

Policy Dialogue Workshop on Flood Index Insurance and Drought Management for Agricultural Development in Bihar

ICAR Research Complex for Eastern Region (ICAR-RCER)

June 7 2017, Patna, Bihar (India)

Background

Climate variability already poses a significant threat to humanity, with the poor and most vulnerable at greatest risk. It is expected that such section of society will become more exposed to climate shocks as a result of climate change. South Asia, and India in particular, is at high risk. India's economy is closely linked to its natural resource base with over 700 million people in the country dependent on climate-sensitive livelihood sectors such as agriculture, water, and forestry that are further threatened by the impact of climate change (GoI 2008). These threats, however, will not be felt uniformly. Renewable freshwater already varies considerably across the country. With the growing hydro-climatic variability, much of India is expected to receive a larger volume of its precipitation during extreme rainfall events, such as in western and peninsular India, while other areas will experience fewer wet days, more dry days, and a heightened frequency of extreme events. Numerous options are emerging that are promising from an overall water resources perspective and provide greater resilience for those exposed to increasing climate-related risks.

In this context, jointly with the Government of Bihar, International Water Management Institute (IWMI) and ICAR RCER are organizing one day workshop to discuss risk management solutions that promote better resilience among small and marginal farmers and vulnerable communities in promoting the advances in satellite technology and modeling tools through innovative risk transfer solutions involving insurance and drought monitoring to support preparedness as well as contingency plans for agricultural drought management. The holistic approach of managing floods and drought will allow developing comprehensive flood and drought mitigation plans and disseminate information rapidly that can enable water resources and disaster managers, communities and farmers to better manage risks related to climate variability and its impact on agriculture and food security.

The four-year project had its inception workshop in Patna on 1st August 2015 with the goal to contribute to sustainable approaches to index-based flood insurance that can help smallholders better manage their flood risk. The project's objective is to develop agricultural flood insurance products using remote sensing data and flood modelling tools that can accurately depict yield loss, map extent of flood damages in smallholder farming due to weather and/or other perils, and be scalable in insurance schemes delivered at micro and meso levels. The project has developed meso-level IBFI scheme using flood hazard model and remote sensing data – to pre-determine flood thresholds that trigger speedy compensation pay out. The project is working with various stakeholders such as NDMO, DDM, BSDMA, Ministry of Water Resources and Agriculture and insurance industry to develop reliable and affordable product that are scalable and sustainable. Other project components includes IBFI Business Models, IBFI Economic Analysis, Index Insurance and Gender Equity, Rising Awareness through Media network and social network. This project, apart from being the first such attempt at a large-scale in the two countries, is also a trendsetter for catastrophe insurance in natural disaster prone developing world. The set up and social network is further advanced in India and are in the final stage of implementation.

The first half day of the workshop is to briefly present the project progress until date and set up a policy dialogue platform in Bihar/India to inform and exchange experience about the potentials of an index-based flood insurance with relevant high-level policy- -makers. Further, the workshop will briefly discuss with Department of Disaster Management, GoB and Ministry of Agriculture (New Delhi) to experiment the IBFI product for the 2017 monsoon season. The second part of the workshop will focus on the IWMI's Drought Monitor and its application in agriculture drought management in together with the works of ICAR institutes in drought management and contingency planning.

The main purpose of the workshop is to:

- Present the results of IBFI product development and product evaluation in Bihar, India
- Discuss strategies for implementation in 2017 monsoon season.
- What are the other key challenges in the utilization of these technologies?

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- Evolve mechanism of linking spatial drought information with drought management planning on near real time basis at sub-district level and district level.
- Focus on the need for spatially distributed integrated drought mitigation plans including both supply, augmentation and demand management interventions as improved preparedness to drought proofing
- Develop and recommend protocol for drought monitoring and mitigation with inbuilt contingency measures including capacity development
- What steps need to be taken in the coming years to make sure that responses to climate change are riskinformed and that we are better prepared for flood risk financing and drought proofing?



RESEARCH PROGRAM ON Climate Change, Agriculture and Food Security





Tentative Program Outline

Time	Drogram	Resource Persons
08:30 – 09:30	Program Registration	Pooja Pandey & ICAR RCER
	uguration ceremony	
	tasha Nair, IWMI New Delhi	
09:00 - 10:15	Welcome Remarks	Alok Sikka, IWMI Delhi
	Workshop Introduction	Giriraj Amarnath, IWMI HQ
	Opening Remarks	Shri Anil Sinha, Sr. Advisor & Mentor Hazard Risk Management and Climate Change Adaptation
	Remarks from DDM	Sri Pratyaya Amrit, I.A.S., Principal Secretary
	Remarks from BSDMA	Shri Vyas ji, Vice Chairman
	Remarks from Cooperative Dept.	Sri A L Meena, I.A.S., Principal Secretary
	Remarks from MoA,FW	Ashish Kumar Bhutani, JS, MoA (TBC)
	Inaugural Address by Chief Guest	Prof. Chandrashekhar, Hon'ble Minister for Disaster Management , Government of Bihar
	Vote of thanks	Dr. B P Bhatt, Director, ICAR RCER
10:15 - 10:45	Group photos and Tea Break	
-	late on Project Results	
	Amrit & S K Ambast	Rapporteur: Avinandan, IWMI
10:45 - 11:15	Project Overview, results and IBFI	Giriraj Amarnath, IWMI HQ
	product	Mangesh Patankar, SwissRe
11:15 - 12:00	IBFI Implementation plan for 2017	TBD
Cognion 2. Do	15mins Q&	
	nel Discussion "Policy dialogue on floo on in scaling up flood insurance"	ou risk financing, guidennes and
Duration: 12:0		
	(Government, Insurance Industry, N	MFI's and NGOs)
	nil Sinha & Vyas Ji	Rapporteur: Karthikeyan, IWMI
can take various f the various types providing financia • What are stakehold • What is th • How can • What pres • What can • What can experienc • What con	forms to meet the differing needs of different of public private partnerships that have be al protection for significant risks and/or to the different approaches that can be taken lers? the role of government in each of these are governments prioritize sector(s) where int conditions are necessary for the developm be done to improve smallholder farmers be done to support the establishment of a se with insurance?	n to providing disaster insurance to different as? tervention may be most needed? tent of a flood insurance market?

13:00-14:00 Lunch

Session 4: Drought Monitoring and Management for Agriculture DevelopmentModerators: B P Bhat & Director, Agri, BiharRapporteur:		
14:00 - 14:30	Experience of SADMS Drought Monitor and its application	Giriraj Amarnath, IWMI HQ
14:30 - 14:45	Presentation on Drought Management and contingency plans	K V Rao, CRIDA, Hyderabad
14:45 - 15:00	Presentation from Department of Agriculture and DoM, Patna	TBD
15:00 - 15:15	Mainstreaming Climate Resilience into District level Planning for Drought Proofing in Bihar	Alok Sikka, IWMI & ICAR RCER
15:15- 15:30	Tea break	

Session 5: Panel Discussion "Drought Monitoring, Assessment and Forecasting in India and explore broader application in drought preparedness and mitigation measures"

Duration: 15:30 – 16:30

Panelist: LS Rathore, KV Rao, IMD, DoA Patna Moderator: Alok Sikka, IWMI

Rapporteur: Nitasha, IWMI

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This session will discuss on the current and existing drought monitoring and management plans to identify areas of medium to long-term drought risk reduction measures. Further, discuss on the coordination among stakeholders for information sharing among Meteorology, Agriculture, Water Resources & Irrigation and Socio-economic institutions for drought preparedness and risk management. Selected topics but not limited to the discussion are outlined below.

- What are the current procedures/challenges on Early warning systems?
- What mechanisms are in place for communicating and liaising drought monitoring and early warning information between national institutions?
- Discuss the initiatives that are required to integrate the future drought response and recovery in *drought plan*?
- Finally need to develop both medium- and long-term measures and specify the responsible agency(ies) for each measures.

16:30- 17:00	Closing remarks and way forward	
19:00 – 21:00	Workshop Dinner (Location TBD), Patna	