



AFRICA-ASIA CONCLAVE ON LOSS AND DAMAGE DUE TO CLIMATE CHANGE

**INSTITUTING A GLOBAL AGRICULTURAL
INSURANCE PROGRAMME AS A RISK-SHARING AND
TRANSFER MECHANISM FOR DEVELOPING COUNTRIES**

NAIROBI

25-26 AUGUST 2016

PROCEEDINGS

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Introduction

There is growing scientific evidence that climate-related risks are unevenly distributed, with poor and developing countries bearing maximum loss and damage due to climate change. According to Munich-based reinsurance company Munich Re, the impact of natural disasters is much greater on developing countries—currently around 13 per cent of their GDP—than on rich nations, where it is around 2 per cent. Further, since most developing countries are largely dependent on agriculture for their livelihood, the impact is felt most on the agriculture sector. The Food and Agricultural Organization (FAO) estimates that the agriculture sector, including crops, livestock, fisheries and forestry, absorbs approximately 22 per cent of the economic impact caused by natural disasters in developing countries.¹ FAO findings show that of a total US \$140 billion worth of loss and damage caused by 78 disasters (2003–13), damage worth US \$30 billion was incurred on agriculture and its subsectors.² Among the subsectors, the crop subsector incurred the most loss and damage, worth US \$13 billion. The livestock subsector incurred damage worth US \$11 billion (2003–13).³

Overall, Asia and Africa have been the most affected regions, with crop and livestock losses caused by natural disasters in 2003–13 worth US \$28 billion and US \$26 billion respectively.⁴ People affected were mostly poor and marginalized, and dependent on agriculture, forestry and fisheries.

This pattern is likely to continue. By 2020, UNEP projects that 75–250 million people in Africa would be exposed to increased water stress due to climate change. Further, rice yields are expected to drop by 50 per cent by the end of this century in South Asia.⁵ It, therefore, becomes crucial to address loss and damage within the United Nations Framework Convention on Climate Change (UNFCCC).

Since global efforts to address climate change fall drastically short of what is required, loss and damage due to climate impacts is becoming a very important issue for developing countries in global climate change negotiations. Developing countries have fought hard to push for this issue for nearly two decades before the Warsaw International Mechanism for loss and damage was constituted in 2013 and an Executive Committee established to implement its objectives.

Under the Paris Agreement (2015), loss and damage is treated under a separate section. At the next Conference of Parties (CoP 22) at Marrakesh, the two-year work plan of the Executive Committee (ExCom) under loss and damage will be reviewed and a five-year plan would be devised.

We believe that to enhance the resilience and coping capacity of farmers in developing countries, agricultural insurance and financing is critical. Data, however, indicates that African countries and South Asian countries are inadequately insured. According to recent estimates, only about 100 million people in developing countries and emerging economies are currently covered by climate-risk insurance, the prime reason being that most developing countries cannot afford an insurance mechanism from their own resources. It is therefore important to institute a globally supported agricultural insurance mechanism for reducing, sharing and transferring the risks of poor farmers in developing countries.

Objective of the Conclave

Centre for Science and Environment (CSE) believes that since Asian and African countries—which lack the ability to reduce risk or cope with climate risks—experience climate risks disproportionately, the importance of tools like agricultural insurance meant for sharing and transferring the risks are significant and therefore must receive greater global attention. Hence a globally supported agricultural insurance mechanism is necessary to address agricultural issues in developing countries. We advocate that such an insurance mechanism be set up as part of loss and damage under the United Nations Framework Convention on Climate Change (UNFCCC) and financed by developed countries.

The objective of the '*Africa–Asia Conclave on Loss and Damage due to Climate Change: Instituting a Global Agricultural Insurance Programme as a Risk-sharing and Transfer Mechanism for Developing Countries*' was to seek a better understanding on the issue of agricultural insurance and risk financing in African and Asian countries and understand the underlying issues and challenges involved.

The Conclave also sought to examine the feasibility of a global agricultural insurance mechanism as an integral part of the loss and damage mechanism under UNFCCC. If found feasible, another objective was to come out with a set of principles that should guide the development of the globally supported agricultural insurance mechanism.

The Conclave brought together experts and officials from the government, insurance industry and academia and civil society members from fifteen African and South Asian countries, including Bangladesh, Ethiopia, Ghana, India, Kenya, Malawi, Mali, Mozambique, Myanmar, Nepal, Nigeria, Rwanda, South Africa, Sri Lanka and Tanzania.

The Conclave encouraged discussion and had presentations on the following issues:

- Impacts of climate change on agriculture and role of agricultural insurance in building resilience and disaster-risk reduction
- Overview of agricultural insurance in African and Asian countries
- Agricultural insurance: experiences and challenges
- Agriculture insurance: small farmers' perspective
- Enabling farmers to deal with extreme weather events: civil society perspective
- Possibilities of building global agricultural insurance mechanism under UNFCCC: perspective of climate-change negotiators

Proceedings

The two-day Conclave was organized in Nairobi, Kenya, on 25–26 August 2016. Each day comprised three sessions with presentations from various countries, followed by a round of discussion and comments after every session. Annexure 1 gives the programme schedule. The list of participants is in Annexure 2.

Day 1

Inaugural session

Sunita Narain, *Director General*, Centre for Science and Environment, New Delhi

Chandra Bhushan, *Deputy Director General*, Centre for Science and Environment, New Delhi

Christina Schubert, *Manager*, Secretariat, G-7 InsuResilience Initiative, Bonn

Sunita Narain, in her welcome and keynote address, highlighted that the world needs to 'step up the game' to push for justice for poor people affected by climate change. She spoke of the need for collective responsibility to find scaled-up and effective responses to tackle the humanitarian crises and underscored the role of insurance as an important response to deal with the loss and damage due to climate change.

Chandra Bhushan set the agenda for the Conclave on the creation of a globally supported agricultural mechanism for developing countries. He highlighted that extreme weather events have increased manifold and that developing countries and the agricultural sector, including crops, livestock, forestry and fishery, bear the most losses. He also spoke of the importance of financial mechanisms such as insurance to address loss and damage since there are limits to adaptation and because the poor farmers cannot afford insurance by themselves. He said that there is a need for global intervention on climate-risk insurance and talked of the pressing need to create a global agricultural insurance mechanism to facilitate large-scale penetration of agricultural insurance to poor farmers under the Warsaw International Mechanism. He said that there was enough provision under the present Paris Agreement to push for a global agricultural mechanism under WIM for loss and damage and that such a provision could be developed and implemented in the next five-year plan under WIM. To establish a global agricultural insurance mechanism, he advocated the need for WIM to gain experience, conduct pilot projects and collaborate with stakeholders as part of its next work plan.

Christina Schubert spoke on the G-7 developed countries global risk-insurance initiative, InsuResilience initiative. She highlighted the growing importance that developed countries are attaching to climate-risk insurance. Under it, 55 million farmers are currently covered by direct insurance and 45 million farmers covered under indirect insurance. The aim is to increase insurance coverage up to 400 million, the number of people in developing countries who would have access to climate-risk insurance. On a significant note, to attain its objective the initiative seeks to collaborate with partners from public and private sectors as well as civil society. Schubert said that the initiative's short-term focus was expanding existing indirect insurance schemes, such as African Risk Capacity (ARC), Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) and Caribbean and Central American Catastrophe Risk Insurance Facility (CCRIF), while in the medium and long run,

the initiative will put stronger focus on direct insurance schemes. She also said that US \$420 million of public funds was pledged under the initiative for a rapid action package that aims to insure at least 180 million people against climate risks. She emphasized that climate insurance should provide timely finance and financial liquidity after natural disasters. She also stressed on the need to incentivize climate change adaptation and facilitate risk-management practices. Synergies between risk reduction and insurance were also mentioned.

Session 1: Impacts of climate change on agriculture and role of agricultural insurance in building resilience and disaster-risk reduction

The session discussed the impacts of climate change on the agriculture sector in specific countries, existing disaster management mechanisms and policies in place to respond to extreme weather events and their effectiveness, and role of agricultural insurance mechanism as a tool to build resilience and in disaster risk reduction.

Speakers

Vineet Kumar, *Programme Officer*, Centre for Science and Environment, New Delhi

Nelson Mutanda, *Kenya Country Coordinator*, African Risk Capacity (ARC)

Peter Nawiri, *Senior Lecturer*, Kenya Water Institute (KEWI)

Jamal Seid, *Director*, Climate and Geospatial Research Directorate, Ethiopian Institute of Agricultural Research, Ethiopia

Feliciano Mataveia, *Chief*, Disaster Information and Response, National Institute of Disaster Management, Mozambique

Moderator: Joab Osumba, *Technical Advisor*, Matrix Development Consultants Limited, Kenya

Vineet Kumar gave an overview of the impact of climate change on agriculture and the role of agricultural insurance in building resilience in Asia. He spoke of the impacts of climate change in tropical and temperate regions. He said that the existing relief mechanism against crop loss in India is ad hoc, unreliable, insufficient and inefficient, works on inaccurate assessments and is ridden with corruption and malpractice. A declaration of calamity and the amount of relief disbursed are more political decisions than decisions based on scientific assessments. He also spoke of the importance of agricultural insurance with regard to its role in managing climatic and natural risks. He said that the Government of India has recognized and decided to move from the relief system to a formal insurance system and use part of the relief money to subsidize insurance premiums. He, however, also cautioned that the agricultural insurance system in its current form will not be able to help farmers unless it is made affordable, accountable and universal.

Nelson Mutanda gave insight on the climate impacts on the agricultural sector in Africa and the role of agricultural insurance in building resilience and reducing disaster risk. He spoke of the development of a significant Pan-African initiative in risk resilience and insurance, called the African Risk Capacity, developed in 2012 by the African Union and UN to provide cost-effective contingency funding to African governments to execute preapproved contingency plans in the event of severe natural disasters. He explained how Kenya has established a multi-sectoral and multi-agency coordination structure to combat drought by the campaign Ending Drought Emergencies (EDE). Further, he listed the challenges in the implementation of agriculture insurance, including:

- Funding constraint for mitigation and adaptation programmes
- Lack of access of long-term data for developing an insurance index
- Combined effects of global downturn and the global food crisis
- Ineffective disaster management systems
- Public–private partnership required to increase penetration and be cost effective
- Low capacity of African research and development organizations

Peter Nawiri presented Kenya's picture on the existing mechanisms for disaster-risk reduction and agricultural insurance. He said that there has been an emphasis on disaster-risk reduction only since 2010 before which the disaster risk system was largely ad hoc. He also highlighted several government programmes to tackle risk, including the National Action Plan on Climate Change (2013–17), National Disaster Management Policy, and Kenya National Agricultural Insurance and Risk Management Program (KNAIRMP).

He stated that the overall goal of the Disaster Management Policy is to establish and maintain an efficient, effective and coordinated system for managing disasters. He spoke at length about KNAIRMP, designed in partnership with the private sector and funded by World Bank-led Disaster Risk Financing and Insurance Program (DRFIP). Within KNAIRMP, launched in 2016, one part focuses on livestock insurance, while another focuses on maize and wheat insurance. Estimates indicate that in 2005–11, the government spent on average more than KES 7 billion per year on disaster relief. He said that by enabling better financial protection for the most vulnerable through insurance, the government hopes to reduce its need to provide financial support following natural disasters.

Jemal Seid reflected on the Ethiopia's situation. He shed light on the pilot agricultural insurance projects in the country, including macro-level weather-risk insurance introduced by the World Food Programme in 2006 (targeting 5 million people) and Horn of Africa Risk Transfer for Adaption Program (HARITA) that has developed the largest weather index insurance based on advanced satellite technology for small-scale African farmers. He spoke of the recently launched ambitious pilot project crop insurance, the Normalized Difference Vegetation Index (NDVI), which plans to cover **15 million smallholder farmers in five years, based on vegetation index.**

He also highlighted challenges in the implementation of insurance, including:

- Lack of awareness among farmers with regard to agricultural insurance and lack of reliable data to assess risk
- Legal and regulatory framework not yet implemented
- Inadequate capacity-building work for private insurance companies, cooperatives and MFIs
- Limited financial capacity
- Lack of banking credit (loan) to the smallholder farmers
- Limited range of micro-insurance products
- High administrative costs of agricultural insurance

Seid recommended an aggressive nation-wide campaign to create awareness about insurance products and spoke of building on already established reliable delivery channels by focusing on capacitating cooperative unions and MFI.

Feliciano Mataveia presented Mozambique's disaster profile. He said that the impact of the rise in extreme weather events in his country has led to the decline in crop yield for various crops (such as cassava, sorghum, soya bean, wheat, groundnuts, maize, millet, potato etc.). He elaborated on the role of National Institute for Disaster Management (INGC) which is **the coordination authority of emergency actions and post-emergency actions too.** He pointed out that the current disaster management systems in Mozambique were ineffective and inadequate and spoke of the challenges for the government in implementing programmes for disaster-risk reduction, including limited geographical coverage of hydro-meteorological network, lack of climate information products, technical barriers

to translating and disseminating climate information, and limitations in forecasting and warning systems relating to meteorological events. He also stated that there was currently no agricultural insurance scheme in Mozambique, but expressed optimism that once in place under the country's loss and damage insurance regulations, agricultural insurance will increase farmers' capacity and resilience.

Key outcomes of the session

The following were the main outcomes of the session:

- Negative impacts of climate change are clearly visible on the agriculture and livestock sector in Africa and Asia. Reduction in crop yield, crop loss due to extreme weather events, emergence of pest attacks and other crop diseases are now being frequently recorded. Livestock is suffering because of decline in pastures, fodder availability and disease.
- Projections indicate an increase in extreme weather events.
- Disaster-risk management systems in many of the developing countries are ad hoc, insufficient and ineffective.
- There is a need to strengthen disaster management and preparedness at the country level.
- Most African countries depend on international assistance to deal with losses due to climate-related extreme events. While some countries have allocated state-level funds on paper, in reality countries such as Ethiopia struggle for funds.
- Countries recognize agricultural insurance as a mechanism to cope with the financial burden caused by extreme weather events.
- Strengthening and capacitating existing crop and livestock insurance products and delivery channels, such as cooperative unions and Microfinance Institutions (MFIs), is the quickest way for increasing coverage.
- There is a need for an aggressive nationwide campaign to create awareness of the insurance products among farmers.
- Good quality weather data is necessary and a challenge.
- Strengthening collaboration and partnership between governments, NGOs, domestic insurers, farmer cooperatives/microfinance and bankers.
- Need for a legal and regulatory framework that includes regulations governing the development and operation of insurance and micro-insurance products.

Session 2: Overview of agricultural insurance in African and Asian countries

The session discussed the agricultural (crop and livestock) insurance policies and programmes in respective countries, challenges faced in the implementation of agricultural insurance, and need for supporting a universal, affordable and effective agricultural insurance mechanism to build resilience, especially for small and marginal farmers in developing countries.

Speakers

Vijeta Rattani, *Programme Officer*, Centre for Science and Environment, New Delhi

James Sina, *Consultant*, Disaster Risk Financing and Agriculture Insurance, World Bank Group

Chandika Vilashini Ethugala, *Director*, Ministry of Irrigation and Agriculture, Government of Sri Lanka

Ashish Kumar Bhutani, *Joint Secretary*, Ministry of Agriculture and Farmers Welfare, Government of India (delivered by Vineet Kumar, Centre for Science and Environment)

Joab Osumba, *Technical Advisor*, Climate Smart Agriculture, Matrix Development Consultants Ltd, Kenya

Moderator: Chandra Bhushan, *Deputy Director General*, Centre for Science and Environment, New Delhi

Vijeta Rattani presented an overview of agricultural insurance in Africa and Asia. She highlighted that the penetration of agricultural insurance is very low in Asia and Africa. She also said that China, Japan and India share the most of the agriculture insurance coverage (with China accounting alone for 50 per cent for the agricultural insurance premium in the entire Asian region), while most other Asian and African countries either do not have any kind of agricultural insurance or have them at the pilot stage. One of the key reasons for low penetration is that farmers cannot afford actuarial premium rates and most countries cannot afford to subsidize insurance. The highest rates of insurance penetration are found in developed countries that have large government support in the form of subsidy and where crop and livestock insurance is compulsory.

James Sina lent insight into the global agricultural insurance scenario and shared the experiences and challenges of the agricultural insurance sector. He emphasized the importance of risk retention and risk transfer and need to identify risks, quantify the cost of risk transfer and prioritize risk as per sub-sector, crop and region. He stressed that risk layering and stratification needs to be factored in while designing insurance products. He observed that agricultural insurance helps improve access to agricultural credit, enhances farmer resilience by providing protection against losses and protects the government by reducing contingency liability. He emphasized that other activities under agriculture, such as forestry and fisheries, must also be included under agriculture insurance. He highlighted challenges in agricultural insurance, including:

- **Low effective demand:** Low awareness among farmers and low affordability of insurance products
- **Risk transfer (index insurance):** Index insurance is a relatively new science with few experts with insight on designing suitable products and factoring in basic risks. Product distribution is also a challenge.
- **Product appropriateness:** Data gaps make it difficult to build a suitable product and evaluate appropriate product pricing.

- **Government involvement (quantification of loss and damage):** There is a lack of clearly defined government policies and approaches.

He recommended public–private partnerships to enhance agricultural insurance coverage and said that agricultural insurance, applied appropriately, can be used to pursue different policy objectives in the context of climate change. He also highlighted the need for strong government support in a variety of ways such as providing subsidies, data collection and management, raising awareness, training for distributors and capacity building for the insurance industry. He spoke of the World’s Bank Disaster Risk Financing and Insurance Program (DRFIP), currently working in over 30 countries, which provides advisory and knowledge services for capacity building, and manages financial aspects of risk, including fiscal risk assessment, contingent liabilities and strengthening institutional frameworks.

Ashish Bhutani gave an overview of the recently launched yield index-based crop insurance scheme, Pradhan Mantri Fasal Bima Yojana (PMFBY). He discussed the key features of the scheme as follows:

1. PMFBY covers all food crops, oilseeds and commercial/horticultural crops and has been made compulsory for loanee farmers and voluntary for non-loanee farmers.
2. Risks/perils covered have been increased under PMFBY as compared to previous schemes. Provisions for prevented sowing and transplantation, localized perils and post-harvest losses have been further extended.
3. The village is treated as an insurance unit. However, provisions for individual farm-level assessment for perils covered under localized and post-harvest losses have been made.
4. Premiums paid by farmers for different crops have been made uniform and kept between 1.5 per cent and 5 per cent. Government provides upfront subsidy in the premium.
5. Extensive use is made of technology (remote sensing, drone, mobile technology etc.) for assessment of loss and to ensure early payment of claims.

The presentation also brought out that funds were a major barrier in providing agricultural insurance and India would require approximately US \$10.65 billion annually to provide universal insurance coverage for crops and livestock. The key point made was that developing countries may be able to afford universal agricultural insurance if insurance costs are shared in a global mechanism according to the loss index and development index of the concerned country.

Bhutani referred to several new pilot initiatives, including one by the Mahalanobis National Crop Forecast Centre (MNCFC) that has been conducting pilots on Remote Sensing Technology (RST) to supplement Crop Cutting Experiments (CCEs) for two years, setting up the protocol of use of RST in supplementing estimation of yield through CCEs, experimental projects on the use of drones in estimating yield losses specially due to localized and post-harvest perils, launch of a web portal on crop insurance for better administration, coordination among stakeholders and faster dissemination of information.

With regard to livestock insurance, he said that only 0.02 per cent of the total animal population is currently insured in India, primarily due to budget constraints and claim assessment barriers.

Joab Osumba talked about the state of agricultural insurance in Kenya. He talked about existing index-based insurance products piloted in Kenya, which include weather index insurance (WII), area-yield index insurance (AYII), Normalized Difference Vegetation Index (NDVI) and satellite-based rainfall index. He discussed previous schemes and the recently launched (2016) Kenya Agriculture Insurance and Risk Management Program (KAIRMP) which is public-private partnership (PPP) programme for both crops and livestock and under which 1,61,000 producers are covered. He concluded with the observation that Kenya is moving in the right direction in terms of implementing recommendations of past studies on index-based agricultural insurance, but a lot of work needs to be done.

He primarily recommended government support for the development of the agricultural insurance market to enable the private sector to achieve scale and sustainability and strengthening the legal and regulatory framework for index-based agricultural insurance.

Chandika Vilashini Ethugala spoke of the state of agricultural insurance and challenges in Sri Lanka. She said that although the agricultural insurance scheme has been in operation for over five decades, its actual penetration among farmers is far from satisfactory. She highlighted the low private participation in agricultural insurance programmes and cited reasons that included periodical legal restrictions because of publicly owned schemes, difficulty in competing with heavily subsidized public schemes, absence of diversified private insurers and limitations of international reinsurance for agriculture.

She discussed the strategies adopted to promote insurance in Sri Lanka, including payment of fertilizer subsidy after reduction of insurance premium, bank loans for livestock approved only after insurance, and that loan schemes for cultivation from public entities covered insurance and government subsidy for banks to promote cultivation loans.

Constraints in agricultural insurance development in Sri Lanka were brought out. These included lack of awareness, insufficient and delayed indemnity, increased interest on bank loans due to delay in indemnity payments, difficulties in getting insurance policy for lands that are not legally owned and difficulty in obtaining indemnity for damage by wild animals. The key conclusion was that agricultural insurance must be reliable, trustworthy, case sensitive, timely, accessible and reinsured.

Key outcomes of the session

- Public financial support needs to be directed to address gaps in the provision of agriculture insurance. It should:
 - ◆ **Provide advisory and knowledge services** to increase capacity to plan and prepare for and manage financial aspects of disaster-related risks. This encompasses assessing of fiscal and financial-risk assessment that identifies needs and contingent liabilities, developing new tools and approaches in risk-financing strategies, and strengthening institutional frameworks for managing financial instruments and mobilizing funds.
- **Private insurers see market potential but are unsure about risks:** Currently, there is little interest from private insurers, save for the traditional indemnity-based covers for large-scale commercial farmers. There is need for public–private partnership programmes to build on the strengths of private sector insurers as risk owners and government support for political buy-in.
- **Insurance coverage must be comprehensive to cover other areas of agriculture including fisheries, forestry and other allied activities.**
- **Reinsurance a concern:** Local reinsurers are not well capitalized to absorb catastrophic losses and damages inherent in systemic agricultural insurance risk and international reinsurers charge high rates for local insurers.
- **Need to strengthen delivery channels:** Considering low levels of access to agricultural insurance, very few insurance companies have the marketing and distribution channels to cost effectively deliver agricultural insurance to non-organized farmers/pastoralists in geographically remote areas.
- **Agricultural insurance products must reflect the diversity in agriculture practices**
- **Use of technology for quick estimation of losses and indemnity payment is key**

Session 3: Agricultural insurance—experiences and challenges

This session dealt with the challenges faced by the insurance companies in implementing agricultural insurance schemes.

Speakers for the session

Geetika Singh, *Programme Officer*, Centre for Science and Environment, New Delhi

Mayur Ankolekar, *Fellow Member*, Institute of Actuaries of India, Mumbai, India

Malay Kumar Poddar, *General Manager*, Agriculture Insurance Company, India

James Kiguru, *Agriculture Business Manager*, UAP Insurance Kenya Ltd, Kenya

Bashir Haliru, *Chief Executive Officer*, Nigeria Agricultural Insurance Corporation, Nigeria

Rahab Kariuki, *Managing Director*, Agriculture and Climate Risk Enterprise Ltd, Kenya

Moderator, Sunita Narain, *Director General*, Centre for Science and Environment, New Delhi

Geetika Singh listed the 'ideal' attributes of an agricultural insurance scheme for developing countries. She discussed the challenges for farmers in dealing with the insurance products like poor understanding of loan-linked insurance, lack of awareness, limited access to insurance for small and marginal farmers, burden of premium, difficulty in understanding and complying with clauses, long wait for settlement and corruption, among others. In case of weather index-based insurance, challenges pertained to unreliability of satellite data, limited weather stations and lack of long-term, clean and internally consistent historical records to allow for proper actuarial analysis of weather risks. Other challenges included high administrative cost (that is not viable without subsidy), tax levied on agricultural insurance premiums and reinsurance.

Mayur Ankolekar shared the challenges and experiences that agricultural insurance underwriters face. He spoke of the rationale of agricultural insurance that was transferring risks, targeted subsidy design for farmers, incentivizing credit institutions, smoothening government fiscal outlay and risk coping for farmers. Talking about themes and undercurrents in the agricultural insurance market, he marked out five categories and options that could take precedence. These included:

- **Product development:** Should it be reinsurer-led or underwriter-led?
- **Subsidy structure:** Should it be based on premium or information dissemination?
- **Product design:** Should it be indemnity-based or index-based?
- **Claim process drivers:** Should it be based on technology + redressal mechanism or technology alone?
- **Distribution channel:** Should it be through loan providers (involuntary) or groups (voluntary)?

Ankolekar emphasized that product development should factor the reinsurance cost. He also suggested that subsidy could be information-based and product design index-based. Redressal mechanism could be better channelized through technology (doing away with intermediary) and voluntary-group uptake could be encouraged.

Malay Kumar Poddar shared his experiences and talked about challenges for the agricultural insurance sector in India. He said that the crop-insurance system in India

is predominantly index-based and compulsory through credit linkage. Insurance acts as a collateral and the lending agency has the first line of claim. The sum insured is based on production cost. Under the new crop insurance scheme—Pradhan Mantri Fasal Bima Yojana (PMFBY)—private insurers are given the same level of support as public insurers. Challenges as stated from the perspective of agricultural insurance companies in India were:

- Global organizations such as WTO should not discourage agricultural subsidies provided for agricultural insurance by developing countries governments.
- **Business risk due to cluster-based allocation:** There is likelihood of greater risk as a specific cluster might have a similar risk profile within it and therefore greater risk exposure
- **Enhancing the office network to each tehsil/district:** Too few staff is a challenge
- Low market penetration by banks in spite of compulsory nature of scheme
- **Claims assessment on individual farm basis as per PMFBY (localized and post-harvest losses):** Farm areas are small and assessors visit each field for assessment
- Time window is short for pricing, marketing and claims assessment by firms
- **Moral turpitude in yield estimation:** Corruption and malpractice in crop-yield estimation during crop cutting experiments (CCE)

James Kiguru shared the Kenyan experience of agricultural insurance. He talked of existing insurance in Kenya that included traditional insurance schemes for both crops and livestock, index insurance for crops and livestock, and a hybrid of traditional and index insurance. He said that the Kenyan government has subsidized the crop insurance premium by 50 per cent and by 100 per cent for the livestock herders. The qualification criteria suits small farmers. Challenges for insurance companies in implementing insurance schemes were also identified. These are:

- **Breakdown in solutions communications to the market:** Solutions exist but adoption rate as evidenced by the industry premium average is still low.
- **Low financial literacy among farmers to understand insurance**
- **Low purchasing power among farmers to afford insurance**

Bashir Haliru shared his views and experiences from the perspective of public-sector corporations in Nigeria. He talked about the Nigeria Agricultural Insurance Corporation (NAIC), the sole agricultural insurance company in Nigeria. The Nigerian government currently provides a premium subsidy for agricultural insurance. The number of farmers covered is 2.5 million. Haliru stated that government-provisioned financial support is in the form of 50 per cent premium subsidies for most classes of agricultural insurance (crops and livestock), and the subsidy is financed by the federal and state governments in the ratio of 37.5 per cent and 12.5 per cent respectively. Like other countries, Nigeria too faces challenges in implementation, listed as follows:

- Low awareness among farmers and agri-businesses about insurance products
- Inadequate infrastructure and support services
- Lack of actuarial data
- High start-up costs for administration of agricultural insurance programmes
- Non-remittance/delay of premium subsidy payments from government
- Claims issues: moral corruption and exaggerated claims
- Lack of financial literacy of farmers
- Few underwriters to address risk exposure

- Agricultural cover is typically limited to loan amount rather than total production
- Scheme participation is low due to financial institutions' lack of interest in lending to agriculture

Haliru recommended that the government adopt the public–private partnership approach in implementing agricultural insurance and integrate agricultural insurance as part of a comprehensive approach to agricultural risk management in all its agricultural programmes. He proposed the idea of creating an agricultural insurance reserve fund that may be created by countries to serve as an intervening measure during a major catastrophe or whenever cumulative premium incomes become inadequate to meet the cost of claims. He also pressed for exploring the feasibility of a global agricultural mechanism under UNFCCC.

Rahab Kariuki shared the experience of ACRE Africa, which links stakeholders to agricultural insurance through localized solutions to reduce climate risks. They work as licensed insurance intermediaries and support local insurers in providing smallholder-focused insurance across value chains. Her presentation reiterated following implementation challenges:

- **Farm budget prioritization:** Competing needs for low household incomes
- **Scaling up:** Partnerships are critical for market reach. Well-organized aggregated systems are few.
- **Financial literacy:** The design of insurance products should be simple
- **Basis risk:** The risk that the actual loss on the ground does not match the index measurement so actual losses incurred by farmers are not insured
- **Data availability and reliability:** National inventories either do not exist or are not comprehensive and/reliable
- **Asymmetric information:** Fear of moral corruption and adverse selection leads to high premium. Few farmers subscribe to expensive products.

Kariuki said that a combination of items for a package best suited to get more farmers interested in insurance is needed. A combination of elements such as suitable delivery channels, innovative insurance design, locally driven schemes and a regulatory framework allow flexibility for farmers to pay for insurance. She emphasized on the need to build 'smart subsidies' by looking at demand for insight into what farmers need and combining it with inputs from technical advisory facilities. She also recommended incorporating proven communication strategies in the short term, weather data collection, government involvement in pricing techniques and participation of government and other agencies in designing smart subsidies.

Key outcomes of the session

- **Low financial literacy and lack of awareness:** Low financial literacy and lack of awareness remains the predominant challenge across countries. There is need to increase awareness on insurance.
- **Subsidy needed to survive:** Agricultural insurance (even in the developed countries) function based on government-provided subsidy
- **Product design:** Product should be designed factoring in the basis risk. This is possible if there is reliable, timely and high-quality data. Also, insurance companies should have local presence to understand basis risk.
- **Reliable timely and high-quality data:** Lack of data on historical exposure and crop yield is one of the biggest challenges as this increases uncertainty about product design and associated basis of risk. A well-built database with proper weather parameters and/or historic yield information to risk assessment and evaluation is required. This should be backed by robust satellite data and ground truth.
- **Government support:** Governments should adopt the public–private partnership approach in the implementation of agricultural insurance in their countries. Private-sector underwriting firms must be encouraged to underwrite agricultural risks as their participation will bring innovation and competition in the agricultural insurance landscape.
- **Cost effectiveness:** Agricultural insurers should aim for efficient distribution networks and increased use of technology to minimize administrative and claims settlement costs. Insurance programmes have begun to use of mobile technology, remote-sensing data and automated weather stations for parametric insurance products (index-based insurance products) for emerging markets.
- **Reinsurance:** Agricultural insurance service providers must ensure that adequate reinsurance arrangements are made to prevent them from defaulting in payment of claims in years when large payouts are made
- **Global Support required for developing countries:** Insurance costs must be supported through a global mechanism.

Day 2

Session 4: Agriculture insurance—small farmers' perspective

In this session, speakers from various organizations presented the perspectives of farmers, especially small and marginal farmers, in the context of extreme weather events and agricultural insurance.

Speakers for the session

Dyborn Chibonga, *Chief Executive Officer*, National Smallholder Farmers' Association of Malawi (NASFAM)

Meena Pokhrel, *Senior Programme Manager*, Small Farmers Co-operative Ltd, Nepal

Rupsha Bannerjee, *Postdoctoral Researcher*, Index Based Livestock Insurance, International Livestock Research Institute (ILRI), Nairobi, Kenya

Sebastien Weber, *Africa Director*, PlaNet Guarantee

Moderator: Gezahegn Gebrehana, Regional Representative, ACT ALLIANCE

Dyborn Chibonga spoke of issues, challenges and the way ahead in agricultural insurance in Malawi. He talked about weather-risk insurance as the main operating agricultural insurance in Malawi. He highlighted the challenges in the implementation of the agricultural insurance programme in the country, including too few instruments to measure and forecast weather, high interest rates and limited availability for agricultural loans, small landholding size and lack of secure land tenure leading to high transactional costs, lack of collateral for production credit and not enough policies relating to agriculture and climate change in Malawi. He recommended partnership among institutions to provide key services to farmers, crop selection so that returns cover the cost of input loan and insurance premium, enhancing capacity-building of farmers, making a cooperative of farmers to share costs and risks, reducing interest rates to incentivize those taking insurance cover and offsetting the cost of premiums.

Meena Pokhrel put forward the perspective of small-farmer cooperatives in Nepal. She spoke about the community model of agricultural protection (insurance), including the livestock protection programme. She said that livestock insurance programmes are commercialized for higher income generation for farmers in Nepal and have resulted in decreased mortality rate, improvement in health of livestock and increased domestic products from animals, among many other benefits. Paddy, maize, wheat, millets, barley, buckwheat, tobacco and potatoes are the crops covered under crop insurance for risks, such as independent risks (fire, hail, windstorms), intermediate risks (excess rain, frost, landslides) and highly correlated risks (drought and flood in crops).

She also spoke of the challenges in implementation of agriculture insurance in Nepal. These are as follows:

- Current insurance legislation in Nepal does not recognize the informal crop and livestock insurance programmes implemented through the cooperatives and MFIs.
- Limited financial capacity of private insurance companies and cooperative-agriculture insurers.
- Lack of exposure to international agricultural insurance technology, and limited range of crop- and livestock-insurance products, data and information.

- Private insurers lack rural-branch networks and administrative costs of agricultural insurance are high.
- Insurance product must be tailored to farmers' needs.

She said that the creation of cooperative-owned agro-insurance companies can show the way forward to meet challenges in the agricultural insurance sector in Nepal.

Rupsha Bannerjee focused on the sustainable livestock insurance programme in Kenya. She said that index-based livestock insurance is better suited to the pastoral production system and to their risk profile. This is because index-based livestock insurance has lower transaction costs and less moral corruption than conventional insurance, as satellite data is used and physical verification of losses is not required. This is because the cutting-edge econometric response model, developed by the IBLI team at ILRI, identifies the relationship between the Normalized Difference Vegetation Index (NDVI) and livestock mortality.⁶

Bannerjee said that sustainable insurance can prevent the downward slide of vulnerable populations and allows focusing humanitarian resources on the needy. She emphasized challenges farmers face, including poor basic infrastructure, low literacy levels, security issues, liquidity constraints and instances of mis-selling. Sales agents of insurance companies are available only for a given period of time and if later on pastoralists want more details about insurance products, then insurance sales agents are not available. Remuneration and coordination among underwriters and sales agents also pose challenges in the effective implementation of the programme. Other challenges identified were capacity development of consumers, beneficiaries and implementing agencies.

She recommended regular feedback from the communities with regard to design of insurance products. She highlighted the role of public–private partnerships in coverage of agricultural insurance programmes. She said that insurance is most efficiently and effectively managed by the private commercial agricultural sector. She emphasized, however, that successfully scaled-up agricultural insurance programmes typically require leadership and targeted support from government.

Sebastien Weber talked about micro-insurance. He said that index insurance is more adapted to the African farmer-risk profile than traditional insurance. The insurance portfolio of PlaNet Guarantee concentrates on post-harvest risks while farmer revenues are highly impacted by extreme weather events during the crop seasons. He said that insurance solutions mitigate the impact of climate events and result in stabilizing income in whole agriculture value chain.

He highlighted key factors for a successful micro-insurance programme. These include strong network of delivery channels, products tailored to demands and elaborated with the clients and end beneficiaries, simplicity in implementation and management and strong partnerships with leading insurers and reinsurers.

He said that the way forward for scaling up agriculture insurance is finding innovative distribution channels. He also said that long-term reinsurance, government support and agricultural finance linked to insurance are key to scaling up agricultural insurance. Government can play a crucial role in financial education, regulation and incentives (taxes policy and subsidies).

Key outcomes of the session

Key issues identified are as follows:

- Lack of awareness and access to agricultural insurance for small farmers.
- Absence of or inadequate instruments to measure or forecast weather, high interest rates and limited availability for agricultural loans, small size of landholding leading to high transactional costs, high administrative cost, lack of collateral for production credit, lack of rural branch network.
- Little exposure to international agricultural insurance technology, limited range of crop and livestock-insurance products, and data and information related to forecasting and monitoring weather.
- There cannot be one type of insurance for all farmers, but there are huge challenges in providing diverse products to farmers.
- Need for technical assistance in the design and implementation of agricultural insurance products. Insurance products should suit farmers' needs.
- Need for long-term reinsurance, government support and agricultural finance linked to insurance.

Recommendations that emerged from the session are:

- Insurance product for small farmers should be tailored to reflect farmers' demand and risks.
- Promotion of non-traditional insurance providers like cooperatives and MFIs to cover small and marginal farmers.
- Simplicity in implementation and management of insurance programme is key for small farmers.
- Quick disbursement of claims or part disbursement before final loss estimation is the key safeguard for small farmers.
- For increasing coverage for small farmers, insurance providers need to develop innovative distribution channels using local partners and building strong partnerships with leading insurers and reinsurers.

Session 5: Enabling farmers to deal with extreme weather events—civil-society perspective

What kind of insurance works best for small farmers and how to ensure climate justice to them, the feasibility of the global agricultural insurance mechanism and the risks, challenges and opportunities in creating such a mechanism

Speakers for the session

Gezahegn Gebrehana, *Regional Representative—Africa*, ACT Alliance, Kenya

Isaac Kabongo, *Coordinator*, CAN Africa and Executive Director, Ecological Christian Organisation (ECO), Uganda

Chandra Bhushan, *Deputy Director General*, Centre for Science and Environment

Moderator: Dyborn Chibonga, *Chief Executive Officer*, National Smallholder Farmers' Association of Malawi (NASFAM), Malawi

Gezahegn Gebrehana spoke of the limitations of insurance. While it cannot reduce the risk and uncertainty of extreme weather events, it can help farmers cope with weather impacts. He spoke of the need for affordable and accessible insurance coverage to farmers. He said that index insurance is relevant tool in tackling the high cost of conventional insurance for smallholder farmers. He also said that insurance has to be equitable, fair and affordable and that the best model for agricultural insurance for farmers should be one where government takes the premium on behalf of subsistence farmers. He welcomed the idea of a global agricultural insurance mechanism and proposed that such a mechanism should be not a for-profit private-sector endeavour. It must be linked to the UN Climate Convention and supported by strong accountability mechanisms.

He cautioned that global agricultural insurance should not be the first line of defence as that could absolve the responsibility to provide and facilitate adaptation in developing countries in accordance with principles of the UNFCCC.

Isaac Kabongo presented his views that a global agricultural insurance mechanism is plausible under the current Paris Agreement but the principle of such a mechanism should be thinking global but acting local and it should also recognize unique circumstances and include voices of the different farmers to ensure justice. Further, it should supplement existing adaptation measures and not replace them. The Paris Climate Agreement (2015), current piloted projects and the lessons learnt about agricultural insurance provide us with the opportunity for global agricultural insurance mechanism. He reiterated that agricultural insurance should not entail profit motives and it should also be broadened to include fisheries, beekeeping etc .

Chandra Bhushan in his talk focused on first reducing the risk and then transferring the risk. He highlighted that agricultural insurance should cater to multi-crop agricultural practices, implying that agricultural insurance has to be diverse as agriculture is diverse. He said that small and marginal farmers require innovative solutions. Agricultural insurance mechanism has to promote sustainable agriculture and biodiversity, not mono-crop cultivation. He stressed that the key feature of a global agricultural insurance mechanism should be to support local insurance initiatives that cater to the specific needs of local farmers. He also spoke of the importance of technology such as remote sensing, geo-tagged mobile and drones to for quick and accurate loss assessment and claim disbursal.

Key outcomes of the session

- Global agricultural insurance has to be equitable, fair and affordable and should not entail profit motives. It should support domestic insurance initiatives and must include the voices of different stakeholders including farmers.
- Agricultural insurance has to be diverse as agriculture is diverse and should promote sustainable agriculture and biodiversity, not mono-crops.
- Use of technology such as remote sensing, geo-tagged mobile and drones should be promoted.
- Global agricultural insurance must complement and facilitate adaptation in developing countries in accordance with principles of the UNFCCC.

Session 6: Panel discussion—Possibilities of building global agricultural insurance mechanism under UNFCCC

In this panel discussion, negotiators presented their views on the feasibility of the creation of a global agricultural mechanism under the UNFCCC.

Speakers for the session

Dissabandara Sunimal Jayathunga, *Director*, Climate Change, Ministry of Mahaweli Development and Environment, Sri Lanka

Michael Ochieng Okumu, *Senior Assistant Director*, Climate Change Negotiations and Finance, Climate Change Directorate, Ministry of Environment and Natural Resources, Kenya

John Kaddu, *Professor*, Uganda Academy of Sciences; Part of African Group of Negotiators

Helen Asiamah, *Chief Programme Officer*, Environmental Protection Agency, Ghana

Joab Osumba, *Technical Advisor*, Climate Smart Agriculture, Matrix Development Consultants Ltd, Kenya

Moderator: Sunita Narain, *Director General*, Centre for Science and Environment

Dissabandara Sunimal Jayathunga asserted prevailing agricultural insurance mechanism does not appeal to farmers. Small farmers have not been covered by existing agricultural insurance schemes because of un-affordability of premium and lack of information. He said that the availability of existing agricultural insurance programmes in countries, availability of L&D mechanism under UNFCCC, the Paris Agreement and upcoming CoP 22 provide good opportunities for pushing for a global agricultural insurance programmes. He said that risk reduction, however, should be given priority over risk transfer and that the global agricultural insurance mechanism has to be efficient, effective, timely, affordable and accountable. According to him, there is enough scope for global agricultural insurance mechanism to be part of UNFCCC process.

Michael Ochieng Okumu spoke of the considerable scope for a global agricultural insurance mechanism under UNFCCC. He pointed out various provisions under UNFCCC (Work programme on loss and damage under the Cancun Adaptation Framework at CoP 16, WIM at CoP19, Article 8.4 (f) of the Paris Agreement, development of a five-year work plan to be adopted in COP 22) that could consider a global agricultural insurance mechanism under UNFCCC.

He elaborated on Article 8.4 (f) of the Paris Agreement to make a case for the feasibility of a global agricultural mechanism, highlighting that Article 8 is entirely dedicated to Loss and Damage while specific sections of the Agreement list areas of cooperation and facilitation to enhance understanding, action and support to include risk insurance facilities, climate risk pooling and other insurance solutions. He further discussed the opportunities and potential challenges/risks in having the global agricultural insurance programme. He said that the global agricultural insurance programme should have the flexibility to address local circumstances and capabilities and should ensure fairness, affordability and effectiveness. He recommended strengthening reinsurance programmes at the regional level, public and private insurance programmes at the national and local levels and farmer groups and cooperatives at the grass-roots level.

John Kaddu talked of the dynamics of various negotiator groups that need to be understood to push the idea of a global agriculture insurance mechanism. He floated the idea of a non-paper that could be submitted to UNFCCC with the following elements:

1. Global agricultural insurance mechanism
2. Sensitization about a global agricultural insurance mechanism
3. Capacity building
4. Technology

Helen Asiamah talked about climate change threats to different sectors of Ghana. She emphasized that loss and damage need greater integration with development. Global agricultural insurance can be made part of loss and damage. She said that country-specific mapping of loss and damage hotspots are needed to inform policy. Loss and damage related public expenditures need to be scaled up. Public awareness is key.

Joab Osumba spoke about the provisions for loss and damage under the Bali Action Plan (decision 1/CP.13) in 2007, Cancun Adaptation Framework (1/CP.16) in 2010, Durban (8/CP 17) and Doha (3/CP 18) (3/CP.18).

He pointed out that second thematic area of the work programme on loss and damage recognizes 'a range of approaches to address loss and damage'. He reiterated the possibility of a global agricultural mechanism within the framework of Warsaw International Mechanism for loss and damage (2014) and under the Paris Agreement (2015).

He said that Para 49 and Article 8 under the Paris Agreement recognizes insurance solutions. He also pointed out that the Intergovernmental Panel on Climate Change, Fifth Assessment Report (IPCC-AR5) recommends insurance solutions, among other interventions, for unavoidable loss and damage. He said that report/results/findings of the Warsaw Mechanism's two-year mandate, to be presented at COP22 in Marrakesh 2016, will come in handy. He also highlighted the growing global focus on insurance and noted that insurance has been in the agenda of the Executive Committee of WIM and at Marrakesh (COP22) where the WIM work-plan will be reviewed.

He further elaborated the agenda of developed countries, particularly the G-7 Climate Risk Insurance Initiative that aims to address loss and damage through insurance solutions, which is understood to have high political goodwill. He highlighted the risks and challenges anticipated for global agricultural insurance. He discussed the criteria for a fair, affordable and effective agricultural insurance mechanism. He stressed that fairness, affordability and effectiveness are crucial in establishing a mechanism to build resilience in farmers in developing countries. He said that it is feasible to establish a global agricultural insurance mechanism under the UNFCCC. Opportunities exist for establishing such a mechanism, but challenges and risks are also anticipated. He recommended that the mechanism be framed as a new way of viewing the climate change challenge, for instance by providing evidence where adaptation and DRR have fallen short and also appealed for gathering sufficient diplomatic momentum for a decision in Marrakesh.

Key outcomes of the session

There is enough scope for the establishment of a global agricultural insurance mechanism within UNFCCC and negotiators provided sufficient evidence for it, as provided below:

Provisions of L&D and insurance in climate negotiations:

- L&D provisions are mentioned in AWG-LCA under Bali Action Plan (decision 1/CP.13) in 2007, 2008: AOSIS multi-window mechanism to address loss & Damage, Cancun Adaptation Framework (1/CP.16) in 2010. L&D provisions were further elaborated in Durban 2011 (8/CP 17) and Doha 2012 (3/CP 18).
- The Warsaw International Mechanism for Loss and Damage (WIM) established at CoP 19 in 2013. Action Area 7 of the Executive Committee of the WIM is dedicated to insurance solutions while Article 8 of the Paris Agreement (2015) is dedicated to loss and damage. Article 8.4 (f) of the Paris Agreement lists areas of cooperation and facilitation to enhance understanding, action and support to include 'Risk insurance facilities, climate risk pooling and other insurance solutions' of the Paris Agreement.

Scope to push for a globally supported agricultural insurance mechanism:

- Executive Committee (ExCom) of WIM will have its fourth meeting in September 2016, which give us a scope to push for a globally supported agricultural insurance mechanism.
- At CoP-22 in Marrakesh, there would be a review of the two-year work plan of WIM and a five-year work plan would be devised in light of the Paris Agreement, providing us an opportunity to push for such mechanism.

The important point is how to take it forward. It could be in the form of a non-paper or submission through Parties, group of negotiators or observers. The new global agricultural insurance mechanism for developing countries should be fair, affordable, effective, transparent, accountable and equitable.

Outcome of the Conclave

Globally supported agricultural insurance mechanism is feasible within UNFCCC

There is growing focus on risk insurance and transfer approaches under loss and damage within and outside UNFCCC.

Bali Action Plan, 2007

Decision 1/CP.13, Bali Action Plan talks of risk management and risk reduction strategies, including risk-sharing and -transfer mechanisms, such as insurance.⁷

Cancun Adaptation Framework, 2010

Decision 1/CP.16, Cancun Adaptation Framework, mentions:

- (a) Development of climate-risk insurance facility to address impacts associated with severe weather events;
- (b) Options for risk management and reduction, risk sharing and transfer mechanisms, such as insurance, including options for micro-insurance.

It also talks of enhancing strategies for climate change related disaster-risk reduction, including sharing and transfer mechanisms, such as insurance, at the local, national, sub-regional and regional levels for enhancing action on adaptation.⁸

Durban Outcomes, 2011

The decision 2/CP.17 of the Durban Outcome text recognizes the importance of funding, insurance and transfer of technology to meet the specific needs and concerns of developing country Parties.⁹

Doha Outcomes, 2012

Decision 3/CP.18 invites all parties to enhance action on designing and implementing risk-transfer activities to address loss and damage and, on a significant note, talks of taking into account common but differentiated responsibilities and respective capabilities and specific national and regional development priorities.¹⁰

Further, it also talks of enhancing coordination, synergies and linkages among various organizations, institutions and framework to address strategies to address loss and damage, such as risk-transfer tools.

Warsaw International Mechanism, 2013

WIM developed as a full-fledged mechanism to address loss and damage and talked of various approaches to address loss and damage, including risk-transfer instruments. It called for mobilization of resources and support to such approaches as one of its objectives. The Executive Committee established to implement the objectives has the entire Action Area 7 dedicated to financial instruments and tools to address loss and damage under its two-year work plan.

Action Area 7

This is dedicated to encouraging comprehensive risk management by the diffusion of information related to financial instruments and tools that address the risks of loss and damage. These financial instruments and tools may include comprehensive risk management

capacity with risk pooling and transfer, catastrophe-risk insurance, contingency finance, climate-themed bonds and their certification, catastrophe bonds and financing approaches to making development climate-resilient, among other innovative financial instruments and tools.¹¹

Paris Agreement, 2015

Loss and damage is covered under Article 8 of the Paris Agreement where cooperation on risk insurance facilities is clearly identified and under Paragraph 48-52 of the Decisions adopted by CoP also specifies the importance of addressing loss and damage.¹²

G-7 InsuResilience initiative of developed countries aims to increase the number of people having access to risk insurance in developing countries to 400 million by 2020.

Developing countries of Asia and Africa are increasingly adopting agricultural insurance as an important instrument to address loss and damage within their agriculture sectors.

At CoP-22 in Marrakesh, there would be a review of the two-year work plan of WIM and a five-year work plan would be devised in light of the Paris Agreement, providing an opportunity to push for a globally supported agricultural insurance mechanism.

In view of this, we propose the establishment of a globally supported agricultural insurance mechanism to be established within the Warsaw International Mechanism for loss and damage by 2022. In the ensuing years, we propose that WIM should conduct pilot projects globally, mobilize resources and promote collating and collaborating towards the creation of a global agricultural insurance mechanism. We believe that such a mechanism can increase the resilience of farmers and help them cope with negative climate impacts.

Features of Globally Supported Agricultural Insurance Mechanism

- The globally supported agricultural insurance programme under loss and damage mechanism of UNFCCC should support the development of fair, affordable, simple, inclusive, transparent, effective and universal agricultural insurance (which includes crop, livestock, fisheries, forestry and allied activities) in developing countries.
- It should provide financial support, technological knowhow to countries to implement their domestic agriculture insurance programmes. The insurance mechanism in countries should be locally determined and consider the requirements of farmers at the local level.
- It should support local, regional and national agricultural insurance initiatives that recognize the unique circumstances of different countries. Funding for this mechanism should be pooled in from countries, based on their responsibility and capability. This funding should be separate from funding to adaptation. Eligibility for insurance should be linked with capability and requirement for finance.
- It should support sustainable agricultural practices, biodiversity and a wide diversity of agricultural practices and not push for standard practices in the name of simplicity of implementation. It should support premium subsidy, reinsurance, agricultural-insurance product design and development, information and data system, weather database, weather forecasting and early warning system, capacity development, awareness raising, regulatory reform, technology and institutional strengthening in developing countries.

- Aspirations and the needs of farmers, pastoralists and forest-dependent communities should be taken into account in establishing the mechanism.
- The global agricultural insurance mechanism should encourage diversity, innovation and genuineness of insurance product. Diversity of products should reflect diversity of practices.
- It should promote diversity of nationally applied insurance mechanisms comprising traditional and non-traditional insurance. Companies, cooperatives and micro-insurance firms must also be supported as functional agents of agricultural insurance.
- It should serve as a platform for knowledge and data sharing (including weather data etc.), expertise sharing and technology transfer related to good agricultural practices etc.
- It should support development of technologies for weather and crop loss estimation, along with quick disbursement using satellite, GIS, drones, mobile etc.

Principles to make the Globally Supported Agricultural Insurance Mechanism Workable for Developing Countries

- Equity and climate justice should be the cornerstone of the globally supported agricultural insurance mechanism. It is crucial that the costs of climate risks are not transferred to developing countries that have had no role in creating climate change.
- Insurance is not the first response. Countries must first work towards reducing risk and building resilience of vulnerable communities. Transferring risk in the form of insurance is the last response; focus on insurance should not reduce focus on adaptation and mitigation. Funding support to adaptation and mitigation should not be compromised because of funding for agriculture insurance
- Sustainable agricultural practices (that incorporate conservation, biodiversity and traditional cultivation) should be promoted. The global agricultural insurance mechanism should actively seek to realize wider sustainable development benefits and must not be restricted to financial risk transfer.
- Profit maximization should not be the motive. There is a looming risk of profit maximization if private sector is given a free hand in agricultural insurance. Therefore, it is imperative that agricultural insurance programme is government-led, with transparent and accountable regulatory framework for determination of premium, estimation of losses and disbursement of payments.
- Integration of insurance with other programmes. Insurance schemes must align with other programmes such as social safety nets, early warning, awareness-raising programmes, disaster-proof infrastructure and investment in more sustainable livelihoods. It should also be integrated with services such as extension and training, inputs, financial inclusion and weather information.
- Synergies between risk reduction and insurance must be recognized.

ANNEXURE 1: Africa-Asia Conclave on Loss and Damage Due to Climate Change

Instituting a global agricultural insurance programme as a risk-sharing and transfer mechanism for developing countries

August 25-26, 2016 • Nairobi, Kenya

PROGRAMME SCHEDULE

DAY 1 : AUGUST 25, 2016

09:00 TO 9:30 Registration

INAUGURAL SESSION – 9:30 TO 11:00

Welcome and overview

Sunita Narain, Director General, Centre for Science and Environment, New Delhi

Setting the context

Chandra Bhushan, Deputy Director General, Centre for Science and Environment, New Delhi

G7 Climate Risk Insurance Initiative

Christina Schubert, Manager, InsuResilience Secretariat, GIZ

Inaugural speech

Ms. Judi Wangalwa Wakhungu, Cabinet Secretary, Ministry of Environment, Water and Natural Resources, Kenya

11:00 to 11:30 – Tea Break

SESSION I – 11:30 TO 13:30

Impacts of climate change on agriculture and role of agricultural insurance in building resilience and disaster risk reduction

Moderator: James Sina, Consultant, Disaster Risk Financing and Agriculture Insurance, World Bank Group

Impacts of climate change on agriculture and role of agricultural insurance in building resilience in Asia

Vineet Kumar, Programme Officer, Centre for Science and Environment, New Delhi

Impacts of climate change on agriculture and role of agricultural insurance in building resilience in Africa

Nelson Mutanda, Kenya Country Coordinator, African Risk Capacity (ARC)

Existing disaster risk reduction mechanism and role of agriculture insurance in building resilience in:

Kenya

Peter Nawiri, Senior Lecturer-Mechanical Engineering & Trainer Disaster Preparedness & Engineering Management, Kenya Water Institute (KEWI), Kenya

Ethiopia

Jamal Seid, Director, Climate & Geospatial Research Directorate, Ethiopian Institute of Agricultural Research, Ethiopia

Rwanda

Jean Baptiste Nsengiyumva, Director, Risk Reduction and Preparedness, Ministry of Disaster Management and Refugee Affairs, Rwanda

Mozambique

Feliciano Mataveia, Chief, Disaster Information and Response, National Institute of Disaster Management, Mozambique

Discussions

13:30 to 14:30 – Lunch

SESSION 2—14:30 TO 16:00

Overview of agricultural insurance in African and Asian countries

Moderator: Sunita Narain, Director General, Centre for Science and Environment, New Delhi

Overview of agricultural insurance in African and Asian countries

Vijeta Rattani, Programme Officer, Centre for Science and Environment, New Delhi

Overview of global agricultural insurance: experiences and challenges in Africa

James Sina, Consultant, Disaster Risk Financing and Agriculture Insurance, World Bank Group

State of agricultural insurance: experiences and challenges in

India

Ashish Kumar Bhutani, Joint Secretary, Ministry of Agriculture and Farmers Welfare, Government of India

Nepal

Sabnam Shivakoti, Program Director, Department of Agriculture, Ministry of Agricultural Development, Government of Nepal

Sri Lanka

Chandika Vilashini Ethugala, Director, Ministry of Irrigation and Agriculture, Government of Sri Lanka

Discussions

16:00 to 16:30—Tea break

SESSION 3—16:30 TO 18:30

Agricultural insurance: experiences and challenges

Moderator: Chandra Bhushan, Deputy Director General, Centre for Science and Environment, New Delhi

Overview of challenges in implementation of agricultural insurance

Geetika Singh, Programme Officer, Centre for Science and Environment, New Delhi

Problems and challenges faced by agricultural insurance companies in Asia and Africa

Mayur Ankolekar, Fellow member- Institute of Actuaries of India, Ankolekar & Co. Actuaries and Consultant, Mumbai, India

Agricultural insurance: experiences and challenges in:

India

Malay Kumar Poddar, General Manager, Agriculture Insurance Company, India

Kenya

James Kiguru, Agriculture Business Manager, UAP Insurance Kenya Ltd, Kenya

Nigeria

Bashir Haliru, Chief Executive Officer, Nigeria Agricultural Insurance Corporation, Nigeria

ACRE Africa

Rahab Kariuki, Managing Director, Agriculture and Climate Risk Enterprise Ltd, Kenya

Discussions

19:00 onwards – Dinner

DAY 2 : AUGUST 26, 2016

SESSION 4 – 9:30 TO 11:00

Agriculture Insurance: Small farmers perspective

Moderator: Gezahegn Gebrehana, Regional Representative—Africa, ACT Alliance, Kenya

Pan-Africa overview of agriculture insurance

Sebastien Weber, Africa Director, PlaNet Gaurantee

Small farmers perspectives: experience and challenges in agriculture insurance in Nepal

Meena Pokhrel, Senior Programme Manager, Small Farmers Co-operative Ltd, Nepal

Small farmers perspectives: experience and challenges in agriculture in Kenya

Rupsha Bannerjee, Post-doctoral Researcher, Index Based Livestock Insurance, International Livestock Research Institute (ILRI), Nairobi, Kenya

Small farmers perspective: experience and challenges in agriculture in Malawi

Dyborn Chibonga, Chief Executive Officer, National Smallholder Farmers' Association of Malawi (NASFAM), Malawi

Discussions

11:00 to 11:30 – Tea

SESSION 5 – 11:30 TO 12:45

Enabling farmers to deal with extreme weather events: a civil society perspective

Moderator: Dyborn Chibonga, Chief Executive Officer, National Smallholder Farmers' Association of Malawi (NASFAM), Malawi

Panel discussion: Opportunities and risks involved in global agriculture insurance mechanism – enabling climate justice to vulnerable farmers

Gezahegn Gebrehana, Regional Representative - Africa, ACT Alliance, Kenya

Robert Muthami, Representative, Pan African Climate Justice Alliance

Isaac Kabongo, Coordinator, CAN Africa and Executive Director, Ecological Christian Organisation (ECO), Uganda

Chandra Bhushan, Deputy Director General, Centre for Science and Environment, New Delhi

Discussions

12:45 to 13:30 – Lunch

SESSION 6 – 13:30 TO 15:30

Panel discussion: Possibilities of building global agricultural insurance mechanism under UNFCCC

Moderator: Sunita Narain, Director General, Centre for Science and Environment, New Delhi

Dissabandara Sunimal Jayathunga, Director, Climate Change, Ministry of Mahaweli Development & Environment, Sri Lanka

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Yerima Peter Tarfa, Acting Director, Department of Climate Change, Federal Ministry of Environment, Nigeria

John Kaddu, Professor, Uganda Academy of Sciences; Part of African Group of Negotiators

Helen Asiamah, Chief Programme officer, Environmental Protection Agency, Ghana

Joab Osumba, Technical Advisor, Climate Smart Agriculture, Matrix Development Consultants Ltd, Kenya

Discussions and concluding remarks

ANNEXURE 2: Africa-Asia Conclave on Loss and Damage Due to Climate Change

Instituting a global agricultural insurance programme as a risk-sharing and transfer mechanism for developing countries

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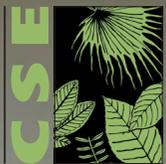
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