

# Indigenous Knowledge for Coastal Risk Reduction

Initial Efforts of SAARC Disaster Management Centre (SDMC)

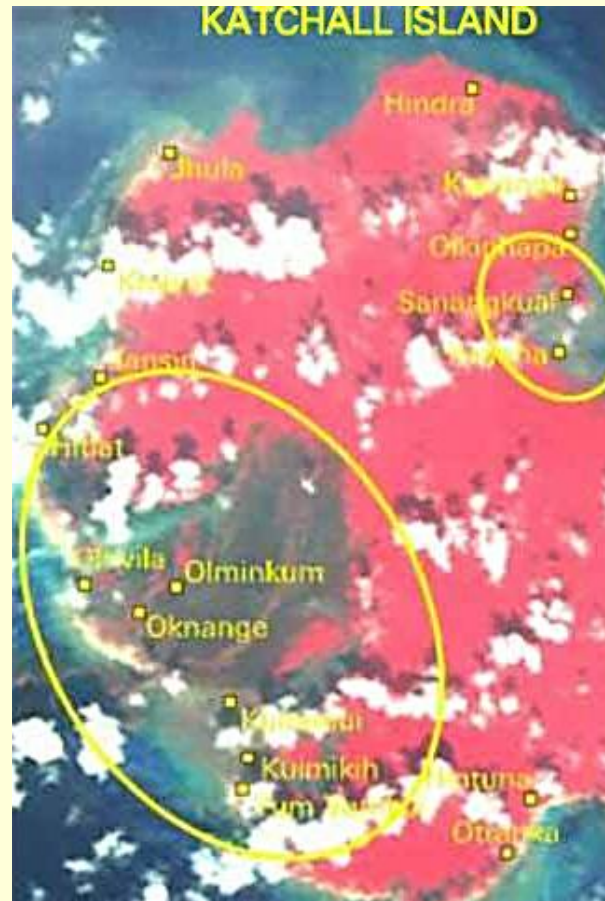
SAARC Workshop on Coastal and Marine Risk Mitigation Plan for Asia  
Organised Jointly by SDMC and NIO March 27-28, 2008  
Goa

# ***Tsunami, India***

Dec 2004 Tsunami inflicted several wounds to A&N Islands..



IRS-P6 AWiFS  
December 21, 2004



IRS-P6 AWiFS  
December 26, 2004



IRS-P6 LISS-III  
January 04, 2005

The southern islands of the Nicobar group, closest to the epicenter of the tsunami are also homes to the aboriginal natives 95% of the tribal folks

Many of these islands had been totally submerged and structurally broken apart. And what about these natives?

Those Sentinelese - numbered only 32, while the largest group - Jarawas - had about 226 members - all five together around 1000



## A Tale of the Wounded Islands inhabited by “uncivilized” aboriginal people



# A Tale of Onge

*When the earth shook and waters began receding from the creek near their settlement...*

The Onge of India's Little Andaman Island knew nature was telling them something.

“The first people”, the man's earliest ancestor did not wait to pick up their possession but instinctively made for higher ground.

All of the 100-or so Onge left/ in the world the tsunami's deadly power.





# A Tale of Jarawa

An elder of the Jarawa tribe led his people to safety on a hilltop after a boy's sudden dizziness signaled the distant tremors that presaged the tsunami.

The old man told them that when he was a child and these types of things happened, his father told him that he should follow this procedure if they happened again..



Five aboriginal tribes of A&N Islands, our last missing link with early civilization have emerged unharmed from the tsunami because of their age old ‘warning systems’

They also get wind of impending danger from **their biological warning signals** - cry of birds and changes in the patterns of marine animals.

# Indigenous knowledge enabled them to survive..

- **Ancient, native warning systems**
- A Collective memory of earthquakes and tsunami so they knew to move to higher grounds..
- Island survived strategy that they have developed through the knowledge of the generations..
- The rainforest that surrounds the tribes, along with traditional tribal wisdom, saved in a catastrophe that killed more than 150,000 people in South East and South Asia.

# Indigenous knowledge of those “Aboriginals”

The ancient, ancestral warning system that these tribes have evolved over the centuries.

The tribes-people live in close harmony with nature and with the local flora and fauna; have an intense system of by which they observe their fellow-creatures to develop their **instinctive biological warning system**

The cries of the birds, the frenzy of the smaller mammals, even the change in the swimming pattern of the marine animals - all give them clues and signals of approaching natural calamities -- like storms or tidal waves.

It is a system that has been developed - **almost through natural instinct - by their forefathers and which have been passed down from generation to generation.**

# Capitalizing on Indigenous knowledge

Anthropologists have further confirmed that these tribes probably trace their traditions back 20,000 years - each generation adding its own knowledge to the existing pool of information.

This knowledge has not yet been completely recorded and studied. Probably hidden somewhere in the knowledge that the tribes have there may be some methods that can be developed to form a warning system that will save future generations from the destruction by the forces of nature.

# South Asia: A Large Reservoir of Indigenous Knowledge

Those are confined, untapped and locked up in the:

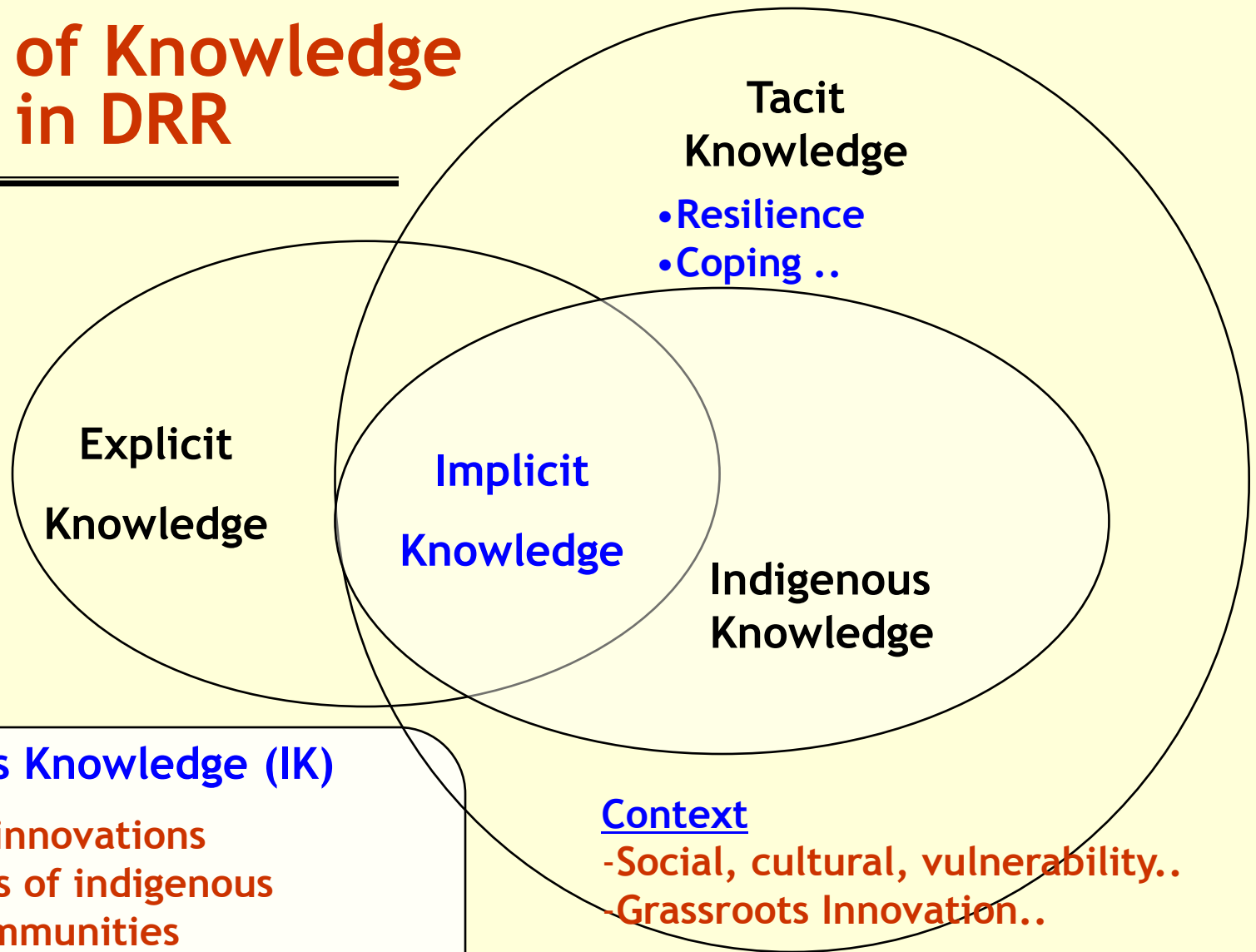
- Remote mountains,
- Forests,
- Isolated Coasts
- Semi-arid/arid regions
- ...

*and with resides with those live on the margins of the nature...*

They are unique and powerful knowledge resource for Disaster Risk Reduction..

# A Saga of Knowledge in DRR

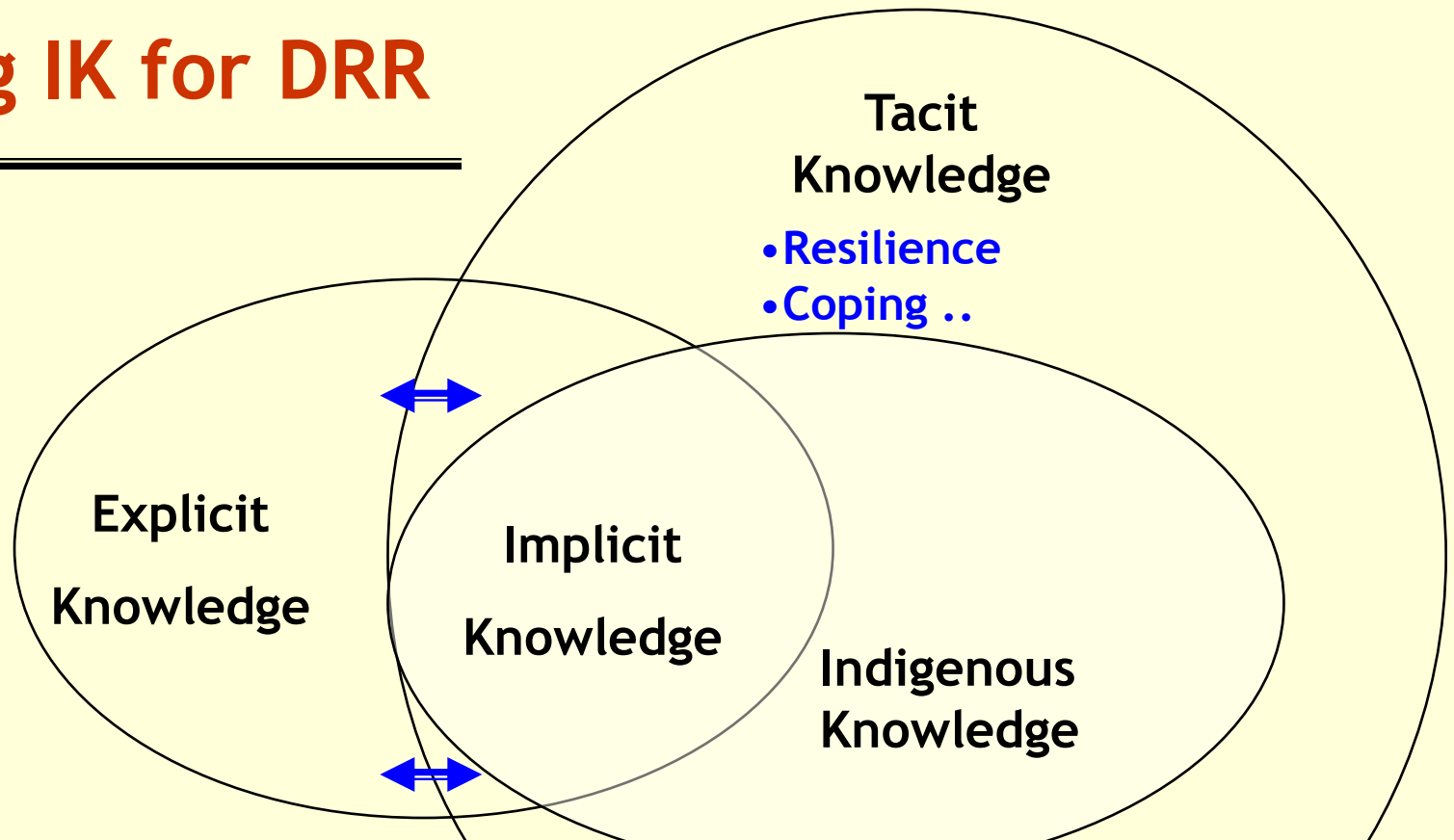
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Mostly not codified, limited access & outreach, often in tacit knowledge

# Tasking IK for DRR

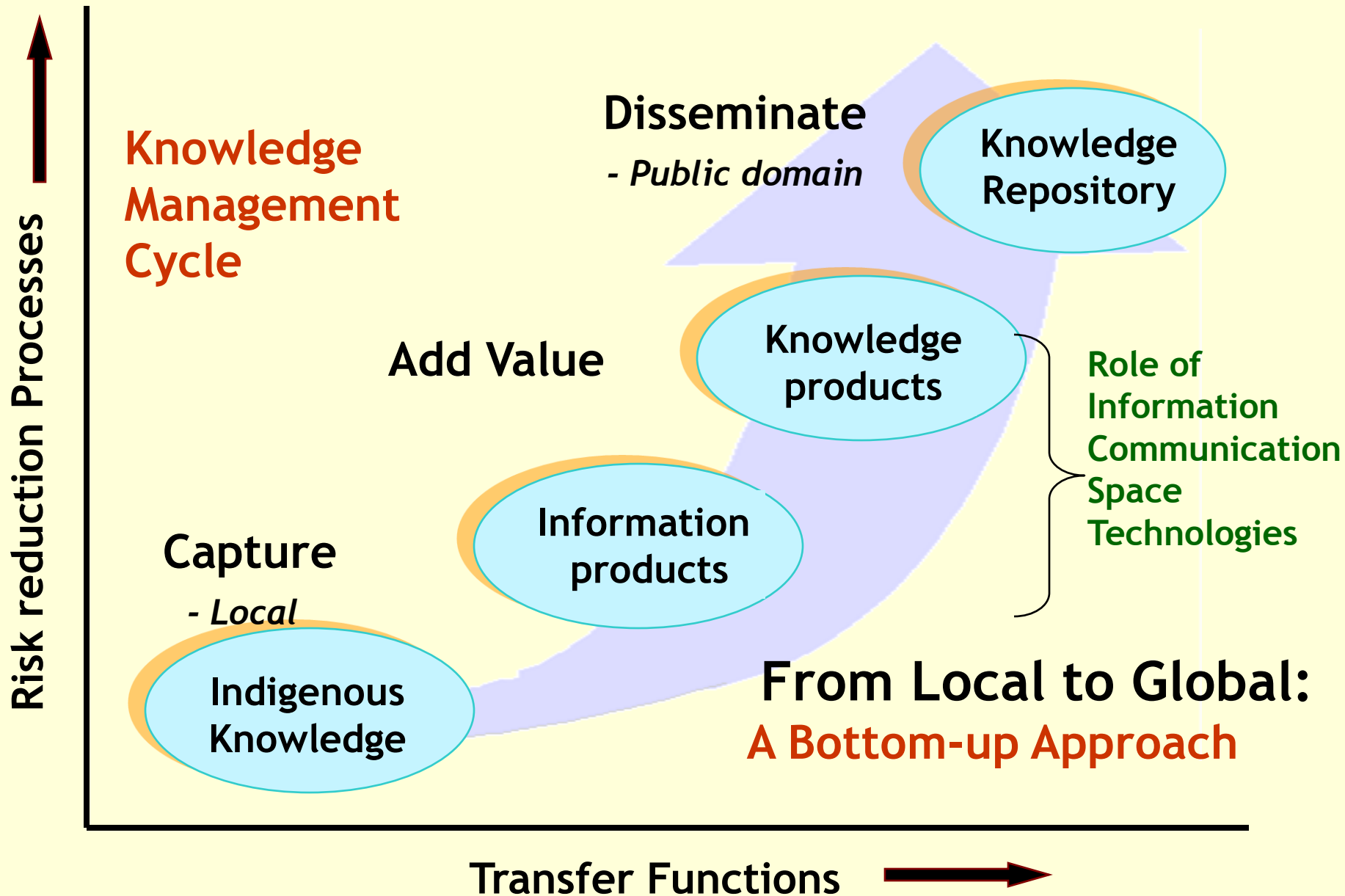
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## Setting the Paradigms..

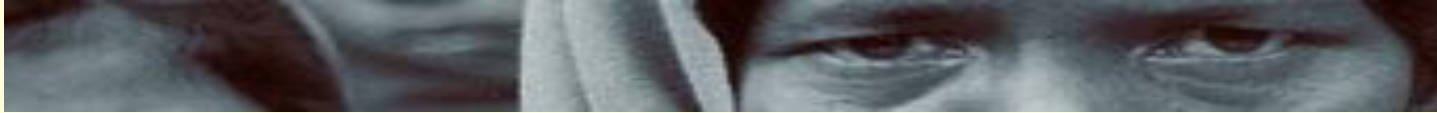
- Effective means of empowerment of people through knowledge management
- A dynamic process of interchange between subjective and objective, tacit and explicit and thus concomitant processes
- Emphasize objectification, codification and externalization

# Tasking IR for DRR - A Process



# Channeling IK thru' RTCs for DRR ..

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Community on living on the margins - not only recipient but also the donors of knowledge - their civilizational heritage of IK..

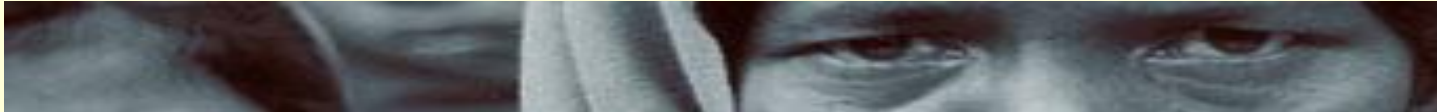
The Heritage of IK not enough and calls for implicit knowledge to address the critical gaps

Transferable IK - Strong Possibilities for developing Community based Disaster Risk Reduction

Urgent need to populate TIK in High Risk South Asian Countries

# SDMC Perspectives

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SAARC Disaster Management Centre (SDMC) has work plan on documenting and capitalizing upon IK in South Asia (to Start with India, Nepal and Sri Lanka)

Role of IK will analyze in order to develop the knowledge management strategies and CBDRR

Documentations of the IK will also analyze to develop the policy advise for the region

**Thanks ...**