# Report Inclusive insurance for the mass market 13th International Microinsurance Conference 2017

7—9 November 2017 Lima, Peru

Edited by Zahid Qureshi and Dirk Reinhard -----

Conference documents and presentations are available online at: www.inclusiveinsurance.org

Links:

Munich Re Foundation www.munichre-foundation.org

Microinsurance Network www.microinsurancenetwork.org

APESEG – Asociación Peruana de Empresas de Seguros www.apeseg.org.pe This report is the summary of the 13th International Microinsurance Conference that took place in Lima, Peru, from 7 to 9 November 2017.

As the styles of the sessions varied, so too do the styles of the individual summaries. Readers, authors and organisers might not share all opinions expressed or agree with the recommendations given. These, however, reflect the rich diversity of the discussions.

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## Foreword

For those working in the insurance industry, it is easy to understand the huge difference that a good (micro) insurance product can make in the lives of those who are vulnerable. Most of the low-income population is inadequately insured, however. We are therefore constantly scratching our heads trying to understand which part of the mechanism is not working properly. Are there problems with our products? Is regulation creating obstacles? Is it a question of the quality of our service? Or maybe the other institutions that are part of the service chain are not fulfilling their duties?

These annual conferences, sponsored by the Munich Re Foundation, are part of our continual effort as an industry to understand much better how to fulfil our promises. It is also an opportunity to gather the best experiences from around the world, learn from the innovators and open our minds up to different regulatory approaches to improve the population covered.

This year, we gathered here in Peru, a country in which a large part of the economy works in the informal sector but which has been able to reduce poverty ratios from 50% to 20% over the last 25 years. A nascent middle class has managed to accumulate a larger list of assets - that should be properly insured. We gathered in Peru in a year that has (again) been a stark reminder of just how badly natural phenomena can impact the lives of families and businesses. The massive El Niño effects have destroyed public and private assets totalling in excess of 10 billion dollars. Only 5% of this damage was insured.

That is why we decided this year to emphasise in our agenda the role of insurance in the public policy agenda. The last book by Stefan Dercon, one of our keynote speakers, was a call -to-action directed at governments to use to a greater extent risk transfer mechanisms to face the potentially damaging effects of earthquakes, floods and tsunamis. In addition, we asked Dean Karlan, our second keynote speaker, to focus on how much microinsurance could help in the development agenda. Government officials are convinced that savings mechanisms and assigning dedicated funds represent a potent tool for solving many issues. However, it is much harder to see wider use of the other development tool - insurance and risk transfer mechanisms.

We hope that this teamwork will provide great insights for everyone in our audience. We were glad to host the 13th International Microinsurance Conference, and as learning never ends, we hope to see most of you in Zambia in 2018.

## Eduardo Morón, President, APESEG

Lima, March 2018

1 — Eduardo Morón, President, APESEG, Peru.



## Acknowledgements

The 13th International Microinsurance Conference was the fourth IMC to take place in Latin America. The strong presence of participants from Peru was a clear indication of how important inclusive insurance is for Peru. The strong focus on discussions about climate risks made it clear that this is a topic not only relevant for the host country, but the entire world.

The Insurance Association of Peru was an amazing host that made this perfectly organised event possible. I would like to express special thanks to Eduardo Morón, President of the Peruvian Association of Insurance Companies - APESEG, and Hector Lucero, APESEG's project manager for the conference. Without this local expertise and support, the conference would simply not have been possible or successful. A special thank-you also goes to all the members of the national organising committee as well as César Liendo, Vice Minister of Finance of Peru, and Socorro Heysen, Peru's Superintendent of Banking and Insurance, for their support.

I would also like to thank the content partners and supporters of the 13th International Microinsurance Conference – CEAR, A2ii, GIZ on behalf of BMZ, Cenfri, ILO's Impact Insurance Facility, IAA, IPA, the Microinsurance Centre at Milliman and the World Bank.

The 13th International Microinsurance Conference brought together 415 participants from 42 countries. My thanks go to them for sharing their knowledge and experience. On behalf of the organisers, I would also like to thank the members of the Conference Steering Committee. This event would not have been possible without its work in identifying suitable speakers and presentations from the large number of applications submitted for the conference. Furthermore, I would like to make special mention of the team of rapporteurs and authors led by Zahid Qureshi – who volunteered and summarised the key messages and lessons from the various sessions of the 2017 conference.

In addition, I would like to extend my thanks to the Munich Re Foundation conference team – Thomas Loster, Torsten Kraus and Julia Martinez – as well as the staff of the local event management agency. A special thankyou goes to Doubell Chamberlain, Chairman of the Board of the Microinsurance Network, and the entire team of the Network's secretariat for its great support. At the same time, I would like to welcome Katharine Pulvermacher as the new Executive Director of the Microinsurance Network.

The 2018 conference on Inclusive Insurance for Emerging Markets, the 14th International Microinsurance Conference, will take place in Zambia. Together with the Zambian Technical Advisory Group on Microinsurance, we are looking forward to the next event, set to take place from 6 to 8 November in Lusaka.

**Dirk Reinhard,** Vice-Chairman Munich Re Foundation, Germany, Chairman of the Conference Steering Committee

Munich, March 2018

2 — Dirk Reinhard, Vice-Chairman, Munich Re Foundation, Germany, Chairman of the Conference Steering Committee.



## "If you target microinsurance on a massive scale, focus on data and technology in order to make it work."

Mathilda Ström Deputy CEO, BIMA, United Kingdom







3 — A full room as a result of a strong interest in the topic keeping "micro" in the "mass" insurance.

4 — Left to right: Dirk Reinhard, Chairman of the Conference Steering Committee, Vice Chairman, Munich Re Foundation, Germany; Eduardo Morón, President, APESEG, Peru; Katharine Pulvermacher, Executive Director, Microinsurance Network, Luxembourg.

5 — The organisers 2017 and 2018: Left to right: Thomas Loster, Chairman, Munich Re Foundation, Germany; Nakamau Ntini, Manager, policy and analysis, Pensions and Insurance Authorities, Zambia; Dirk Reinhard, Chairman of the Conference Steering Committee, Vice Chairman, Munich Re Foundation, Germany; Doubell Chamberlain, Chair of the Board of Directors, Microinsurance Network, South Africa; Eduardo Morón, President, APESEG, Peru; Héctor Lucero, Project Manager of the 13th IMC, APESEG, Peru.

6 — Over 415 participants from 42 countries attended the 13th IMC.

## Agenda

## 6 November 2017

11th Consultative Forum

in Microinsurance 2017 The Center for the Economic Analysis of Risk organised an academic pre-conference in conjunction with the 13th International Microinsurance Conference. The pre-conference invited researchers to present findings and participate in panels on research methods to understand risk management choices of the poor.

**CEAR Academic Pre-Conference** 

<u>Stefan Dercon</u> Professor of Economic Policy University of Oxford, United Kingdom

Dean Karlan Professor of Economics at Northwestern, President and founder of Innovations for Poverty Action (IPA), United States

Facilitator

<u>Glenn Harrison</u> C.V. Starr Chair of Risk Management & Insurance Director, Center for the Economic Analysis of Risk (CEAR) – Georgia State University, United States Scaling up insurance as a disaster resilience strategy for smallholder farmers in Latin America. Participants must be registered for the main conference.

Hosted by IAIS/A2ii/ Microinsurance Network

related to scaling up agricultural insurance including developing proportionate regulatory frameworks to support the insurance business on one hand, and to protect the consumer rights of smallholder farmers on the other. It explored how various stakeholders – insurance supervisors, the industry, policymakers, researchers and donors – can cooperate and align their respective roles to achieve sustainability and scale while ensuring fair treatment of this vulnerable segment of the population. This Forum was the third of a three-part series and built on insights from the Asia Pacific region, based on the 9th Consultative Forum on the same topic, held in Singapore, and from the African Region based on the 10th Consultative Forum held in Uganda earlier this year. The 11th Consultative Forum took place alongside the 13th International Microinsurance Conference. By Jia Min Ng

The Center for the Economic Analysis of Risk (CEAR) organised an academic pre-conference seminar in conjunction with the 13th International Microinsurance Conference. The pre-conference seminar attracted researchers wishing to present major findings and participate in panels on recent developments in research methods to try to understand the risk management choices made by the poor. The seminar provided an opportunity to share opinions and discuss each presentation in detail.

## Demand heterogeneity for indexbased insurance: The case for flexible products

Rather than limiting insurance options to a one-size-fits-all product, this field experiment allows farmers to customise a portfolio of index insurance. The portfolio can vary by coverage period and intensity of risk to better match the unique loss functions individual farmers face. This project launched by the International Food Policy Research Institute (IFPRI) and the Ministerio de Ganadería, Agricultura y Pesca (MGAP) offers protection against excess rainfall around harvest time in Canelones, Uruguay. A structural model was used to measure the impact of crop mix, planting dates, soil drainage, product understanding and distance to weather station on portfolio selection.

Take-up was only 15% even though the premium was 90% subsidised. The survey of 91 farmers showed that, for those who take up insurance, all the factors above contribute to the heterogeneity of insurance portfolio chosen, and the flexibility of the portfolio provides value to these individual farmers.

## Evaluating the welfare of insurance: Index insurance and non-performance

A series of laboratory experiments with university students shows that we cannot assume "naive" revealed preference when evaluating the welfare benefits of insurance. Take-up is not a good indicator for how beneficial an insurance product is. Instead, economic theory is applied to use risk preferences in calculating the consumer surplus of the insurance product to the individual.

The experiments differentiate between a simple risk on the one hand, and a compound risk which has more than one level of uncertainty. Such compound risks can be found in index insurance, where there is a risk of loss and basis risk. There is also compound risk when there is a risk of the insurer defaulting on top of the risk of loss to the individual.

This study shows that compound risk itself impacts welfare. Although insurance take-up is higher when premiums and basis risk are lower, welfare is only significantly improved for individuals who show consistent preferences between compound risks and the actuarially equivalent simple risks.

7 — CEAR Academic Pre-Conference in Microinsurance 2017.

8 — Dean Karlan, Professor of Economics at Northwestern, President and founder of Innovations for Poverty Action (IPA), United States.

9 — Stefan Dercon, Professor of Economic Policy, University of Oxford, United Kingdom.







## Box 1 RCT

A study where subjects are randomly assigned to treatments and control. Checks are usually carried out to ensure that the subjects between the groups are comparable.

# The future in mind: Aspirations and forward-looking behaviour in rural Ethiopia

A Randomized Control Trial (RCT) was conducted on 84 villages in Doba (Woreda), Ethiopia, to investigate if low aspirations limit choices that improve economic positions. The study exposed rural households to one of three treatments over 6 months - they either watched a video about role models who had achieved success through their own efforts, or they watched a general video to test for the placebo effect, or they were not exposed to any video. The role models in the treatment video do not explicitly talk about aspirations, and they do not encourage specific behaviour.

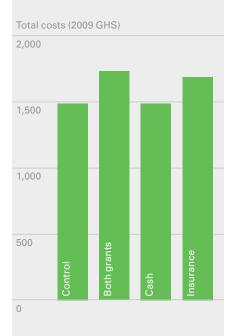
After 6 months, farmers who watched the treatment videos show increases in aspirations for children's education and the number of hours worked. They also show increases in futureoriented behaviours, such as in children's enrolment in school, investment in education and the use of credit. After 5 years, the effects of the aspirational video can be seen in consistent increases in spending on agricultural inputs, stocking of assets, and consumption of durables.

# Agriculture, technology and economic development: A view from the field

Poor farmers are trapped in a cycle between poor agricultural activity and high poverty rates, although there have been exceptions, such as cocoa and pineapple farmers in Ghana, who have broken out of this poverty cycle. An RCT was conducted over three years in northern Ghana on smallholder farmers to test if capital constraints and uninsured risks were salient barriers to the adoption of technology to improve productivity. Farmers either randomly received cash grants, insurance for drought and flood, both treatments, or neither treatment

Rainfall risk was found to be a salient constraint (Figure 1), with demand for insurance sensitive to trust and prior experience with the insurance contract. Furthermore, the introduction of so-called community extension agents, who delivered videos on cultivation practices to farmers, showed that such nudges are effective in changing the farmers' behaviour.

## Figure 1 Average total expenditures on farming by treatment group



Source: Karlan, Dean. Presentation "Agriculture, technology and economic development – A view from the field." 13th International Microinsurance Conference 2017. 10 — Glenn Harrison, C.V. Starr Chair of Risk Management & Insurance Director, Center for the Economic Analysis of Risk (CEAR) – Georgia State University, United States.



## Evidence-based insurance policy for the poor

A panel of three professors from Oxford, Georgia State and Northwestern universities discussed how academic evidence can help with developing insurance policies for the poor.

First, it is important to establish what is being asked in the study, and who the stakeholders are. Regulators, for instance, would be interested in well-being derived from insurance. Another question one could consider is which income segment the insurance or policy is targeting.

One should check for a confirmation bias when evaluating whether a certain insurance product or policy works best. If a study is transparent and the results replicable, the results would be indisputable. The following factors contribute to the credibility of the evidence:

- Studies should be theory-driven.
- Methodologies such as econometrics should be tested and standardised.
- A good set-up and methodology in a study are more important than the results.
- Academics need to synthesise their knowledge.

If there are cost constraints on data collection, suitable observable correlates could be used as proxies. Alternatives include a well-designed experiment set up to prove causality, and conducting a proof-of-concept in the lab before going into the field.

## Picture-based insurance: A formative evaluation on using smartphone camera data for crop insurance in northwest India

Crop insurance with a trigger based on crop conditions measured using photographs taken from the farmer's smartphone rather than a remotely measured index, would be expected to improve insurance demand. The use of such triggers should reduce basis risk and increase farmers' engagement.

An RCT in northwestern India randomly assigned 750 farmers to receive, free of charge, either weatherbased insurance (WBI) with excess rainfall or above-normal temperatures as the trigger, or weather-based insurance together with picture-based insurance (PBI), with damage in pictures of crops taken by farmers as the trigger. An experiment was also conducted to measure willingness-topay for both types of insurance.

On average farmers were willing to pay more for PBI than WBI, but these amounts were still below market premiums. In the short-term PBI does not appear to create problems with adverse selection and moral hazard.

#### **Lessons learnt**

Presenting a portfolio of index insurance products and using farmers' photographs of their crops are innovative ways to better align the protection of insurance to the farmers' risks and increase demand for index insurance.

- An unbiased approach to compound risks, such as we find in basis risk in index insurance and non-performance risk, improves the welfare of insurance choices.
- Improving aspirations through exposure to videos and insuring rainfall risks encourage farmers to engage in behaviour that could help them break out of the poverty cycle.
- For the evidence in academic studies to be credible, the methodology should be transparent and theory-based, and the results should be replicable.





11 — Berber Kremer, Research Fellow, IFPRI, United States.

12 — Francisco Ceballos, Senior Researcher, IFPRI, United States.

# The 11th Consultative Forum held by IAIS/A2ii/MiN

By Jenny Nasr and Regina Simões

"Scaling up insurance as a disaster resilience strategy for smallholder farmers in Latin America" was the topic of this forum, which was jointly sponsored by the International Association of Insurance Supervisors, the Access to Insurance Initiative and the Microinsurance Network.

Agricultural insurance, mostly offered as indemnity-based insurance in Latin America, has a penetration rate of only 0.03% of the GDP across the entire region, compared to over 0.06% for North America.<sup>1</sup> According to IFAD (the International Fund for Agricultural Development), there are about 15 million family farms in Latin America, controlling some 400 million hectares, of which 10 million are subsistence farms.<sup>2</sup> The remainder are intermediate and large groups with different degrees of integration with markets. Agricultural producers in Latin America are particularly vulnerable to natural catastrophes, which vary widely in type, frequency and severity across the region and even within countries.

## Challenges for agricultural insurance to reach scale

For agricultural insurance to reach scale, the insurance value chain has to address four key issues: high premiums, high cost of claims, constraints in data availability, and distribution challenges. In addition, a key challenge is the sustainability of public premium subsidies and long-term government support.

Index-based insurance provides an innovative solution to overcome some challenges with indemnity-based insurance, by decreasing administrative costs, simplifying claims processes and improving timely payouts to farmers. Payouts are based on and triggered by an index correlated to the loss suffered by all policyholders within a defined area from severe weather or other factors, thus doing away with the need for individual loss assessment. It eliminates asymmetric information and is best distributed involving stakeholders at all three levels: micro (farmers), meso (aggregators including MFIs, input suppliers, farmers' associations and NGOs) and macro (government).

> http://agroinsurance.com/wp-content/ uploads/2016/08/Agricultural-Insurance-in-Latin-America-en.pdf

2 https://www.ifad.org/ documents/10180/7770b19f-53d7-4ef6-8326-e931c40d356b

13 — Teresa Pelanda, Advisor, Access to Insurance Initiative (A2ii), Germany.

14 — Katharine Pulvermacher, Executive Director, Microinsurance Network, Luxembourg.

15 — Francesco Rispoli, Senior Technical Specialist, Inclusive Rural Financial Services, International Fund for Agricultural Development (IFAD), Italy.







The 11th Consultative Forum held by IAIS/A2ii/MiN

#### Disaster insurance in Guatemala

Aseguradora Rural in Guatemala, established in 2007 as a complement to Banrural, a development bank, provides the bank's 7 million clients with innovative, simple and affordable credit-linked products insuring against earthquakes, excessive rain and droughts. This disaster insurance covers up to 100% of the sum insured in the event of earthquakes and excessive rain, and up to 50% for droughts. Premiums are collected as part of the loan arrangements. Claims are submitted to the insurance company, which verifies them and reports to Banrural, which makes the payments within 10 days. Banrural also develops marketing materials, trains the sales force and business agents for follow-up, and ensures that the clients understand the products.

In Guatemala, the registration of an index-based product is part of the national strategy for financial inclusion and is strongly supported by the regulator.

#### Public- and private-sector initiatives

The forum noted two examples from another continent as well. In Indonesia, rice farmers are protected against yield loss in a state-led scheme implemented by the Ministry of Agriculture. This crop insurance cover has an 80% premium subsidy and is indemnity-based.

In the country's private sector, PT Asuransi Central Asia has partnered with Mercy Corps for a pilot project named Agriculture Financial (Agrifin) Mobile for corn. Agrifin is an areayield index insurance cover offered via mobile phone payments. The cover is not government-subsidised but provides support with risk mitigation measures. The programme also partners with Syngenta, an input supply company providing seeds and making available so-called extension workers who advise farmers on best agricultural practices. Farmers in the project have increased their corn yields from 5.5 tons to 8 tons per hectare, in the process improving incomes and overall welfare. The project also offers capacity-building and sharing of knowledge with regulators to better explain weather index-based insurance.

16 — Left to right: José Guillermo López Cordón, General Manager, Aseguradora Rural, Guatemala; Carla Chiappe, Coordinator of the ASSAL microinsurance working group, Supervision Intendent at the Superintendencia de Banca, Seguros y AFP (SBS), Peru; Pranav Prashad, Senior Technical Officer, ILO Impact Insurance Facility, Switzerland; Erik Geurts, Regional Manager Latin America, BlueOrchard Finance Ltd., Lima, Peru.

17 — Andrea Camargo, Head of Regulatory Affairs and Consumer Protection for Central America, Microinsurance Catastrophe Risk Organisation (MiCRO).





#### **Regulatory advancements in Peru**

According to the Superintendence of Banks and Insurance (SBS) in Peru, the key factors to develop a successful agricultural insurance are: knowledge of the sector, risk analysis of crops, and risk transfer options, while focusing on the promotion of accessible insurance and constant monitoring. Political commitments from the state and government are needed to support national policies that incorporate risk transfer systems and public-private partnerships that encourage a greater supply of insurance. SBS aims to publish a specific regulation for agricultural insurance in Peru and encourages increasing insurance supply with the involvement of a range of stakeholders,

such as the Ministry of Finance, the Ministry of Agriculture, the President's Cabinet, regional governments and the Fund for Agricultural Insurance, Fondo de Garantía para el Campo y del Seguro Agropecuario (FOGASA).

## Product design and approval

Product design in agricultural insurance is an iterative process involving ongoing review and adaptation. At the outset, feasibility studies are needed to understand the demand, risk profile, available data and regulations in place. There is also a need to identify government priorities and policies supporting a parametric solution for farmers. Government entities also need to be willing to become involved in a financial inclusion strategy. Then there is a role for donors and investors to fund a test model and for regulators to take a proportionate approach to parametric insurance to enable pilot programmes.

Issues to be taken into account when preparing a proposal are: consumer empowerment, existing distribution and aggregation channels, monitoring and evaluation processes, product design, the claims process and reinsurance. Figure 2 shows the different steps in designing an agricultural insurance product.

#### Product design - an iterative process 18 — Enrique Rafael Lucas Feasability study Understanding needs of the end clients, risk, 19 — Jakub Nugraha, Head Partners alignment **Piloting and** assessment of data Fair commissions. improvement and regulations definition of roles and Trial and error responsibilities, early M&E - constant involvement of improvement reinsurers Other product Contract design features Sum insured, benefit, Basis risk, insurable policy holder, insured interest and party and beneficiary. compliance with regulatory framework value added services (tangibility) Access to local or Price calculation global data Affordability - for more cover higher Permanent access, reliability, good price, important to quality, public access achieve a balance!

Figure 2

Source: Camargo, Andrea. Presentation "Preparing and assessing an agricultural index insurance product proposal." 13th International Microinsurance Conference 2017.

## Estrada, Normative Department, Superintendencia de Bancos de Guatemala, Guatemala.

Microinsurance Department, PT Asuransi Central Asia, Indonesia.





The 11th Consultative Forum held by IAIS/A2ii/MiN

### Key takeaways

#### and recommendations

## For the industry

- Engage early on with government entities and supervisory authorities when developing an agricultural insurance product; understand the regulatory framework in place.
- Get support from reinsurers and good technical and data providers to design innovative products and foster local capacity building.
- Ensure the client, aggregator and supervisor properly understand product details. Engage in financial literacy programmes for clients to increase insurance awareness.
- Ensure ongoing training of the industry sales force.
- Continuously monitor results and evaluate impacts on clients and the market.

## For supervisors

- Keep an open dialogue and encourage cooperation among all stakeholders.
- Raise awareness in other government entities about the role of index-based agricultural insurance in achieving national objectives.
- Enable a regulatory framework providing a proportionate approach for agricultural insurance and keeping pace with technology changes.
- Promote financial literacy programmes to raise public awareness of insurance.
- Support appropriate and efficient use of subsidies.
- Ensure ongoing monitoring of results.
- Engage in constant dialogue with supervisory authorities in other jurisdictions to learn innovative approaches.







20, 21 — Participants of the Consultative Forum presenting the results of working groups.

22 — Regina Simões, Regional Coordinator for Latin America, A2ii.

## Agenda

## 7 November 2017 Morning sessions

## The ILO's Impact Insurance Forum

Insurance for resilient value chains

The ILO's Impact Insurance Forum provides an interactive and open environment for discussing lessons learnt and exchanging experiences on forefront issues confronting practitioners working in inclusive insurance. Since its debut run in 2008, the Forum has attracted and inspired hundreds of insurance practitioners and consistently received excellent satisfaction ratings from them for relevant content, credible speakers and engaging method. This year's forum will focus on the topic "Insurance for resilient value chains".

**Cooperation (APEC) Finance** Ministers adopted the Cebu Action Plan (CAP) in September 2015. The CAP provides a 10-year roadmap for building a connected APEC community that is financially integrated, the pillar of Enhancing Financial ance) shall be shared among APEC economies. Under the Asia Pacific Financial Forum APFF includes the promotion of markets as one of its work streams. To pursue this, the CAP shall accomplish the following: Establish and promote private insurance programmes through the collaboration and exchange of information and experiences; Deepen penetration within their economies and develop regional risk sharing schemes; Develop a roadmap and network of experts for expanding the coverage of surance Roadmap (MIR) has already undergone a number of roundtable discussions and review among the Asian players and other stakeholders. The MIR roundtable meeting in Lima Peru aims to engage especially from Peru, Chile and Mexico which are membereconomies of APEC.

#### Facilitator

Dante Portula Senior Advisor for Regional Policy – Asia, GIZ – RFPI Asia, Philippines IPA and J-PAL Matchmaking event

The goal of the matchmaking event is to generate dialogue, and ultimately partnerships, rigorously evaluate the business evidence-driven insurance products. The event will introduce the state of the evidence on microinsurance research. Pre-selected implementing organisations will be grouped with researchers based on the issues their products address, such as low take-up, small groups, researchers will concerning insurance in that area and attendees will have an opportunity to briefly introduce their insurance model. IPA and J-PAL will support in facilitating these discussions and follow-up the event.

#### Facilitator

Dean Karlan

Professor of Economics at Northwestern, President and founder of Innovations for Poverty Action (IPA), United States

APFF Microinsurance Roadmap

for APEC - Roundtable meeting

## IPA and J-PAL's Impact Evaluation **Matchmaking Workshop**

By Danielle Moore

Innovations for Poverty Action (IPA), in collaboration with The Abdul Latif Jameel Poverty Action Lab (J-PAL) and APESEG, hosted a pre-conference matchmaking workshop. The goal was to generate dialogue, and ultimately partnerships, between researchers and microinsurance providers to rigorously evaluate the business and social impacts of innovative, evidencedriven insurance products.

23 — Dean Karlan, Professor of Economics at Northwestern, President and founder of **Innovations for Poverty Action** (IPA), United States, opening IPA's matchmaking event.

24 — Rebecca Rouse, IPA, United States.





The event opened with the state of the evidence on microinsurance and gaps requiring further research. Key findings from the research so far have included:

- Uninsured risk, rather than a lack of capital, may be the primary constraint to investment in agriculture.
- The provision of insurance can cause households to shift investments towards the production of higher-return, but higher-risk, cash crops.
- Demand for insurance products is often low, and consumers are highly price-sensitive.
- Financial education can increase the take-up of complex financial products, but it is expensive and difficult to scale.
- The ease with which clients can file claims and receive payouts is crucial to their retention of the product.
- Differences in risks faced, institutional trust, risk aversion, and financial literacy may contribute to lower demand among women.

Table 1

**Building Theory of Change** 

There are several gaps in the research, including:

- whether distribution through digital channels can bring down costs;
- how "nudges" like framing, timing, and bundling with other products affect the decision to purchase insurance;
- how insurers can accurately ascertain event occurrence and guarantee quality of service while keeping costs low; and
- how to assess welfare, compared to other interventions, such as cash transfers.

To prepare for the group activity, participants were instructed on how to develop a theory of change (see Table 1 for example).

Activities	Outputs	Outcomes	Goal
Participant selection / product design	Index-based insurance	Profitable crop choice	Increased productivity
Programme budget / human resources	Training	Adoption of improved seeds	Increased income

15

Implementing organisations were grouped with researchers to discuss the key issues concerning microinsurance, including consumer demand, service quality, financial literacy, gender inclusivity, and distribution channels. Participants had an opportunity to briefly introduce their insurance model, and together the groups developed a theory of change for an innovation or innovations that address one of the key issues.

IPA and J-PAL provided support in facilitating these discussions and are following up on potential evaluations after the workshop. This follow-up includes:

- Connecting interested practitioners with relevant IPA and J-PAL country and regional offices.
- In countries without an IPA or J-PAL office, matching interested practitioners with a rigorous research partner with local operations.
- Supporting partners in securing donor funds for research.

#### **Lessons learnt**

- Well-designed microinsurance products offer a safety net for the poor and a market expansion opportunity for the insurance sector.
- The evidence on microinsurance shows promise in increasing productivity, but demand is low in low- and middle-income countries.
- Some product tweaks show promise, including those addressing financial literacy, service quality, gender inclusivity, and distribution channels.
- Insurance providers interested in testing their products for welfare impact can follow up with IPA and researchers on potential evaluations.
- Randomised evaluations can provide insurers with causal evidence of the impact of design and service innovations on take-up, usage, and consumer welfare.











Agramonte, IPA, United States explaining results of group discussions.

25 — Juan Manuel Hernández-

26 — Participants of the workshop discussing distribution channels.

27— Stanislao Maldonado, Assistant Professor, Universidad del Rosario, Colombia.

## 2017 Impact Insurance Forum

**By Alice Merry** 

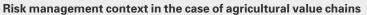
The 2017 Impact Insurance Forum focused on the theme "Insurance for resilient value chains". The forum explored the risks faced by actors across a range of value chains. Participants examined how insurers can respond to these risks, and the benefits for the insurance provider in partnering with value chain actors. In addition, the forum focused on how insurers can achieve greater impact by linking insurance products with financing, climate adaptation and productivity interventions. Valuechain experts joined participants throughout the forum to share their experiences and allow in-depth analysis of specific value chains.

## Why insurance matters for value chains (and vice versa)

The session began with a review of the Impact Insurance Facility's approach to insurance and value chains, stressing the need to expand our thinking about the risks involved in a typical value chain. For example, farmers not only face the climate and other risks to their crops or livestock that are typically addressed by insurers. They also face a range of other risks, including personal risks and market risks. Insurers should think more holistically about the risks faced by farming households in order to offer relevant solutions.

It is important to consider how insurance can fit in with other risk management solutions that are used to make value chains more resilient. Insurance can have a far greater impact when it is carefully linked with other risk management initiatives, such as climate adaptation plans, loans for climate-smart investments and government agricultural policies (see Figure 3).

## Figure 3





Source: Solana, José Miguel. Presentation "Agricultural insurance value chains." 13th International Microinsurance Conference 2017.

## **Risks faced from the perspective** of value chain actors

This talk included two representatives of Peru's value chains, as well as an Impact Insurance Fellow working in Ivory Coast. They shared their experiences, the risks faced in their industry, and how they believe insurers could play a more significant role in supporting value-chain actors.

The speakers agreed that there is little access to relevant insurance products in their markets, particularly for smaller producers. They explained that the biggest challenge relating to insurance for value chains is a lack of trust in insurance among value-chain players. Nonetheless, all three speakers shared the belief that there was a need for insurance in the value chains they work with, and that insurers could play an important part in supporting their development.

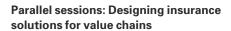
A case cited involved cocoa producers in Ivory Coast. Most of these producers are small, with limited resources, low adoption of technology and very high dependency on a single product. For these reasons, they face particularly high risks. Insurance companies need to cover the risks both at the production as well as the household level, and also need to start with simple products.

Insurance could be offered at two levels:

- Personal insurance products, such as life and health insurance, could be offered directly to the workers.
- Companies could be encouraged to take on insurance for their activities, as well as covers for their workers.

Specific products requested by the speakers included products covering

- equipment breakdown,
- health products, and
- products that facilitate access to credit.



The participants divided into four groups to each examine one value chain in more depth and to propose potential insurance solutions for players in that value chain.

One group discussion was on the dairy value chain. The value chain was found to be complex and to include a range of players at each stage. Concerns for the value-chain players included improving the quality of milk and securing regular supplies from producers. Insurance solutions should take these concerns into account.

A second group analysed the tourism value chain and mapped an equally complex web of actors. The group examined which risks could be covered by insurers, and which fell outside their remit. It suggested that insurers should focus on business interruption insurance. In this case, participants highlighted the need for more and better data. Better information flow between the various service providers, assisted by technology, could also help in reducing some risks and providing data. Such collaboration could also lead to the provision of value-added services that benefit both providers and customers. Finally, participants felt that there was a need for increased support from governments in supporting adaptation and resilience in the industry and related infrastructure.

28 — John Bliek, ILO Specialist in Enterprises, Cooperatives and Rural Development for the ILO Office for Andean Countries, Peru

29 — Miguel Solana; Technical Officer - Microinsurance, ILO's Impact Insurance Facility, Switzerland.

30 — Left to right: Maricé Salvador Alejos, President of Grupo GEA, Peru; Edgar Aguilar Paucar, Impact Insurance Fellow, ILO, Ivory Coast; Alice Merry, Research and Innovation Officer, ILO, Peru.





The third group focused on the cocoa value chain, continuing the discussion begun during the panel session. Participants thought through both the productive and livelihoods risks faced by farmers, as well as the other players in the value chain. The group concluded that similar solutions to those introduced for the cocoa value chain in Ivory Coast would also be valuable in their country contexts.

The fourth group focused on the wood- and furniture-making value chain, discussing how to address challenges related to the limited scale of most small businesses in guite a fragmented market. However, the group also noted that revenues are higher in this industry, and if companies can be clustered together, they could represent an interesting client base for insurers. The group also identified a wide variety of risks relevant to the value chain, many of which are specific to the sector, for example those around storage and safety within wood processing.

#### Lessons learnt

- Insurance can have a greater impact in boosting resilience when it is carefully linked with other risk management initiatives, such as climate adaptation plans, loans for climate-smart investments and government agricultural policies.
- Value-chain players see the need for insurance to support the development and resilience of their sectors. Nonetheless, trust is limited and suitable products are often not available for the specific risks faced in their industry.
- When insuring producers, insurance companies should consider risks both at the productive and household level, and should start with simple products.
- Clustered together, small businesses in the value chain can form a client base of greater interest to insurers.

31 — Interest in the Impact Insurance Forum again exceeded expectations resulting in another full session.



## The APFF microinsurance roadmap for APEC

Box 1

## By Dante Oliver Portula

The Deutsche Gesellschaft für Interna-

tionale Zusammenarbeit (GIZ) – Regulatory Framework Promotion of Pro-poor Insurance Markets in Asia (RFPI Asia), which is leading the work stream in Microinsurance of the Asia Pacific Financial Forum (APFF), has initiated the drafting of the microinsurance roadmap and held a round table meeting to consult and solicit comments and inputs from stakeholders of APEC member economies in Latin America.

## The Cebu Action Plan (CAP)

The APEC (Asia-Pacific Economic Cooperation) Finance Ministers adopted the Cebu Action Plan (CAP) in September 2015, which provides a 10-year roadmap for building a connected APEC community that is financially integrated, transparent, and resilient. The roadmap is anchored on four pillars:

1. Promoting financial integration

2. Advancing fiscal reforms and transparency

3. Enhancing financial resilience

4. Accelerating infrastructure development and financing

Under pillar 3 on Enhancing Financial Resilience, information and experiences in developing innovations on disaster risk finance and insurance mechanisms (including microinsurance) shall be shared among APEC economies. Developing a microinsurance roadmap is one of the deliverables under pillar 2 in the CAP. The APFF Microinsurance Roadmap Roundtable meeting held in Lima, Peru, on 7 November 2017 resulted in the following recommendations for APEC: **Political leverage** is required to mainstream microinsurance in APEC economies. Microinsurance must be reflected in the national agenda, plans and policies, and must strive to create value for the Government and the beneficiaries. Critical champions from the Government need to be identified to fast track improvements in microinsurance public policy.

A standardised diagnostic tool on the status of microinsurance in APEC economies is required to establish the general "starting point". Understanding the exposure of families and businesses to risks, and ways of mitigation, have to be defined. Publicprivate partnerships and coordination are useful in implementing a country diagnosis to document available services and resources, and with a view to the development of the APEC roadmap for microinsurance. The implementing agency should also be identified.







33

32 — Dirk Reinhard, Chairman of the Conference Steering Committee, Vice Chairman, Munich Re Foundation, Germany, opening the meeting.

33 — Eduardo Morón, President, APESEG, Peru.

34 — Left to right: Jorge Claude, Executive Vice President, AACH, Chile; Dante Portula, Senior Adviser, GIZ RFPI Asia – member of Microinsurance work stream, Asia-Pacific Financial Forum (APFF), Philippines.

When assessing the key reforms that mainstreamed microinsurance in high growth economies like the Philippines, **open consultation between the public and private sector** has been identified and proven as one of the key ingredients in bringing in reforms. In Peru, coordination between the public and private sectors through dialogue, e.g. in the agriculture sector, also contribute to growth in the market.

A market-based policy encouraged competition in terms of efficiency and innovation on microinsurance

products in the Philippines. Various government offices, e.g. the Bangko Sentral (Central Bank), Department of Finance (DoF), Securities and Exchange Commission (SEC), the Cooperative Development Authority (CDA), and the Insurance Commission (IC), contributed to the success by providing the necessary regulations on product development, distribution, licensing, and others.

In Chile, there is high growth in mass insurance. Growth is driven by the 50% of the population who possess a debit card, and the 45% who have a retail card - this equates to 63 million people with mass insurance (life and non-life), or 17.4 million families, all of whom are captured by banks and department stores, and pay with debit and retail cards. In Chile, the challenge is coming up with a simple model and process for delivering insurance policies, particularly as signatures are needed in single claims. Financial literacy is also needed to inform and educate the buyers on the products they are buying.

A definition of microinsurance and mass insurance across APEC economies is needed. In Peru and Chile, the focus is on building up the resilience of the low-income population. However, the low-income sector expects Government assistance in all matters, including access to microinsurance.

Mass insurance should not be used as an alternative to microinsurance. Microinsurance is designed to provide protection to low-income people – quite a different market segment from mass insurance which targets all income levels.

Government must change its approach to assisting the low-income population in accessing to insurance. One of the dilemmas is the selling of microinsurance products in the same distribution channels as mass insurance - so should new distribution channels be created for microinsurance? All actions must be based on a concrete strategy for and agreed principles on microinsurance. In Peru, the SBS (La Superintendencia de Banca, Seguros y AFP) focus is also on protecting low-income people. Access to insurance is embedded in the latter's National Sustainable Financial Roadmap which includes banking.

A strong entity/organisation with funding has to be identified to champion the mainstreaming and **development** of microinsurance in APEC economies. The Mutual Exchange Forum on Inclusive Insurance Network (MEFIN), a collegial body of insurance regulatory authorities and private sector entities from seven Asian countries, is a possible organisation that, if given the appropriate funding, could take on the APEC Microinsurance roadmap. Other actors, including mobile network operators and distribution channels, also need to become members.

UNEP advocates that **financial resilience must be included in environmental sustainability** to complement sustainable development. Proportionate regulation is required within the context of respective jurisdictions, and the varied status and level of economic development of APEC member economies. Regulation must strive for the right balance in terms of new products and markets.

#### Next steps

The Roadmap will be submitted by the APFF for adoption by APEC leaders in the next round of discussions in Papua New Guinea (PNG). PNG is the chair of APEC in 2018. ABAC (the APEC Business Advisory Council) will monitor its progress after that.

More information about the Mutual Exchange Forum on Inclusive Insurance Network can be found at: www.mefin.org

More information about the CAP www.apec.org/Meeting-Papers/ Sectoral-Ministerial-Meetings/ Finance/2015\_finance/annexa



35 — Left to right: Renato Bedoya, Risk Manager, APESEG, Peru; Ms. Katharine Pulvermacher, Executive Director, Microinsurance Network, Luxembourg; Michael J. McCord, Managing Director, Microinsurance Centre at Milliman, United States.

## Agenda

## 7 November 2017 Afternoon sessions

#### Press conference

Katharine Pulvermacher Executive Director, Microinsurance Network, Luxembourg

Eduardo Morón President, APESEG, Poru

<u>Dirk Reinhard</u> Vice-Chairman, Munich Re Foundation, Germany Opening ceremony

<u>César Liendo</u> Vice Minister of Economy, Peru

<u>Socorro Heysen</u> Superintendent, SBS, Peru

Eduardo Morón President, APESEG, Peru

Doubell Chamberlain Chair of the Board of Directors, Microinsurance Network, South Africa

<u>Thomas Loster</u> Chairman, Munich Re Foundation, Germany

#### Plenary 1

# How does (micro) insurance matter for development?

<u>Stefan Dercon</u> Professor of Economic Policy, University of Oxford, United Kingdom

Dean Karlan Professor of Economics at Northwestern, President and founder of Innovations for Poverty Action (IPA), United States

#### Facilitator

Clenn Harrison C.V. Starr Chair of Risk Management & Insurance Director, Center for the Economic Analysis of Risk (CEAR) – Georgia State University, United States Only 30 years ago, Peru was a completely different country, said Eduardo Morón, president of APESEG, as he welcomed visiting participants to the conference. "We were at the beginning of hyperinflation that wiped out all long-term markets and the middle class. The fiscal state of the economy was so complicated that you had to bring your own medical supplies if you were checking into a public hospital.... Poverty was widespread and the most common aspiration of people of my generation that graduated in those years was to leave Peru."

However, Peru has since made a dramatic comeback, he said. "Income per capita has multiplied by six, poverty is now only 20%, inflationary concerns are gone, and now the younger generation looks upon Peru again as a land of promise." The middle class has recovered, but Peru, as a small, open economy, faces many risks. It could be battered by any crisis in the global markets. Plus, it sits at the edge of the Ring of Fire's Peru-Chile trench, Mr Morón said. "Severe earthquakes could deter our progress and climate-related disasters such as the El Niño one that hit us this year could return with a vengeance." If there are risks, there should be insurance, he added.

Our role is to help the government, the business sector and families with insurance products that enable them to withstand all these risks and even more, without creating havoc in their finances. We could help build a more resilient economy, Mr Morón said. "I do hope that this conference brings all of us the possibility to learn how to fulfil our calling."

Families should have at least four types of insurance to protect themselves, Mr Morón suggested: life, health, property, and pensions. He called upon delegates to reflect on questions such as:

- What is the correct balance between a regulation that protects the consumer and one that promotes the development of new products, new markets?
- How can we sell very cheap products through the same costly distribution channels? Are there any alternative channels that might work to reach this market?
- What are the real insurance needs of this population? How can we develop our products that will compete with traditional forms of insurance, such as panderos and *juntas*<sup>4</sup>, among others?
- Are we really passing the message on to our potential clients? Is our language way too complex?

Doubell Chamberlain, Chair of the Board of MiN, also stressed the relevance of our actions and agenda to ensure an impact in the years ahead.

The world in which we live has moved on in dramatic ways: economic crises, technology, natural disasters and climate risk. We must be relevant in the current environment and to the people we want to help: the poor, women, forcibly displaced individuals, SMEs and other vulnerable groups, he said. "We also need to demonstrate our commitment to the real economic development objectives of countries, in agriculture, health and education. We need to not only discover potential solutions, but ensure that these are implemented in our target markets."

It is great to see a growing set of constituencies represented in the conference, he said: intermediaries, regulators, donors and academics. "We still need to do more to have insurers, tech players, MNOs and other key stakeholders join us, as they hold the keys to implementing the solutions."

Thomas Loster, chairman of the Munich Re Foundation, said **the conference is a joint effort of many partners** "and certainly the most important partner this year is the Insurance Association of Peru, APESEG, whose support in numerous ways included attracting more than 200 participants from Peru."

36 — Around 420 insurance experts participated in the 13th International Microinsurance Conference.

> Informal peer-to-peer, rotating savings and credit associations, known as committees in some countries.



With all the huge hurricanes in the

Caribbean and the US this year, many people outside the country do not know that Peru was also hit hard by flooding, he said. "More than 100 people died and about 200,000 homes were damaged, but only 12% of the overall losses were insured. Thousands of people are struggling to recover because they do not have the safety net to overcome such devastating events."

The insurance industry needs to promote solutions to help better manage what we call "climate risks," Mr Loster said. "Nearly half of the papers and proposals submitted for this conference dealt with agricultural insurance and natural disasters, and nearly one third of the 29 sessions touch upon these important topics."

One of the plenaries will deal with the challenges of regulating digital insurance, he added. "**We see promising developments in mobile insurance**. An impressive 500 million mobile money accounts are now registered, providing access to the account holders and their families. But around two billion people in developing countries still have no bank account and cannot make electronic payments. We must not forget that insurance penetration in many countries, especially in Africa, is still only 2% or even lower." César Liendo, Vice Minister of Economy, Peru, sitting in for Minister of Economy and Finance Claudia Cooper, inaugurated the conference and said that, as a macroeconomist, he had learnt two key things: **"Just as important as it is to conceive a model of economic growth based on the accumulation of capital and the gains of overall productivity** – which is the model that Peru adopted more than 25 years ago – **is the resilience and strength of the model against different types of exogenous** (external) shocks."

From a macroeconomic point of view, we have made progress, he said, and to face unexpected events such as international crises or natural disasters, we have a fiscal stabilisation fund and contingent lines in the budget. "However, there is room to improve the resilience of businesses and families in the face of unexpected events. Reflecting the high informality of our economy, Peru's insurance market still has low penetration, around 1.7% of GDP, and microinsurance accounts for less than 1% of total net premiums."

Some progress has been made in terms of insurance development in specific sectors, such as agriculture and SMEs, and there is a work team to propose policies for the development of the insurance market, Mr Liendo said. "But we need more. And here is where I'm sure you can help guide us to find better answers. Peru, despite being exposed to serious seismic risks, is a country where the level of housing insurance is almost nonexistent. Despite being a country where in each decade we have had the adverse effects of the El Niño phenomenon, most of Peru's cities that could be affected are not prepared to respond, and most of its companies prefer to assume that it will not affect them."

We are an economy where the per capita income of families has grown remarkably in these years, but much of that improvement can be lost quickly in an adverse event, Mr Liendo said. "The challenge you all have is to convince this population that **the promise you are offering is worth much more than the value of the premium charged**."

The opening ceremony concluded with a speech by **Socorro Heysen**, Peru's superintendent of banking and insurance, which follows on the following pages.

37 — César Liendo, Vice Minister of Economy, Peru.

38 — Left to right: Eduardo Morón, President, APESEG, Peru; Doubell Chamberlain, Chair of the Board of Directors, Microinsurance Network, South Africa.

39 — Thomas Loster, Chairman, Munich Re Foundation, Germany.







## Speech by Socorro Heysen, Peru's Superintendent of Banking and Insurance

Ten years ago, in 2007, the Superintendence of Banks, Insurance and Pension Fund Administrators (*Superintendencia de Banca y Seguros*, SBS) initiated steps to facilitate the development of microinsurance in Peru by issuing the first regulation.

At that time, it saw an important opportunity to cover risks for a segment of the population that wasn't traditionally served, by means of simple, low-cost products. These products had to have few exclusions and be as inclusive as possible. For that, they needed to be offered through various channels that would allow insurers to reach a greater number of customers. The figure of the "insurance marketer" was thus introduced to act as the insurer's representative in promoting and selling microinsurance, while the insurer assumed the responsibility for marketing.

Subsequently, in 2009, it was considered necessary to incorporate changes to the regulation by removing the limits for the sum insured or monthly premiums. On that occasion, the aim was to emphasise the importance of designing products suitable for the target group for microinsurance.

In 2012, the SBS considered the desirability of taking part in the Project for the Implementation of Regulatory and Supervisory Standards for Microinsurance - a joint project with the Access to Insurance Initiative, the German Development Cooperation agency (GIZ) and the Inter-American Development Bank. This project envisaged the preparation of a diagnostic study of the insurance market, aimed at the low-income population. The result provided a better understanding of the insurance market situation and the target population's perception.

Taking up the recommendations, in 2016 the current regulation established a more precise definition of microinsurance that included its qualitative and quantitative characteristics, in order to facilitate its design and identification, as well as to implement a more streamlined process for reviewing and registering new products.

In addition, provisions relating to the marketing of microinsurance were updated to provide for the use of electronic policies and distance marketing systems, as well as use of the receipt, which contains relevant information on the terms and conditions of insurance, as proof that insurance has been taken out. For example, we would expect products to be able to be distributed through various businesses, with the receipt containing evidence of the features of the product, and the company then being able to send the virtual policy to the user. The regulation likewise allows the use of banking agents from banking, finance and microfinance companies, as well as from electronic money issuing companies (EEDEs5).

Peru's microinsurance market currently involves around five million insureds, a volume that is the result of a continuous process of learning, reflection and adjustment. It is, however, necessary to recognise that there is still a lot to do in order to continue to boost the development of microinsurance:

### On the supply side:

Extend coverage of property, catastrophe and agricultural risks to make them accessible to all sectors – microentrepreneurs, households, producers.

Develop standardised products like Obligatory Traffic Accident Insurance (known by the Spanish acronym SOAT<sup>6</sup>), which would allow far wider distribution and dissemination, thereby generating a culture of insurance. It is important to review claims handling and payment processes and requirements, so that claims are dealt with promptly and without operating costs.

# On the regulatory operating environment design side:

Incorporate greater use of technology that will facilitate access to more people, speeding up the policy arrangement process with less use of physical documents – thereby reducing costs – without neglecting the information required on the product's features. For example, the use of fingerprints or PINs as a mechanism for confirming an insured's identity and their acceptance of the arranged cover are alternatives that we are studying.

Further reduce the response time for the registration and analysis of new products, in order to promote innovation. To this end, we are reviewing our internal processes.

Strengthen market conduct in order to maintain high standards of fair treatment of insureds, resulting in greater faith in the insurance system.

Continue with insurance education strategies that will allow people to be more empowered in relation to their rights and to have an adequate understanding of how insurance works.

#### On the ecosystem side:

One of the obstacles to reaching a larger part of the population is the high cost of distribution imposed by the channels involved; we need to promote and highlight channels that have a financial inclusion purpose in facilitating cover for the people they are able to reach. We will see mechanisms that allow this information to be made more transparent.

We at the SBS will continue with the necessary commitment and dedication to promote all the initiatives and efforts that will allow major advances in the protection of people with no insurance cover, working very closely with the various participants interested in greater financial inclusion.

I feel very honoured to be taking part in the opening of this important conference and to be welcoming our guests from abroad. I wish you all a very pleasant stay in our country and hope that your time here will be beneficial to you, that you will exchange the different experiences you have had in your respective countries, and that important new challenges will be set which contribute to the development of microinsurance in the world.



40 — Socorro Heysen, Superintendent, SBS, Peru.

## Plenary 1

## How does (micro)insurance matter for development?

#### **By Pedro Pinheiro**

The plenary takes a critical look at the role of insurance in development from the perspectives of two professors of economics, both of whom also have extensive practical experience in developing countries: one as the founder of a non-profit organisation promoting effective solutions to global poverty, and the other as the chief economist at a national aid agency leading intervention projects on rural poverty and communities vulnerable to natural disasters.

For the poor, insurance means avoiding the use of assets to recover from a financial shock or disaster and preventing a fall back into deeper poverty. But even before a shock occurs, there is a risk management role insurance can play to help the poor prepare for and deal with unforeseen perils.

By providing protection against risk and other threats to the status quo, insurance makes economic activity possible. With the security insurance provides, people, as entrepreneurs or even microentrepreneurs, can assume a degree of financial risk and invest in an enterprise or community, thus generating business. There is no doubt that insurance underpins development, whether at a macro or micro level. The question is how well it is able to perform that role in the current scheme of things. Specifically, that role can be examined against the backdrop of the UN's latest sustainable development goals (SDGs). These are a new, universal set of goals, targets and indicators for UN member states to use to frame their agendas and policies over the years 2015-2030. The first two SDGs are: no poverty, and zero hunger. How does (micro)insurance figure in this macro agenda, with its potential of risk management and financial protection to unleash investment by the poor and low-income sections of the population?

## Cover risk well to counter underinvestment in small-scale farms

Insurance can provide more than simply financial protection, especially for the poor. It promotes risk management which, even if not practised, at least makes people aware of the need for it.

Experiencing financial shocks makes people cautious about investing to improve their circumstances - which then delays escaping from poverty. Awareness of risk management, in addition to having insurance protection, provides an incentive to invest.

Some 75% of the world's poor depend largely on farming. Innovations for Poverty Action (IPA), dedicated to improving the lives of the world's poor, believes investing to increase the productivity of small-scale farms is key to the well-being of farming families. An IPA intervention in northern Ghana found that risk, rather than lack of capital, is what drives underinvestment in agriculture.

This study of 1,406 households in 84 rural communities – conducted from 2008 to 2012 - divided the population into four groups: one received cash grants, a second received rainfall index insurance against drought and flood, a third received both, and the fourth (the control group) did not receive either. Farmers with insurance invested more in agricultural inputs than those with cash grants (see Figure 4).



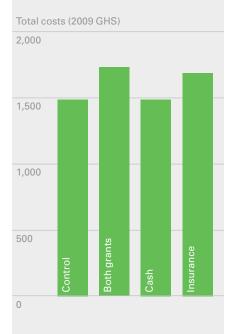
41 — Stefan Dercon, Professor of Economic Policy, University of Oxford, United Kinadom explaining why disaster preparedness is better than the post-disaster "begging bowl" approach.

42 — Dean Karlan, Professor of Economics at Northwestern. United States; Glenn Harrison, C.V. Starr Chair of Risk Management & Insurance Director, CEAR - Georgia State University, United States.

However, the study also found that insurance take-up is highly influenced by trust and the recency bias. Take-up of insurance was considerably higher among farmers who also received a capital grant, but it was not higher among households who were wealthier. This suggests that farmers might not have been entirely confident that the promised insurance payouts would be made when trigger events occurred, and so they were more willing to take the risk of purchasing when they had been given extra cash. Similarly, individuals who were familiar with others who had received insurance payouts in previous years were significantly more likely to take up insurance themselves.

To promote trust, insurers must guarantee that claims processes are fast and effective, and that exclusions are clearly understood by the consumer.

## Figure 4 Average total expenditures on farming by treatment group



Source: Karlan, Dean. Presentation "Agriculture, technology and economic development – A view from the field." 13th International Microinsurance Conference 2017. It may help to make payouts more frequent – for example, by bundling insurance with a savings component. However, when automatic set-off mechanisms are put in place for payment of the loan, insurers should heed any built-in perverse incentives for the insured to sell loan proceeds at a lower price to third parties and then default on the loan.

Social networks in rural areas also come into play. Community extension agents, assigned to deliver timely messages about cultivation practices, were found to have a positive influence. With an educational or consultative component added, insurance has a nudging effect on practices which help manage risk. These components need to be simple and direct (such as "do this, do not do that") – keeping in mind that there is not even a word for "insurance" in some local languages.

Also important to remember are the household dynamics and the roles of different members of the family in relation to the risk: whose income is affected, who owns the object at risk, whose assets are going to be sold in the case of a shock, who controls the premium, etc.? The answers will affect the targeting and success of an insurance product.

## An insurance-like public system with better products

The second presentation made the point that one third of poverty is associated with adverse events. Loss of health and loss of assets are the two biggest risks the poor face, and (micro)insurance so far has not lived up to expectations. In terms of both impact and uptake, the effect of health insurance and weather index insurance schemes on the poorest is negligible. The question arises: are these products the right way to protect progress in global SDGs that leave no one behind? A focus on microinsurance products is, of course, important for insurance market's development - but not as a tool to reach the poorest.

Additionally, in the event of natural disasters, the response to shocks after they occur has been dismal in both the developing and developed world, at the cost of many lives. This is due largely to a failure in implementing ex ante risk management instruments and poor decision-making at the time of the event, as well as to a reliance on the medieval financing instrument of a begging bowl. A cultural shift is needed, to proactive risk management at all levels of society, including: risk identification and ownership, risk reduction and preparedness, and financial planning.

Plenary 1 How does (micro)insurance matter for development?

With natural disasters on the rise, more and more countries should have an insurance-like system (such as FONDEN in Mexico and HSNP in Kenya) that is able to promote clear risk ownership and a fast, evidencebased decision-making process, with a coordinated, credible plan for post-disaster action agreed in advance, and a financing system on standby to implement the plan.

Arguably, (micro)insurance in its current mode as a market-based private system is falling short of alleviating poverty and helping meet SDGs. To matter most for development, it should evolve into an "insurance-like" public system (see Figure 5).

#### Lessons learnt

- Most of the world's poor are in rural areas and involved in farming. Increasing productivity of smallscale farms is key to raising farmer income and alleviating poverty. That means enabling farmers to invest in improved seeds and fertilisers.
- Risk, rather than lack of money, is what keeps farmers from investing in improved inputs. Insurance offsetting the risk will counter underinvestment and persistent poverty.
- Microinsurance is growing rapidly in low-income sectors, but has not spread much across the bottom of the pyramid among the poorest.
   For both health insurance and natural disaster protection – the two main risks the poor face – products on offer have had little impact or take-up among the poorest.
- To contribute effectively to development, as envisioned in SGDs, insurance for the very poor needs to be a public policy, not a market development, concern. It should evolve into an insurance-like system that guarantees inclusion of the poorest, builds on informal systems, and improves consumer protection, product quality and risk reduction incentives.

Figure 5 Conclusion: insurance and the poor

## Not about a Market-Based Solution to SDGs or Poverty

But a Public Policy issue: use insurance principles for a system that ensures poor people are protected

- Systems that provide protection of the poor against health and climate risk, ensuring maximum inclusion
- Use sovereign insurance as part of pre-arranged financing for large relative to local economy
- Use micro-insurance to reach more people

#### **Role of private providers?**

- Don't just go and sell insurance products to families
- But use the power of insurance principles and risk transfer to develop systems to protect people

Plenary 2

## Agenda

## 8 November 2017 **Morning sessions**

The landscape of microinsurance in Latin America and the Caribbean	Andrea Camargo Chief Strategy Officer, MiCRO, United Kingdom	Opportunities and barriers for microinsurance in Peru Hosted by APESEG
Hosted by Microinsurance Network Results from the "Landscape of	<u>Raúl De Andrea</u> Secretary General, FIDES, Peru	<u>Luis Ato</u> Product Manager, Caja Sullana Peru
Microinsurance in LAC 2017"	Facilitator	Augusto Paz-Lopez
<u>Alex Proaño</u> Principal – MSME Finance,	Katharine Pulvermacher Executive Director,	Manager of Asset and Insurance Products, Mibanco,
A2F Consulting,	Microinsurance Network,	Peru
United States Carla Chiappe	Luxembourg	Victor Delgado Head of Business to Consumer
Head of the microinsurance working group of ASSAL, SBS, Peru		e-Solutions, Enel, Peru
<u>Juan José Durante</u> Financial Markets Lead Specialist, IDB,		<u>Luis Alberto Gallegos</u> Business Strategy Manager, Caja Arequipa, Peru
United States		Facilitator
Doubell Chamberlain Chair of the Board of Directors, Microinsurance Network, South Africa		Juan Luis Jaureguy Director of Massive Channels, MAPFRE,

## Parallel session 2

Innovations in microinsurance matching customer needs

Behavioral intervention to increase uptake and usage of mobile microinsurance

Shilpi Shastri Microinsurance Specialist, Women's World Banking,

Mathilda Ström Deputy CEO, BIMA,

Facilitator

ance Centre at Milliman, United States

Parallel session 3 Health index insurance: A game-changing solution?

Hosted by the World Bank/IFC

and Agricultural Insurance,

Jimmy Loro Senior Advisor, GIZ RFPI,

Senior Technical Officer, ILO's Impact Insurance Facility,

Chairman of the Board, MiCRO, **United States** 

#### Facilitator

**Gilles Galludec** Principal, Global Insurance, **United States** 

## Parallel session 1

Peru

Parallel session 4 Agriculture/Natural disasters

Insurance as one of the pillars of integrated risk management in the agriculture sector

Nacional de Gestión Integral de Riesgos, Agroseguros/Ministerio de Agricultura, Chile

Two cases of agricultural insurance for small farmers

Consultor Senior, Muenchener

Facilitator

## Plenary 2

# The landscape of microinsurance in Latin America and the Caribbean

By Maria Victoria Sáenz

Microinsurance, no longer the "Cinderella"<sup>7</sup> of financial inclusion, is now widely acknowledged as a key player. To help keep track of the rapid progress, the World Map of Microinsurance (WMM) – a joint effort of the Microinsurance Network and the Munich Re Foundation – provides a detailed and regularly updated overview of regional markets. The focus of this year's landscape study, reviewed in this plenary, was Latin America and the Caribbean (LAC).

## Key findings of LAC landscape 2016

- Lives covered:
   52.1 million
- % of population:
   8.2% covered
- Gross written premiums: US\$ 420 million

The methodology included requiring products to satisfy microinsurance criteria, that is, products explicitly developed for the low-income population, managed based on risk and business principles, and priced to be affordable to the low-income sector. Data was self-reported by insurers, supplemented by figures from regulators and other secondary sources.

The accessibility of data for this study was particularly challenging. Despite using the same criteria for microinsurance products, isolating them is difficult in markets evolving at great speed in the region. With insurers submitting information on a voluntary basis and no obligation to complete the survey, the gathering of information is hampered by non-disclosure caveats and a lack of trust. Plus, in most jurisdictions there is no regulatory requirement to report microinsurance data as a category. The regulator calls for indications on the design and development of life or general microinsurance policies, but not specifically for reporting of their sales. Usually, data from the private sector shows higher levels of outreach and premium collection than the regulatory agencies.

43 — Alex Proaño, Principal – MSME Finance, A2F Consulting, United States.

44 — Left to right: Doubell Chamberlain, Chair of the Board of Directors, Microinsurance Network, South Africa; Andrea Camargo, Chief Strategy Officer, MiCRO, United Kingdom; Carla Chiappe, Head of the microinsurance working group of ASSAL, SBS, Peru.

45 — Juan José Durante, Financial Markets Lead Specialist, IDB, United States.





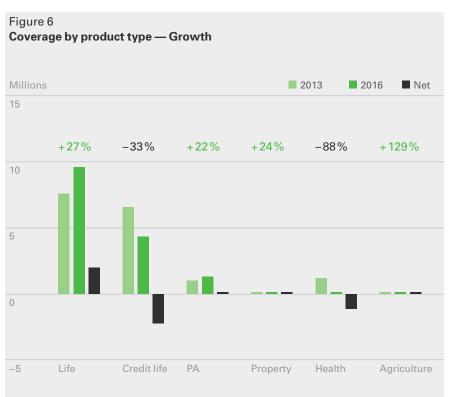
7 Term coined by Jeremy Leach of Bankable Frontier Associates in 2013



Reconciling data from primary sources with secondary research on the 21 largest markets in the region has yielded notable results. A preliminary briefing note was distributed at the conference, ahead of the study's publication in the first quarter of 2018. According to the study, an estimated 52.1 million people are now (micro) insured – some 8.2% of the region's population – and there is significant growth in the supply of property (P), personal accident (PA) and agriculture (A) lines that is changing the markets' composition (see Figure 6). A change worth noting is that in LAC the use of mobile distribution channels is catching up with the highly developed examples in Africa. A quarter of the new insurance products are now drawn from partnerships between mobile service providers, banks, microfinance institutions, and insurers.

Some countries had incredible growth in premiums between 2013 and 2016: 1,799% in **Brazil**, 284% in **Nicaragua** and 95% in **Peru**. Coupled with this is a decline in the levels of commissions, from an average 20% to 12%. Only 17% of the products now earn commissions of more than 30%, down from 25% in 2014 – indicating a more competitive market aimed at the low-income population. Complementing the landscape study results, FIDES (Federación Interamericana de Empresas de Seguros or the Inter-American Federation of Insurance Companies) presented highlights of a survey of its member national insurance associations. FIDES groups insurance associations from Latin American countries as well as the US and the Iberian Peninsula.

The survey shows that microinsurance is a reality that is being progressively implemented in the countries in the region. The most common step their supervisors have taken is to define microinsurance – in Argentina, Brazil, Colombia, Costa Rica, Honduras, Mexico and Peru. In Bolivia, the insurance sector itself has agreed on a definition. Although many countries have a definition, only the supervisory bodies in Honduras and Brazil measure the microinsurance volume. In Mexico and Colombia, this is the task of the insurance associations.



#### Box 2 Key findings of FIDES study

- Average amount insured: US\$ 2,300
- Average claim:
   US\$ 1,000
- Average premium for life and personal accidents US\$ 4 to US\$ 15; for a funeral US\$ 30; and for a productive unit US\$ 43.

31

## Figure represents comparable data only (companies reporting in both the 2014 and 2017 studies, plus new market entrants). This includes 27 reporting companies.

Source: Proaño, Alex. Presentation: "The Landscape of Microinsurance in Latin America and the Caribbean". 13th International Microinsurance Conference 2017

Report 13th International Microinsurance Conference 2017

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Plenary 2 The landscape of microinsurance in Latin America and the Caribbean

## The increasing involvement of regulators has played a significant

role in the development of the market. An example of this is the willingness of Peru's authorities to make changes to the regulation after the Access to Insurance Initiative (A2ii) diagnostic study of the microinsurance market. One of the key changes introduced by the Superintendencia de Banca, Seguros y AFP (Administradoras de Fondos de Pensiones) is the improvement of data reporting to make information more reliable and complete.

### Lessons learnt

- Design strategies to motivate the private sector to share more information. The market can develop better if accurate information about it is available.
- It is important to keep analysing the data to draw a better landscape of the industry in the region and also to design a more systematic approach or process for gathering information.
- What is needed is not "spurious accuracy" but slightly more in-depth knowledge of what the market needs – including both the "appropriate" products and the "desirable" ones. In this sense, LAC has done a great job by defining microinsurance and identifying products for the mass and inclusive markets.
- All in all, the creation of awareness of risk among the target market remains a challenge.



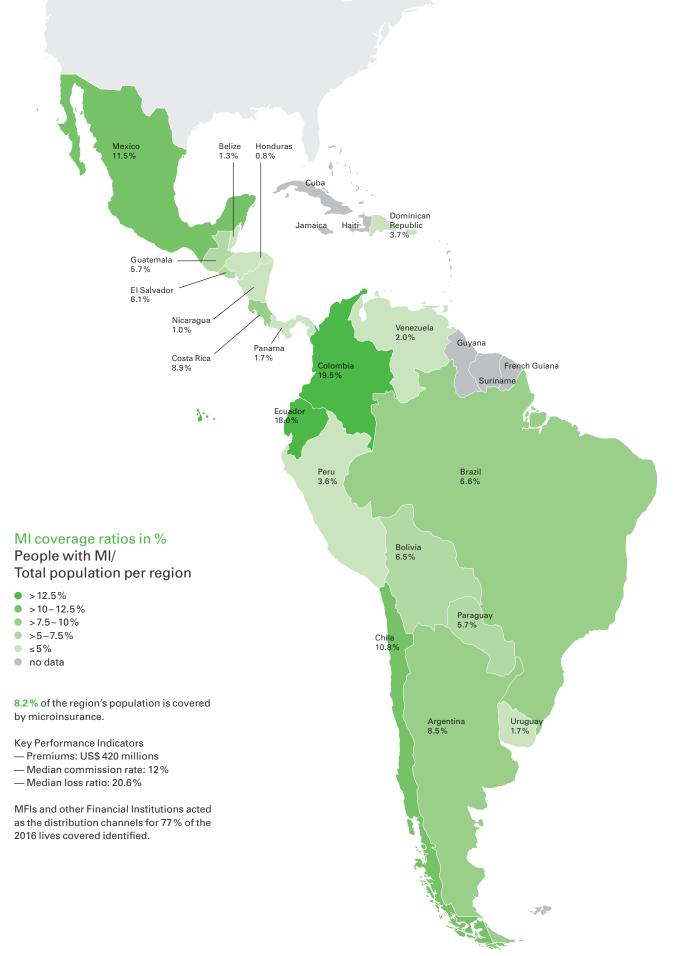


46 — Katharine Pulvermacher, Executive Director, Microinsurance Network, Luxembourg.

47 — Raúl De Andrea, Secretary General, FIDES, Peru. Report 13th International Microinsurance Conference 2017







Source: The Landscape of Microinsurance in Latin America and the Caribbean 2017 – Briefing Note. Published by the Microinsurance Network and the Munich Re Foundation, November 2017

## Parallel session 1

# Opportunities and barriers for microinsurance in Peru

## By Maria Victoria Sáenz

Four financial services experts reviewed the prospects for microinsurance in Peru as they detailed their own institutions' forays into this new business segment.

Peru is a diverse country with 32 million inhabitants and one of the highest economic growth rates in the region. It has a per capita income of US\$ 6,123, a low illiteracy rate and a financial inclusion index of 30%. But insurance penetration in Peru is low (1.7%), even in relation to that of the region (3.2%). However, the microinsurance market is dynamic, with an average annual growth of 11.7%<sup>8</sup> in premiums over the last 10 years. It now has 62 microinsurance products registered, 4.9 million insured persons and US\$ 19.7 million in premiums.

An important breakthrough for Peru's microinsurance regulation – first issued in 2008 and updated in 2016 – is the provision of varied distribution channels. Today the inclusive insurance market is served through 16 banks, 27 financial institutions, 11 microfinance institutions, 3 public utilities institutions and 7 retail store networks.

In the session, three regulated MFIs – Mibanco, Caja Sullana and Caja Arequipa – and a public service entity, Enel, presented their experiences. **Enel**, an energy multinational, has 1.3 million clients in Peru and is recognised as a leader in community service and responsibility.

## Enel MásSeguros

'Insurance at your fingertips'

Number of people insured 400,000

Insured risks Funeral, dental, cancer, life, family

Premium range S4.90 (US\$ 1.52) to S25.90 (US\$ 8.03) per month

In 1999 Enel began to offer its customers products insuring the main risks: personal accidents, burial, funeral expenses, home protection, cancer diagnosis, dental and medical emergencies.

For the purposes of the offer, Enel formed an alliance with an insurer to develop products with affordable prices, easy payments and coverage associated with its core business. Sales were made face to face and by telephone. For Enel, having more than 200,000 insurance clients with 5+ years of renewals represents a parallel business that supports its main line of business, as well as loyalty and social inclusion. The **Municipal Savings and Loans Banks (CMAC)** were created with GIZ assistance 35 years ago to democratise credit, and deepen and decentralise Peru's financial system.

Both **Caja Arequipa and Caja Sullana**<sup>9</sup> have a long-standing history of innovation and financial stability. Their combined assets are US\$ 2.3 billion, with deposits of US\$ 1.8 billion. The income from their microinsurance operations is significant, around 4.5% of the overall income in the case of Sullana.

Microinsurance activities also build customer loyalty in the competitive microfinance market. MFI clients, despite making progress, remain vulnerable to setbacks, particularly in the field of health. The culture of prevention is still not prevalent and the "bad reputation" of insurance is significant. The decision to purchase insurance does not come easy, given the precarious finances of families.

For this reason, both CMACs have strategies to include insurance in a way that boosts well-being and opportunities for low-income people, as well as achieving the institutions' financial inclusion goals.







48 — Luis Ato, Product Manager, Caja Sullana, Peru.

49 — Augusto Paz-Lopez, Manager of Asset and Insurance Products, Mibanco, Peru.

50 — Victor Delgado, Head of Business to Consumer e-Solutions, Enel, Peru.

#### 8

Peru was the second country in the world and the first in Latin America to have specific microinsurance regulation.

#### 9

Caja Arequipa is larger. This analysis was based on the 2016 closing financial statements of both CMACs as reported by the SBS. The exchange rate was also taken from the official SBS site.

### Microseguro de Vida, Caja Arequipa

Number of people insured 156,095

Insured risks Death, burial, abandonment

Premium S2.50 (US\$ 0.77) per month

**Caja Arequipa** designed products adapted to the customer's life cycle: special savings accounts for children and teenagers; cheque accounts and credit for working capital and fixed assets for young people; and for middle-aged people: mortgages, property and car loans, life, car, credit life and health and cancer insurance.

With this strategy, Caja Arequipa in 2016 had a 12% share of the microinsurance market in terms of insured persons, and a 20% share of premiums. It is planning to package the different insurance products and sell them massively (see Figure 8).

#### Seguros Caja Sullana

Number of people insured 222,369

### Insured risks

Loans, funeral, personal accidents, cancer, card theft, agro harvest

#### Premium range

S1 (US\$ 0.31) to S6 (US\$ 1.86) per month

Caja Sullana started selling insurance linked to its core business "credit," to build loyalty; today it is a substantial part of its business. It cross-sells a portfolio of linked insurance products (multiperil microenterprise or household, all risks, car, agriculture and credit life insurance) and some optional products (cancer, personal accidents, credit card protection, funeral and the mandatory automobile insurance). As Sullana bundles the offerings, prices stay affordable with different ways of paying and debiting savings accounts.

#### **Seguros Mibanco**

Number of people insured 1.2 million

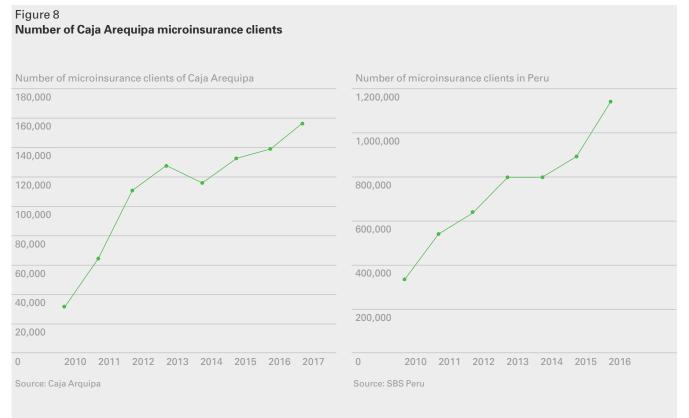
Insured risks Death, disability, income loss, family, business

#### Premium range

S3 (US\$ 0.93) to 4% of loan balance per month

In 1998, after 43 years of successful history as an NGO, Accion Comunitaria del Peru (ACP) created **Mibanco**, a full-fledged bank. Today, after successfully establishing the business and then taking over other MFIs, Mibanco is the largest microfinance institution in Latin America and the Caribbean in terms of loan placements, and it is the undisputed leader in the micro and small-enterprise market, with a 26% share.

Its mission is to achieve financial inclusion with profitability, through a relational model that implies working directly in the field, providing a comprehensive service and adapting



Source: Gallegos, Luis Alberto. Presentation "Microseguros: Oportunidades y barreras." 13th International Microinsurance Conference 2017. Report 13th International Microinsurance Conference 2017

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Parallel session 1 Opportunities and barriers for microinsurance in Peru

to the clients' needs. In the course of meeting those needs, Mibanco has been an important advocate of microinsurance.

With more than 1.2 million clients, it has sold more than 2 million insurance policies. In 2016 Mibanco paid 2,512 claims with an average payment of US\$ 2,183. And in the first 6 months of 2017, it processed 1,536 claims with an average payment of US\$ 2,781.

As a client-minded institution, it sees its clients as having the dual roles of micro-entrepreneurs and family members. So the insurance offering is divided into three types of protection (see Figure 9).

### Opportunities

Lessons learnt

- Clients know their concerns about health, education and security that can be covered by customised microinsurance.
- Peru's market for microinsurance is growing, as the population segment it is directed at continues to understand the service better and recognise its role in improving their quality of life.
- For financial institutions, microinsurance represents a loyalty tool linked to their core business.
- The impact of benefits in the coverage offered allows providers to establish lasting relationships with the family and the business in the event of a loss.
- A culture of prevention and well-being is generated through microinsurance and financial inclusion.

### Barriers

- For the low-income sectors, the insurance premium payment has an impact on their family finances; it is an investment they find difficult to take on. So insurance companies need to evaluate their costs and keep them low.
- The lack of a reading habit, coupled with the enormous amount of information in the insurance policies, generates distrust in customers.
- Today, providers do not perform a comprehensive evaluation of the client's needs, although there are isolated efforts focused on offering active and passive products.
- Although insurance is an intangible service, it requires strategies and actions on the part of everyone involved to make it "tangible" and translate to a true understanding of what the client tells us and needs.
- The slow spread of a culture of prevention and protection hinders the further growth of microinsurance.

Source: Gallegos, Luis Alberto. Presentation "Microseguros: Oportunidades y barreras." 13th International Microinsurance Conference 2017.

Figure 9 Three types of protection



Protected family Covers accidental death and total and permanent disability due to accidents



Permanent disability due to accidents

Protects the business against fire, natural disasters (earthquake, floods, landslides, etc.) vandalism and terrorism

Financial protection Coverage of natural death, accidental and total and permanent disability for accident and disease

Source: Paz-Lopez, Augusto. Presentation "Mibanco." 13th International Microinsurance Conference 2017. 51 — Luis Alberto Gallegos, Business Strategy Manager, Caja Arequipa, Peru.

52 — Juan Luis Jaureguy, Director of Massive Channels, MAPFRE, Peru.





### Innovations in microinsurance – matching customer needs

**By Pedro Pinheiro** 

Innovative solutions in insurance are commonly focused on administrative efficiency, and tend to be evaluated according to their impact on sales. In this session, examples of innovations that aimed primarily at improving the customer experience and understanding of the products were presented by the Women's World Banking, BIMA and Pioneer Insurance.

### Behavioural economics insights to review mobile insurance products

Data from the Landscape of Microinsurance in Africa 2015 showed that the continent had 13% penetration of life insurance through mobile programmes, but the claims ratio of 0.4% undermined their value to customers.

The Women's World Banking (WWB) assisted insurer BIMA to review insurance products sold in partnership with telecom operator Smart in Cambodia, drawing on insights from behavioural economics in order to increase uptake and improve usage. The feedback from clients was that the products were affordable and meaningful, and processes were quick and hassle-free. But they generated limited trust and credibility, and limited interaction with the insurer through the mobile channel.

### **BIMA Insurance + Smart telecom** operator partnership in Cambodia

### **Smart Life Insurance**

Launched end 2014 Over 500,000 customers

Sum assured 12 million Cambodian riel (KHR) (US\$3,000)

Premium 6,500 KHR (US\$ 1.60) a month

**Smart hospital insurance** 

Launched mid 2016 Over 200,000 customers

Sum assured 40,000 KHR (US\$ 10) a day

Premium 325 KHR (US\$ 0.08) a day

WWB found that throughout the customer's journey, from enrolment through to the time there is an insured loss, clients and families tend to forget about the insurance. To counter this with a design methodology relying on listening to the customer and quickly prototyping, WWB came up with four tools to help create more memorable sales, and keep the clients engaged and ready to contact the insurer in the event of a loss.







53 - Left to right: Mathilda Ström, Deputy CEO, BIMA, United Kingdom; Geric Laude, President and CEO, CARD Pioneer, Philippines; Michael J. McCord, Managing Director, Microinsurance Centre at Milliman, United States.

54 — Shilpi Shastri, Microinsurance Specialist, Women's World Banking, United States.

55 — Mandla Shezi, CEO, Hollard Life, South Africa sharing his experience with innovative insurance solutions.

Parallel session 2 Innovations in microinsurance – matching customer needs

Personalised sales scripts were created with analogies for helping sales people to explain the products, and ask questions to double check if the product's features were understood. SMS messages were restructured to give nudges with a call to action for the customer ('don't forget to top-up your phone!'). Robot calls were implemented, with public service announcements and testimonials about the relevance of insurance in times of difficulty. And customers were offered a digital card with their photo and personal details as a symbolic proof of the purchase that could be shown to their families (or posted on the fridge door).

After the field test, the four tools brought important behavioural insights that could also be implemented in other strategies. WWB and BIMA found, for example, that in the robot calls, customers prefer to listen to testimonials from people that were like them rather than public service announcements. The insurer, in fact, was surprised by how much time people could spend listening to a recorded message about their insurance product in Cambodia - an inclination that can vary a lot in different countries or regions of the globe. The digital card, in turn, was able to help improve trust by making the relationship between the customer and insurer "more official".

### 'Fail fast, fail plenty'

#### Sagip Plan (CARD Pioneer)

Number of people insured 20 million

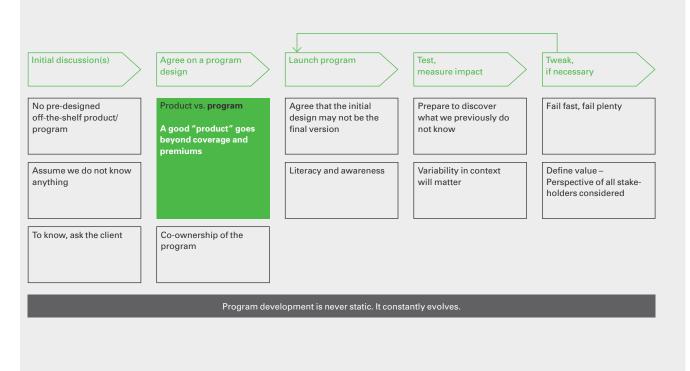
Insured risks Personal accident, funeral, home

### Premium range PHP 2,000 (US\$ 40) per annum

For the Philippines-based CARD Pioneer, customer-centric innovation comes from "failing fast, failing plenty". Since there is no blueprint for what good microinsurance is, the company adopts a methodology of figuring out what works and what does not work in the field, sometimes even living with customers – this could also be called "rapid prototyping" (see Figure 10).

### Figure 10

Microinsurance program (product) development approach



Source: Laude, Geric. Presentation "Automating the enrolment process – A learning journey." 13th International Microinsurance Conference 2017. At CARD Pioneer, there are three employment rules. No one should run the business from behind the desk; staff – even senior managers – have to go out into the field. If they do not know anything about a product or process, they have to ask the client – the client will tell them what needs to be done. And then they have to go back to the office and re-engineer the organisation based on the lessons from the client.

### Automating the enrolment process – a learning journey

One of the failure cases that generated important insights to review products and processes was the attempt to improve enrolment processing using smartphones. When the improvement was launched, CARD Pioneer had one thousand microinsurance agents doing enrolment manually, which generated many errors in encoding, delayed access to information, generated a lack of confidence in the data and failures in customer service handling, all in a context of increasing volumes. To reverse that scenario, the insurer provided the agents with smartphones and trained them to make sales with the devices. This strategy, however, proved a failure at first. The agents were not familiar with the use of smartphones, and the insurer was not structured to support their continuous learning. Intermittent connectivity due to lack of network availability also led to distrust on the part of the customers. CARD Pioneer soon learned that agents should have been treated as customers in that context, and that technology is not a magic pill - people and processes must be aligned.

In a relaunch of the project, the insurer adopted inputs from the microinsurance agents, and implemented Techie Nanay (Tech-mom), workshops on how to use the smartphones with a continuous buddy (peer-to-peer) support structure. The issue of connectivity was addressed by providing offline capability and offering internet connections in physical branches. But more importantly, people were put at the centre of the project, with technology becoming a tool for improving the sales experience.

#### Lessons learnt

- Insurers must remember that, most of the time, it is a lot to ask of a customer to learn about insurance in the moment of purchasing it, so they need to adopt strategies to make the messages more straightforward and easy to understand.
- Customers forget the main features of the product after some time. They or their family might even forget they have insurance. So insurers must find ways to engage with customers on a continuous basis after sales.
- Sometimes sales agents must be treated like customers, in the sense of receiving assistance from insurers, in order to make adequate sales, especially when technology is involved.

### Health index insurance – A game-changing solution

### By Shilpi Nanda

Research has shown that certain vector-driven diseases such as malaria and dengue are correlated with weather patterns. There is a potential for creating health index insurance solutions that are triggered under parametric criteria linked to weather events, and pay out in cases of pandemic or epidemic outbreaks. This session reviewed the research and initiatives and brainstormed design and distribution strategies for such a product.

56 — Left to right: Lourdes del Carpio, Manager, Massive Channels and Agricultural Insurance, La Positiva Seguros, Peru; Pranav Prashad, Senior Technical Officer, ILO's Impact Insurance Facility, Switzerland.

57 — Gilles Galludec, Principal, Global Insurance, World Bank Group, United States.

58 — Left to right: Stephen Mitchell, Chairman of the Board, MiCRO, United States; Jimmy Loro, Senior Advisor, GIZ RFPI, Philippines.

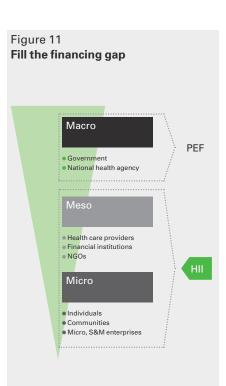




### Pandemic Emergency Financing Facility

Index-insurance products have become increasingly popular, particularly for agricultural risks. The key benefit of index insurance is speedier claims settlement, as the pay-out for a loss is based on a predetermined index for the area rather than specific damage to an individual farm. While agricultural risks affect many in the developing world, health-related risks, particularly pandemics and epidemics, pose a serious threat to people everywhere. Some of the most widespread diseases are climate-sensitive. WHO estimates that between 2013 and 2015, 250,000 deaths per year were caused by climate change, most of them due to malaria, diarrhoea and other vector-borne diseases.

In 2014–2015, the Ebola outbreak did significant damage in West Africa. After the outbreak, the World Bank Group created the Pandemic Emergency Financing Facility (PEF) in response to a need for liquidity. The objective was to enable fast financing mechanisms in case of outbreaks. The PEF is a combination of one cash window and one insurance window. It covers 6 viruses and the insurance (Health Index Insurance) window relies on parametric criteria to be activated based on publicly available data. The parametric criteria depend on the outbreak size (number of cases or number of deaths), outbreak growth (growing over a defined period) and spread (number of countries affected). This support is provided at the macro level; the session focused on micro and meso levels to enable similar financial mechanisms for pandemics (see Figure 11).



Source: Galludec, Gilles. Presentation "HII: Expanding index insurance to the health sector." 13th International Microinsurance Conference 2017.

### Index-based and disease-specific

In Peru, nearly 53% of people do not have any health insurance. Of the 47 % who do, 94% are covered under the public health system. Only 0.4% of the people at the bottom of the pyramid have private health cover. These figures indicate a lack of information on health services for people who also face challenges with access to health care when needed. The need for insurance cover is acute, especially for diseases like dengue and cholera. Equally, there is an opportunity for insurance companies to develop disease-specific products along the lines of health index insurance. Research in Peru, too, shows a correlation between certain viral and bacterial diseases and climate changes, particularly in humidity and temperature, triggered for example by El Niño and La Niña (see Figure 12).

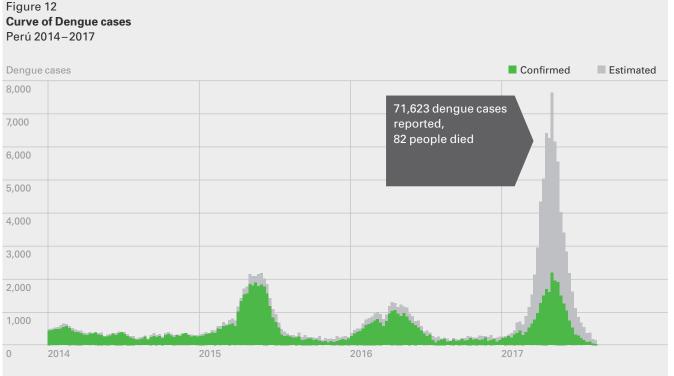
Health index insurance would give people access to treatment and hospitals, and cash to spend on prevention measures. The public system, in Peru as elsewhere, does not always have the ability or resources to respond to epidemics in a timely or suitable manner.

Data continues to be a challenge in all types of index insurance products, but proliferation of technology is leading to greater opportunities. The Centre for Disease Control (CDC) in the USA has found that tracking social media enables faster identification of disease incidence compared to traditional data sources. For countries with high usage of social media, this could be a path to explore. Constructing a suitable index is challenging as well. Insurers could build indices on footfalls at hospitals or within communities, or could explore hybrid indices comprising weather events and hospital admittances.

#### A specialty reinsurer

In 2010, following the devastating earthquake in Haiti, the Microinsurance Catastrophe Risk Organisation (MiCRO) was set up as a specialty reinsurer providing natural catastrophe and weather index products to MFIs insuring low-income microenterprises. Its founding partners are Swiss Re, Mercy Corps and Fonkoze microfinance, and it is supported by the IFC.

MiCRO developed a hybrid product with a parametric component as well as an indemnity one. If there were a triggering event, funds would be released by Swiss Re, and MiCRO would cover the indemnity pay-outs to Fonkoze clients. With a cholera outbreak in Haiti in the wake of the earthquake, MiCRO explored parametric product structures to cover such epidemic risks, but pricing proved to be a challenge, as was the availability of dedicated resources to accomplish the task.



There is evidence that the incidence of dengue in endemic areas is correlated to temperature and humidity. There is a positive correlation with El Niño and La Niña phenomenon.

Source: Del Carpio, Lourdes. Presentation "Health Index Insurance" 13th International Microinsurance Conference 2017. Parallel session 3 Health index insurance -A game-changing solution

#### Focus on prevention

Research in the Philippines shows that rainfall duration, relative humidity and temperature are climatic parameters that influence the emergence of dengue haemorrhagic fever. However, the incidence of dengue spikes at least a month after the main triggering event, such as rainfall.

This means that there is still time to implement suitable preventive measures at the community level and prevent the disease from spiking.

When designing health index insurance products, one has the choice of either an individual as a beneficiary or an institutional intermediary. The study in the Philippines demonstrates how health index insurance products can be used to identify health emergencies before they happen, and trigger a release of funds to the public health institutions or other intermediaries to enact preventive measures. It is also possible to extend this concept to multiple perils like earthquakes, floods, etc. and make it mandatory to address issues around basis risk and anti-selection.

Regardless of the choices, it is clear that there is a real need and an opportunity for insurers to innovate in health index insurance. To develop these plans, they can use lessons learnt on data, consumer education, aggregation and distribution channels from existing agricultural insurance pilots and schemes.

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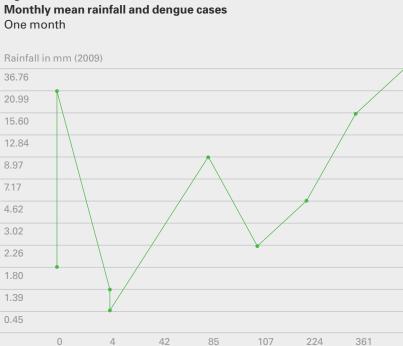
Jan – Dec (2009), dengue cases in Quezon City

#### Lessons learnt

Health index insurance offers speedy settlement due to the index-linked trigger for claims which, in turn, helps stabilise income for people and businesses during epidemics and support rehabilitation.

One challenge to be met is the availability of quality data, a key element in the construction of an appropriate and reliable index. An epidemic takes time to start and develop after the insured event, such as excess rain, is triggered time which can be used for preventive services.

Education and trust are important for index insurance, particularly in relation to health. Multiple players need to play a part in popularising insurance, particularly the government and media.



Relationship of Quezon City mean monthly rainfall levels mm (Y) adapted from PAGASA, and dengue cases (X) adapted from DoH; 2009

4

Source: Loro, Jimmy. Presentation "Developing an Index-Based Insurance in Response to Human Health Consequences due to Heavy Rainfall". 13th International Microinsurance Conference 2017.

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# Figure 13

### Agriculture/Natural disasters

By Marie-Christine Bélanger

In this session, agricultural insurance is presented from the perspective of two different actors: government and the private sector.

The new trends in policy formulation promote the development of integrated management policies based on four pillars: knowledge infrastructure, mitigation and adaptation, risk transfer, and response-reconstructionrecovery. Because farmers are exposed to a wide variety of risks (weather, price fluctuations, epidemics), risk management policies, instead of concentrating on a single factor, should consider all factors negatively impacting farm income.

### An optimal risk management strategy should integrate three levels of intervention

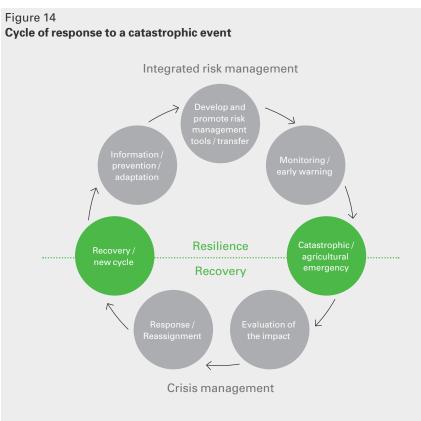
1. The first level should be assumed by the farmers themselves and by technical assistance to cover events of small magnitude but frequent occurrence.

2. The second level should cover middle-range events with products of insurance, futures, risk pooling, etc.

3. The last level should be covered by the government. Its role should be to manage the risk of catastrophic events, having a low probability of occurrence but high impact.

### Integrated risk management

Instead of always working in a response mode, the government of **Chile** chose to adopt an integrated risk management policy that allows for sound preparedness and response in the event of a catastrophe (see Figure 14). For policy implementation, a separate department was created in 2015 in Chile's Ministry of Agriculture. It is in charge of three levels of intervention. The first, relating to information, prevention and monitoring, set up a national agro meteorology network, an observatory on agro meteorology, and an app that provide farmers with easy access to live weather data, forecasts and recommendations. The second one is the development and promotion of risk transfer tools, such as agricultural and catastrophic insurance schemes and price stabilisation. The third relates to disaster management. It includes developing a project monitoring platform, spatial data infrastructure and tools for rapid assessment of damages and productive losses.



Source: Navarro, Camilo. Presentation "Insurance as one of the pillars of integrated risk management in the agricultural sector". 13th International Microinsurance Conference 2017.

Parallel session 4 Agriculture/Natural disasters

Two types of insurance scheme were developed: a 40%-subsidised commercial scheme and a fully subsidised catastrophic index insurance for drought, flood, frost, and fire for smallholder farmers. The objective of this catastrophic insurance scheme is to stabilise the national budget by disbursing a fixed amount of premium instead of undetermined ex-post payments.

### Commercial agricultural insurance Agroseguros Chile

Number of policies sold 17,082

### Insured risks

Crops against climate and disease perils

### Premium range

6% of sum insured (before 40% state subsidy)

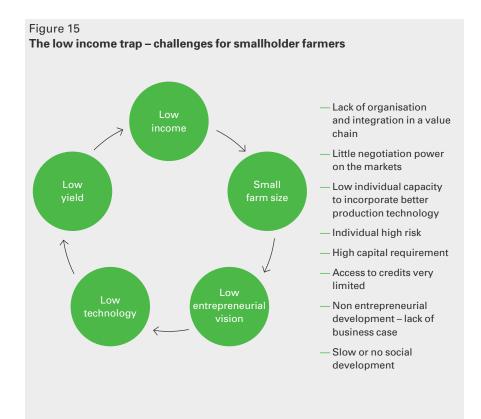
#### Protecting small farmers

In **Mexico**, most of the agricultural value chains are not well organised. The crops harvested from smallholder farmers represent between 60% and 90% of Mexico's agricultural production. These smallholder farmers have little negotiating power in the markets and remain trapped in low income situations with limited access to credit, high capital requirements and an individual high risk.

To be included in a credit programme, small farmers are required by financial entities to have access to full coverage of the risks they face. Current crop insurance schemes in Mexico are not viable for small farmers, because they are single-peril schemes and their operating expenses are high (see Figure 15).

Two innovative crop insurance plans were developed for small farmers in Mexico. Educampo, a program run by the NGO FUNDAR, promotes enhanced corn productivity by bringing technology, best business practices, training courses, financing, and insurance to less developed regions of Mexico. This programme is operating in 5 states with 2,542 farmers and has been generating US\$ 2,700 of additional annual profit per farmer. It offers multi-peril crop insurance (MPCI) covering climatic and biological perils, and is operated jointly by FUNDAR and an insurance company whose main role is loss assessment.

The second plan is developed by PULA-Advisors, a social enterprise promoting crop microinsurance in 8 countries. In Africa and Asia, it offers 3 products: a weather index (WI) covering the value of seeds and triggered by satellite data; and two area-yield indexes (AYI) covering either the fertiliser value or the full credit and harvest income, triggered by ground and satellite data. Farmers can subscribe to these schemes by cell phone, entering a specific code found in the bag of seeds or fertilisers.



Source: Perez Cabrera, Horacio. Presentation "Two cases of agricultural insurance for small farmers". 13th International Microinsurance Conference 2017

### **Lessons learnt**

- The government needs to be not only reactive in response to disasters, but also proactive in getting ready for them. Chile provides a good example of such integrated risk management.
- A catastrophic insurance programme can serve a dual purpose: protecting farmers, and stabilising the government's budget.
- Variable levels of subsidy by the government for catastrophic insurance in agriculture can be costeffective, with small farmers helped most and larger producers paying a greater share. The type of crops (degrees of vulnerability) and the producer's location (severity of risk zones) may also be factored in.

- Small farmers are often required to have access to comprehensive insurance coverage in order to qualify for credit.
- A partnership of an MFI/NGO and an insurer/reinsurer can work well in meeting the crop insurance needs of small farmers.





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59 — Camilo Navarro, Executive **Director Agriculture and National** Coordinator of IRG, Ministry of Agriculture, Chile.

60 — Left to right: Horacio Perez Cabrera, Consultor Senior, Muenchener de Mexico, S.A., Mexico; Miguel Solana, Technical Officer – Microinsurance, ILO's Impact Insurance Facility, Switzerland.

61 — Agricultural sessions at the 13th IMC were among the most popular sessions of the conference.

62 — Mariela Zaldivar, Deputy Superintendent of Market Conduct and Financial Inclusion, SBS, Peru, presenting in front of a full room, showing the strong interest in the topic of consumer

63 — Peter van den Broeke, Senior Policy Advisor, IAIS, Switzerland, facilitating the post-conference meeting of the IAIS – Financial Inclusion Working Group (FIWG).

64 — Doubell Chamberlain, Chair of the Board of Directors, Microinsurance Network, South Africa, addressing the General Assembly of the Microinsurance Network.

65 — Participants at work in the Consultative Forum on agricultural insurance regulation.







63

# "The market is there, and it is huge."

Jakub Nugraha Head of Microinsurance Division, PT Asuransi General, Indonesia



65

### Agenda

### 8 November 2017 Afternoon sessions

Par	allel s	essio	n 5	

### Parallel session 6

How tech data and analytics can shape the future of microinsurance

Hosted by Cenfri

Plenary 3

Introduction to the topic

<u>Mia Thom</u> Technical Director, Cenfri, South Africa

<u>Mzwandile Mtshali</u> Managing Executive, Hollard Insurance, South Africa

<u>Neha Bhatia Ramdas</u> Global Director of Sales, Juntos, United States

Mathilda Ström Deputy CEO, BIMA, United Kingdom

Facilitator

Doubell Chamberlain Managing Director, Cenfri, South Africa Innovative distribution beyond mobile

Edgar Aguilar Paucar Impact Insurance Fellow, ILO, Ivory Coast

Victor Delgado Head of Business to Consumer e-Solutions, Enel, Peru

Onkgopotse Masekwameng Two Mountains Funeral Parlour, South Africa

<u>Caio Valli</u> Head of consumer, middle market and motor insurance – LAC, Marsh, United States

Facilitator

<u>Craig Churchill</u> Head, ILO's Impact Insurance Facility, Switzerland Leveraging partnerships to provide access to insurance Hosted by the Microinsurance

Network

Nadia Boughaba AXA, France

Business Development Manager Latin America, BIMA, United Kingdom

Carlos Boelsterli CEO, MiCRO, Barbados

Mandla Shezi CEO, Hollard Life, South Africa

Facilitator

<u>Andrea Keenan</u> Senior Managing Director – Industry Relations, AM Best, United States

### Parallel session 7

Agricultural information and crop insurance

### Hosted by GIZ

Rodrigo Salcedo National consultant, GAF,

Joachim Herbold Senior Underwriter, Munich Reinsurance Company, Germany

Axel Relin Unit head, GAF, Germany

Hakan Demirbüken International consultant, GAF Turkev

Facilitator

Philine Oft Senior Consultant, GIZ, Peru

### Parallel session 8

How private insurance complements universal health cover

Strategic alliance in the design of health microinsurance

<u>Guillermo Aponte Reyes-Ortiz</u> Microinsurance Advisor, Procosi, Bolivia

Manyata – injecting quality of care into the insurance markets in India

Pompy Sridhar Merck/MSD for Mothers, India

Facilitator

Denis Garand President, Denis Garand and Associates, Canada

### **Plenary 3**

# How tech data and analytics can shape the future of microinsurance

By Marie-Christine Bélanger

In this session, the role of data and technology is evaluated and its contribution to the future development of microinsurance envisioned from three perspectives: a research centre, insurance providers, and a customer relationships agency. Digital technologies and business approaches applied to the insurance industry are popularly known as *Insurtech.* The use of Insurtech to deliver microinsurance in emerging countries was identified by the South African research organisation Cenfri as a promising solution. After analysing 157 initiatives around the world, there are still five challenges that need to be addressed (see Figure 16) than in Cenfri's view.

Insurtech is an interesting avenue but is it the panacea? Two insurance providers and a customer relationships agency presented their challenges.

### **One-stop shop**

In South Africa, **Hollard Insurance** is a champion of partnerships. Through these partnerships, it offers microinsurance to more than 5 million policyholders. For Hollard, customer experience is the key. Its products are designed around customer life events or stages, and tailored to the insurance needs at each stage.

This customer interaction through partner organisations in the field remains its focus, while Hollard explores and develops a number of digital approaches, such as a mobile platform to connect, bank and insure (one-stop shop – see Figure 17)

Hollard also continuously analyses data related to product development, claims management and fraud, customer lifecycle management, sales and distribution, and risk selection and pricing. New methodologies are often learnt and tested to improve customer experience and performance indicators. The biggest challenge remains embedding these new solutions within the business. To do so, a multifunctional project team is essential.



Source: Thom, Mia. Presentation "Role of InsurTech in overcoming challenges in microinsurance". 13th International Microinsurance Conference 2017.

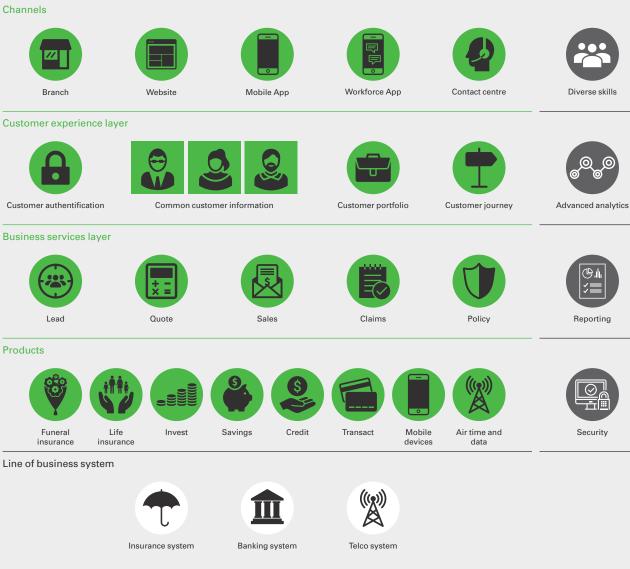
66 — Mzwandile Mtshali, Managing Executive Hollard Insurance, South Africa.



Cross-cutting capabilities

### Figure 17





Source: Mtshali, Mzwandile. Presentation "Leveraging data, analytics and technology". 13th International Microinsurance Conference 2017



67 — Left to right: Mia Thom, Technical Director, Cenfri, South Africa; Neha Bhatia Ramdas, Global Director of Sales, Juntos, United States; Mathilda Ström, Deputy CEO, BIMA, United Kingdom.

68 — Doubell Chamberlain, Managing Director, Cenfri, South Africa.

Report 13th International Microinsurance Conference 2017

Plenary 3 How tech data and analytics can shape the future of microinsurance

### Smart tech, not high tech

BIMA is an insurance provider that uses mobile technology to bring easy-to-use and affordable insurance and health services to low-income families. Since 2010, it has reached more than 24 million customers in 14 countries. Over 90% of these customers live on less than 10 dollars a day. The BIMA business model relies on partnerships with mobile operators, an award-winning platform delivering a great user experience, dedicated agents providing product distribution and education, and high-value products such as insurance-led product bundles that include insurance, medical advice, preventive care, medication discounts and delivery, and electronic health records. In order to reach such a high number of customers in emerging markets, BIMA has put an intense focus on data and technology.

Technology is used to solve problems, not just to fit in with the business solution. It must have a purpose - and be smart tech rather than high tech. See Figure 18.

Recent technology innovations in BIMA include electronic claims processing using WhatsApp, video consultation for physician assistance in Pakistan, and chatbots for subscription. Even though technology is important for BIMA, people are still a key component. There are more than 3,500 BIMA agents globally, and they are providing trust, education and awareness to their customers.

**Juntos** is a customer relationships agency that uses data analytics and technology to build digital relations between a company and its customers. Juntos reaches the customer using a simple SMS sent by a chatbot. Behind the SMS there are complex data analyses as well as an everchanging strategy to identify what works best (see Figure 19).

Juntos has conducted various pilot projects with financial institutions. In these projects, increases were achieved for Juntos-treated customers in loan application rates (4 times), in average monthly transactions per user (8%), and in average monthly current account balances (45%). Juntos is keeping an eye on developments in technology to be ready for "the next communication channel" and how it may be deployed to assist client organisations.

Figure 18 BIMA's platform digitalises the customer experience and destroys the barriers to registration and payment



Registration

Paperless registration in under 2 minutes



MSISDN as digital signature



Management of over 27 million

micro-payments each day

Payment





**Electronic claims** tracking

Source: Ström, Mathilda. Presentation "Empowering customers through technology: The BIMA way." 13th International Microinsurance Conference 2017.

"If you target microinsurance on a massive scale, focus on data and technology in order to make it work."

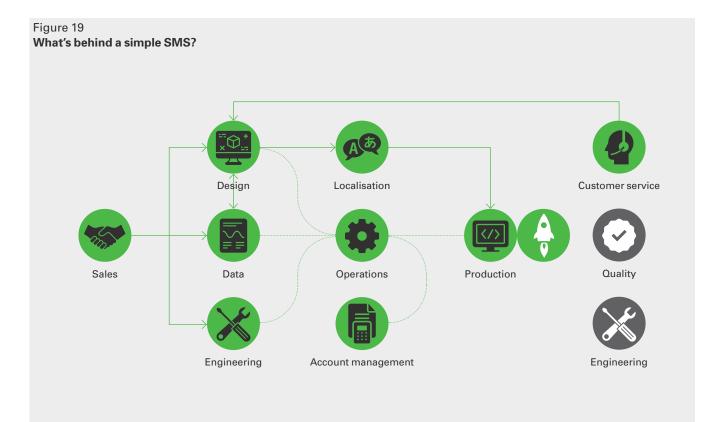
Mathilda Ström

"When embedding technological solutions within a business, it is important to rely on multifunctional project teams."

Mzwandile Mtshali

#### **Lessons learnt**

- Subscription payments using mobile operators are not the panacea. Most of the time, customers don't have a balance in their account, and the payment frequency does not seem to be easily adaptable. The industry must find an alternative payment channel.
- Data analytics can be used in business analysis as well as product development – for instance, to evaluate key performance indicators, develop more targeted products, or to detect fraud.
- Listening to customers helps develop new products that are more targeted and responsive to their needs, such as health insurance bundled with medical advice, preventive care, medication discounts, and health records.
- Enable clients now to make claims with Whatsapp. Use technology to improve a process and solve a problem rather than trying to fit a cool technology into your business solution.



Source: Ramdas, Neha Bhatia. Presentation "Juntos: Empowering users to build confidence in their financial lives." 13th International Microinsurance Conference 2017.

### Innovation beyond mobile

### By Marie-Christine Bélanger

This session reviewed three microinsurance schemes and their innovative delivery channels, concluding with a look at chatbot and its potential in the insurance industry.

### Using business ties

In **Ivory Coast**, a microinsurance pilot project launched in April 2017 is promoted by **Barry-Callebaut**, a Swiss-Belgian chocolate company that has business links with 60,000 producers and cooperatives, selling farm inputs and buying cocoa. For Barry-Callebaut, offering insurance to the producers is a way to offer a highvalue bundle and establish loyalty.

Historically, insurance covers such as life, health, or crop insurance have not been easily available to cocoa producers. The reason is simple: the producers live far from the insurance branches and are mistakenly seen as very low-income people. In reality, the annual income of cocoa producers is higher than the minimum annual wage in the city. And an existing delivery channel such as Barry-Callebaut's reaching 60,000 producers gives them ready access to insurance. When presented with these facts, the country's insurers started to see the potential. The producers' needs were collected in focus groups and surveys conducted by Barry-Callebaut's agents. The product developed is life insurance for the producer and spouse.

### Life insurance for cocoa producers in Ivory Coast

Number of policies sold since 2017 2,000

Insured risks Life of producer and spouse

Premium range US\$ 7–8 annual

Sum insured US\$ 400

This life insurance is sold as part of a bundle of services offered by Barry-Callebaut, which also includes credit for inputs, a savings account, and technical assistance. Because of business ties with producers, the company does most of the work itself, including producer education, subscription, and claims processing. The insurer provides training to the company's field agents and looks after pricing of the product.

### Bundling with a utility

In Peru for 20 years, the electricity company Enel has offered insurance schemes to its clients. At the beginning, this insurance was offered as part of its social responsibility, but many insurance companies rapidly got involved. Although 70% of the houses located in the North of Lima are not easily accessible, Enel's employees periodically visit them to assess electricity consumption and maintain the network. Like Barry-Callebaut, Enel offers a bundle to its clients: access to credit, access to appliances, and insurance.

The clients choose from a variety of products. Enel is in charge of product marketing, education, subscription and claims payments. The insurer handles product development, customer service and claims processing. In 2017, 14% of Enel clients bought this insurance; altogether, more than 25,000 clients have been paying premiums for the last 17 years (see Figure 20).

### Packaged with a service

In South Africa, Two Mountains Funeral Parlour has been in operation since 1999. Its 1,700 employees handle more than 5,000 funerals per month. Thanks to its 100 satellite offices located in 4 of the 9 provinces of South Africa, Two Mountains holds a 13% market share. In partnership with Hollard Insurance, Two Mountains

69 — Left to right: Caio Valli, Head of consumer, middle market and motor insurance – LAC, Marsh, United States; Victor Delgado, Head of Business to Consumer e-Solutions, Enel, Peru.

70 — Left to right: Onkgopotse Masekwameng, Two Mountains Funeral Parlour, South Africa; Edgar Aguilar Paucar, Impact Insurance Fellow, ILO, Ivory Coast.

71 — Craig Churchill, Head, ILO's Impact Insurance Facility, Switzerland.







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has more than 100,000 policies in force. Hollard looks after product development, and Two Mountains, as a trusted local company, serves as the delivery channel. Because each market is unique, surveys and focus groups were conducted and various coverage options introduced to fit the needs of each market group. An insurance pay-out could include the funeral service, airtime, grocery,

sells a funeral insurance product, and

funeral service, airtime, grocery, transport (usually more than 1,000 persons attend the funeral), burial, gravestone, credit and legal advice.

The business model put in place by Two Mountains and Hollard is a joint venture between two equal partners. They share the cost of premium collection, a call centre, product marketing, subscription and claims processing. Claims processing is carried out in the same office where the client bought the insurance cover. This has generated trust. Once the claim is processed, the funeral home proceeds with the funeral service.

### Chatting with a robot

Chatbot is short for *chatting with a robot* and is one of many spinoffs of artificial intelligence. It is a contemporary and fast-growing technology through which people can access information. It usually chats with a customer through a text messaging service.

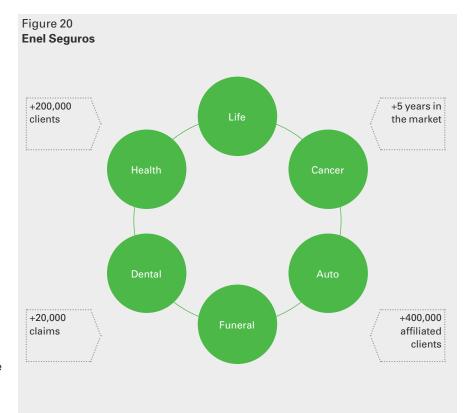
The first chatbot ever, called Eliza, was developed in the 1960s by MIT professor Joseph Weizenbaum. Chatbots have been evolving since, but are still essentially machines; they do not sleep or eat, and they can work 24/7. Chatbots can guide the users through conversation and they can even be in charge of subscriptions, renewals, after-sales service, conducting surveys and also leads generation. By integrating a chatbot into its workforce, an insurance company can expect to reduce its costs, increase its sales, collect validated data, optimise the call centre performance and provide a friendly communication channel with its customers and even with employees.

MARSH, an insurance broker, has just started to offer the chatbot package (customisation, integration, sending, measuring and following all campaign details) to its clients to maximise some sponsored consumer/affinity programmes.

Newgenapps, a consulting firm which helps clients develop mobile apps and cloud solutions, defines chatbots as a conversational interface, infused with artificial intelligence, cognitive abilities and the power of natural language processing. It uses cloud technology and is stimulating better customer service for businesses across all industries. According to Newgenapps, 86% of millennials agree that businesses should use chatbots to promote deals and products, and that overall 65% of consumers are willing to interact with a company via a chatbot.

### Lessons learnt

- A distribution channel for microinsurance can take many forms: electricity company, funeral home, exporter. But coverages offered should tie in with the core business or service, and respond to a demand (solve a problem).
- Innovation in distribution beyond a mobile network would involve another actor in the value chain.
   The one chosen must be trusted most by potential clients.
- Offering life microinsurance to clients is a good way of building loyalty (*fidelizacion*).
- Chatbot (a robot chatting) is a new way to communicate with customers and attend to their current needs. Powered by artificial intelligence, it serves as an automated service agent, so it should have a personality that customers can connect with.



Source: Delgado, Victor. Presentation "Enel Seguros". 13th International Microinsurance Conference 2017.

# Leveraging partnerships to provide access to insurance

### By Shilpi Nanda

Partnerships are a key enabler of success in emerging markets particularly for insurers. They need to depend, in many ways, on popularly based and other organisations to reach clientèle groups who are their potential customers in target markets. Alignment of interests and strategies is important in making partnerships with such organisations successful. In this session, experts shared their views on how they deployed partnerships in their businesses, and the factors that should be considered while designing a partnership arrangement.

### Aligning interests and seeking strategic clarity

For **MiCRO**<sup>10</sup>, partners are allies that help bring product solutions to the market. Partners could be in the form of reinsurers who provide capacity and technical support, or distributors who could perform a variety of roles in a partnership. A major challenge in inclusive insurance markets is to achieve economies of scale, and this is where partnerships really show their worth in realizing the potential of collaboration.

In a multi-partner arrangement, it is important to seek commonality. In public-private partnerships, the private partners' focus may be on higher revenue, while the public sector may have a greater interest in its mandate for consumer protection. Seeking commonality may be a matter of realizing what is of mutual interest: the public sector could benefit from more financially sustainable outcomes for private partners, and the private companies could benefit from increased levels of consumer trust fostered by government. Finding strategic alignment of this nature is key to making partnerships work over the long term. Perseverance is also important, not only for innovation, but also for lasting partnerships.

### Building trust and commitment

At AXA, the "emerging customer" initiative also involves seeking mutually beneficial and innovative partnerships that last – while it focuses on addressing challenges that insurers typically face in developing microinsurance (see Figure 21).

For **AXA**, customer knowledge is an important trait in potential partners. All partners should be comfortable opening up their data to insurers. Conviction and commitment are necessary as partnerships can sometimes be hard work. For partners, insurance is not only a revenue driver, but a business driver as well. It can play a crucial role in customer acquisition, increasing customer loyalty and sales force commitment, and in making communities more resilient.

### Figure 21 Why we need to partner

Addressing some of the challenges that insurers face to deliver microinsurance



Source: Boughaba, Nadia. Presentation "Developing mutually beneficial partnerships." 13th International Microinsurance Conference 2017.





72 — Left to right: Carlos Boelsterli, CEO, MiCRO, Barbados; Nadia Boughaba, AXA Emerging Customer – Senior Project Manager, AXA, France.

73 — Eliseo Haro, Business Development Manager Latin America, BIMA, United Kingdom (presenting).

#### 10

The Microinsurance Catastrophe Risk Organisation (MiCRO) was set up in Haiti as a specialty reinsurer providing natural catastrophe and weather index products to MFIs insuring low-income microenterprises. Its founding partners are Swiss Re, Mercy Corps and Fonkoze microfinance. In AXA's view, initiating partnerships is as important as ensuring their longevity. Maintaining partnerships is all about the right incentives, especially for the insured. But the "customer" in emerging markets is an

ever-evolving entity. Value perception is constantly changing; therefore, the insurer needs to collect feedback regularly and ensure that the partnership is delivering the intended value to the beneficiary.

### Aiming at a win-win-win outcome

Hollard Insurance in South Africa is something of a specialist when it comes to partnerships. They are an inherent part of its DNA and a cornerstone of its purpose. Hollard has a specialist unit called Hollard Partner Solutions, which tailors partnerships with retailers, banks, motor insurance and other sectors to provide shortterm and longer-term life products. It extends its reach across various industries, targeting customers across income levels. The focus is on a

Figure 22

win-win-win formula: a win for the customer, a win for the insurer and a win for the partner.

Insurance competitors today are non-traditional, and insurers need to adapt. To create an attractive brand in the customer's mind, they need to be a member of the community and partnerships are a great way to achieve that objective. In the process they need to leverage technology and partnerships to deploy omni-channel distribution strategies for a range of products meeting different needs at various life stages. Hollard now has distribution touchpoints ranging from direct physical sales outlets via franchise partners to selling via mobile channels. It has also leveraged relationships with third-party administrators and technology partners. Hollard's "partner ecosystem" even includes pharmacies, which can complete sales of a fully underwritten life product. Since 1980, Hollard has worked with nearly 120 partners, and can point to what makes partnerships tick (see Figure 22).

#### Playing to partners' strengths

In the case of **BIMA**, successful partnerships with mobile network operators (MNOs) and insurers have resulted in a customer base of over 24 million in 14 countries, with 575,000 new ones added each month. Its partnerships have enabled it to overcome typical barriers to the consumer that traditional insurers fail to address (product design, affordability, lack of trust and awareness), as well as barriers to scale (lack of cost-effective registration mechanisms and of fast-recurring payment channels).

BIMA's insurance is much more accessible to informal-sector workers who make up more than 90% of the workforce in developing economies.

Critical success factors for various part	nerships
Partner's <b>target customer</b>	High <b>brand affinity</b> which will stretch to insurance
Product <b>take-up prosperity</b> and proposition	Appropriate <b>sales method and</b> <b>channel</b>
Partner alignment and resourcing	A <b>Win-Win-Win</b> situation and nothing less
Shared values and vision	Measurement of success

Source: Shezi, Mandla. Presentation "Leveraging partnerships to provide access to insurance: the Hollard experience." 13th International Microinsurance Conference 2017.

Parallel session 6 Leveraging partnerships to provide access to insurance

The partner MNOs' brand was strong relative to typical insurers' and this led to a greater degree of trust between customers and their insurance policies. The mobile channel also enabled better and cheaper communication, which is a key factor in micro markets.

BIMA believes partnerships are all about creating value for customers and partners alike. MNOs had traditionally struggled with retaining customers, and tying up with insurers allowed them to offer value-added services to their customers which improved customer loyalty and led to better brand recognition.

By integrating the claims process via the mobile channel, BIMA has brought claims settlement times down to 3 days, something that is appreciated by customers. By leveraging their partner relationships so effectively, BIMA has become the top insurance scheme in 40% of its markets. Partnerships crucial to creating scale and trust are likely to see more integration of technology in the creation and delivery of greater value to customers.

#### **Lessons learnt**

- Partnerships are important for insurers as they help address challenges of access, scale, trust, and infrastructure.
- Competitors of insurers in emerging markets are increasingly non-traditional as more and more retailers and others in service industries are applying for insurance licences. Partnerships help insurers enter the newcomers' own sectors.
- A short-term approach to partnerships (e.g. to make money fast and exit) is a common reason why they break down.
- Customers keep changing and so does their value perception.
   Partners need to monitor these changes and respond to them effectively.



74 — Mandla Shezi, CEO, Hollard Life, South Africa.

75 — Andrea Keenan, Senior Managing Director – Industry Relations, AM Best, United States, facilitator of the session.

### Agricultural information and crop insurance

By Maria Victoria Sáenz

This session covered information requirements for crop insurance, how best to collect agricultural statistics, key technologies used for agricultural information systems, and how such a system is to further develop crop insurance in Peru.

Essentially, a sustainable crop insurance plan requires good-quality data to determine pricing that is actuarially correct for various covers; assessing risk exposure over the policy term; correlating deductibles and rates; and detecting fraud (see Table 2).

Data availability, quality and analysis capabilities are not uniform or consistent across the board; there are gaps between a good and poor record that are widening, among countries and among insurance companies. Investment is needed in both public and private sectors to improve data collection, storage, analytics and sharing. Most crop insurance schemes involve public money (e.g. premium subsidies), so insurance data should be transparent.

Artificial intelligence and machine learning may help better manage and process data in the future. Meanwhile, other new technologies, such as yield-recording, can help fill the gaps – though they cannot substitute the "ground" work required.

## Available, reliable and integrated to meet users' needs

Like agriculture, having dependable information about it is vital. The global value of agricultural products exceeds US\$ 2.4 trillion, farming produces jobs for 1.3 billion persons, and it is crucial for developing countries, with women making up 43% of the agricultural labour force there. Statistics like these are used to produce data for a myriad of purposes, including agricultural insurance. The data must be available, reliable and meet the specific needs of users. Without it, governments can make inaccurate decisions, producers can suffer because of wrong public agricultural policies, which may even pose a threat to food security.

The reliability of the data is rooted in the selection of the method for agricultural statistics. It must be accurate, cost-efficient (fairly priced, good quality), sustainable and integrated (put together from various sources, such as the cadastral database and weather stations).

### Table 2 Data requirements and sources

Why needed	What kind	Who collects	Quality/availablity	New technologies
<ol> <li>Pricing (crop varieties, agricultural practices, risk prevention strategies)</li> <li>Risk assessment (exposure)</li> <li>Underwriting questions (Deductible? Self retaining?)</li> <li>Fraud detection</li> </ol>	<ol> <li>Depends on the crop and type of insurance (damage loss, yield based or meteorolog- ical trigger)</li> <li>Location (geograph- ical, general statistics, administrative units)</li> <li>Size of plot</li> <li>Plot types</li> <li>Liability and deductible</li> </ol>	<ol> <li>Insurance companies</li> <li>Centralised organisations of the industry</li> <li>Government organisations</li> <li>Questions: Who does the acturial rating? Take in consideration potential differences between company and industry standards</li> </ol>	Varies among countries and regions. For example, hail information is good in developed countries, in developing not so much. Yield information is average.	<ol> <li>Automatic yield recording technologies</li> <li>Remote sensor – plot and crop identification monitoring, yield estimates</li> <li>Data analytics</li> <li>Artificial intelligence</li> </ol>

Source: Herbold, Joachim. Presentation "Information requirements for crop insurance." 13th International Microinsurance Conference 2017. Parallel session 7 Agricultural information and crop insurance

#### Giving risk a price tag

Nowadays, big data resounds throughout the land. The insurance and reinsurance industry focused on data long before the hype about big data started. The reason for that is simple: our business model is based on data. But data alone is not sufficient: we need reliable, highquality data. Bear in mind that one of the major tasks of risk takers is to give risks a price tag. And if we fail to do that appropriately, our business won't be sustainable.

Joachim Herbold

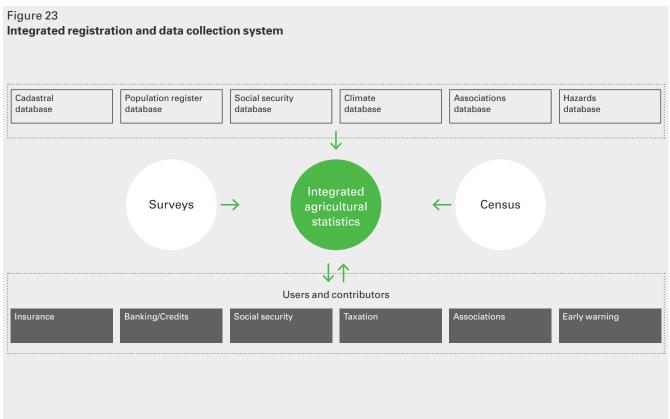
A periodic census, sample surveys and the official registration systems are among prevalent methods for statistics. The type of integration shown in Figure 23 is what allows long-term planning, monitoring, quality-control systems and sustainable human resources, among other purposes.

### **Remote sensing and GIS**

Two key technologies in agricultural information systems are remote sensing and GIS (geographic information system). The potential of remote sensing is obvious, as it provides independent data from space, covers huge areas every day, and is partly free of charge. Some satellites like Sentinel capture the whole earth every 5 days at a level of 10 m<sup>2</sup>. A consortium led by GAF AG<sup>11</sup> covers 39 countries from Europe and provides high-resolution layers of forest, grassland, water and wetlands, among others. The system in 3D pictures can monitor floods (water spread, depth, and velocity), and it has helped the EC emergency management service since 2012. It is also used to control farmers' subsidies – an important task as 40% of the EU budget goes to agriculture - and to help with land registration, risk assessments, loss adjustments, and automated crop monitoring. The results are obvious for public policy and for the insurance industry.

11

GAF AG is a German company that has grown from a small satellite remote sensing start-up into a well-respected geo-information service provider.



Source: Demirbüken, Hakan. Presentation "Agricultural statistics. Why and how? Summary of best practices." 13th International Microinsurance Conference 2017.

### Mapping of agricultural areas

GAF AG is being contracted by German International Cooperation (GIZ) in the Climate, Agriculture and Risk Transfer Project that is being implemented jointly with the Ministry of Agriculture in Peru and financed by BMUB(13). The objective of this project is to create a risk transfer system to foster the resilience of agricultural producers to climate change; its information component has the following goals:

1. Improve the agricultural statistics system. 2. Implement a collaborative information platform. 3. Provide training in the use of modern technology.

The priority so far is the first, for which the project has developed a tool called Mapping of Agricultural Areas (MAA), researching what the government has, what needs to be improved, and what must be added. The interrelated dimensions of the MAA are the agricultural area (space), parcels

(cadaster), farms (registration) and the agricultural households. The dimensions, captured through satellite images, create the geographical information (see Figure 24).

The decision-making information for the government and other stakeholders is derived from three sources. One is the qualified informant, currently used for official agricultural statistics. It is not reliable because it has no frame, no way of measuring potential error and is non-probabilistic. The second is a probabilistic method used by the National Agriculture Survey – better but needing improvement. The third is the administrative record of different stakeholders, such as a "declaration of intention" for the next planting season. The pilot phase reported a more accurate estimation of the agricultural area, confirming that the MAA is a useful tool that improves the administrative, qualified-informant and probabilistic information by using technology and producing reliable and cost-efficient information.

### Lessons learnt

Investment is needed to fill the gaps in data availability, quality and analysis capability across countries and insurance companies.

- The potential of new technologies such as remote sensing and GIS is immense. However, there must be a human interface to analyse all the data and produce accurate and sustainable information.
- Satellite imaging is producing high-resolution layers of forest, grassland, water and wetlands, as well as agricultural areas that can help monitor floods, record land registration, and assist with risk assessments, loss adjustments, and automated crop monitoring.

76 — Joachim Herbold, Senior Underwriter, Munich Reinsurance Company, Germany.

77 — Left to right: Rodrigo Salcedo, National consultant, GAF, Peru; Hakan Demirbüken, International consultant, GAF, Turkey; Axel Relin, Unit head, GAF, Germany: Philine Oft, Senior Consultant, GIZ, Peru.





### Statistical sectors - Cadastre - MAA of the pilot area Chongoyape / Lambayeque (Peru)

Statistical sector

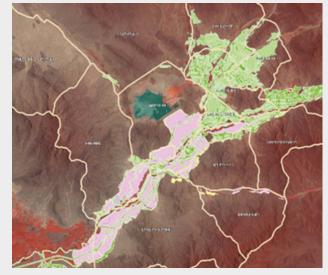
### Cadastre

Figure 24

### MAA

- Arable crop
- Permanent crop Heterogeneous
- agricultural areas Non-agricultural land

Sentinel image (09-10-2016)



Source: Salcedo, Rodrigo et al. Presentation "Improving the Peruvian agricultural information system: the bases for further developments in crop insurance." 13th International Microinsurance Conference 2017. © GIZ / GAF AG

### How private insurance complements universal health cover

**By Pedro Pinheiro** 

This session discusses the role of private health insurance, where the state provides universal healthcare coverage to the population, drawing from case studies in India, Bolivia and other countries.

The role of health systems should be to promote and improve the health of the population via the most costeffective and evidence-based methods. In addition to health gain, the systems should pursue "equity in health" (a fair distribution of health status among the population), financial protection in case of a health issue in the family, "equity in finance" (fair distribution of the financing according to capability), and responsiveness of the system.

78 — Left to right: Guillermo Aponte Reves-Ortiz, Microinsurance Advisor, Procosi, Bolivia; Pompy Sridhar, Merck/MSD for Mothers, India.

79 — Denis Garand, President, Denis Garand and Associates, Canada.



### Giving prevention a priority

While universal health coverage is proposed by the World Health Organization and others, the focus of health systems often gets lost on the way of collecting revenue. Very rarely is attention paid to cost-effectiveness. Because of this, countries that spend a higher percentage of their GDP on health are not necessarily the ones that provide the best healthcare to their populations. More often than not, an increase in investment is followed by an increase in prices from healthcare providers, and the population remains unattended (see Figure 26).

Low-income countries that are succeeding in generating good life expectancy and infant mortality indicators tend to prioritise health promotion and prevention over technology-intensive high-cost investments, as well as addressing abuses of the system such as over-utilisation by a small percentage of users.

### Tackling maternal mortality through quality improvement

Every day, more than 800 women die from complications of pregnancy and childbirth around the world, and 15% of these maternal deaths occur in India. Despite increases in the number of women delivering in facilities, maternal mortality remains too high, suggesting gaps in quality of care both in private and public health systems. To address the shortcomings, MSD<sup>12</sup> for Mothers in India (aka Merck for Mothers in the USA and Canada) is working with the Manyata<sup>13</sup> initiative a national certification and quality improvement system to recognise private providers who consistently deliver quality care to the women they serve (see Figure 27).

The initiative's vision is a world where no woman dies while giving life. It links health system stakeholders to create incentives for payers to demand quality - setting, maintaining, and delivering standards for care to ensure healthy pregnancies and safe childbirths.

### An experience of complementary health insurance in Bolivia

In Bolivia, universal healthcare coverage is offered to pregnant women from the beginning of the pregnancy until six months after birth, to children until 5 years old and to uninsured seniors older than 60. People between 5 and 60 years of age are not entitled to state-provided healthcare and in most cases are not able to find access to private healthcare at a reasonable cost. For the poor population especially, getting sick without a safety net could mean reverting to even lower levels of poverty. This was the target audience for a multi-stakeholder alliance designed to offer health microinsurance at a cost of US\$ 0.11 per day, with an insured sum of US\$ 1,000.

### **Bolivia's Proteger Microseguro** de Salud

Premium cost US\$ 0.11 per day

Insured sum US\$ 1,000

Over 100 health procedures covered.

Actionable pre-paid card with selected benefits: pap smear; mammography; quick test for HIV; and prostate cancer test.

Mass selling through Banca Comunal and alternative distribution through an MFI, IFD Crecer.

Payment schedule adequate to income.

Simple policy design with enumerated risks and limited exclusions.

Expedited claims and complaints processes.

Over 60 thousand policies sold.



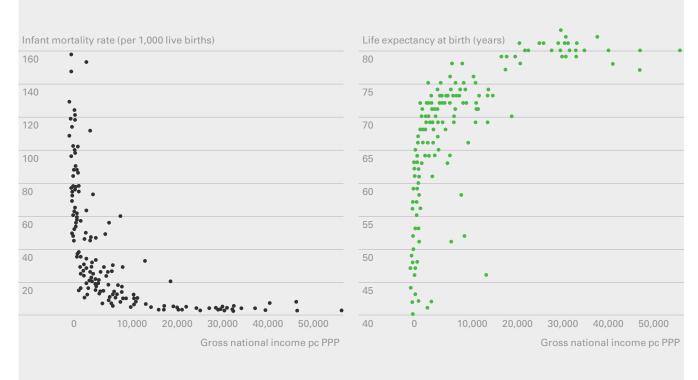
79

Merck Sharp and Dohme 13

12

Sanskrit name for girls meaning respect.

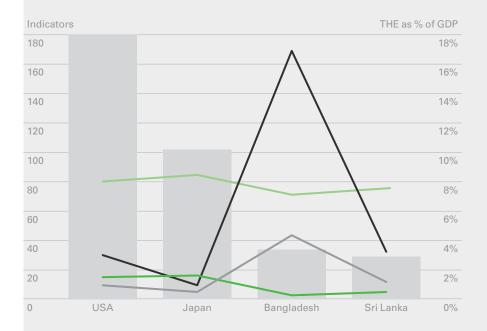
### Figure 25 Higher income = Higher life expectancy and lower infant mortality



Source: Garand, Denis. Presentation "Universal health insurance – an overview." 13th International Microinsurance Conference 2017.

### Figure 26

### Expenditures vs outcomes Health spending (% of GDP) and indicators



- Total health expenditure (THE) % of GDP
- Under 5 mortality rate per 100,000 live births
- Maternal mortality ratio per 100,000 live births
- Physicians, nurses and midwives per 1,000 people
- Life expectancy

Source: WHO Country profiles (2012), United Nations population division (2012), WHO (2014), World Bank Data (2012)

### Parallel session 8 How private insurance complements universal health cover

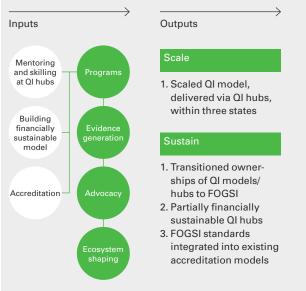
One of the main challenges with the micro health insurance programme was to find the balance between the interests of the different stakeholders involved - the insurance company, beneficiaries and healthcare providers, all of whom were represented in a collegiate decision committee. One of the learnings of the programme designers was that this permanent zero-sum game could have been addressed by establishing a technical direction position which would report to the committee, but still be able to make decisions more efficiently and generate less friction among the alliance members.

Finding the right balance for compensating each stakeholder for its role in the alliance, while at the same time keeping premium cost at the lowest possible level for consumers, was also a major challenge. Since the policyholder is free to choose between different providers, the programme sought to create uniformity in attention protocols and in the management structure of healthcare facilities, without affecting the organisational culture.

#### **Lessons learnt**

- The role of health systems should be to promote a healthy population via the most cost-effective and evidence-based methods.
- In order to be effective, investment in the public-private partnership should focus on quality, followed by the monitoring of health indicators.
- Quality improvement in clinics run by private providers can help lower maternal mortality.
- Health insurance programmes must find the right balance between compensating the different stakeholders involved and offering an affordable premium cost to consumers, while at the same time making sure the incentive structure avoids being abused by suppliers and customers.

## Figure 27 Manyata: Improving the quality of maternity care



Impact

Payers strategically purchase high quality services from certified providers, assuring quality maternity care for women in India

Source: Sridhar, Pompy. Presentation "Manyata – injecting quality of care into the insurance market in India." 13th International Microinsurance Conference 2017.

### Agenda

### 9 November 2017 **Morning sessions**

#### Parallel session 9 Parallel session 10 Parallel session 11 **Strengthening resilience** The role of the actuary Improving the value through insurance solutions in microinsurance of agricultural insurance Hosted by GIZ Hosted by IAA Hosted by ILO's Impact Insurance Facility **Charlotte Norman** Maria Augusta de Director, National Disaster Manager, Massive Channels and Agricultural Insurance, (NADMO), Nigel Bowman Peru Project Associate, MCII, Working Group, International Assistant Director, BASIS AMA Innovation Lab, UC Davis, Francisco Sánchez United States **Denis Garand** Secretariat (SAS), President, Denis Garand Andrea Camargo and Associates, Chief Strategy Officer, MiCRO, Paraguay Facilitator Facilitator Facilitator Senior Policy Officer, Federal Ministry for Economic Research and Innovation Managing Director, Cenfri, Cooperation and Development,

### analysis of microinsurance The University of Alabama,

**United States** 

Parallel session 12

Scientific track – economic

Health insurance: a friend in need? Evidence from financial and health diaries

**Berber Kramer** Research Fellow, International (IFPRI), United States

Demand heterogeneity for indexbased insurance: the case for flexible products

Senior Research Analyst, IFPRI, **United States** 

#### Facilitator

C.V. Starr Chair of Risk Manage-Center for the Economic Analysis of Risk (CEAR) - Georgia State **United States** 

Parallel session 16 **Consumer education** 

#### The Climate Insurance Fund

Gustavo Muchotrigo office, BlueOrchard Finance, Peru

Getting client education right, balancing complex information with the need for simple messages

Barbara Magnoni United States

- The Peruvian experience

Deputy Superintendent of Banking, Insurance and Private Pension Funds,

Facilitator

Craig Churchill Head, ILO's Impact Insurance Facility, Switzerland

insurance Using satellite data to improve index insurance: Lessons from the IRI's NASA interdisciplinary science project Senior Research Staff Assistant, IRI, Columbia University, **United States** Evaluating the efficacy of an app-based livestock insurance scheme in rural India Suraj Nair

Lessons in delivering agricultural

Senior Research Associate, IFMR

Lessons learned from projects in Mongolia and Vietnam

Jerry Skees Chief Strategy Officer and United States

Facilitator

Germanv

Parallel session 13

Vice Chairman, Munich Re Foundation,

Parallel session 14 The role of insurance associations in market development

Hosted by ILO's Impact **Insurance Facility** 

Division Head, PT Asuransi

Microinsurance Director. Fasecolda, Colombia

Executive Director, IAZ,

Facilitator

**Miguel Solana** Facility, Switzerland

Parallel session 15 Keeping the "micro" in "mass insurance

#### Hosted by Milliman

Organization,

Peru

CEO, Pioneer Life,

Michael J. McCord Managing Director, Microinsurance Centre at Milliman, United States

Mathilda Ström Deputy CEO, BIMA, United Kingdom

Facilitator

Principal and Consulting Actuary, Milliman, **United States** 

President, EA Consultants,

Financial education on insurance

# Strengthening resilience through insurance solutions

By Pedro Pinheiro

Insurance can be an important tool for managing climate risk and enhancing recovery in disaster-prone regions of the world. This session discusses three examples of insurance-based schemes that aim at strengthening the resilience of vulnerable populations – in the Caribbean, Ghana and Paraguay.

# Creating linkages between direct and indirect climate risk insurance

The Munich Climate Insurance Initiative (MCII), in partnership with several international and local organisations, has launched the Climate Risk Adaptation and Insurance in the Caribbean (CRAIC) Scheme, aiming at addressing climate change adaptation and vulnerability by promoting climate risk insurance as an instrument to manage and transfer risk.

### CRAIC Scheme

#### Countries

Jamaica and St. Lucia. Phase II will expand to Grenada, Belize and Trinidad & Tobago.

### Perils covered

High wind speed and excessive rainfall.

### Type of insurance

Trigger-based parametric index.

### Data source

Rain is monitored by DHI<sup>14</sup> and wind is monitored by CCRIF<sup>15</sup> (until October 2017).

### Partner organisations

CCRIF, Munich Re, DHI, ILO Impact Insurance Facility and local insurers, aggregators, ministries and regulatory authorities.

### **Distribution channels**

Local insurers and authorised agents.

### Policyholders

Over 500, with the aim of reaching 10,000 by July 2018.

### Claims

Five payouts (US\$ 112,774)

80 — Charlotte Norman, Director, National Disaster Management Organization (NADMO), Ghana.

81 — Alexandra Rudolph, Senior Policy Officer, Federal Ministry for Economic Cooperation and Development, Germany.





14 Danish Hydraulic Institute 15 Caribbean Catastrophe Risk Insurance Facility

The CRAIC Scheme is based on the

Livelihood Protection Policy (LPP), a non-subsidised insurance product accessible to all the people in participating countries. The policy covers damage from heavy rains and strong winds, with an expedited claims process that promises to pay within 14 days.

The scheme has found support with local regulators, who in some cases came up with special provisions to allow the establishment of the parametric index and inclusive insurance. But the limitations on distribution channels still pose a pertinent restriction to the scheme's outreach. Other challenges are related to clients' lack of willingness to pay, and trustbuilding in the face of previous bankruptcies on the part of insurers in the market. The common issue of basis risk in parametric insurance is also a concern. This led to an exceptional payment below trigger being allowed in Jamaica in order to reinforce product trust.

On the way forward, the CRAIC Scheme intends to partner with indirect schemes for disaster risk management and social protection policies, as well as providing additional services based on assessments of customer needs (see Figure 28).

## Insurance plus risk management strategies

In Ghana, severe drought used to cause damage to crops and livestock, decreasing agricultural output, and creating extensive health problems before any aid could reach the affected population. Now, an update of the Integrated Climate Risk Management (ICRM) framework has included "risk transfer and financial protection" among its strategies. And drought is being tackled through food distribution and cash transfers with funds from the African Risk Capacity (ARC).

The ARC is a specialised agency of the African Union which enables participating member states to prepare, manage and finance natural disasters. It offers insurance coverage to national states provided they develop and implement contingency plans before purchasing coverage. Its funding will allow Ghana to put in place the Climate Smart Agriculture Programme, which will help local farmers in 20 communities to improve their techniques of soil management and water conservation. It will also supply drought resistant seeds, and direct agriculture insurance with access to credit.

The ARC's insurance policy will become accessible as Ghana obtains the Certificate of Good Standing, and the premium is calculated for inclusion in the public budget of 2018.

### Figure 28 The way forward Increase scale Enhance client value - Link LPP to social protection "Attachment point" payment — Insurance a part of the government Additional services based on customer needs assessment agenda Build financial capacity **Enhance resilience Reduce basis risk** – Link product to DRM policies "Hybrid payout" for member organisations

#### How?

- Product refinement and marketing through broadened partnerships with insurance industry or government
- Promote demand side through horizontal channels and
- initiatives at the bottom (i.e. Coffee Boards or cooperatives)
- Deepen linkages with insurance sector (macro-level/indirect scheme)

Source: Fernandez, Raúl. Presentation "Creating linkages between direct and indirect climate risk insurance in the Caribbean." 13th International Microinsurance Conference 2017.

# Integrating microinsurance into cash transfer programmes

The Microseguro Social in Paraguay is a benefit granted to participants in the government's cash transfer programme Tekoporā. It provides a safety net and enhances beneficiaries' capacity to overcome loss and hardship after the death or disability of a family member.

The microinsurance is part of the government strategy of integrating insurance into disaster risk management and climate change adaptation strategies. It allows individuals access to financial support after a disaster, requires government to take preventive actions to reduce the risk level, and contributes to a more productive and sustainable economic development. By improving ex-ante budget allocation and putting in place better ex-post risk management, it enhances people's resilience.

### Microseguro Social – Paraguay

### Coverage and insured sum

US\$ 1,089 for the policyholder's death or total/permanent disability and US\$ 454 for funeral expenses for the policyholder and up to 3 dependents.

# Monthly cost US\$ 0.73

### Limited exclusions

Suicide, civil war, criminal acts, serious fault, drunkenness, drug use and temporary invalidity.

Age limit for enrolment **74** 

### Number of families covered

13,109 as of April 2017, aiming to reach every family in the Tekoporã programme.

Insurer Tajy S.A Insurance Company

Percentage of Tekoporã budget 1.8%

### **Lessons learnt**

Direct schemes, like CRAIC-LPP, are struggling to reach sufficient scale – especially because of regulatory restrictions on distribution channels, clients' willingness to pay and trust issues – even though product demand in the Caribbean is latent.

 Direct schemes can achieve scale and become feasible by linking with indirect schemes for social protection and disaster risk management. The linkages provide operational synergies and institutional leverage.

 Integrating insurance into disaster risk management and climate change adaptation strategies benefits the government as well as vulnerable people.

 Microinsurance can be injected effectively into cash transfer programmes, which provide it with a ready market.

82 — Francisco Sánchez, Director, Social Action Secretariat (SAS), Paraguay.

83 — Raúl Fernandez, Project Associate, MCII, Germany.



### The role of the actuary in microinsurance

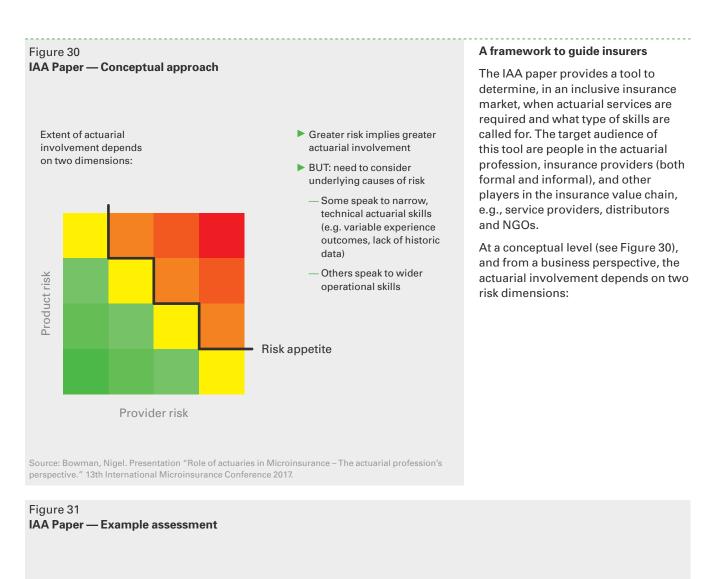
### By Shilpi Nanda

There is a general acceptance in the microinsurance industry that actuaries can add value, but the question is to what extent. Since there is a wide variety of insurance risks, not all tasks require the same level of actuarial expertise. This session discussed how an organisation may determine the type and level of actuarial skills needed for a particular task. It also reviewed regulatory aspects that may apply. Most developing countries have very few actuaries (see Figure 29). Microinsurers there often have to hire external consultants, and need to better understand the level of actuarial skills required for a particular task. To deal with such challenges in demand and supply, the IAA (International Actuarial Association) and IAIS (International Association of Insurance Supervisors) have a joint project on inclusive insurance. The project is producing two complementary papers on proportionate actuarial approaches, with the IAA paper focusing on it from a business perspective, and the IAIS paper from a supervisory perspective. These papers have been developed jointly and are essentially two sides of the same coin.

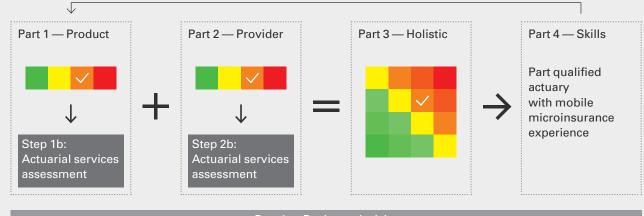


perspective." 13th International Microinsurance Conference 2017.

### Parallel session 10 The role of the actuary in microinsurance









cquire services of a technical services provider with in-house actuarial skills

Source: Bowman, Nigel. Presentation "Role of actuaries in microinsurance – The actuarial profession's perspective." 13th International Microinsurance Conference 2017.

These are factors that decide the level of risk within product design, e.g., size of sum assured, propensity for fraud, predictability of claims, and catastrophe risk.

#### **Provider risk**

These are factors relating to the provider or the organisation, e.g., financial controls within the organisation, and the ability to understand customers' product and education needs.

Applying these risk parameters within the framework indicates the level of actuarial skills required, e.g., higher risk product categories within organisations exposed to higher operational risks will require a more experienced actuary. It is a structured process that enables the organisation to start measuring where the risk areas are, and allows for the adjustment of product and/or operational parameters to reduce the overall risk down to the level manageable by available actuarial resources.

The product and provider risk assessments involve a number of parameters to each of which the organisation assigns a relative weight and score. Then a holistic risk rating is calculated, which determines the actuarial resources required.

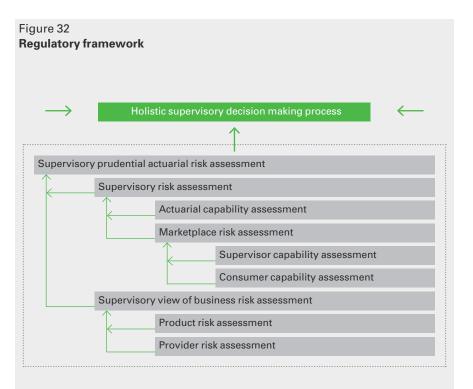
A key thing to watch is the setting of the risk appetite at the start. This is crucial, as there could be the temptation to redefine the risk appetite to suit the risk rating determined by the tool. Judgement is also required to check if the final risk score makes logical sense given the context of the product and organisation.

### A framework to guide regulators

From the regulatory perspective, the IAIS has designed a similar framework that could help decide the level of prudential and actuarial oversight required on a case-by-case basis. The objective is to provide support and understanding to decision-makers about actuarial advice, and promote a dialogue between regulators and providers in the market.

Other input(s) include assessment of marketplace risk, and actuarial capability. A standard heat map is used to allocate scores to each of the risks. The process of calculating a final risk score is an iterative one (see Figure 32). As in the IAA tool, the setting of the risk appetite is important to determine the level of risk the organisation is comfortable in assuming. This prudential risk assessment leads to a more holistic supervisory decisionmaking process that is more informed and proportionate in light of the risks.

The point was underscored from the perspective of an experienced actuary who has consulted with several microinsurance practitioners across the world. Governments, regulators, insurers, and donors all play a distinct and crucial role in market development. A good example is in the Philippines, where the government created a steering committee including the governor of the Bank of the Philippines, the insurance regulator and other interested parties. Its mandate was to create a stable rules framework that would enable insurance in low-income sectors to flourish in the country.



Source: Alves, Maria, and Gribble, Jules. Presentation "The role of the actuary in microinsurance -Update on IAIS Application Paper 'Proportionate Prudential Requirements in Inclusive Insurance Markets'". 13th International Microinsurance Conference 2017. Parallel session 10 The role of the actuary in microinsurance

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A change of thinking may be required on the part of regulators in emerging markets to develop proportionate approaches to regulation. One way is to combine a lower minimum capital requirement with a risk-based approach to capital, which would encourage market participants and enable innovation. Simplified product approval processes are also marketfriendly measures that can be considered by regulators.

The responsibility of market development also lies with actuaries who, in the absence of traditional actuarial data, pile margins on premiums, which is not advisable for a developing market with lower levels of insurance coverage.

### Lessons learnt

- Scarce actuarial skills in several sub-Saharan African countries make it necessary to hire consulting actuaries who are a cost burden to the insurer and business developers. The IAIS and IAA framework will indicate when actuaries are not required.
- The IAA and IAIS are producing frameworks to guide insurers and regulators in deciding what kind of actuarial skills are required for particular tasks. They determine the degree of actuarial skills needed based on assessments of risk for the product, the provider and the marketplace.
- An appropriate actuarial analysis helps manage pricing, operations and regulatory supervision to keep the levels of risk manageable while ensuring the right client value. However, actuaries are often not required.

- Client value is even more important in inclusive insurance, and supervisors need to ensure the availability and quality of actuarial advice or other capable people for insurers in their regimes.
- A key performance indicator for regulators is to see a greater percentage of the population having microinsurance products. If there is no increase, the regulations are not proportional and should be modified to increase access to microinsurance products.

84 — Maria Augusta de Queiroz Alves, SUSEP, Brazil.

86 — Doubell Chamberlain, Managing Director, Cenfri, South Africa. 85 — Denis Garand, President, Denis Garand and Associates, Canada.

87 — Nigel Bowman, Chair of Microinsurance Working Group, International Actuarial Association, South Africa.









### Improving the value of agricultural insurance

By Marie-Christine Bélanger

This session presented insights into improving agricultural insurance based on evaluations of several schemes using a new client value assessment tool<sup>16</sup> specifically designed for farming protection products.

When exposed to a shock, relatively poor households will usually have few coping strategies. They will either reduce their consumption or sell some assets. These coping strategies can lead to long-term negative impacts such as stunting of children or intergenerational transfer of poverty.

### High quality, high value

Insurance has significant potential for positive welfare impacts on farmers, notably by enabling investment in their agricultural activities. These benefits can only be appreciated if the product designed is of a high quality and has demonstrated a high value to the client. If a low-quality insurance product is offered, and farmers experience an insurable loss, the contract could fail and these farmers could be left worse off than farmers with no insurance at all. A low-quality insurance scheme will increase distrust and eventually ruin the market. It is urgent to examine the quality and value of insurance contracts being offered to small farmers.

The pilot version of the new client value assessment tool is based on 14 indicators specially adapted to analyse agricultural insurance products. It evaluates products across four dimensions: the Product itself, its Access, Cost, and customer Experience (PACE) (see Figure 33).

In index insurance, because there are no defined or enforced quality standards, it is not easy for a customer to determine the quality of a product. At the very least, an insurance scheme should not make a difficult situation worse.

Figure 33 ILO's PACE mod	del	
Dimension	Ind	icator
Product	1	Index reliability predicts farmers' experience
	2	Covers appropriate activities
	3	Covers appropriate risks
	4	Makes a positive contribution to clients' overall risk management capacity
Access	5	Minimises unintended gaps in coverage
100000	6	Covered farmers are adequately informed of product details
	7	Staff and sales agents are adequately trained, incentivised, and supervised to inform clients and sell responsibly
	8	Payment methods are appropriate
Cost	9	Price is affordable and accessible
0031	10	Product delivers adequate value for money
Experience	11	Benefits are delivered in a timely manner
	12	Procedure to collect the benefit is simple and easy
	13	Provider is responsive and proactive about questions, problems, and complaints

14 Covered farmers receive evidence of coverage

16

The tool was created by the ILO's Impact Insurance Facility and the Feed the Future Innovation Lab for Assets and Market Access (AMA Innovation Lab)

Source: Steinmetz, Tara. Presentation "Improving the value of agricultural insurance". 13th International Microinsurance Conference 2017

Improving the value of agricultural insurance

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# Commercial agricultural insurance in Peru

In Peru, 13% of the cropped area is insured, 96% of this is insured under a fully subsidised catastrophic insurance scheme and 4% under an unsubsidised commercial scheme of La Positiva. This last scheme is an area-yield index insurance programme offered to small and medium agricultural farmers producing any crop in any region of Peru.

This product is one of those evaluated during the pilot of the adapted ILO-PACE tool. The scores for each of the 14 indicators were then ranked in four categories corresponding to their levels of compliance: high, medium, low, and very low. For the commercial agricultural insurance product offered in Peru, only two indicators obtained a low score in the evaluation. They were both related to education. Therefore, for La Positiva the most important result of the analysis was the need to improve its communication with its clients. To do so, it analysed which communication means it should use, what the message should include, and also with which organisations it could be productive to create synergies.

**Commercial agricultural insurance** La Positiva in Peru

Number of policies sold in 2017 7,761

Insured risks All climate risks

Premium range 2.8 to 3%

Insured yield 50% of predicted yield

Sum insured Credit value or production costs

#### Index-based insurance in Guatemala

According to the Microinsurance Catastrophe Risk Organization (MiCRO) it is possible to improve the value of agricultural insurance by using a client-centred approach for product development – empowering the client and monitoring and evaluating the impact of the product.

In November 2016, MiCRO launched an index-based insurance for business interruption in Guatemala. It is designed for agricultural producers as well as microenterprises that could be affected by natural risks such as drought, excess rainfall and earthquakes (see Figure 34).





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88 — Left to right: Lourdes del Carpio, Manager, Massive Channels and Agricultural Insurance, La Positiva Seguros, Peru; Andrea Camargo, Chief Strategy Officer, MiCRO, United Kingdom.

89 — Tara Steinmetz, Assistant Director, BASIS AMA Innovation Lab, UC Davis, United States.

90 — Alice Merry, Research and Innovation Officer, International Labour Organization, Peru.

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To be appealing, the programme is bundled with financial education, game training on disaster risk reduction, a 72-hour emergency kit and delivery of relevant information via SMS.

The financial education programme is offered by a network of more than 600 trained officers. Didactic materials include simple contractual documents, videos, an action plan in case of emergency, welcome calls, games, etc.

All the processes included or bundled with the index-based insurance are constantly monitored and evaluated. The results are then used to adjust and improve the processes for future expansion.

## Business interruption insurance in Guatemala

Number of policies sold since Nov 2016 1,600 (54% women)

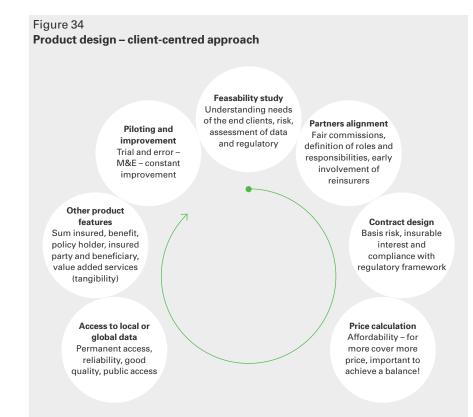
Insured risks Excess rain, drought, earthquake

Bundled With credit from Banrural

### Lessons learnt

Index insurance can't solve every problem, but it can enable smallholder farmers to invest more in growth opportunities, and avoid costly coping strategies when a shock occurs.

- More needs to be done to ensure that the contracts brought to market are of high quality and well implemented so they can actually protect farmers as intended and achieve development impact.
- Creating value for clients means listening to them, empathising with them, and innovating to meet their needs.
- Insufficient information on insurance and services is a constant problem in rural areas.
   A cell phone app could be created so farmers could access the location of input suppliers, weather alerts, prices of products, local market and wholesale market, and insurance financial services options.



Source: Camargo, Andrea. Presentation "Improving the value of agriculture insurance". 13th International Microinsurance Conference 2017.

# Scientific track – Economic analysis of microinsurance

By Maria Victoria Sáenz

### Three research studies were presented in this session – on weather risks, health insurance, and indexbased insurance.

# Self-protection using improved maize varieties

For more than a decade, ways of managing weather risks for lowincome farmers have included the use of drought-tolerant varieties of maize. A study conducted in Uganda by researchers at the Universities of Alabama and Georgia in 2017 evaluated the effects of using such improved maize varieties (IMV) and other self-protection practices like off-farm income. It shows that both IMV and off-farm income reduce the personal cost of risk among smallholder farmers.

91 — Sebastain Awondo, The University of Alabama, United States.

92 — Berber Kramer, Research Fellow, International Food Policy Research Institute (IFPRI), United States.



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The reduction varies across farms and farming characteristics. This effect of IMV is stronger on infertile than fertile land, and even stronger with low fertiliser use. Measuring different moments and conditions of the farmers, and analysing with different statistical tools, the study found that self-protection practices may contribute to crowding out insurance if its design fails to consider the reduction in the probability of crop failure due to self-protection.

### Health insurance: a friend in need?

Health insurance can protect consumption from health shocks, but it can also crowd out informal transfers. A study using the PharmAccess Health and Financial Diaries project in Kenya collected high-frequency panel data on health and finances for a sample of dairy cooperative members in a rural part of the country. The study was conducted by researchers at the PharmAccess Foundation, University of Amsterdam and the International Food Policy Research Institute (IFPRI). It tests whether health insurance improves consumption smoothing in the face of health shocks, and to what extent the results obtained depend on households' access to informal transfers as a risk-coping strategy.

To analyse the effect of health insurance, the study uses the highfrequency panel nature of the diaries data, along with variation over time in a household's health insurance status. That is, many households in the sample experienced health shocks both in months with and without insurance coverage. Differences in the effect of health shocks between these insured and uninsured periods are interpreted as the effect of having health insurance. Using this identification strategy, the team found the following situations regarding the financial behaviour of users and non-users of mobile money in relation to health shocks (Table 3):

### Table 3 Effects of insurance

#### Mobile money users

Have stronger access to informal transfers to cope with health shocks

When they have health problems, they can smooth consumption even without insurance because of the informal transfers received

When they have health insurance, their overall healthcare is improved and having insurance does not crowd out the inflow of informal transfers

### Non-mobile money users

Have less access to informal transfers to cope with health shocks

When they have health problems, but no health insurance, they lower their non-health expenditure by 25%

Health insurance lowers their out-of-pocket health expenditure and helps them smooth consumption.



The findings have important implications for the design of health insurance and mobile health financing products. For instance, the finding that health insurance has different effects depending on mobile money usage suggests using this variable as an instrument in targeting health insur-

ance premium subsidies to popula-

tions that need insurance most.

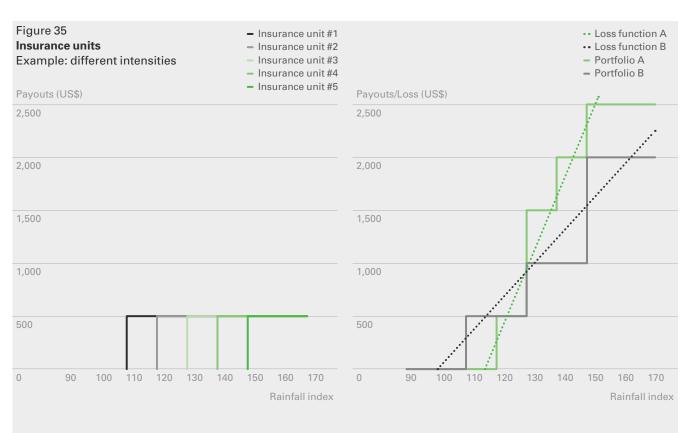
ding that offorts of the low take-up of indexbased insurance, the International

Food Policy Research Institute (IFPRI) has been testing an innovative product that considers the heterogeneity in farmers' risk profiles due to factors such as mix and timing of crops, seed varieties, farming practices, risk-coping mechanisms, and soil characteristics. In contrast to the "one-size-fits-all" product that has generally been offered so far in index insurance implementations, IFPRI proposes the creation of a flexible product that can adapt to the heterogeneity of farmers. The product allows the possibility of buying different insurance "units" with a simple payout structure: a fixed compensation linked to a single trigger for the index. Farmers can then create their own portfolio, with various triggers to cover against different intensities of the risk and various coverage periods (see Figure 35).

Demand heterogeneity: The case

for flexible index-based insurance

An alternative way of explaining this system is with a matrix showing the six months of the harvest season with exposure to excess rainfall and the two different intensities of rainfall. The idea is for farmers to estimate, according to their own circumstances, for which months they need to purchase cover against this risk and at which intensities. To test this design, IFPRI led a project in the department of Canelones, Uruguay, with mediumincome horticultural farmers exposed to excess rainfall during harvest. The insurance was offered commercially to all horticultural farmers during the 2014–2015 summer harvest season and was underwritten by Banco de Seguros del Estado (BSE). Farmers were encouraged to purchase a portfolio that best suited their individual needs. However, despite the highly subsidised premium, take-up was low, at 15%.



Source: Ceballos, Francisco. Presentation "Demand heterogeneity for index-based insurance: The case for flexible products." 13th International Microinsurance Conference 2017.

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### Parallel session 12

Scientific track – Economic analysis of microinsurance

Interestingly, farmers purchased a variety of portfolios of insurance units. The authors proceeded to test whether these portfolios are indeed related to the underlying heterogeneity in farmers' risk profiles by using a structural model using crop mix, timing of planting, soil drainage, product understanding and distance to the weather station as underlying farmer characteristics.

The results show that heterogeneity matters: farmers can build insurance portfolios that make sense given their risk profile. The results can be summarised as follows (see Figure 36):

More generally, rolling out a realworld system of flexible insurance products is feasible and farmers seem to value this flexibility.

### Lessons learnt

The studies offer some optimism about the future of index-based insurance, but also point to the need to analyse and overcome challenges when working with regulatory entities. In particular, a common denominator in the studies is to explicitly account for existing risk management strategies that beneficiaries already have.

- The insurance sector needs to be open-minded so that it can use academic research to design and price products better.
- Think tanks, academia and researchers must keep experimenting and sharing results with regulatory entities and other policymakers.

### Figure 36 **Results and welfare**

Actual mix of crops shows better fit than *average mix of* crops

Actual planting dates shows better fit than recommended planting dates

Soil drainage matters More tolerant of higher rainfall amounts (46 mm)

**Lack of understanding reduces demand** Equivalent to 1/3 of potential product

Distance to weather station affects purchases 1 km farther = 0.07 lower correlation

Source: Ceballos, Francisco. Presentation "Demand for Heterogeneity for Index-Based Insurance. The case for flexible products." 13th International Microinsurance Conference 2017. 93 — Francisco Ceballos, Senior Research Analyst, IFPRI, United States.

94 — Glenn Harrison, C.V. Starr Chair of Risk Management & Insurance Director, Center for the Economic Analysis of Risk (CEAR) – Georgia State University, United States.





### Lessons in delivering agricultural insurance

By Marie-Christine Bélanger

In this session, three schemes of livestock and crop insurance are presented, including results from an interdisciplinary research project conducted to improve the use of satellite data in index insurance in Africa and the developing world.

### Taking pictures from the sky

Satellite imagery allows index insurance projects to scale across large geographic areas. Many indexbased schemes are developed using satellite data, relying on satellitederived estimates of vegetation abundance and estimates of rainfall.

The International Research Institute for Climate and Society (IRI) has now teamed up with remote-sensing specialists from NASA, the US Department of Agriculture (USDA), and the National Oceanic and Atmospheric Administration (NOAA) to improve the design process of index-based insurance schemes being offered in Ethiopia, Senegal, and Zambia. The team conducted multiresolution, multi-sensor analyses that look at how different satellite-derived variables perform when detecting historical droughts in very different agro-climatic regions in Africa.

Further, the team analysed the data collected during the participatory design process in order to discern how space and time affect the relationship between farmer-reported drought years and satellite rainfall estimates.

# Improving efficiency by implementing an app-based approach

In **India**, livestock insurance is not new. The current scheme has a low rate of penetration (14%), high premiums (12%) and trust among farmers is low, mainly due to long delays in enrolment (paperwork), claims processing and settlement (see Figure 37).

In October 2017, an app-based livestock insurance plan was launched. The enrolment and claims submission process are entirely digitised and enrolment and claims settlement times have been significantly reduced. All data is transferred in real time, reducing errors in data entry and saving time and transaction costs.

### App-based livestock insurance (India)

Number of policies sold in 2017 Just launched

Insured risks Death

Premium range 4.7–6%

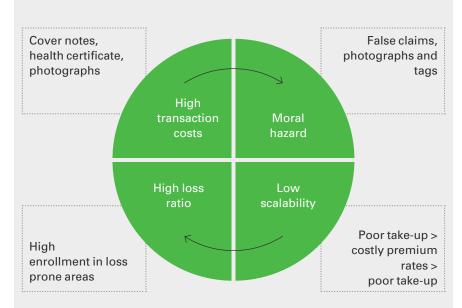
#### Sum insured

Assessed market value of nonloanee cattle

No subsidy

Source: IFMR-LEAD





Source: Nair, Suraj. Presentation "Livestock insurance in rural India – Evaluating an app-based scheme". 13th International Microinsurance Conference 2017.

Lessons in delivering agricultural insurance

#### A step-by-step process

The design, development and implementation of this app-based scheme involved a step-by-step process. It started with a thorough evaluation of the local context drawn from scoping surveys, focus groups and interviews with key stakeholders. The development of the app and the insurance scheme were tested and modified in line with the feedback. Before launching the product, a team of trained agents held door-to-door meetings with clients to develop marketing and promotion plans. Focus was not only on disseminating information, but also monitoring its reception in the field. The first results show that the average time for enrolment using the app is normally under five minutes, with the issue of the policy, done at the cooperative level, taking under 24 hours. Farmers appreciate the efficiency, as the lower transaction costs are translating into a 1% reduction in premiums.

## Index-based livestock insurance in Mongolia

Number of policies sold in 2017 About 25,000

Insured risks Livestock mortality

Premium range 3.09 %

Sum insured Value of the herd

Government subsidises by providing risk pooling and reinsurance

Source: Global Parametrics

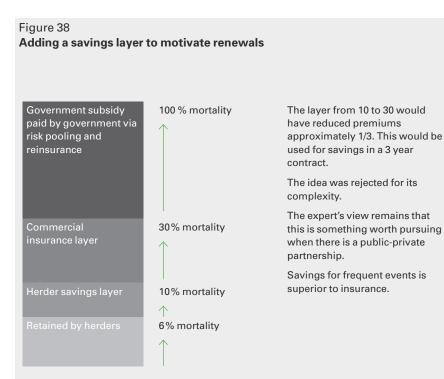
#### Using three layers of risk-sharing

In **Mongolia**, livestock is an important asset, and as stated in the Constitution, "it shall be protected by the State". There are more than 50 million heads of livestock in the country, and a census has been conducted each year for the last 100 years. Index based livestock insurance started in Mongolia in 2005 as a pilot project and since 2012 has covered entire herds throughout the country. It protects the herders against livestock mortality, mainly caused by harsh winter weather.

The programme is structured in three layers of risk sharing. The first is the risk retained by the herders, up to 6% of mortality. The second layer, from 6 to 30% of mortality, is the commercial layer fully financed by the herder premium, and the third level from 30 to 100% covers catastrophic events that are fully subsidised by the government risk pooling and reinsurance.

### Risk layering can serve as a new model for public-private partnerships. While the pilot project was scaled, one idea considered was adding a fourth layer for savings by herders, from 6 to 10%, thereby paring down the commercial layer to 10–30% and cutting premiums to finance savings (see Figure 38). For frequent events, saving is superior to insurance. However, implementation of the proposal so far seems to be facing challenges due to its increased complexity.

A pilot project in Vietnam in the Mekong delta involved rainfall insurance to cover the extra costs of irrigation prior to the onset of rain after coffee plants bloomed in Tan Chau, on the Mekong close to the Cambodian border. And in Dong Thap, farmers coped with business interruption as early flooding slowed the rice harvest.



Source; Skees, Jerry. Presentation "Lessons learned from projects in Mongolia and Vietnam." 13th International Microinsurance Conference 2017.

Conclusions drawn from the projects in Mongolia and Vietnam, along with index insurance in other countries served by Global Parametrics, are that

- delivery systems can be costly, and so can reinsurance for first efforts
- demand is an issue
- weather stations are not well suited for index insurance
- basis risk matters
- developing products that pay frequently is ill-advised; the regulatory environment is important
- pilot programs are difficult to scale

By framing index insurance as a form of contingent claims insurance, the legal and regulatory risk can be mitigated and issues tied to basis risk presented better. The contingent claims cover is similar to life insurance or insurance for a surgeon to protect eyesight loss – given an event that is well described, the burden is on the insured to select the financing needs (or level of coverage). "Livestock is neglected in insurance even though it is an asset."

Jerry Skees

"Share your learnings along the way."

Suraj Nair

#### **Lessons learnt**

- Farmers and villagers react positively to satellite use for insurance purpose. They catch up with technology quickly.
- Capacity building and expertise transfer in remote sensing to local experts should be included in the process of satellite-based insurance.
- Global circulation models might reflect better the real distribution of rain than weather station networks.
- A multidisciplinary team can design indexes for varying drought detection, with subtle differences in specific environments.
- An app-based livestock insurance enrolment process can help reduce costs and premiums.
- For livestock insurance, a government subsidy is better delivered via risk-pooling and reinsurance for catastrophes than premium payment.
- Sound risk assessment is key.







95 — Left to right: Bristol Powell, Senior Research Staff Assistant, IRI, Columbia University, United States; Suraj Nair, Senior Research Associate, IFMR LEAD – Institute for Financial Management and Research, India.

96 — Jerry Skees, Chief Strategy Officer and Director, Global Parametrics, United States.

97 — Dirk Reinhard, Vice Chairman, Munich Re Foundation, Germany.

# The role of insurance associations in market development

By Maria Victoria Sáenz

This session reviewed how industry associations in three countries continue to help develop microinsurance markets: Zambia, Indonesia and Colombia.

Insurance companies in a country form an association to mainly promote development of the market and represent the industry's interests. A developing market generally goes through three stages:

1) emerging, as insurers enter it with simple products;

2) diversifying, as they add more products and distribution channels; and

3) competitive, as they offer distinct features and lines to attract customers.

For microinsurance market development over the last 15 years, the insurance associations have been helping member companies move through the emerging and diversifying stages to the competitive stage. In the process they have become a key contributor to the national agenda of financial inclusion, moving the industry and regulators to new levels of understanding the demand, supply and environment of microinsurance.

#### Spearheading financial inclusion

Zambia is a sparsely populated, mining-dependent country with a small insurance market and low insurance penetration. The Insurers Association of Zambia (IAZ) is young. Despite having been created in 1997, its secretariat was only established in 2013. However, the four years of operation have seen confidence (trust) build in the market through measures to strengthen demand and supply of insurance and microinsurance.

The process is facilitated by the fact that membership in the IAZ is compulsory for insurers and that, by law, all initiatives and licences must be processed through it. This has helped create cohesion and trust among members, and a mutual understanding of the joint mission. With funding from members, the IAZ has given an important boost to consumer education, creating a new platform for public communication and exchange with the insurance sector that also generates a culture of insurance in the general public. It has also focused on strengthening supply, through annual meetings, training workshops and statistics on the sector.

As the focal point for changes in the regulatory framework including consumer protection mechanisms, the IAZ is an active member of the government's Technical Advisory Group and provides a platform for interaction between international development entities and the industry for implementing inclusive regulation and a financial inclusion agenda (see Figure 39).

Figure 39 Success recorded (Zambia)

- Government removed VAT on insurance premiums
- Two statutory instruments signed
   Mandatory display of motor insurance discs
   Increase in minimum capital
- Pushing for enactment of Insurance Act – new bill includes the definition of microinsurance
- Insurance is now being embedded in various national policy documents such as the National Strategy on Financial Inclusion
- Expansion of primary and secondary school curriculum to include insurance education in business subjects

Source: Banda, Christabel. Presentation "Role of Associations in market development: The Zambia experience." 13th International Microinurance Conference 2017.





98 — Left to right: Alejandra Diaz, Microinsurance Director, Fasecolda, Colombia; Jakub Nugraha, Division Head, PT Asuransi Central Asia, Indonesia; Miguel Solana, Technical Officer – Microinsurance, ILO's Impact Insurance Facility, Switzerland.

99 — Christabel Michel Banda, Executive Director, IAZ, Zambia.

### Joining the President's dream team

In Indonesia, the association of insurance companies was formed 60 years ago but in 2002 it split into two, one for life insurance and the other for general insurance. Microinsurance started in Indonesia in 2009 when the dengue fever affecting the country gave rise to products like an indexbased health plan, followed by property, personal accidents (PA), natural disasters, microenterprise insurance and in 2015 by an area-yield maize insurance scheme. However, it was not until 2013 when the insurance sector with the help of the World Bank started to discuss whether microinsurance was a new line of business or a corporate social responsibility and how to define it. After this learning phase, during which the general insurance association AAUI set up a microinsurance department, seven

standard products were developed for insurance companies to sell. Despite the lack of enthusiasm in a sector accustomed to moving in its comfort zone, the AAUI joined the Indonesian President's "Dream of Indonesia 2015 - 2085" (see Figure 40).

The AAUI belongs to MEFIN (Mutual Exchange Forum on Inclusive Insurance) - a peer network of insurance regulatory authorities in Asia established as a platform for the effective and efficient exchange of relevant knowledge and best practices on inclusive insurance.

#### Setting an example

If there is an insurance association that is a role model, it is Fasecolda in Colombia. It put inclusive insurance on the map under the banner of sustainable development for the entire sector. All this was done without any regulation or government intervention. In fact, the government's effort to develop a Financial Inclusion Agenda was actually influenced by Fasecolda's own inclusive insurance agenda. The insurance sector is now committed to achieving sustainable development by "promoting economic growth in the sector that is inclusive, low in carbon and resilient, by promoting inclusive insurance, climate insurance, eco-efficiency and management of environmental, social and governance risks."

### Figure 40 The new approach of the General Insurance Association of Indonesia (AAUI)

Understanding SDG at the national level > The Vision of Indonesia and The Dream of Indonesia 2015-2085 (officially published on Sept 26th 2017 in more detailed explanatory notes)

- Make people smart
- Sustainable farming
- Access to finance
- Digitalisation

# Impian Indonesia 2015-2085

- 1. Sumberdaya manusia Indovesia yang kecerdasannya menggunggut kanysa-bargsa lain Sidunia.
- 2 Masyarakat Endonesia yang menjunjung tinggi pluratitimo, kerkudaya, religins dan menjunjung tinggi nilai-nilai etika.
- 3. Indonesia menjadi posat pendidikan, teknologi dar perabakan dunia . 4. Manyarakat dan aparatur pemerintah yang
- belas dari perilahu korupsi.
- 5. Terlangunnya infrastruktur yang merata si seluruh Indonesia.
- 6. Indonesia menjadi negara yang mankiri dan negara yang paling berpengaruh di Adu kasifik 7. Indonesia menjali barometer pertumbuhan de
- Junia . Merauke, 30 Dosember 2015

A Ropublik Indenesi

Translation of the President's Dream of Indonesia 2015 - 2085:

The Indonesia Vision of 2015–2085

- 1. Indonesia's human capital is smarter than all the nations in the world;
- 2. Indonesia upholds pluralism, culture, religious and ethical values;
- 3. Indonesia is a centre of education, technology and world culture;
- 4. The people of Indonesia, including the government apparatus, are honest and free of corrupt conduct;
- 5. There is good infrastructure in every part of Indonesia:
- 6. Indonesia is self-governing and is the most influential country in the Asia-Pacific region;
- 7. Indonesia is a barometer for economic growth in the world.

Source: Nugraha, Jakub. Presentation "The Role of Association in Microinsurance Market Development." 13th International Microinsurance Conference 2017.

Parallel session 14 The role of insurance associations in market development

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This agenda has chalked up a number of successes at the regulatory level (without promoting or implementing a specific regulation), and in terms of both demand and supply. At the regulatory level, Fasecolda was able to get the government to simplify treatment of the Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) regime; the use of insurance correspondents; and, along with the World Bank, the creation of a catastrophic insurance scheme for small farmers with Colombia's government as the risk carrier. Fasecolda designed the insurance component of the financial inclusion survey led by the government, conducted two microinsurance demand studies, and is continuing to offer training and capacity-building

workshops to members. To foster trust in the sector, it has developed and enforces a Code of Good Practice and implemented a detailed financial education programme. Many of Fasecolda's actions have been measured by impact evaluation studies and improved accordingly.

### **Lessons learnt**

As insurers enter the low-income sector, they contribute individually to the development of the market. Insurance associations, being aware of their members' weaknesses, needs and strengths, are best placed to generate a conducive environment for the market development collectively on their behalf.

Insurance associations are also well positioned to collaborate with and even influence the government to pursue a financial inclusion strategy.

 Having an inclusion agenda of their own can only strengthen such lobbying and advocacy.

The insurance associations, like almost all organisations, need to change and adapt to the various environmental, social and governance challenges. Their role and priorities vary with time, from basic demand and supply interventions, to developing a holistic approach toward eco efficiency, low-carbon imprint and resilience.

Table 4 The role of General Insurance Association of Indonesia (AAUI) (2017–2020) in microinsurance

### Government level

Partnering with various government body/ministries to reach the dream:

- 1 Dialogue with ministries and government agencies about current issues and importance of insurance
- 2 Create new products with Terms and Conditions proposed by the ministries
- 3 Share ideas/thoughts on new decrees related with microinsurance

### Industry level

- 1 Reorganise the microinsurance department (2017–2020). Six members with various experiences and networks
- 2 Offer capacity building at least for the members through having a long-term commercial-based pilot project under AAUI.
- Product design, business model, financial literacy.
- A show case for CEOs of the industry.
- Insurance for traditional shrimp farmers requested by Ministry of Maritime and Fisheries.

Source: Nugraha, Jakub. Presentation "The Role of Association in Microinsurance Market Development." 13th International Microinsurance Conference 2017.

### Keeping the "micro" in "mass" insurance

By Shilpi Nanda

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Landscape studies in emerging markets are beginning to show a shift towards "mass" markets. It is important not to lose focus on the lowerincome "micro" segments that are underserved. This session started with a definition of the mass and micro markets, followed by a look at one insurer's strategies regarding mass and another's regarding micro.

# Defining "mass" and "micro" insurance

There is already a set of regulations in Peru that defines the two types of insurance:

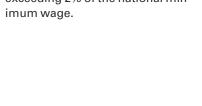
### Mass insurance

These are standardised products constructed in simple language which are easy to understand and do not require special conditions. A simple acceptance by the insured is considered sufficient. They could be sold via a wide range of entities or "mass marketers."

### Microinsurance

These are products *accessible to the low-income population* through proportionate premium payments in accordance with the risks covered by the policy and are *designed to respond to the protection needs of low-income people.* They can take the form of individual or group insurance, and be sold via intermediaries serving low-income people and microentrepreneurs, with monthly premium not exceeding 2% of the national minimum wage. The definition of mass insurance is channel-focused, whereas that of microinsurance is market-focused. There is a certain "intentionality" in the design of micro products which sets it apart from the mass products – which only need to be simple and accessible.

The session considered whether the distinction between mass and micro insurance matters (see Figure 41).



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100 — Left to right: Mathilda Ström, Deputy CEO, BIMA, United Kingdom; Lorenzo Chan, CEO, Pioneer Life, Philippines; Michael J. McCord, Managing Director, Microinsurance Centre at Milliman, United States.

101 — Michael Weilant, Principal and Consulting Actuary, Milliman, United States.

102 — A full room as a result of a strong interest in the topic.



- Everyone could benefit
- Mass AND micro

Figure 41

Source: Weilant, Michael. Presentation "Keeping the 'micro' in 'mass' insurance." 13th International Microinsurance Conference 2017.

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Parallel session 15 Keeping the "micro" in "mass" insurance

#### Segmentation matters

A single mass market product may well be beyond the means or needs of segments targeted by micro on the basis of income, urban or rural location, or gender. **Value is not universal**. It may not be financial only. For some, it may lie in other factors such as faster claims settlement and flexible coverage.

### **Building an insurance culture**

Both mass and micro products create higher levels of insurance awareness, insurance penetration, leading, eventually, to competition in pricing that benefits everyone. Emerging markets initially lack traditional industry data and oversight – challenges are met gradually over time as mass and micro insurers gain experience and are noticed by regulators, as well as by industry associations.

### Targeting an unignorable sector

Pioneer Life Inc. believes that to become the "insurer of choice" in an emerging market, it should not ignore the insurance needs of the lower-income segment (C2 and D, in Figure 42).

The C socio-economic segment, which constitutes part of the mass market, accounts for 28% of the country's population. In Pioneer Life, 55% of the total premium comes from this segment. On the other hand, while 57% of the population belongs to the D segment, its contribution to the insurer's premium is merely 13%. In terms of the number of lives insured, however, the micro segment accounts for 59% of Pioneer Life's portfolio.

The differences between Pioneer's offerings for the micro and mass segments range from product design and distribution channels to price points and payment schemes. Its mass products are offered at shopping malls, travel agencies and retail distributors, whereas the micro segment is served via MFIs, rural banks and pawnshops, which tend to be frequented and trusted by the lowerincome segment. While Pioneer has adapted only one of its micro products to the mass segment, it has adapted several mass offerings to the micro market to make them more accessible and useful.

An example of this is the Sagip Plan, a personal accident cover with burial and calamity aid for individuals and families. With premiums up to US\$ 40 per year, the product was quite pricey but equally desirable for the micro market. Pioneer partnered with a large MFI to structure loans to pay for the insurance premium. The loan is repaid in weekly instalments, which makes it affordable for the customer. The outcome is a win-win-win: the partner sells a loan product, the insurer earns a premium and the customer can afford a desirable product.

Philipp	ine socio-econon	nic classes					
Class	Profession	Cars owned	TVs owned	Other appliances	Minimum monthly income	Household help	Percentage of population
A B	i i		At least two TVs	8 and up facilities	US\$ 3,155 and up US\$ 2,125 and up		1%
C1	White collar	May or may not own a car	At least one TV	8 and up facilities	US\$ 1,052 to 2,104	Can have household help	28%
C2	Blue collar	May or may not own a car		5 to 7 facilities	US\$ 420 to 1,051		
D			May or may not have a TV	4 facilities at most	US\$ 210 to 419		57%
E	<b>*</b>			4 facilities at most	Less than US\$ 210		14%

Figure 42 Philippine socio-economic classes

# Reaching mass not possible without micro

BIMA, a leading provider of insurance and health services in Africa, Asia and Latin America, believes the mass and micro segments both face the same risks and are crucial from an insurance perspective: it is not possible to target the mass segment without understanding and serving the lower-income micro segment.

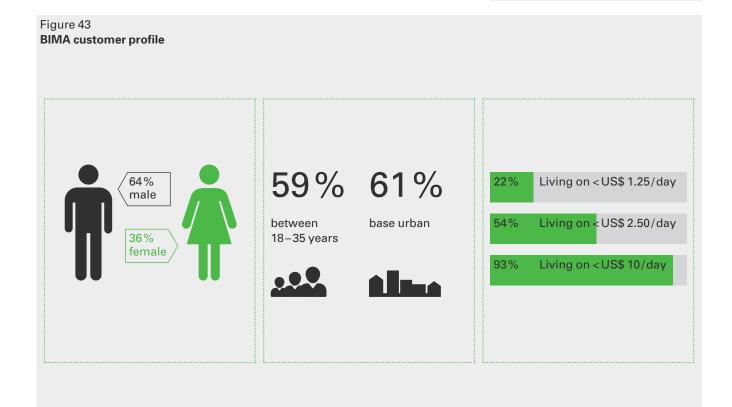
About 22% of BIMA's policyholders survive on less than US\$ 1.25 a day, and 54% are from the income segment of under US\$ 2.50 a day (see Figure 43). To access this market and reach scale, BIMA started with partnerships – mainly with MNOs who had reach and a good brand in the emerging markets and leveraged data and technology to build the entire insurance value chain. To make partnerships work, BIMA added three more Ps to its marketing model: people in a dedicated agent force, a tech platform, and high-value products.

Acquiring customers across the socio-economic segments means a diversified portfolio and greater sustainability for BIMA. The products are simple, affordable and often offered at multiple price points to suit the different income segments.

### **Lessons learnt**

Making a distinction between mass and micro is necessary to more effectively address the needs of the micro market.

- There is a win-win-win opportunity for insurers partnering with MFIs or MNOs to make desirable products affordable for the lowincome market. A distinguishing feature of a microinsurer is the intentionality to serve lowincome people appropriately with products that fit their needs.
- When designing products for the mass market, an insurer is unlikely to achieve scale without a system of digital registration and acceptance, digital processing of micro-payments and electronic claims tracking.
- Serving the micro as well as mass segments calls for flexibility to adapt products designed for one to suit the specific needs of the other.



Source: Ström, Mathilda. Presentation "Serving the underserved: The BIMA way." 13th International Microinsurance Conference 2017.

### **Consumer education**

**By Pedro Pinheiro** 

Consumer education programmes have too many ambitious objectives. They usually achieve the goal of raising awareness about insurance and its main concepts – but do not succeed in changing behaviour. This session discusses how, when combined with market strategies to promote responsible sales, financial education has the potential to improve consumer protection, increase sales and build a sustainable commercial model.

On many occasions, financial education programmes face a number of challenges and do not provide the expected results. The main reasons for this are that the education programmes are not always relevant to the targeted audience, or are actionable and expensive and thus infrequent.

### Clients' understanding of insurance

In 2014, the Colombian financial institution *Crezcamos* introduced agricultural insurance to small producers in diverse microclimates and a competitive credit market. In 2015, EA Consultants led a study with CGAP and the Microinsurance Centre to understand take-up and education. The quantitative sample was 358 farmers, plus 30 qualitative interviews. Mapfre-Crezcamos crop insurance in Colombia

### Insurer MAPFRE

Distributor Crezcamos (MFI)

Premium subsidy (Finagro – government)

### Weather risks

Drought, flooding, hail, landslides, frost, excessive rain and wind.

Targeted at smallholder farmers.

Covers one crop, permanent or transitory.

Voluntary to Crezcamos applicants.

The study was aimed at sensitising clients about climate risk by showing a video that explained the product features and offered a brief testimonial from a client. It also involved the calculation of the premium and managing questions and concerns expressed by the clients. In order to make it actionable, enrolment forms were completed on site with the loan. The results showed that, as a result of the intervention, customers were able to understand the product and had a positive perception of it. The take-up was 23% and customers who decided not to purchase did so on rational terms (see Table 5).

In 2017, EA Consultants went back to Colombia with Crezcamos to test the feasibility of another agriculture insurance product, this time parametric climate insurance. Despite the complexity of the new type of insurance, they found that both customers and agents easily understood the main features of the product. This example shows that many financial education programmes might be failing because they start with the assumption that customers are not able to understand the main concepts of insurance and engage with agents in the sale process.

### Table 5 Rational non-purchase

Redundant	Very diversified clients felt their risk was already protected.
Not relevant	When sale took place too late in the crop cycle.
	Non-purchasers univer- sally described the product as covering only a small portion (one third or less) of the total risks their crop.
Not sufficient/ useful	"My greatest risk is related to market price, especially with the pigs – the costs are consistent and very high, but the price in the market varies a lot."

Source: Magnoni, Barbara. Presentation "Financial education in insurance: The Peruvian experience". 13th International Microinsurance Conference 2017.

# Responsible sales are a continuous engagement process

When sales are responsible and transparent, clients are better able to reach an informed decision on whether the product is relevant to their risk context. But just because they understand it does not mean they will remember it after the sale. The study found that a couple of weeks after the sale, 80% of the clients who purchased the insurance did not know the sum assured, 67 % did not remember what events were covered, 41% thought it was mandatory, and 68% did not remember the premium they had paid. This shows that financial education must be a continuous engagement process.

# Lessons from an insurance and credit bundle

The InsuResilience Investment Fund (IIF)<sup>17</sup> aims to increase protection for the poor and vulnerable from extreme weather events and natural catastrophes. It does so by building market experience and promoting the development and distribution of climate insurance products in Peru, Paraguay, Ecuador, Colombia, Bolivia, Mongolia and Tanzania.

In its consumer education projects, the IIF found that the strategies can be (positively or negatively) affected by local lending practices. In Paraguay, for example, extensive use of loan rescheduling/restructuring by financial intermediaries to face scenarios of volatile commodity prices and/or adverse climate events undermined the value perception of insurance products by clients. Because they knew their loan would be restructured, their financial behaviour was less responsible. Sound regulatory framework and rules are thus key to disciplining the market and improving behaviour.

In the case of a partnership with Caja Sullana, offering a multi-risk insurance for farmers in Peru, the IIF found that low-income farmers do not necessarily perceive climate risk as their most important risk. The risks of plagues, crop diseases and commodity prices, which cannot always be insured at affordable premiums. compete with climate risk. Based on this finding, informative talks with farmer clients were broadened to include content on pest and disease management - in addition to crop insurance information - to increase attendance rates and interest from clients

17 Formerly known as the Climate Insurance Fund



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103 — Mariela Zaldivar, Deputy Superintendent of Market Conduct and Financial Inclusion, SBS, Peru.

104 — Left to right: Barbara Magnoni, President, EA Consultants, United States; Gustavo Muchotrigo, Associate Vice President – Lima office, BlueOrchard Finance, Peru.

105 — Craig Churchill, Head, ILO's Impact Insurance Facility, Switzerland. Parallel session 16 Consumer education

The IIF also found that consumer education is preferable when embedded into the loan origination and loan monitoring processes, vis-à-vis separate informative talks, since it then becomes an ongoing process. And in accordance with the other experiences showcased in the session, the IIF concluded that only through responsible marketing, with sales that are transparent in terms of benefits and limitations, is it possible to build clients' trust in the product.

### A national plan for financial education

As part of its responsibility for the insurance branch of the country's National Strategy for Financial Inclusion (ENIF), Peru's insurance regulator, SBS, launched a digital strategy (see Figure 44) that includes an insurance comparator for customers, and mapped over 80 institutions providing financial education in Peru. Of these, only 10% had a focus on insurance, either solely or combined with other subjects. Insurance is now included in the national curriculum for the basic education of children. Young people, adults and the elderly are addressed through financial literacy talks, virtual platforms and other types of media.

SBS notes that the culture of insurance is part of financial education as financial products are used to enable people to manage resources and follow their life projects – all made possible because the security it provides allows them to manage their risks.

#### **Lessons learnt**

Clients are smarter than insurers assume. They understand basic insurance concepts that relate to their daily activities. But they may not remember them post-sales. Consumer education must be an ongoing engagement process.

- Consumer education is more effective when embedded into the loan application and monitoring processes.
- When sales are responsible and transparent, clients are able to co-create and reach an informed decision on whether the product is relevant or not to their risk context.

Figure 44
SBS' digital strategy for improving consumer empowerment



SBS' Financial Education webpage





SBS' Financial Education e-learning



SBS' Orientation and services for the citizen

Source: Zaldivar, Mariela. Presentation "Financial education in insurance: The Peruvian experience". 13th International Microinsurance Conference 2017.

### Agenda

### 9 November 2017 Afternoon sessions

### Plenary 4

### Mobile Insurance and digital technologies – Trends and supervisory approaches

### Hosted by A2ii

Peter van den Broeke Senior Policy Advisor, IAIS, Switzerland

Denise Garcia General Director of Research & Development, CNSF, Mexico

Michael Kofi Andoh Head of Supervision, National Insurance Commission, Ghana

Carlos Alejandro Belloni Strategic Consultant, Argentina

<u>Sicelo Phiwayinkosi Nkambule</u> Founder & CEO, Riovic, South Africa

Facilitator

Stefanie Zinsmeyer Advisor, Access to Insurance Initiative (A2ii), Germany <u>Eduardo Morón</u> President, APESEG, Peru

Doubell Chamberlain Chair of the Board of Directors, Microinsurance Network, South Africa

Conference close and next steps

Manager, Policy and Analysis, Pensions and Insurance Authorities, Zambia

Facilitator

<u>Dirk Reinhard</u> Chairman of the Conference Steering Committee, Vice Chairman, Munich Re Foundation, Germany

### Plenary 4

### Mobile Insurance and digital technologies – Trends and supervisory approaches

By Shilpi Nanda

The plenary discussed trends in digital technologies and how they affect mobile insurance and the insurance industry itself. Supervisors, in particular, face new challenges in regulating an industry changing rapidly in the face of data analytics and technology.

# The pace of technological change is unprecedented

The world is undergoing a transformation being referred to as the Fourth Industrial Revolution (see Figure 45). It is characterised by a blurring of lines between physical, digital and biological spaces, and three overlapping technologies will redefine our lives in years to come:

- genetics, to reprogramme our own biology;
- nanotechnology, to manipulate molecular and atomic matter; and
- artificial intelligence (AI), to create greater non-biological intelligence.

An example of this is smart cars, which now have features such as blind-spot detection, lane-departure warning, collision warning, trafficsignal notice, etc. In this case, technology has helped a particular risk category to move from post-event forensics to pre-event prevention. The expected proliferation of smart cars may lead to less and less of a focus on loss compensation (insurance) and more on services designed to avoid or mitigate loss. The next step from this will be autonomous vehicles reshaping the entire automotive industry.

Another emerging area is genetics, which is becoming more and more affordable for the public. With everincreasing supervisory restrictions on the information insurers can use in underwriting, there is a risk of asymmetry of information between the insurer and the insured, which could increase adverse selection. Life insurers need to monitor humanity's race to beat death. More research, the use of artificial intelligence (AI) in medicine and 3D bio-printing may lead to unforeseen leaps in human longevity in years to come. Our technological evolution is happening faster than most people ever imagined and it is clearly happening faster than society is able to deal with. These are only a few examples of the challenges for the insurance industry alone and pose the question: Are supervisors prepared or are they perpetually playing catch-up while the industry and markets change?

# Analysis to predict and understand the future

To better understand the future, the FinTech Task Force within the International Association of Insurance Supervisors (IAIS) performed an analysis of the potential impact of technological innovations through a scenario-based approach which considered the varying degrees to which new technology firms could disrupt the insurance business model and the insurer landscape. The analysis was based on three scenarios:

### Scenario 1

The incumbent insurers successfully maintain their customer relationship and leverage technology firms for their own advantage.

### Scenario 2

The insurance value chain becomes fragmented as new technologyenabled players enter the market. The traditional customer relationship weakens.

### Scenario 3

Incumbents and traditional insurers are completely overtaken by puretechnology companies that provide insurance for the emerging needs of the consumer.

Based on the scenario analysis, IAIS has several considerations for supervisors of the future, including:

### Competitiveness

This may reduce over the long term, so work to encourage or accommodate competition and new entrants.

### **Consumer choice**

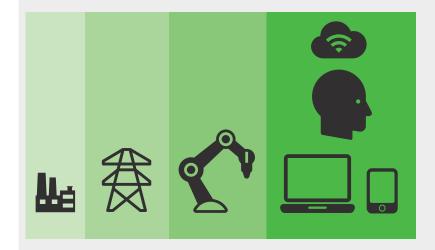
Ensure that the ability to compare products between providers is not compromised due to an increase in customer segmentation.

### **Business model viability**

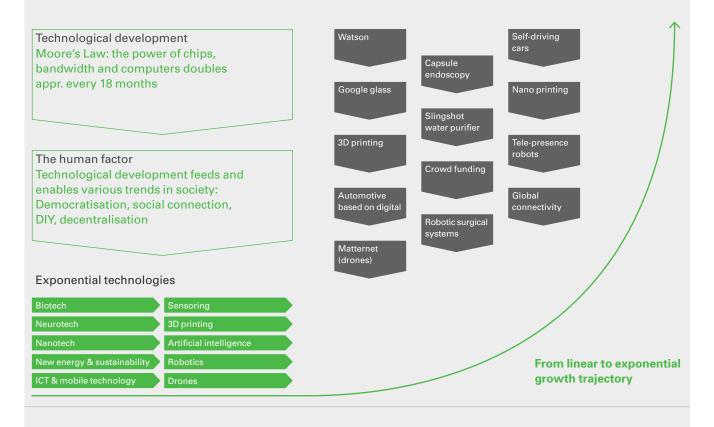
As customer segmentation increases and new players enter the market, will traditional business models survive? Ensure that the regulatory capital frameworks across the world are appropriate, accommodating changes in insurer risk profiles.

### Data ownership

Proliferation of technology and big data potentially raises the risk of unauthorised access, use or transfer of personal data. Strengthen regulatory provisions for data access and transferability between providers. Figure 45 The fourth industrial revolution



Speed of technological change



Source: Belloni, Carlos Alejandro. Presentation "The fourth industrial revolution." 13th International Microinsurance Conference 2017. Plenary 4 Mobile Insurance and digital technologies – Trends and supervisory approaches

### Delivering client value in multipartner initiatives

One class of microinsurance driven by changes in technology and gaining market share is mobile insurance. In Ghana in 2016, there were 2.7 million mobile insurance policyholders, representing 60% of all microinsurance policyholders. For these policyholders, the mobile network operator is the face of the insurance policy. The insurer carries the risk, but performs pricing and reserving with support from third-party service providers (TSPs). The TSPs assume all operational work, including marketing, customer registration, complaints and claims management.

In this business model, the regulator needs to keep an eye on client value to ensure that it is delivered in the multi-partner environment. There is also a risk related to the distribution channels. Much rides on the mobile network operator delivering the product to the customers. If the partnership between the insurer, TSP and MNO were to break down, it could translate into loss of cover for many overnight. From the regulator's perspective, they now need to understand which parties need to be licensed. Traditionally, the insurer assumed all roles and responsibilities, but in this new paradigm the regulator has to reconsider the parties that require licensing and supervision.

It is also important to have proportionate responses to these developments as regulators have to actively promote innovation within the market. Ghana developed mobile insurancemarket conduct regulations to promote best practices in the market. The product approval measures were redesigned and cooperation with other regulatory entities enhanced.

#### **On-demand mobile insurance**

In South Africa, the changing face of mobile insurance is illustrated by a 2016 entrant, Riovic, which provides on-demand insurance. Riovic uses an online platform that allows users to purchase insurance when they perceive the greatest need. Users are able to get this short-term insurance via any mobile device, and daily accidental protection costs US\$ 0.50, including life insurance of US\$ 1,000 and medical insurance of US\$ 50.

Riovic's strategy is aimed at millennial customers, a segment becoming increasingly difficult for traditional insurers to engage with because of the changing patterns of employment in the gig economy<sup>18</sup>.

Figure 46 <b>Scenario Analysis</b>				
Competitiveness BM Viability Cap. Req.	Consumer choice / & Conduct of	Interconnected	dness Pata owner	Regulatory oversight ship
		C C	/	
Incumbents successfully maintain the customer relationship	Fragmentation value chain; ir no longer in co	cumbents		echnology firms zzing out traditional ers

Source: Garcia, Denise. Presentation "IAIS Report: FinTech Developments in the Insurance Industry." 13th International Microinsurance Conference 2017.

18 A gig economy is one in which temporary positions are common and organisations contract with independent workers for short-term engagements.

### **Lessons learnt**

- Technology is driving a fourth industrial revolution. Insurance, and with it microinsurance, are two of the industries in the midst of it.
   The focus of insurance is shifting from post-event management to predictive analytics leading to the prevention of the claim itself.
- The emerging challenges are particularly noteworthy for supervisors and regulators.
   Among market aspects they need to watch are competitiveness, consumer choice, business model viability and data ownership.
- With multi-partner arrangements on the rise in mobile insurance, supervisors need to ensure that client value is delivered as intended.
- Technology is threatening the resilience of the current traditional business models. Insurers have to adopt creative approaches to meet the emerging needs of millennial customers in the technologydriven economy.









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106 — Left to right: Peter van den Broeke, Senior Policy Advisor, IAIS, Switzerland; Denise Garcia, General Director of Research & Development, CNSF, Mexico.

107 — Michael Kofi Andoh, Head of Supervision, National Insurance Commission, Ghana.

108 — Carlos Alejandro Belloni, Strategic Consultant, Argentina.

109 — Sicelo Phiwayinkosi Nkambule, Founder & CEO, Riovic, South Africa.

110 — Stefanie Zinsmeyer, Advisor, Access to Insurance Initiative (A2ii), Germany.

111 — How digitalisation transforms the insurance markets was among the hot topics of this year's conference.



### Conference close and next steps

Dirk Reinhard, Vice Chairman of the Munich Re Foundation, and Chairman of the Conference Steering Committee, thanked staff of the three host organisations - Munich Re Foundation, APESEG and the Microinsurance Network - for the many ways they contributed to the success of the conference. He also recognised the local organising committee, the **Conference Steering Committee and** the ten content partner organisations for supporting individual sessions and enhancing their quality. "Partnerships are important; this conference was a good example of how they can produce memorable results," he said.

Maria Victoria Sáenz, a rapporteur and formerly a lead operations specialist at the Inter-American Development Bank, then summarised the main takeaways from the various sessions noted by rapporteurs for the conference report. She divided the findings into four main streams:

## Agricultural insurance and natural disasters

The discussions around agricultural insurance and protection against natural disasters dominated the conference. Appropriate risk management solutions based on insurance principles are still not available for most small and mid-size farmers.

Insurance schemes have produced mixed results and irregular success. Most had to be set up without availability of reliable data. Some report new technologies are good but not necessarily the panacea. Others show that farmers and villagers react positively to use of technology, including apps and satellite data for insurance purposes. Self-protection such as using improved varieties of grains and off-farm income - reduces the personal cost of risk among smallholder farmers, so insurance schemes should be designed to consider such a decrease in the probability of crop failure. Index-based insurance designed like a portfolio, providing comprehensive coverage of likely perils, can potentially increase takeup. In Chile, coordination of risk transfer mechanisms, preparedness, and response to disasters by a single Department of Integral Risk Management is proving effective. It offers catastrophic insurance and subsidises the premium for crop insurance products (58%). In Mexico, the valuechain actors are not well structured. Almost half of the agricultural pro-

Almost half of the agricultural producers do not have direct access to the market, and use intermediaries. Small farmers in Mexico do not buy crop insurance because it does not offer full coverage against a wide variety of risks. They need this full coverage in order to get access to credit.

### Technology, fintech and new business approaches

Mobile operators show great success worldwide; however, it is important to know how to manage premium collection. Data analytics is important for business analysis and product development. Clients can now make claims using Whatsapp. Listening to customers helps develop new products more targeted to their needs: for instance, bundling health insurance with medical advice, preventive care, and medication.



112 — Nakamau Ntini, Manager, Policy and Analysis, Pensions and Insurance Authorities, Zambia.

#### Role of governments and regulation

Public sector entities overseeing policies and practices relating to the insurance industry and markets need to create conducive environments, and monitor new entrants and their new approaches. They particularly need to watch for the impact of digital technology, which may be unexpected and unanticipated. And they should be clear about what insurance covers for which policyholders need to be subsidised.

### Opportunities and barriers in Latin America and the Caribbean

The increasing involvement of regulators has played a great role in developing the markets. Accessibility of data continues to be a challenge, an area where Insurance Associations can help. Peru's microinsurance regulation and innovation in the industry are both the result of introspective analysis. Putting clients first and foremost has helped design insurance products that complement all other financial offerings. But providers need to keep pushing the use of technology and follow the lead of the microfinance sector which pioneered it for the low-income sector. Use technology to solve a problem instead of trying to fit a cool technology into your business solution.

#### Next steps

Doubell Chamberlain, chair, MiN, said that the organisers have set very high standards for the outcome of the microinsurance conferences. "This conference, too, produced noteworthy results. In addition to the opportunity for participants to network, share and learn, it delivered new trends in the use of technology, adjusting regulation, climate risk protection, and other topics such as how insurance could better contribute to development. The conference covered their multi-faceted impacts not only from the perspective of emerging markets, but also a multistakeholder perspective, presenting and demonstrating a maturing of development models. Discussions also made it clear that the question of delivering the right value to the client remains a challenge - one that the next conference might address in depth."

Shipango Muteto, managing director, Zep Re, then invited participants to mark the venue and dates of the 14th International Microinsurance Conference, to be held in Lusaka, Zambia, 6–8 November 2018. Coincidentally, Zambia launched a financial inclusion strategy just yesterday, he said, though no microinsurance legislation is in place there yet. "Our industry is looking forward to hosting the 2018 conference. Delegates may note that Zambia is not only the land of copper, but has more water than any other country in Africa."

Eduardo Morón, chair, APESEG, concluded the session by recognising numerous volunteers, without whose contribution the event would not have materialised – in particular Hector Lucero, who played a central role. "Our thanks go to the Munich Re Foundation and its national and international partners, as well as to a number of local partners of APESEG, the regulator and donors, who put in a year and a half of hard work to plan and ensure the success of the conference."







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113 — Doubell Chamberlain, Chair of the Board of Directors, Microinsurance Network, South Africa.

114 — Dirk Reinhard, Chairman of the Conference Steering Committee, Vice Chairman, Munich Re Foundation, Germany.

115 — Eduardo Morón, President, APESEG, Peru.

### **Field trip**

### **Mibanco and Pacifico Seguros**

### By Thomas Loster

Name of the insurance product **Family Protection** 

Insured risks Life / Accident

Premium range 36–54 soles per 1,000 sum insured

Erlinda Panebra runs a small quail farm near Lima. Small and mediumsized businesses like hers are a key economic factor in Peru. They are responsible for approximately 40% of the gross domestic product. Microfinance bank Mibanco and insurer Pacifico have developed special covers to protect businesses like these. Erlinda Panebra lives with her family on the outskirts of the Lima metropolitan area. Several small farmers work adjoining parcels of land here close to the famous Pan-American Highway. Her small farm is situated well back on the dusty site. Alongside a paddock with ten calves stands a tent. Inside the relatively small, darkened space, there is a hive of activity. Hundreds of quail are laying eggs like on a conveyor belt. "In good periods, my birds can lay as many as 80,000 eggs in a week", says Erlinda proudly. "But the sales are in kilograms and prices on the market change very quickly here. We also had to take out a 20,000 soles loan (roughly US\$ 6,000) to be able to finance the business".

An insurance policy protects the family in the event of accidents. The annual premium is just 36 soles (around US\$ 11). The death benefit is 15,000 soles (approx. US\$ 4,600), and the policy pays 5,000 soles in cases of disability. It also covers various other critical emergency situations (desamparo súbito familiar).



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116 — Her daughter is her pride and joy, and Erlinda has taken out a microinsurance to protect the girl's future.

117 — In peak periods, Erlinda's quails lay up to 80,000 eggs a week. But even this is not enough to keep the business running. Small and medium-sized enterprises (SMEs) play a key role in Peru's economy. It is estimated that they generate roughly 40% of the gross domestic product. More than 70% of the economically active poor (EAP) are employed in this sector. Mibanco is one of the most important banks in the region. It issues small loans, while at the same time offering insurance protection for small businesses. It cooperates closely with the insurance company, Pacifico, which like Mibanco, is part of the Credicorp Group. Mibanco's statistics for 2016 are impressive:

- Market leader in the micro and small business sector (SMEs) with a market share of 31.5% (524,189 customers).
- Approximately 125 new customers each year.
- An "A" rating from Equilibrium, and an international "BBB" rating from Standard and Poor's.
- International award for "Best microfinance bank in Peru 2016"

(British release of Global Banking & Finance Review).

Pacifico is also a market leader. The insurer has more than 70 years' customer experience and continues to expand. It is familiar with the requirements and demand from the EAP segment. Thanks to newly developed covers, particularly for the SME sector, it has been able to grow its premium income significantly in recent years. Following major floods and numerous fires in Peru in 2016, there were 3,100 claims with a total claims amount of more than 18 million soles (approx. US\$ 5.5m).

# Recovery thanks to insurance protection

Good for the insured: They were able to service their loans once again, rebuild their business and provide for their families. Mibanco and Pacifico offer various types of cover. The most important are:

- Credit Life insurance: secures a loan in the event of death. The premiums are staggered according to the term of the loan.
- Business Protection: multirisk cover for businesses, shops and goods.
   The premiums are staggered according to the amount of the loan.
- Family Protection: property casualty insurance with various gradations and components.

Client service is written large at Mibanco. Roxanna Luz is a sales staff member. She looks after more than 100 customers and is constantly in discussion with them, she tells us during the field trip at the 13th International Microinsurance Conference. "Top-quality client service is a priority for us," she says. "Policyholders want to understand exactly the added value they get from the covers, because they don't have a lot of money to spend. That means you have to exchange a lot of information and provide good support." The nice thing is that the parties get to know one another well. "We offer several products," says Roxanna, "and Family Protection is a very popular one. That is what Erlinda and her husband opted for."

Seven out of ten Mibanco customers take out microinsurance. The customer base for SMEs is highly diverse: it ranges from small shopkeepers at weekly markets, to beauty consultants and small farmers like Erlinda. She and her husband recently took out a loan for their small livestock farm. "We want to protect the business," explains Erlinda, "because accidents can happen unexpectedly. They could quickly make my family and me destitute. I have had my insurance for four years now, and it's a good feeling for us to know we have this protection. You know, when I look at my little girl, I feel really happy. Because, in the end, it's about safeguarding her future too."



### By Dirk Reinhard

#### Insured risks

Field trip

Hail, fire, wind, high temperature, drought and flood.

#### Sum insured

A calculated cost of production depending on the crop.

Premium 2.8 – 3.0% (No subsidies from the government)

Area covered (2016) Approx. 35,000 ha

Policies (November 2017) > 18,000

Agrobanco is a state-owned bank offering loans to small and mid-size farmers in Peru. An estimated 700,000 small and medium size farmers in Peru lack access to credit according to government estimates. Agrobanco offers loans to this group of clients at interest rates of between 16% and 20%, which is nearly half of what farmers usually have to pay. Together with the Peruvian insurer La Positiva, Agorbanco offers an agricultural insurance policy for their clients covering the calculated production costs of the crops. A number of crops like rice, potatoes, quinoa, maize and banana production are currently covered.

About 25 participants at the IMC visited the fields of Rosa Andia and her brother Angel, both Agrobanco clients with and without insurance. Rosa grows avocado on five hectares of land in the district of Ica and has insurance. She explained that her experience after a loss had been positive and she still has insurance. The insurance provided by La Positiva through Agrobanco covers the estimated costs of production for specific crops. It is a non-mandatory product for farmers only with a loan from Agribanco. About 20% of farmers taking out a new loan opt for the insurance. In the event of a loss, farmers call La Positiva. A lost adjuster then visits the farmer. The payment is usually issued between 20 and 30 days after the loss adjustment and goes directly to Agribanco to repay the loan. If the payment exceeds the actual loan, the surplus is paid to the farmer (see picture 120). Mobile phones play an important role in the system. Mobile communication is being used to transfer information to the client, for example weather alerts and a notification when a claim is being paid.





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### Climate change – an opportunity and a threat

"I would get insurance too," said Angel. He grows artichokes on fields nearby. But artichokes are not yet included in the programme. The positive experience of his sister has made him interested in insurance. Agrobanco will therefore continue to work on expanding its insurance cover, said David Sánchez, the Agrobanco representative in the district of Ica. The number of policies dropped between 2016 and 2017 because of a reduced number of loans following the severe El Niño-related natural disasters that hit Peru. Agrobanco will therefore look into farmer education to establish best practice and reduce losses instead of increasing the premium. The number of available loss adjusters were also a problem during the difficult year of 2016 according to representatives of the company.

118 — About 25 people visited Rosa Andina (right) to learn about agriculture insurance for small farmers in Peru.

119 — Rosa's brother Angel grows artichokes on 5 ha of land. He would buy insurance if it were provided.

120 — Claims management process of the insurance in the case of a loss due to excess rainfall.

The government has recognised the importance of insurance and approved subsidies for commercial insurance. Agrobanco therefore sees coming opportunities for growth, but increasing competition as well. "However, we do have a data advantage" said Lourdes del Carpio, the La Positiva manager responsible for agricultural insurance. The representatives of the organisations involved agreed that important lessons had been learned in the past - sometimes the hard way. However, it became clear that the demand is there and insurance has a positive impact on the income of the farmers, allowing them to recover after disasters and making loans available that they otherwise could not access again after big losses. All the parties involved were confident that they can successfully enhance a product that provides value for the client at an affordable price, and therefore allow farmers like Angel to be insured in the future.



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### **Countries represented**





### Participating organisations

Ghana

Peru

Argentina Alasa Santalucia Seguros Argentina Strategic Consultant Australia Australian National University Barbados MiCRO Belgium BRS Bolivia ASEVAP Banco Prodem S.A. Fundación PROFIN Nacional Seguros Vida y Salud PROCOSI Brazil Access to Insurance Initiative (A2ii) CNseg SUSEP Canada Accion Denis Garand and Associates FADQDI ID&CS SOCODEVI Chile Agroseguros Ministerio de Desarrollo Social Ministerio de Hacienda Colombia AJ Seguros LTDA. Altima Seguros Aseguradora Solidaria de Colombia Fasecolda Suramericana Universidad del Rosario Costa Rica Habitat for Humanity Habitat for Humanity International Dominican Republic Seguros Ademi El Salvador Superintendencia del Sistema Financiero France AXA Group Gabon CIMA Germany Access to Insurance Initiative (A2ii) Bundesanstalt für Finanzdienstleistungsaufsicht Federal Ministry for Economic Cooperation and Development GAF GIZ Munich Climate Insurance Initiative Munich Re Munich Re Foundation Sparkassenstiftung für internationale

Kooperation

Ghana Agricultural Insurance Pool GIZ Ministry of Food and Agriculture National Disaster Management Organisation National Health Insurance Authority National Insurance Commission Guatemala Aseguradora Rura Compartamos Fideicomiso FDLG Superintendencia de Bancos Honduras Comisión Nacional de Bancos y Seguros India IFMR LEAD Merck (MSD) for Mothers MicroInsurance Development Agency Indonesia PT Asuransi Central Asia Sienco Aktuarindo Utama World Bank Group Italv International Fund for Agricultural Development (IFAD) Korea (Republic of) Financial Supervisory Service Luxembourg ADA Microinsurance Network Mexico Aterna Comisión Nacional de Seguros y Fianzas Compartamos Grupo Financiero Aserta Munich Re Nepal Beema Samiti Netherlands SuretyBlock Technology Corporation Nicaragua Serinsa-Redcamif Nigeria **NSIA** Insurance Limited Norway Akanko Consultancy Services Paraguay GIZ Ministerio de Hacienda Social Action Secretariat - SAS

ACSL SRL Corredores de Seguros Affinity Marketing International Agencia Andina Agrobanco APEPS APESEG ARS Advanced Risk Solutions AXA Partners Banco Cencosud Banco de Comercio Banco de Crédito Banco Financiero del Perú Banco GNB Banco Internacional del Perú Banco Ripley BBVA BlueOrchard Finance CAFAE S.E. Caja Arequipa Caja Cusco Caja Piura Caja Rural de Ahorro y Crédito RAIZ Caja Sullana Caja Trujillo Central Cooperativa de Servicios -SERVIPERU CITEmadera CMAC Arequipa CMAC Maynas CMAC Tacna CMAC Truiillo Compartamos Conseieros v Corredores de Seguros Contacto Corredores de Seguros Corredor de Seguros Corredores Falabella Crecer Seguros Diario Gestión Diviso Grupo El Comercio ElectroDunas Enel Estilos S.R.L. FEPCMAC FIDES Financiera Confianza Financiera Oh! Financiera TFC Fiorella Bisso Villacorta Freelance consultant GIZ GLOBAL TPA S.A Groupo GEA Health Care Administration Red Salud ILO InfoDigital Institute of Peruvian Studies Interseauro La Positiva La Protectora Corredores de Seguros Latina Broker / Financiera TFC (Grupo)

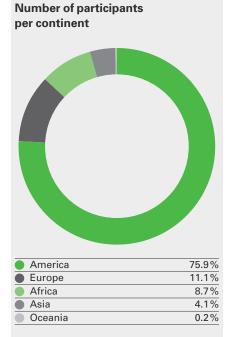
MAF Mapfre Marsh Rehder Master Corredores de Seauro Mibanco Ministerio de Desarrollo e Inclusión Social Ministry of Economy and Finance Number6 Pacífico Seguros Pontificia Universidad Católica del Perú PROMICS Protecta S.A. Compañía de Seguros Rímac Seguros SBS Scotiabank Semana Económica Sifuentes Olaechea Corredores de Seguros Sparkassenstiftung für internationale Kooperation Sygoes Telefónica Universidad del Pacífico VDR Asistencias S.A.C. Viera Corredores de Seguros Willis Corredores de Seauros The Philippines CARD Pioneer Microinsurance Cebuana Lhuillier GI7 Pioneer Life Inc. Portugal Universidad Jaume I/ MiCRO **Puerto Rico** 1990 South Africa Cenfri South Africa **Financial Services** Board Hollard Insurance International Actuarial Association Mocking Bull Holdings (Pty) Ltd Old Mutual Riovic Santam The Best Funeral Society Traficc Two Mountains Spain ILO Switzerland BlueOrchard CelsiusPro ILO International Association of Insurance Supervisors Paralife Management Swiss Capacity Building Facility SCBF UN Environment's Principles for

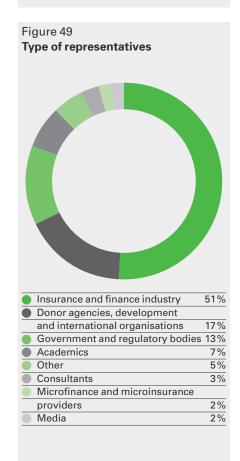
Sustainable Insurance

Initiative

Turkey GAF United Arab Emirates Munich Re (ERGO / Daman) United Kingdom BIMA King's College London MICRO University of Oxford United States A.M. Best A2F Consulting AIG Barents Bradford Insurance CEAR Cloud to Street EA Consultants **Global Parametrics** IFC WORLD BANK GROUP IFPRI Innovations for Poverty Action Inter-American **Development Bank** International Finance Corporation, World Bank Group International Food Policy Research Institute (IFPRI) IRI, Columbia University Juntos Marsh Mercy Corps MiCRO MicroInsurance Centre at Milliman Milliman Northwestern University The University of Alabama Ubedoo UC Davis University of Florida University of Maryland USAID Women's World Banking Zambia Cenfri Financial Sector Deepening Zambia (FSDZ) Insurers Association of Zambia Madison Life Insurance Company Pensions and Insurance Authority

Figure 48





### Acronyms

#### AAUI

Asosiasi Asuransi Umum Indonesia

A2ii Access to Insurance Initiative

#### ABAC The APEC Business

Advisory Council ACP Accion Comunitaria del

Peru AI

### Artificial intelligence AML/CFT

Anti-Monev Laundering/Combating the Financing of Terrorism

### APEC

Asia-Pacific Economic Cooperation

### APESEG

Asociación Peruana de Empresas de Seguros

APFF Asia Pacific Financial Forum

#### ARC

African Risk Capacity AYI

### Area-yield index

BMUB

#### German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety

CAP Cebu Action Plan CDA

GDP

GIZ/BMZ

Gross domestic product

Deutsche Gesellschaft

für Internationale

Zusammenarbeit

International

Cooperation)/

Wirtschaftliche

Zusammenarbeit

(German Federal

Development

Cooperation)

Programme

Association

International

Association of

нш

HSNP

IAA

IAIS

IBWI

IAZ

IC

ICRM

IFAD

IFPRI

Institute

insurance

The Insurers

Management

Agricultural

Development

International Food

Policy Research

InsuResilience

(German Society for

Bundesministerium Für

Ministry for Economic

Health Index Insurance

International Actuarial

Insurance Supervisors

Index-based weather

Association of Zambia

Insurance Commission

Integrated Climate Risk

International Fund for

Hunger Safety Net

Cooperative **Development Authority** CCRIF Caribbean Catastrophe **Risk Insurance Facility** 

CDC The Centre for Disease Control

CEAR Center for the Economic Analysis of Risk at Georgia State University, USA

CMAC Municipal Savings and Loans Bank

CRAIC-LPP Climate Risk Adaptation and Insurance in the Caribbean-Livelihood Protection Policy

DHI Danish Hydraulic Institute

DNA Deoxyribonucleic acid

DoF Department of Finance

EEDE Empresas emisoras de dinero electrónico

### FIDES

Federación Interamericana de Empresas de Seguros or the Inter-American Federation of Insurance Companies

#### FOGASA

Fondo de Garantía para el Campo y del Seguro Agropecuario

### FONDEN

El Fondo Nacional para el Desarrollo Nacional

### Investment Fund ILO

IIF

International Labour Organisation IMV

Improved maize varieties

#### IPA

Innovations for Poverty Action IRI International Research

Institute for Climate and Society

J-PAL The Abdul Latif Jameel Poverty Action Lab

KHR Cambodian riel LAC

Latin America and the Caribbean

ΜΑΑ Mapping of Agricultural Areas

MCII Munich Climate Insurance Initiative

MEFIN The Mutual Exchange Forum on Inclusive Insurance Network

MFI Microfinance institution

MGAP Ministerio de Ganadería, Agricultura y Pesca

MiCRO Microinsurance Catastrophe Risk Organisation

МІТ Massachusetts Institute of Technology

MNO Mobile network

operator MSD Merck Sharp and

Dohme NASA The National Aeronautics and Space

Administration NGO Non-government

organisation

NOAA National Oceanic and Atmospheric Administration

PBI Picture-based insurance

PEF The Pandemic Emergency Financing Facility

PEN Peruvian sol

PNG Papua New Guinea

Regulatory Framework Promotion of Pro-poor Insurance Markets in Asia

La Superintendencia de Banca, Seguros y AFP (Administradoras de Fondos de Pensiones)

Sustainable development goals

Exchange Commission

Short Message Service

Seguro Obligatorio de Accidentes de Tránsito

Third-party service provider

UNEP The United Nations

US\$ United States dollar

USDA US Department of Agriculture

WBI

wı

The Women's World Banking

# RFPI Asia

SBS

SDGs

SEC Securities and

SMS

SOAT

TSP

Environment Programme

Weather-based insurance

Weather index

WMM

Report 13th International Microinsurance Conference 2017

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Picture credits Page 96/97: Thomas Loster Page 98/99 and page 93 (111): Dirk Reinhard All others: APESEG "Just as important as it is to conceive a model of economic growth is the resilience and strength of the model against different types of exogenous (external) shocks."

César Liendo, Vice Minister of Economy, Peru

