

June 2021



Photo: Pradeep Liyanage/IWMI

Social dimensions of Weather Index Insurance in reaching marginal stakeholders: Lessons from Asia and Africa.

Webinar summary report

Mohamed Aheeyar
Sanjiv de Silva
Anamika Barua

IN PARTNERSHIP WITH:



Contents

Acronyms	3
Key Messages.....	4
1. Introduction	6
2. Why is social inclusion in WII important and why is it a challenge?.....	6
2.1 Social inclusion benefits the stakeholder, governments, and the insurer	6
2.2 Who are at the risk of marginalisation and how does this occur?	7
3: Key actions towards more inclusive Weather Index Insurance	11
4. Conclusions	15
Appendices.....	16
Appendix A: Concept Note	16
Appendix B: Agenda	17
Appendix C: List of participants	18
Acknowledgments.....	21

Acronyms

CGIAR	Consultative Group on International Agricultural Research
IBLI	Index Based Livestock Insurance
ILRI	International Livestock Research Institute
IRRI	International Rice Research Institute
NGO	Non-Government Organization
RCC	Risk-Contingent Credit
SATISFy	Satellite Technologies, Innovative and Smart Financing for Food Security
SC	Scheduled Caste
SDG	Sustainable Development Goals
ST	Scheduled Tribe
UNFCCC	United Nations Framework Convention on Climate Change
WHH	Women Headed Households
WII	Weather Index Insurance

Key Messages

All actors in Weather Index Insurance stand to benefit by investing in social inclusion:

1. **Weather Index insurance, unlike conventional insurance, entails a more explicit social function** by ensuring that the vulnerable are able to guard against weather shocks.
2. **Failure to include the vulnerable not only undermines individual well-being but the achievement of national and global development goals**, including nations' contributions to key development goals of global importance including several SDGs and the UNFCCC.
3. **Inclusive WII can be a win-win.** Investing in more inclusive WII can benefit not only marginal stakeholders but also governments to reach their development goals and insurers who can expand and sustain their customer base since small and marginal farmers constitute up to 80% of farmers in most parts of the developing world.
4. **Enabling inclusive WII will additional up-front costs.** The greater social engagement needed for more inclusive engagement process calls on commitment by WII financiers to view these costs as contributions towards attaining national and global development goals.

Who is at risk of exclusion and how?

5. **Those who are at risk of being excluded from WII are mostly those who are already marginalised.** These are not limited to (especially poorer) women farmers, but also include male farmers from poorer households or men and women from minority social denominations based on ethnicity, caste, religion, etc.
6. **WII design and implementation processes that DO NOT recognize social differences risk further supporting social marginalisation.** The root causes of exclusion reflect both the intersection of these marginal social identities together with gender and a failure to adequately recognize and explicitly account for these social differences in WII design and implementation.
7. **An example of marginalisation at a more systemic level is the paucity of digitised datasets** that identify marginal groups, in comparison to the significant advances made in generating data on the biophysical aspects of weather risks. This gap means that marginal groups are left out of the conversation from the outset unless a concerted effort is made to bridge this gap through systematic stakeholder dialogs.

How can Weather Index Insurance be made more socially inclusive?

8. **Stakeholder diversity should inform project design and rollout from the outset.** Anchor the focus of WII products in systematic dialogs with diverse local stakeholders. This will help identify the full range of stakeholders in the target communities; the diversity of risks and stakeholder preferences with respect to which of these is covered, and the various economic, social, and other barriers different stakeholders may have in accessing WII products.
9. **Designing an inclusive WII product should be informed by key entry barriers.** These include that eligibility criteria account for the landless, while stakeholder engagement should account for varying degrees of illiteracy and access to digital information, and ensure financial mechanisms are identified to help poorer stakeholders afford the premium.

10. **Partner with a local development organisation.** Since conventional insurance institutions will not have the skill sets or the in-depth local knowledge needed for systematic stakeholder dialog, the services of a local non-government organisation such as a microfinance institution (MFI) will bring such knowledge, skills, and trust needed for engagement and ultimately successful design and implementation.

1. Introduction

Climate change will have an impact on natural resources, water being one of them, affecting the availability of water including increasing the intensity of floods and droughts. It is also a known fact that the impact of natural hazards is felt more in developing countries compared to developed countries and especially by vulnerable and marginalised groups within communities. Such groups are more at risk due to their greater exposure (e.g. cultivation on low-lying land) and poor capacity to adapt (e.g. less access to irrigation and financial assets- poor literacy and agency) and hence lower resilience. This is compounded by the fact that financial support from the government is not readily available in many developing countries for all losses.

Weather Index Insurance (WII) programs offer potential as an adaptation mechanism in the face of climatic uncertainty, by providing a safety net in the event of various types of losses. However, such programs currently struggle to attract the clients most in need of protection, including marginalized women and men. This risks re-enforcing existing inequalities and missing opportunities to promote pro-poor and gender-sensitive development. Therefore, as noted by Rachael McDonnell (IWMI) in her presentation, bringing the social dimension more squarely into WII by designing them to be accessible to marginalised groups is of utmost importance. In fact, from a climate justice standpoint, the risks are of maladaptation and undermining progress on several Sustainable Development Goals (SDGs) such as SDGs 1, 2, 5 and 13. She noted that failing on SDG 13 would also mean that countries default on their commitments under the United Nations Framework Convention on Climate Change (UNFCCC). Further noting that farmers are already adapting to the changing situation, she pointed out that building on existing adaptive capacity is critical. Insurance, therefore, needs to be seen and understood from a resilience lens and also from the lens of climate justice, where ensuring social inclusion is central.

Noting that several organisations, both international and national, have explored this issue in various geographies and in the context of different commodities, this workshop was organised as a first step towards formulating a way forward to collectively engage the financiers (insurance companies, donor, governments) of WII in how this learning around both challenges but also solutions could be adopted and applied at scale. Representatives from several CGIAR research Centres together with other partners contributed to the workshop through case studies and discussion, providing diverse experiences with different commodities, geographies, strategies, and tools, on the common objective of how social inclusion can be explicitly addressed in WII (list of participants in Annexure 1).

2. Why is social inclusion in WII important and why is it a challenge?

2.1 Social inclusion benefits the stakeholder, governments, and the insurer

From a stakeholder perspective, inclusive WII programs will ensure that those most vulnerable to weather shocks are covered. This translates well for reaching national (and global) development policy objectives, given poverty reduction and food security are universal and often central development objectives. Gender equality and inclusive growth also appear to enjoy increasing resonance in national policy, including commitments to the SDGs.

For insurers and other financiers, WII may differ from conventional insurance by way of the social or developmental objectives of WII. In other words, in the case of WII profitability may need to be tempered with WII's developmental orientation. It may be argued that social inclusion may be in the interest of insurers and other financiers of WII by expanding their client base. It is ironic in this context, that while we think of marginalisation in terms of minority groups, the fact is that in many developing countries,

those stakeholders at risk of marginalisation in fact represent the majority of local communities. In Bihar for example, 80% of farmers are small and marginal and hence vulnerable, according to Mohamed Aheeyar and Sanjiv de Silva of IWMI and it is 90% in Odisha as per the presentation made by Prakashan Veettil of IRRI. As per the presentation made by Rupsha Banerjee of ILRI, there are over 20 million marginalized pastoralists in the horn of Africa that nearly hold all of their productive assets in livestock.

An important aspect of inclusion in WII is ensuring that everyone understands the product so that potential clients' expectations are realistic. Avoiding misunderstandings and hence disappointment if a pay-out is not triggered (or if only a partial pay-out is received) also contributes to the insurer's business sustainability by potentially reducing the dropout rate of adopters. Misunderstandings and consequent disappointments amongst early adopters were common in Bihar (see ppt by Aheeyar and de Silva), because of the very different levels of literacy amongst farmers, who struggled to understand the finer points of how pay-out is triggered and calculated. In Odisha as well, low awareness and low insurance literacy are the major barriers to the adoption of crop insurance schemes, according to Prakashan Veettil of IRRI. A similar situation was also observed in Kenya with the uptake of Risk-Contingent Credit (RCC), as per the presentation made by Liangzhi You of IFPRI, although after conducting financial education of the borrowers, it was observed that the uptake rate of RCC was higher than that of traditional credit in the sampled population, thereby, reaffirming that financial training and education is crucial for widespread uptake of such products.

2.2 Who are at the risk of marginalisation and how does this occur?

Marginalisation in the context of WII involves stakeholders who are unable to access the insurance for reasons other than their own choice to not purchase it. This could occur for many reasons including not being aware of the WII product in the first place; not understanding the product and how it could be of benefit; an inability to meet eligibility criteria, or an inability to finance its purchase. Quite often, who is affected by these challenges reflects those who are already marginalised in a community or village, and are the most vulnerable to climatic shocks. This includes not only marginalized women but also men belonging to various social groupings such as poorer households or minority ethnic/religious/social groups. The term 'intersectionality' is used to recognize that the social positioning of individuals, households, or groups within a society is driven not just by gender, but the combined influence of multiple social identities into which an individual, household, or group falls. As a generalisation, wealthier individuals, households and groups, and those especially belonging to majority ethnic, caste, and or religious groups would enjoy greater social, economic, political, and other capabilities for adaptation.

Conversely, a lack of adaptive capacity and weak resilience makes marginal stakeholders especially vulnerable to any unforeseen event, and failure on the part of WII schemes to pay explicit attention to such stakeholders is likely to re-enforce existing inequalities. For example, individuals from poor or otherwise marginalised households will often own land in the most vulnerable margins of their village; be less literate than others in their communities; may lack access to and experience with technology; may be less visible to awareness programs and consultations when WII programs are being developed and implemented, unable to attend the awareness programs or incapable to understand the WII product even if they attended, and the least able to meet WII eligibility criteria. In fact, the very design of a WII program may exclude some groups from the outset.

These social identities also link to broader structural weaknesses and to weaknesses in the way in which a WII product is conceived, developed, and implemented, whereby this complex contextual heterogeneity is not recognized and accounted for.

Systems barriers: An emphasis on technical data with little focus on social indicators is one of the main causes of poor insurance coverage in both Asia and Africa as highlighted by Giriraj Amarnath while discussing IWMI's interventions in making WII inclusive (Giriraj Amarnath, Evidence from WLE and CCAFS Program). Mohamed Aheeyar, Sanjiv de Silva, as well as Rupsha Banerjee in their presentations also criticised the approach of narrow technocratic interventions which have resulted in benefiting only some farmers while leaving out most of the vulnerable ones.

Giriraj Amarnath emphasised that data is an essential first step to make agricultural insurance universally accessible to everyone, not only as a source of awareness for local stakeholders but also for insurance companies and WII designers to better understand local insurance needs and the full scope of social heterogeneity. According to Deepa Joshi (IWMI), very little progress has been made in digitising how we understand and tackle the intersectional vulnerabilities and inequality within local communities. Some of the important aspects which do not find space in digitised information are who is more vulnerable, how these vulnerabilities and losses are experienced, what are the entry barriers as discussed above. While the science around climate change adaptation or climate adaptability has evolved over time, the extent to which climate change adaptation and climate modeling focus on the everyday experiences of the marginalised is still questionable. Deepa Joshi thus raises an important question on the balance between sophistication that is required in climate modeling vis a vis understanding the diverse and dynamic lived experiences of climate impact and losses as a result of climate change. This glaring gap in capturing the heterogeneity and intersectional vulnerability within communities in digital information systems has also resulted in a digital divide. Variable access to digital environments compounds this digital divide between who do and those who do not have access to reliable digital environments, thus making the excluded further excluded. Consequently, as put by Deepa Joshi, exclusions due to the digital divide makes the poor and marginalised further vulnerable as they do not appear to exist.

In his presentation, Giriraj Amarnath also noted that in addition to identifying different social groups and their needs, data on topics such as precipitation patterns or water level will help these groups to better understand and assess risk. They can then make a better decision on whether they can manage the risk on their own in the future or they need to transfer the risk to the government or insurance companies.

As a bid to move away from narrow technocratic interventions, Rupsha Banerjee from ILRI introduced a sustainable index-based livestock insurance product that varied from traditional products in not only making use of satellite imagery data to assess forage availability and drought-induced scarcity but also by taking into account the livestock migration patterns, with the provision of early-season compensation to minimize livestock losses by supporting drought coping strategies.

Emphasising the importance of a bottom-up, context-specific approach, Mohamed Aheeyar and Sanjiv de Silva observed that when a WII product was implemented in Bangladesh partnering with a local NGO and communities, it resulted in much higher uptake as opposed to its implementation in India, where the local realities and the mechanisms for local feasibility were not taken into consideration.

Entry Barriers: There are several entry barriers to access insurance. Prakashan Veettil from IRRI presented a case study from Odisha, India, focusing on the Prime Minister Fasal Bima Yojana, which was launched in 2016 (Case study 1). The field-level assessment on the level of awareness and insurance literacy amongst

the farmers revealed that there is serious heterogeneity in terms of caste, landholding, and gender and individuals belonging to Scheduled Caste (SC) and Scheduled Tribe (ST)¹ groups had the least awareness and literacy compared to the unreserved category farmers. All of these act as a major constraint for the adoption of the insurance program.

Case 1 Educating the farmers for increased awareness (Prakashan Chellattan Veettil)

In Odisha, 80% of agriculture is rice cultivation. The region is prone to climate risks with extreme events of flood, drought, and disease outbreaks. Approximately 91% of farmers of the state are small and marginal holders. As per govt. data from 2011 to 2015 the proportion of insured rice area as compared to non-insured rice area is dramatically different for different districts, depending upon their economic status.

An assessment of the level of awareness and insurance literacy amongst the farmers to determine the major constraint for the adoption of the insurance program showed that there is serious heterogeneity in terms of caste, landholding, and gender. Individuals belonging to SC and ST groups had the least awareness and literacy compared to the unreserved category farmers. Similarly, the landless and the marginalized farmers are drastically poor performers, followed in close quarters by the female farmers as compared to their male counterparts. Some of the other constraints include delayed payment, basis risk, moral hazard problem, and process and product related issues. The product in itself was improvised with remote sensing based technological intervention, that included yield forecast and estimation of area. Hence, a new product was developed having high accuracy in the region. Damage assessment maps were developed periodically in all events of extreme floods. However, the quest was to understand if these products are accepted by the farmers. Accordingly, a choice-based experiment was carried out to determine their preferences, looking at varying insurance units, risk coverage, yield estimation protocol, claim settlement time, and process transparency, along with premium and sum insured. The findings showed that farmers are prone towards process transparency, and awareness and cognitive ability have a positive impact on insurance choice.

These findings were followed up with an educational training intervention as a means to enhance the literacy of agricultural risk management, w.r.t three products of crop insurance, climate-resilient variety, and bundled crop insurance that includes both insurance and climate-resilient variety. Each of these products were facilitated with a coupon which incurred some cost for availing. It was observed that the majority of the farmers encashed the bundled insurance coupon, making a strong case for this product over the other two.

Post-education intervention survey data showed a spike in awareness in all groups of farmers, thereby, closing the awareness gap. There was a five times increase in awareness for the SC farmers, and the most interesting was the case of landless farmers with a reasonable increase. Inevitably, insurance registration increased significantly post-intervention period.

Similarly, Mohamad Aheeyar and Sanjiv de Silva from IWMI, by conducting case studies in India and Bangladesh observed that low levels of literacy amongst marginal and landless farmers in Bihar, India, and

¹ The Scheduled Caste (SCs) and Scheduled Tribes (STs) are officially designated groups of people in India

Sirajganj, Bangladesh, meant that such stakeholders are highly vulnerable to flooding, were less able to be understand written awareness material about the project (Case study 2). Illiteracy also was a barrier to these groups' comprehension of complex WII mechanisms such as under what conditions an insurance pay-out will be triggered.

Case 2 Making index insurance socially inclusive: reflections from India and Bangladesh

(Mohamed Aheeyar, Sanjiv de Silva)

Given the successful narrative around the weather index insurance (WII) product developed by IWMI, this presentation focuses on addressing the issues of equity and inclusiveness in reaching out to the larger segment of the farming population. As such, studies were conducted in Bihar, India, where IWMI's WII product was piloted and third-party WII products rolled out in Sirajganj, Bangladesh, and some districts in northern Bangladesh. It was observed that in Bihar, 80% of the farmers were small and marginalized, with a considerable proportion of disadvantageous groups like women headed households (WHH), ethnic minorities, and socially divided groups like SCs and STs. It was observed that the scheme when introduced in Bihar could not live up to its potential because it suffered from a severe lack of inclusiveness, in that, there were no explicit mechanisms to attract the farmers who were in most need of weather shocks, and also the product failed to understand the contextual realities. Moreover, the product was rolled out by organizations not known to the village, which led to a distrust compounded by highly price-sensitive and financially illiterate farmers.

In contrast, the product did fairly well in Bangladesh because it was implemented through a local NGO which had established trust with the villagers and the NGO had credible knowledge of the targeted population which helped in its easy access and uptake. Additionally, the program adopted various means to educate the local communities by means of verbal, visual instruments, with gender sensitive spaces to reach out to the women.

Therefore, the major learning from these pilot studies is that there are two groups of barriers to increased inclusiveness, one is the entry barrier characterized by socio-economic attributes of the population, and the other is the system barrier characterized by accessibility and understanding of the technocratic interventions used. Both these barriers require targeted interventions that reflect upon local realities. For instance, tenant farmers with no legal proof of land cultivation could be certified by a third party to be eligible for availing the insurance product. Bottom-up approaches for trust building and training sessions for providing education have been found to be some of the basic strategic approaches. To make the premium affordable, it is emphasized that there has to be a balance between private party motive and public good objective of the insurance scheme.

Another obstacle in Bihar was the inclusion of the land title in eligibility criteria, which would potentially disqualify tenant farmers. In the case study from India, the landless and other marginalized farmers were drastically poor performers in terms of awareness and subsequent adoption, followed closely by the female farmers as compared to their male counterparts. Farmers belonging to SCs and STs had the least cases of adoption, with none of the landless farmers adopting the program (Prime Minister Fasal Bima Yojana) even though there is provision for registration of these landless farmers.

These findings illustrate well the multiple axes of exclusion that interrelationships between identities such as class and gender with under-capacity such as illiteracy, economic poverty and landlessness generate.

The findings also reflect the lack of mechanisms to acknowledge the heterogeneous nature of social settings, which led to a lack of social engagement related to insurance design and implementation to attract and support marginal stakeholders most in need of WII. Consequently, illiteracy, lack of mobility (generally in the case of some women in some cultural contexts), lack of finances and other factors will continue exclusion of marginalised and vulnerable groups, including female stakeholders who would more often lack physical mobility, the agency in household decision making and land title (sometimes needed for eligibility for insurance). Mechanisms in insurance design and implementation are therefore needed to understand these social differences including power structures that act as entry barriers particularly for women in men-headed households and for poor farmers in general.

3: Key actions towards more inclusive Weather Index Insurance

The problem analysis in the previous section highlighted that the root causes of exclusion from WII reflect existing patterns of marginalisation in specific social settings underlain by intersections of a range of social identities, along with a failure to adequately recognize and explicitly account for these social differences in WII design and implementation. Systemic weaknesses also include a paucity of digitised datasets that identify marginal groups, so that marginal groups are outside of the framing of WII design and implementation. Group discussions identified several actions and enabling conditions listed below, which would help address marginalisation, based on grounded experiences of the participants. Of particular note is that these actions are multi-scalar and multi-actor in nature, in recognition of the fact that promoting effective and socially inclusive WII calls for adopting a systemic approach.

1. Countries adopting WII as a part of their climate adaptation strategy should set in place an enabling policy and regulatory framework, without which it will be difficult to encourage the public-private partnerships that WII requires. Such frameworks could also recognise the contribution effective and inclusive WII can make to broader national goals of poverty reduction and pro-poor climate change adaptation. Other important elements would include mechanisms to ensure that private sector profit is balanced with the public good objectives of WII.
2. Countries adopting WII as a part of their climate adaptation strategy should link this to national technology development programs, whereby access in particular to mobile phones in rural areas can greatly facilitate stakeholder awareness of both climatic risks and WII programs. This could also provide marginal groups greater visibility in data collected prior to WII design.
3. Ensure that product design is preceded by fieldwork to understand the stakeholders in a more disaggregated manner (such as the landless, marginal, small, large farmers, and across gender), so that the nature of risks and different capacities to obtain insurance can be understood well. In doing so, the following questions should be addressed:
 - a. Who are the poor and the marginalised?
 - b. What are the drivers of marginalisation, and how may they represent entry barriers re. WII?
 - c. What are the losses on the ground for these different groups?
 - d. What constitutes losses for these different groups?
 - e. Who needs support and what kind of support is needed?

- f. What factors are likely to pose as obstacles for different groups to be aware of, understand and purchase WII? This would include aspects such as levels of literacy (for both men and women) and challenges faced by women-headed households.
4. Engage the various groups in the community in product design to ensure that ground realities including social heterogeneity and associated challenges to inclusion are understood, and inform the focus of WII, eligibility criteria, and implementation arrangements.
5. Ensure transparency to promote inclusive insurance. For clients, understanding the insurance product is important to reduce mistrust and disappointments particularly related to trigger points; compensation to be received in different scenarios, and delays. Thus, educating the client (farmers) through Insurance Educational Training to reduce risk and raise awareness about the product can help to build trust (refer to case study 1 and case study 1). Lack of transparency and poor awareness usually leads to miscommunications and then there is a risk of losing clients. Such interactions will also help build greater trust in the insurance product.
6. Enroll the services of a local Non-Governmental Organisation (NGO) with well-established links with the target communities, where trust has been built and in-depth knowledge of the social landscape is available to support engagement with the full range of farmers at all stages of the WII design and implementation process. Linking with such an organisation is of critical importance because most private insurance companies do not possess the social science skills needed to conduct social assessments. The case study presented by IWMI also indicates that partnering with a local NGO that has deep contextual knowledge and established trust in the community offers multiple benefits throughout the WII process, including mainstreaming marginal and disadvantaged farmers. Moreover, farmers are usually highly price sensitive and mostly financially illiterate, and are wary of unknown institutions (refer to case study 3).

Case 3 Role of Financial education to enhance access to insurance (Liangzhi You)

The Satellite Technologies, Innovative and Smart Financing for Food Security (SATISFy) project was introduced to address the challenge of low adoption of insurance schemes. Lower adoption translates into uninsured risks, inhibiting farmers' abilities to improve agricultural productivity and income in the event of any risk, which results in low agricultural productivity, especially in the Horn of Africa, a region that is subject to extreme seasonality effects.

The SATISFy project proposed an innovative risk management solution called the Risk-Contingent Credit (RCC). RCC is a general term for any credit instrument that embeds within its structure a contingent claim which, when triggered, transfers a part of the borrower's liability or debt service to the lender, i.e., the insurance offsets payments due to the lender. Considering that lenders are reluctant to lend money to farmers because of the possible financial risks associated with sudden fall in the market prices or crop failure, RCC aims to minimize downside business risks, simultaneously reducing financial risks and exposure. This risk balancing effect encourages the increased supply of and access to credit to smallholder farmers and also encourages risk-rationed farmers to increase the use of credit. It also makes use of remote sensing and GIS data that can effectively estimate temperature, rainfall, cropland extent, etc. for designing the instrument to be as robust as possible.

In a pilot study conducted in 2017, farmers' credit rationing, its determinants, and effects on credit uptake were assessed in Machakos, Kenya, by taking 1170 households. A baseline household survey for 1170 households was conducted in May 2017 and found that over 50 percent of the study households are credit-rationed. In September 2017, after conducting financial training and public lotteries in Machakos County of Kenya, the sample was randomly assigned into three groups: traditional credit, RCC, and control (no credit). It was found that the uptake rate of loans in the RCC group is 40 percent, whereas the uptake rate in the traditional credit group is 30 percent i.e., the loan uptake is higher with RCC. From this assessment, it was established that financial education is crucial, and banks and partners need to conduct financial and agronomic education for all borrowers and preparation for unforeseen events like the pandemic or political unrest is also critical.

7. Given the different capacities of farmers, awareness about the insurance product must use multiple channels covering written, spoken, and visual content to account for the low literacy of farmers who are likely to be those most in need of insurance. The locations where awareness events are held will also be important in communities where women encounter restrictions in mobility, noting that uptake rates for WII are considerably lower among female farmers, or where social marginalisation means that certain groups in the community live at the margins of the community's physical boundaries.
8. To minimize if not avoid unsustainable subsidies, noting that WII must be financially viable for the private sector, whilst being affordable to a wide spectrum of local clients, WII designs should explore mechanisms to make premiums affordable to marginal groups. Options could include paying in installments; using micro-finance, especially community-operated savings schemes, and bundled solutions/aggregator models.

Case 4 Public- Private Partnership in insurance delivery (Rupsha Banerjee)

In Africa, the pastoral community is one of the most marginalized communities, with over 50 million pastoralists in SSA, 20 million of which are found in the Horn of Africa alone. The majority of the pastoralist households hold nearly all of their productive assets in livestock, but the severe conditions of drought that occurs as a recurring phenomenon, around 75% of livestock mortality is attributed to it.

Index-Based Livestock Insurance (IBLI) is devised as a means to prevent increased vulnerabilities while easing the burden on humanitarian aid. The project was started in 2010 as a commercial product and in 2015 it was adopted by the Government of Kenya as a Kenyan livestock insurance program. The product is designed for pastoralists in the drylands (arid or semi-arid) and it relies on satellite imagery to assess forage availability and depletion to detect drought related scarcity. For administering the product, each of the areas are divided into unit areas of insurance following a participatory process. A key feature is that the unit area of insurance considers livestock migration patterns. The compensation or payout is provided in a way that it minimizes livestock losses by making the payout just before a severe drought so that the client can use this payout to support their coping strategies. It was observed that most households used the payout for buying food, forage, and fodder with a fewer number of households purchasing additional livestock and so on. As for the long-term impact, it is observed that over the years 43% of the policy holders are women which could be because women usually earn

smaller remuneration. The payout helped in reducing distress livestock sales by 36%, with an overall 25% reduction in the likelihood of reducing meals as a coping strategy.

In order to provide a better enabling environment, IBLI practitioners adopted a mixed approach of research and implementation that considers the private sector as the distributors and pastoralists as the clients, development of tools to generate client awareness and demand, capacity development for addressing institutional gaps, effective evidence generation and policy advocacy. ***Creating an environment for conducive public-private partnership is considered as the key to effective market development and inclusion at present and in the future.***

Case 5 Overcoming the power dynamics

(Enamul Mazid Khan Siddique)

In Bangladesh, Oxfam has been working on enabling micro insurances for the last 7 years, implementing them as small pilot projects. Taking the examples of three recent cases, i.e., crop loss due to flood in Gaibandha district, wage loss due to flood in Kurigram district, and crop loss due to excess rainfall in Sunamganj district, it was observed that even though a triggered payout is appreciated, especially in times of distress, if consecutive payouts happen again and again the product itself becomes expensive and it becomes non-viable for the targeted community.

If the NGOs facilitate the insurance process then the NGO comes first; as it goes for context analysis, involves the community in the discussion, but, they do not have much control over the discussion, because it is the NGO that is taking the initiative. The NGOs reach out to the data service providers who can provide effective data support. “Insurance company” then comes in, and these three agencies work together to design an index. In such a model the impacted community do not purchase the insurance, but the NGOs do on behalf of the community, which inevitably makes the NGOs the stronger stakeholders. Followed by it is the insurance company because it will have to agree with the index and will have to cover the risks. Throughout the process, the data service providers have a stronghold because they bring knowledge to the table and support the entire assessment process. “Regulatory authority” or the Govt. at this point becomes a strong stakeholder as it has control over the subsequent set of actions. During the time of payout, amongst other stakeholders, the enterprise/ company providing distribution support plays an important role, which too has the significant potential of influencing the process.

In this entire picture, the strong power dynamics are conspicuous. Unfortunately, the community, who were supposed to be the key stakeholders, comes at the bottom of the power structure and the insurance company at the highest. NGOs are in the middle because they are facilitating everything. However, this model is far from ideal because in the long run if the model needs to sustain, the impacted community should be at the center of discussions and the top of the hierarchy, so they have a proper say, and have good control over the power dynamics with accountability and transparency.

One acceptable way to stabilize this power structure is to include the communities in every discussion, and it should not be subject to personal decisions, rather there should be a system in place that makes sure that the community has power over the decision-making process,

starting from index design, assessment process, regarding how the payout will happen, only then the model will be sustainable.

4. Conclusions

While WII offers the promise of providing vital financial resources to farmers, pastoralists and other food producers exposed to climate change, WII is by no means a panacea. Rather, its true potential will only be realized if it becomes a viable tool to the more vulnerable and less affluent men and women. Declaring WII schemes a success purely based on reaching numerical targets of adoption is dangerous by glossing over the question of who is not included in such schemes. Such numerical measures in fact may obscure a failure to recognize the highly varying and uneven needs and abilities of food producers, which risks serving mostly those least in need of such support. Such outcomes are contrary to the deeper distribution of impacts demanded by the SDGs, which cannot be achieved without more qualitative questions of who exactly is benefited, why not others, and what could be done to reach those unserved. As the case studies presented at this webinar and following discussion demonstrate, making a transition to more qualitative indicators of success in WII will require added financial and time commitments by insurance financiers, be it government or private entities, for factoring in and navigating contextual social differences. Underlying such commitment is the need for all parties involved in WII to acknowledge the deeper social responsibilities attached to this form of insurance.

Appendices

Appendix A: Concept Note

Weather Index Insurance (WII) programs are considered to be a potentially important adaptation mechanism in the face of climatic uncertainty, the programs struggle to attract the clients most in need of protection, including marginalized women and men. This risks re-enforcing existing inequalities and missing opportunities to promote pro-poor and gender-sensitive development. In fact, from a climate justice standpoint, the risks are of maladaptation and undermining progress on several Sustainable Development Goals. Noting that several organisations, both international and national, have explored this issue in various geographies and the context of different commodities, towards formulating a way forward to collectively engage the financiers (insurance companies, donor, governments) of WII in how this learning around both challenges but also solutions could be adopted and applied at scale.

In doing so, it seems prudent to firstly consider some fundamental questions such as whether WII offers the potential to serve all stakeholders irrespective of gender, wealth, and other social characteristics, and if so, under what circumstances in the contexts of different geographies and commodities. Put another way, to what extent can we reasonably expect WII to meet our lofty expectations of social inclusion, under what conditions, and what implications might meet these conditions have for how WII is currently conceived, financed, and practiced?

The objective of the digital workshop on “Social Dimensions of Weather Index Insurance in Reaching Marginal Stakeholders: Lessons from Asia and Africa” is to develop common understanding and messages around social inclusion based on experiences from the different presentations and discussion with participants, and building consensus on next steps towards uptake.

Appendix B: Agenda

Online workshop

Social Dimensions of Weather Index Insurance in Reaching Marginal Stakeholders: Lessons from Asia and Africa

Time (SL/INR)	Activity	Person
5 minutes	Opening Remarks	Dr. Rachael McDonnell, Strategic Program Director – Water, Climate Change & Resilience, IWMI
5 minutes	Instructions from the Moderator	Prof. Anamika Barua, Professor (Ecological Economics), Department of Humanities and Social Sciences, IIT Guwahati, India
10 Minutes	Overview of weather Index insurance work at IWMI	Dr. Giriraj Amarnath, Research Group Leader, Water and Disasters
15 minutes	Setting the Scene: Inclusive Growth	Dr. Deepa Joshi, Lead Scientist – Gender Youth and Inclusion, IWMI/WLE
15 minutes	Case Study 1: IRRI (Asia)	Dr. Prakashan Chellattan Veettil
15 minutes	Case Study 2: ILRI (Africa)	Dr. Rupsha Banerjee
15 minutes	Case Study 3: Oxfam Bangladesh	Mr. Enamul Mazid Khan Siddique
15 minutes	Case Study 4: IFPRI	Liangzhi You, Environment and Production Technology.
15 minutes	Case Study 5: IWMI	Mohamad Aheeyar and Sanjiv de Silva
15 minutes	Clarifications and Reflections	Moderator with all participants
40 minutes	Development of Key Messages and Recommendations and next steps	Moderator with all participants
	End	

Appendix C- List of participants

Name	Affiliation	Email
1. Amgad Elmahdi	Head of MENA Region- International Water Management Institute (IWMI)	A.Elmahdi@cgiar.org
2. Anamika Barua	Professor, IIT Guwahati, Assam	abarua@iitg.ac.in
3. Arifur Rahman Noyon	Senior Executive officer, Green Delta Insurance	arifrahmangdic@gmail.com
4. Berber Kramer	Research Fellow, Markets, Trade, and Institutions Division. International Food and Policy Research Institute (IFPRI)	b.kramer@cgiar.org
5. Beth Tellman	Postdoctoral Research Scientist , The Earth Institute, Columbia University	Et2663@columbia.edu
6. Bidhan Mohapatra	Agricultural Economist, International Rice Research Institute (IRRI)	b.mohapatra@irri.org
7. Enamul Mazid Khan Siddique	Head of Climate Justice and Natural Resource Rights, OXFAM, Bangladesh	Esiddique@oxfam.org.uk
8. Everisto Mapedza	Senior Researcher, International Water Management Institute (IWMI)	E.Mapedza@cgiar.org
9. Giriraj Amarnath	Research Group Leader – Water Risks and Disasters, International Water Management Institute (IWMI)	a.giriraj@cgiar.org
10. Gitta Shrestha	National Researcher – Gender Social and Environmental Justice International Water Management Institute (IWMI)	g.shrestha@cgiar.org
11. Inga Jacobs-Mata	Country Representative - South Africa International Water Management Institute (IWMI)	i.jacobs-mata@cgiar.org
12. Jeny Raviz	Assistant Scientist, International Rice Research Institute (IRRI)	j.raviz@irri.org
13. Josey Kamanda	The Alliance of Biodiversity International and CIAT	J.Kamanda@cgiar.org
14. Karthikeyan M.	Regional Researcher - Water Productivity International Water Management Institute (IWMI)	k.matheswaran@cgiar.org

Name	Affiliation	Email
15. Liangzhi You	Senior Scientist, International Food and Policy Research Institute (IFPRI)	l.you@cgiar.org
16. Melody Braun	Senior Research Staff Associate, International Rice Research Institute (IRRI)Columbia	mbraun@iri.columbia.edu
17. Mohamed Aheeyar	Researcher, International Water Management Institute (IWMI)	M.Aheeyar@cgiar.org
18. Mohsin Hafeez	Country Representative – Pakistan, International Water Management Institute (IWMI)	m.hafeez@cgiar.org
19. Phay Ko U	Project Coordinator, International Water Management Institute (IWMI)	u.phayko@cgiar.org
20. Pooja Pande	Head of Strategy, Chambal Media, New Delhi	pooja@chambalmedia.com
21. Prakashan Veettil	Scientist, International Rice Research Institute (IRRI)	pc.veettil@irri.org
22. Philemon Chelanga	Research Analyst, International Livestock Research Institute (ILRI)	pchelanga@cgiar.org
23. Rachael McDonnell	Strategic Program Director – Water, Climate Change & Resilience, International Water Management Institute (IWMI)	r.mcdonnell@cgiar.org
24. Rupsha Banerjee	Social Scientist, Institutions and Innovation, International Livestock Research Institute (ILRI)	b.rupsha@cgiar.org
25. Sabina Yasmin	Research Fellow, LEAD at Krea University	s.yasmin.25@gmail.com
26. Sander ZWART	Researcher Water & Climate International Water Management Institute (IWMI)	s.zwart@cgiar.org
27. Sanjiv De Silva	Senior Regional Researcher – Natural Resources Governance, International Water Management Institute (IWMI)	S.S.DESILVA@CGIAR.ORG
28. Suparana Katyaini	Assistant Professor, TISS Hyderabad	suparana.katyaini@gmail.com
29. Surajit Ghosh	Regional Researcher – Water Risk and Data Sciences Specialist International Water Management Institute (IWMI)	s.ghosh@cgiar.org
30. Tapas Ranjan Chakraborty	Disaster Risk Financing Coordinator, Oxfam, Bangladesh	tchakraborty@oxfam.org.uk

Name	Affiliation	Email
31. Vikram Patil	Agricultural Economist, International Rice Research Institute (IRRI)	v.patil@irri.org
32. Vishaka Gulati	Research Scholar, IIT Guwahati, Assam	vishaka.gulati@gmail.com
33. Wei Zhang	Senior Research Fellow, Environment and Production Technology Division, International Food and Policy Research Institute (IFPRI)	<u>w.zhang@cgiar.org</u>
34. Yashodha Yashoda	Post-Doctoral Fellow – Impact Evaluation, International Water Management Institute (IWMI)	<u>y.yashodha@cgiar.org</u>

Acknowledgments

We acknowledge the contribution made by the case study presenters namely Dr. Prakashan Chellattan Veetil of International Rice Research Institute (IRRI), Dr. Rupsha Banerjee of International Livestock Research Institute (ILRI), Mr. Enamul Mazid Khan Siddique of OXFAM- Bangladesh, Dr. Liangzhi You of International Food Policy Research Institute (IFPRI). Special thanks are due to Dr. Berber Kramer of IFPRI and Dr. Prakashan Veetil of IRRI for facilitating the group discussions. We are thankful to all the participants of the workshop representing government organizations, different research centers, development organizations, donor agencies, academic institutes, and insurance companies for their interactive contributions. The organizers gratefully acknowledge their inputs and fruitful debates. The contributions and supports provided by IWMI colleagues, Dr. Rachael McDonald, Dr. Deepa Joshi and Dr. Giriraj Amarnath are gratefully acknowledged. The workshop was very well moderated by Prof. Anamika Barua of the Indian Institute of Technology (IIT), Guwahati, India.

This work was undertaken as part of the the CGIAR Research Program on Water, Land and Ecosystems ([WLE](#)), and was supported by Funders contributing to the [CGIAR Trust Fund](#), including Australian Centre for International Agricultural Research ([ACIAR](#)), United Kingdom: Foreign, Commonwealth and Development ([FCDO](#)), The Netherlands: Directorate-General for International Cooperation ([DGIS](#)), Swiss Agency for Development Cooperation ([SDC](#)), and other [partners](#) found at wle.cgiar.org/donors. WLE is led by the International Water Management Institute ([IWMI](#)) with 12 other [partners](#). Content may not reflect official opinions of these organizations.

Contacts: Mohamed Aheeyar, Researcher, IWMI (m.aheeyar@cgiar.org)
Sanjiv de Silva, Researcher – Natural Resources Governance, IWMI (s.s.desilva@cgiar.org)

IN PARTNERSHIP WITH:

