

Community Based Adaptation (CBA) - Lesson learned from the least developed countries

**Chun Knee Tan^{1*}, Haseeb Md. Irfanullah²,
Raquibul Amin² and Ainun Nishat²**

¹United Nations University – Institute for Sustainability and Peace (UNU-ISP)

²IUCN Bangladesh

*Email: cktan@unu.edu



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What do Chinese normally greet when they meet?

a) **Food**

吃饭了
吗?

b) **Car and house**

c) **Weather**

What do Japanese normally greet when they meet?

- a) Food
- b) Car and house
- c) Weather



今日暑い
ですね。

Community Based Adaptation (CBA)

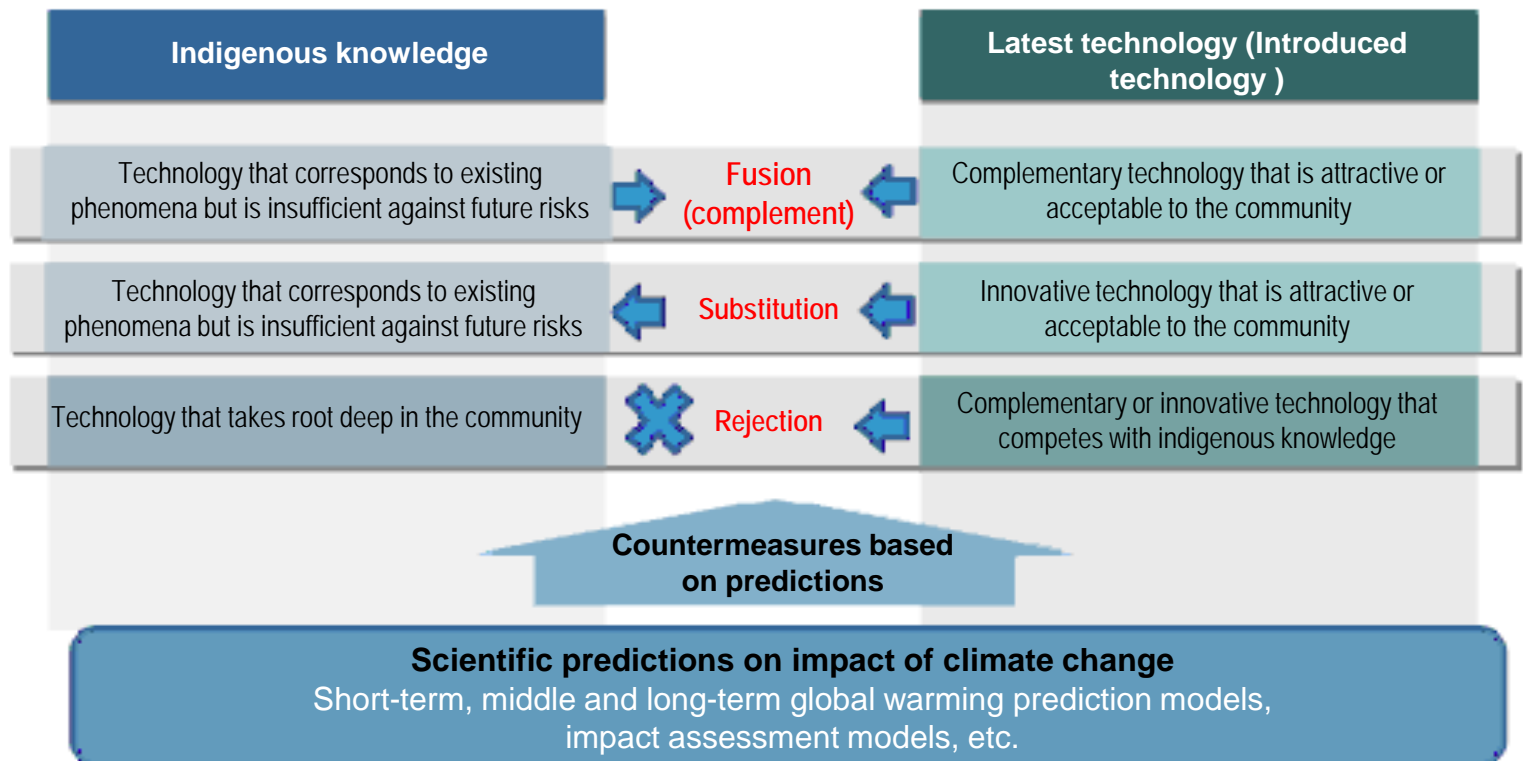
- Adaptation is the ability to respond and adjust to **actual or potential impacts** of changing climate conditions in ways that **moderate harm or takes advantage** of any positive opportunities that the climate may provide
- Adaptation takes place at **all levels**
- Community-Based Adaptation (CBA) is an innovative approach that focuses on enabling communities to enhance their own adaptive capacity, and empowering vulnerable communities to increase their own resilience to the impacts of climate change.

Community Based Adaptation (CBA)

- Process of doing and learning
- Integrating with environmental management, poverty reduction, development process, mitigation etc.
- Social economic incentives is crucial for motivation
- Exploring traditional knowledge for adaptation
- The ability of communities to adapt to climate change is determined by their level of development, their access to resources and their scientific and technical capacity.

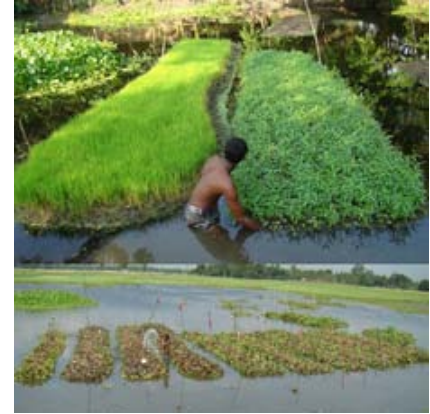
New technology and traditional knowledge

- When new technology is introduced
 - Fusion with traditional knowledge
 - Substitute the traditional knowledge
 - Rejection



Case: Bangladesh CBA

- People try to adapt, they do not wait for external assistance
- Local knowledge
 - Rain water harvesting
 - Floating garden
 - Shifting cultivation pattern
 - Using local available species
- Most successful in cyclone preparedness
 - Less casualties due to effective early warning
 - Cyclone shelter



Floating garden



Rain water harvesting



Saline tolerance rice

Conventional Village House



- Very vulnerable to disaster such as cyclone and flood

Cyclone Shelter



- Constructed by foreign aid
- Accommodate 500-700 people

- Multi-purpose – used as school or public hall
- Insufficient number
- Lack of maintenance



Weather Resilience House

Strengthen the foundation using cement or brick



Cross bars at the wall



Weather Resilience House



Second floor
as storage

Joining the
structure to the
ground



Linking the joint with bolt

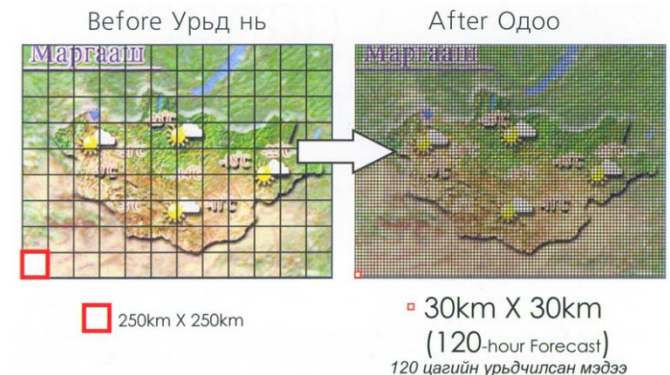


Weather Resilience House

- Affordability - Not more than 10% of the normal cost
- Use of local materials, local skills and local labor
- External expert to improve the housing design
- Training on the local labor to build strengthen structure
- Fast recovery and construction after disaster

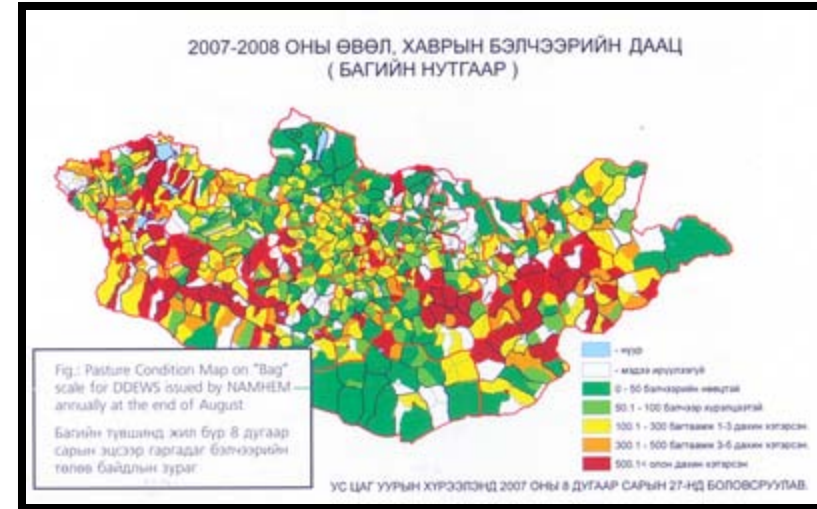
Case: Mongolia

- JICA technical cooperation project for weather forecasting and data analysis
- Activities
 - Forecasting climate change in Mongolia caused by global warming, using a climate model.
 - Preparing weather forecasts (short-term, mid-term, and long-term) based on numerical forecasting data
 - Building an early warning system against drought and dzuds (winter disasters)
 - Better understanding of meteorological information by the nation, local governments, relevant organizations and end-users (including stock raising people and residents)



Case: Mongolia

- Public awareness on utilization of weather prediction and warning
- Customization for end user – to the level of their understanding



Drought/Dzud Early Warning System

Case: Mongolia

- Feed back from the workshop participants to add the lightning risk in the leaflet where they think it is important
- Not relate to weather prediction
- Looking in to the local needs and customized the message for the acceptance of local community



Ойр орчимд 5м-с дээш зайд мод байвал аянга модон дээр бууна. Гэхдээ модонд хэт ойртох нь аюултай. Модны эх бие болон мөчрөөс 4м-с дээш зайд хол байх хэрэгтэй, мөн модноос хэт холдох нь аюултай. Зурагт үзүүлсэн цэнхэр хэсэгт доош суувал харьцангуй аюул багатай байна.



Гэрийн дотор яндан болон зуух, ханатай ойр байх нь аюултай. Гэрийн дотор зай бага учир яндан, хана зэргээс хол байлаа ч 100% аюулгүй бус. Тиймээс гэрээс гарч 4м хол зайд доош суух, эсвэл ойр хавийн барилга байгууламжинд хорогдвол аюулгүй.

After user feed back, add in the lightning information

Limitation

- Community has limited capacity – small action, small scale, lack resilience
- Influence by external factors, e.g. policy changes, politics, etc.
- Important to integrate the top-down (e.g. climate prediction) and bottom-up (e.g. CBA) approach
- Adaptive action do not guarantee total risk free
- Sustainability of adaptation measures
- High duplicability – risk of resulting maladaptation in large scale

Conclusion

- CBA need to put priority on “suitable” traditional knowledge
- Listen and take into consideration of local needs
- Technology intervention need to fit local environment, culture & habits
- We need to act like HSBC



The world's local bank

Thank You

Terima Kasih

ありがとうございました

谢谢

Let's

COOL UNU

28°C