insurance Commission, the Ministry of Finance and Economic Planning and other partners and enable them to draw upon international experience in this area. The project has working relations with similar programmes around the world and can draw upon these experiences and lessons learned. Therefore, the project will not take over the role of the public sector. On the contrary, the project will develop the capacity and enable public institutions in Ghana to fulfil their role in providing an enabling environment for agricultural microinsurance.

In conclusion, due to the risky nature of such a highly-innovative approach, the initial costs involved in upgrading meteorological infrastructure and due to a lack of technical expertise in this area, other players, including the private and the public sector, are not yet in a position to drive the development of agricultural microinsurance in Ghana by themselves. The project sees itself as a facilitator and aims at supporting both the private and the public sector to get engaged in this area and to spearhead the development of agricultural microinsurance in the future.