

The primary objective of AgInsurance project is to develop and implement an optimal, self-sustained, market-based insurance system in order to provide better coverage to more farmers. Under this primary objective, we first started by comparing and contrasting the effective insurance schemes between the European Union and United States. The research team has performed an extensive analysis and examined almost all of the existing literature on the agricultural insurance starting from the ancient times. Several academic published studies, EU Commission reports, World Bank studies, and USDA policy briefings have been analyzed and summarized. The discussions with industry experts and government officials suggested that income insurance is used in the U.S. as an indirect agricultural subsidy to farmers.

Next, the researchers investigated the feasibility of European agricultural insurance schemes, in terms of sustainability and actuarial analysis. We created a hypothetical insurance portfolio model, where we estimated the risk exposure of European states in agricultural insurance. Our results suggested that Nordic countries have the lowest risk exposure, whereas Southern states have the highest risk exposure. The total risk carried out by the Greek government was strikingly higher compared to other Mediterranean states as the country imposes mandatory insurance policies backed by state insurance agencies.

Once we developed the macro framework, we looked for micro-models to offer alternative insurance schemes. In order to eliminate the undesirable outcomes of information asymmetry, we developed index-based insurance. Our insurance scheme is more cost efficient, which enables it to provide coverage against more risks such as drought. Unlike sophisticated indices, our index is based on readily available meteorological data. The indemnity payments are linked to the pre-defined threshold parameter which is based on mutual agreement with the insurer and the insured. It is updated with relatively simple forecasting techniques that implement the trending and seasonal nature of the data. This model is currently employed at the pilot stage to cover drought risk, but it is easily scalable to European countries and associates as long as there is enough demand for it.

The attitude of farmers against insurance is tested by means of interactive training sessions followed by a short survey. The survey results also revealed highly interesting results. 40% of the respondents suggested that they buy insurance because it is linked to credit. Thus, linking credit with insurance could be a highly effective tool to enlarge insured area. Education and income from farming activities also turned out to be highly significant in farmers' decision to buy insurance. Being too small to be insured had an adverse affect on insurance purchase decision. Therefore, the researchers have developed and proposed a mutual insurance mechanism to offer insurance to small stakeholders.

Finally, the researchers derived the demand curve for insurance under different coverage ratios. The results suggested that most farmers are willing to buy insurance as long as it is affordable and provides enough coverage. While the demand graphs are negatively sloped, they abruptly become zero for coverage under 70%. Thus, any insurance scheme should offer at least 70% coverage to be accepted by the farmers.

The AgInsurance project addressed agricultural insurance in Europe, which is a crucial issue for the European economy. Besides developing the theoretical framework, we also addressed practical application of research results. During the course of the project, we developed an easy-to-calculate index insurance, which minimized the issues of moral hazard and adverse selection. The developed insurance

insurance, which minimized the issues of moral hazard and adverse selection. The developed insurance scheme enjoyed both political and social support. The free farmer training sessions helped us to familiarize the farmers with risk and insurance concepts.

The multidisciplinary aspects of the project leveraged the socio-economic impacts. The above mentioned outcomes of the project are not only of interest to insurance and agriculture industry, but also agricultural economists and policy makers in Europe. One of the greatest challenges in the European agricultural industry is to offer adequate coverage against risks faced by farmers. By offering additional insurance tools, we helped the industry to provide better coverage to a wider audience. The European agribusiness industry became more competitive by offering market-based solutions to one of the current problems faced by the agricultural households. This also reduced the dependency of farmers on government aid in case of weather-related disasters.

Throughout the project, the researchers maintained a professional website. Selected outcomes of the project are uploaded to the project website. This website has been a reliable source of information for the interested researchers and policymakers alike.

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