

Community Based Flood Early Warning System

Reaching the most Vulnerable

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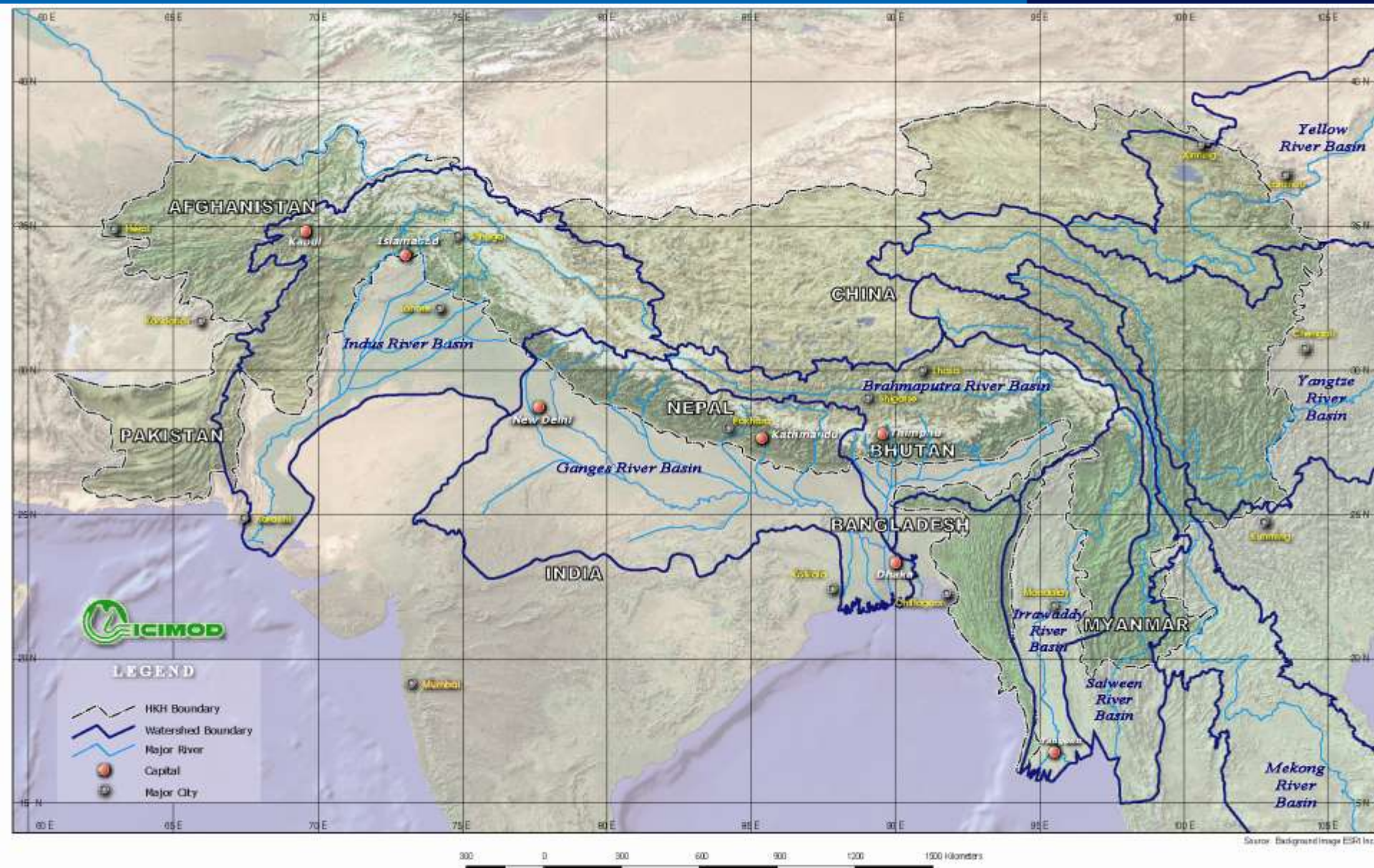
International Centre for Integrated Mountain Development

Kathmandu, Nepal

Hindu Kush Himalayas (HKH)

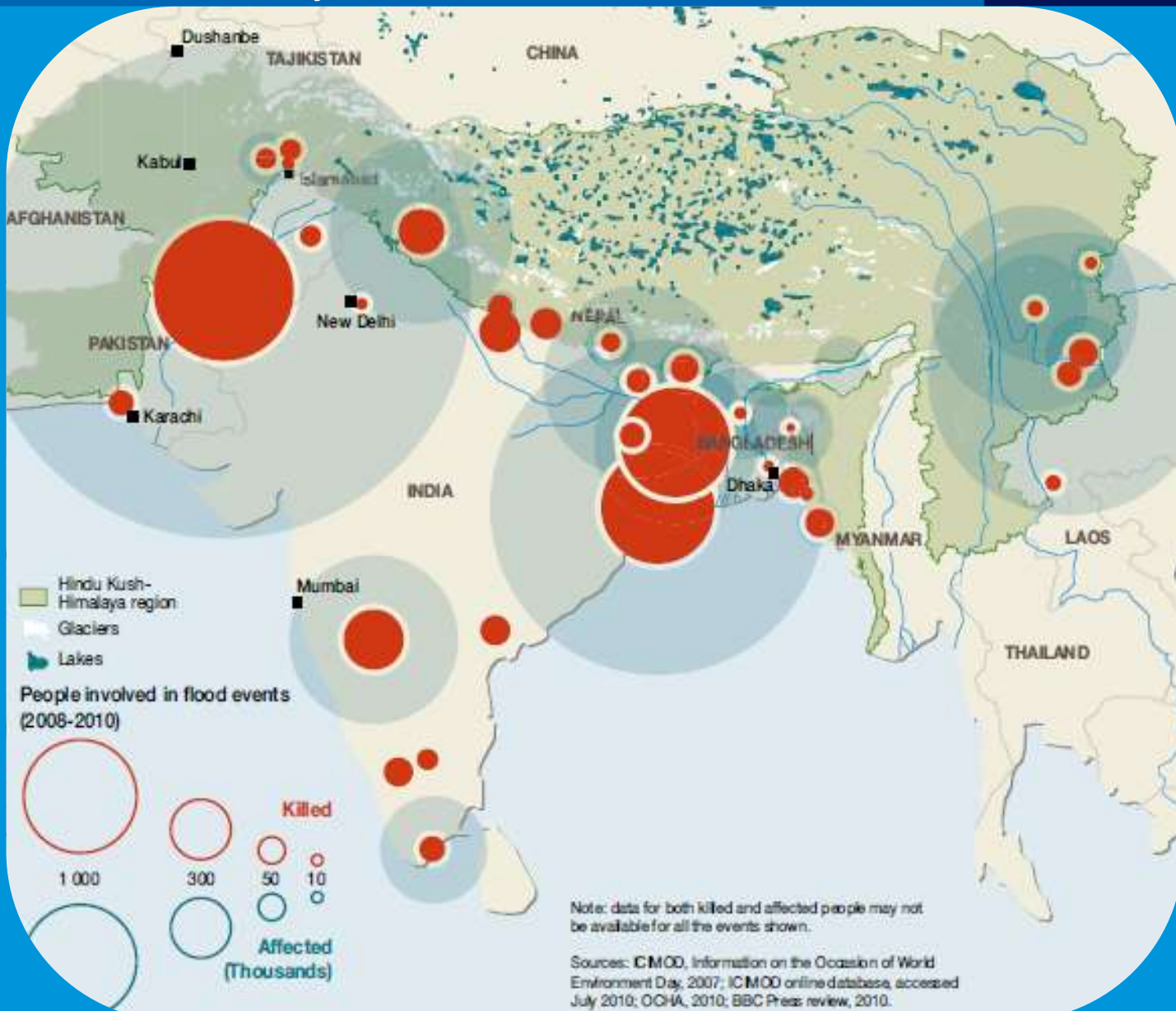
8 Countries and 10 River Basins

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Floods in the HKH

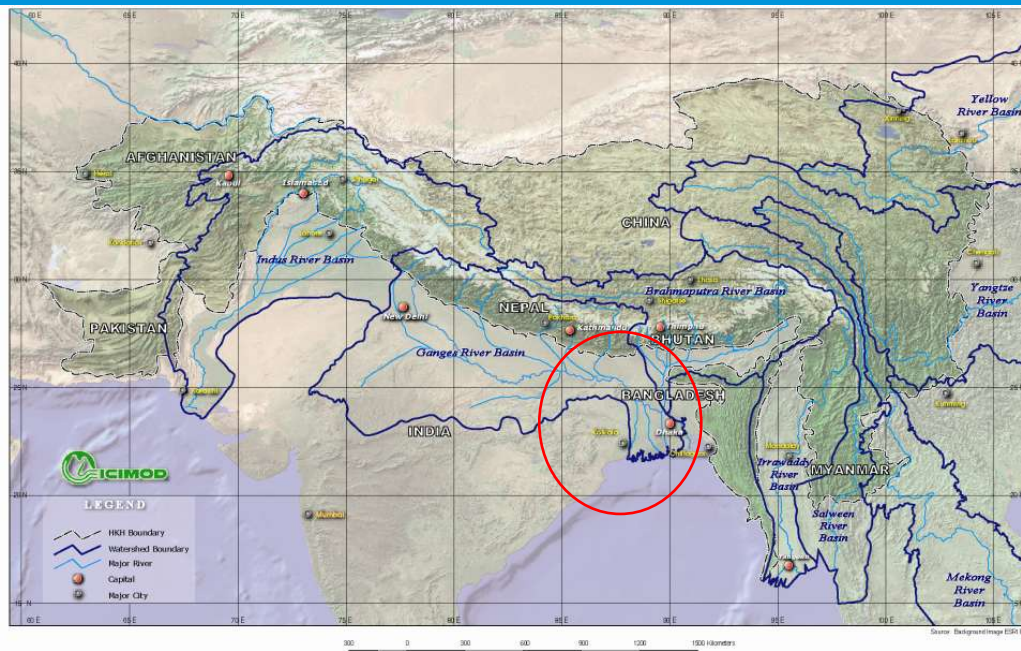
Shared vulnerability across national borders



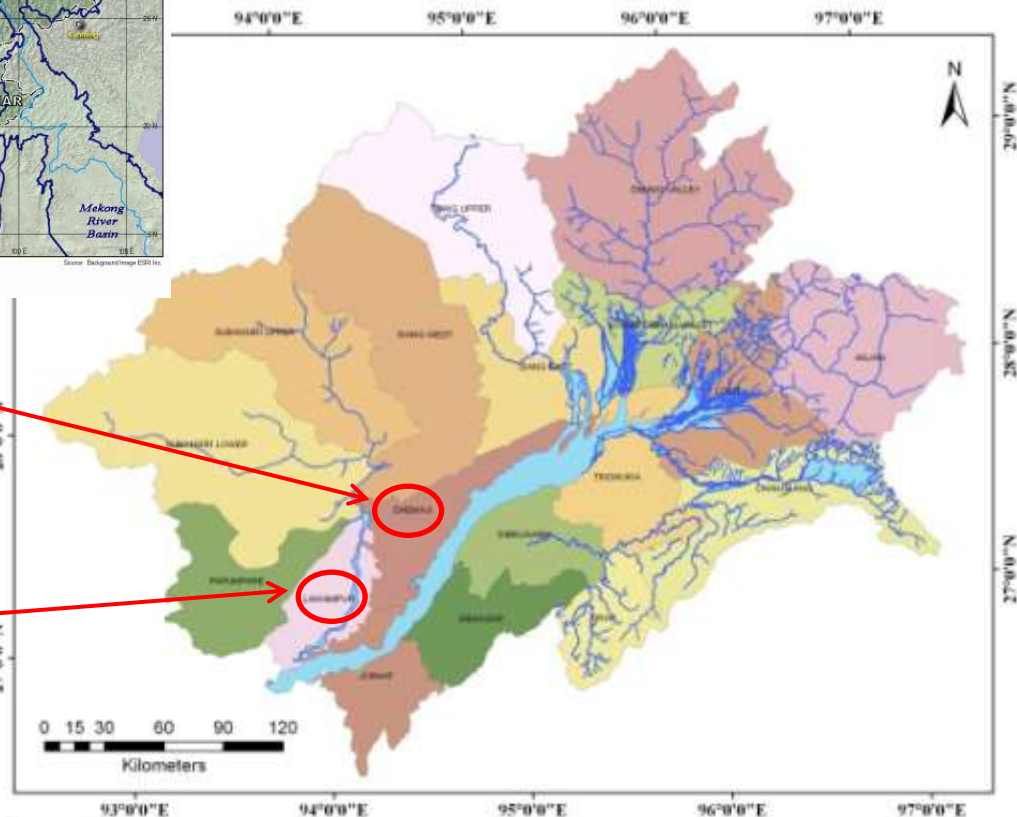
Impacts of floods



Pilot Sites in Assam, India



District Map of Assam & Arunachal Pradesh



**Jiadhal River in
Dhimaji District**

**Singara River in
Lakhimpur District**

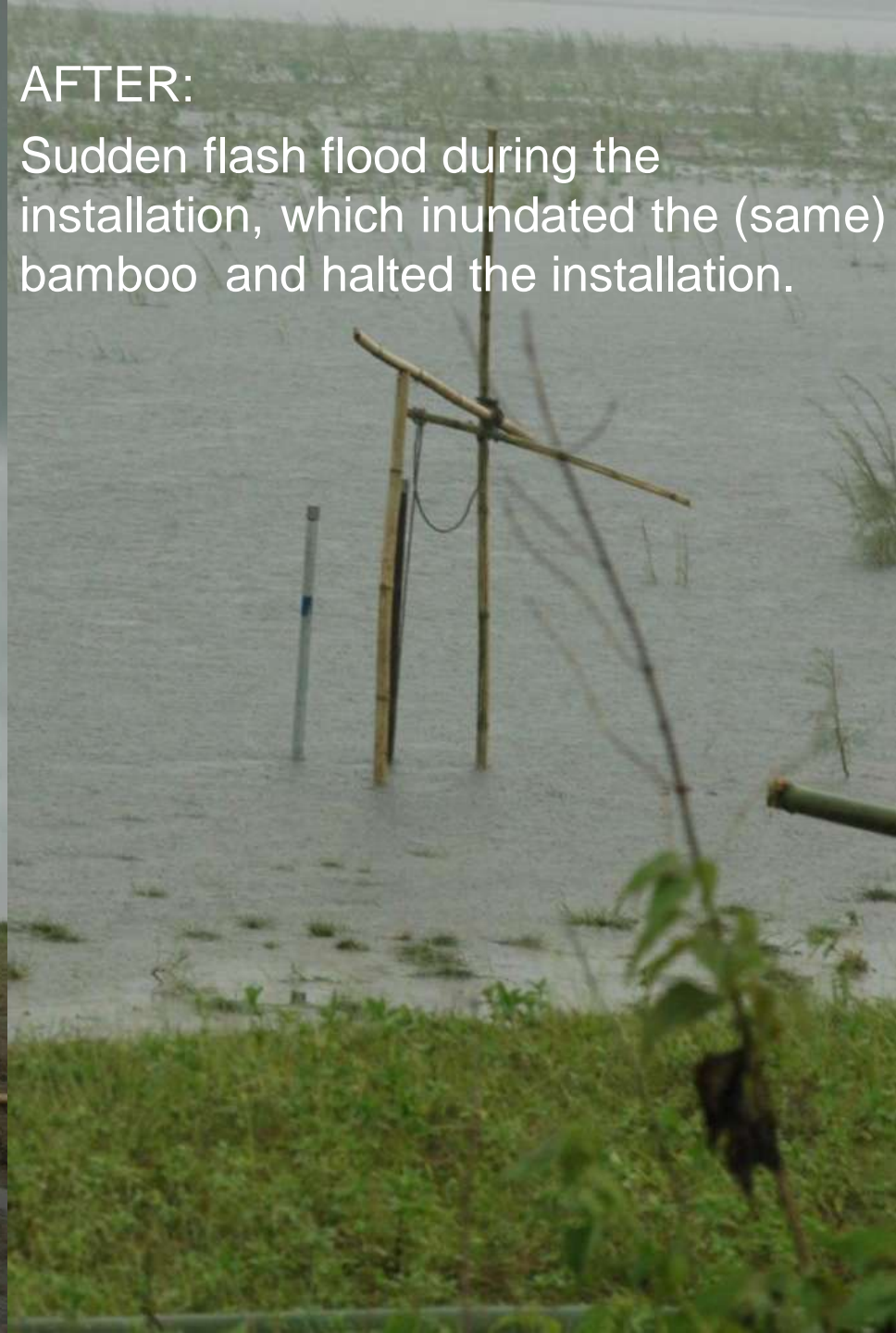
BEFORE:

During installation: 20 ft long bamboo laid to install instrument in the river bed.



AFTER:

Sudden flash flood during the installation, which inundated the (same) bamboo and halted the installation.



Community Based Flood Early Warning System (CB-FEWS)

Reaching the communities to reduce vulnerabilities

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FOR MOUNTAINS AND PEOPLE



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Northeast needs separate policies on flash floods to stay afloat, say experts

■ URMIMALA BHATTACHARJEE
GUWAHATI, FEB 14

NORTHEAST experts have figured out that India, unlike China, does not have separate policies on flash floods — something

“Countries in the Hindu Kush Himalayan region generally lack policies, strategies, and plans dealing specifically with flash floods. Most of the existing

2002 the damage was \$ 3.1 million (based on the rate of \$ 1 = ₹45). About 680 villages, 9,000

1. People centered
2. Timely and understandable to those at risk
3. Provide guidance on how to act on warnings
4. Low cost technology

general.”

Researcher at Aaranyak, Partha Jyoti Das explains, “Although both riverine floods and flash floods leads to a similar crisis, flash floods are particularly devastating since the mortality rate from flash floods is much higher than from oth-

needed to manage the problem.”

A study published recently by Das in ICIMOD revealed that the most serious damage caused by these flash floods is the widespread deposition of sand on fertile agricultural land. About 5.72 kms of land lying in more than a hundred villages in the catchment

18 per cent and the agricultural area under both summer and winter crops has decreased by 34 per cent, which implies a direct impact on agricultural livelihoods and food security in the catchment area.

In recent times, devastating flash floods were recorded on the Jadhav River has amounted to huge land losses since 1984 to 2011. In

that the northeastern states adopt flood mitigation policies of their own with specific provisions for the treatment of flash floods and upstream-downstream cooperation. “The enhancement of community resilience through socioeconomic empowerment and strengthened adaptive capacity should be the ultimate goal of disaster management and development programmes,” he said.

Working with Partners

ICIMOD



Government Partner: District Disaster Management Authority, Lakhimpur and Dhimaji



Implementing Partner: Aaranyak together with local communities



Knowledge Partners: CICERO and GRID-Arendal



ICIMOD experts

CB-FEWS: Approach/Framework

(Pilot in Jiadhah and Singora Rivers, Assam)

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Risk
Knowledge

CB-FEWS
Installation
and Monitoring

Dissemination
and
communication



Sept 2013, Dihiri:

Saved assets, including livestock, worth approximately USD 3,000



February 2014



August 2014

Limitations: Battery life, wireless range; sensor

Way Forward

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GOVT. OF ASSAM
OFFICE OF THE DEPUTY COMMISSIONER LAKHIMPUR : NORTH LAKHIMPUR
DISTRICT DISASTER MANAGEMENT AUTHORITY

No- CDMCR/NC/2016/119

Date-18/06/2017

To:

Partha J Das, Ph.D.

Programme Head

Water, Climate & Hazard(WATCH) Programme

AARANYAK, A Scientific and Industrial Research Organisation of India

50 Sansarwati Path, Survey, Belhola, Guwahati-781 078, Assam, India

Sub: Flood Early Warning System (FEWS)

Ref: Your letter dated 20th May 2017

Sir,

Greetings from District Disaster Management Authority Lakhimpur, it gives me immense pleasure to let you know that the Chairman, DDMA, Lakhimpur has accepted and approved the joint collaborative effort to work on installation of Flood Early Warning System in flood affected areas of Lakhimpur District.

Therefore, I on behalf of DDMA, Lakhimpur agree to work hand in hand on the proposed project to be implemented during this flood season.

Thanking You,

Yours faithfully,

Dr. Rajiv Dutta Chowdhury

District Project Officer

District Disaster Management Authority

District Administration, Lakhimpur

Memo No: CDMCR/NC/2016/119

Copy to:

1. C.A to DC, for kind approval of the Deputy Commissioner, Lakhimpur.

Date-18/06/2017

Dr. Rajiv Dutta Chowdhury

District Project Officer

District Disaster Management Authority

District Administration, Lakhimpur



Strengthening partnership to implement CB-FEWS for reduction of vulnerability to flash flood

THANK YOU

ICIMOD

