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2nd Asian Ministerial Conference on DRR,

New Delhi, 7-8 November 2007

Technical Segment, Group B Theme 1

Mainstreaming Disaster Risk Reduction In Poverty Alleviation

Community-Based Disaster Shelters and their impact on the Poor - SDC's Experiences in the Region

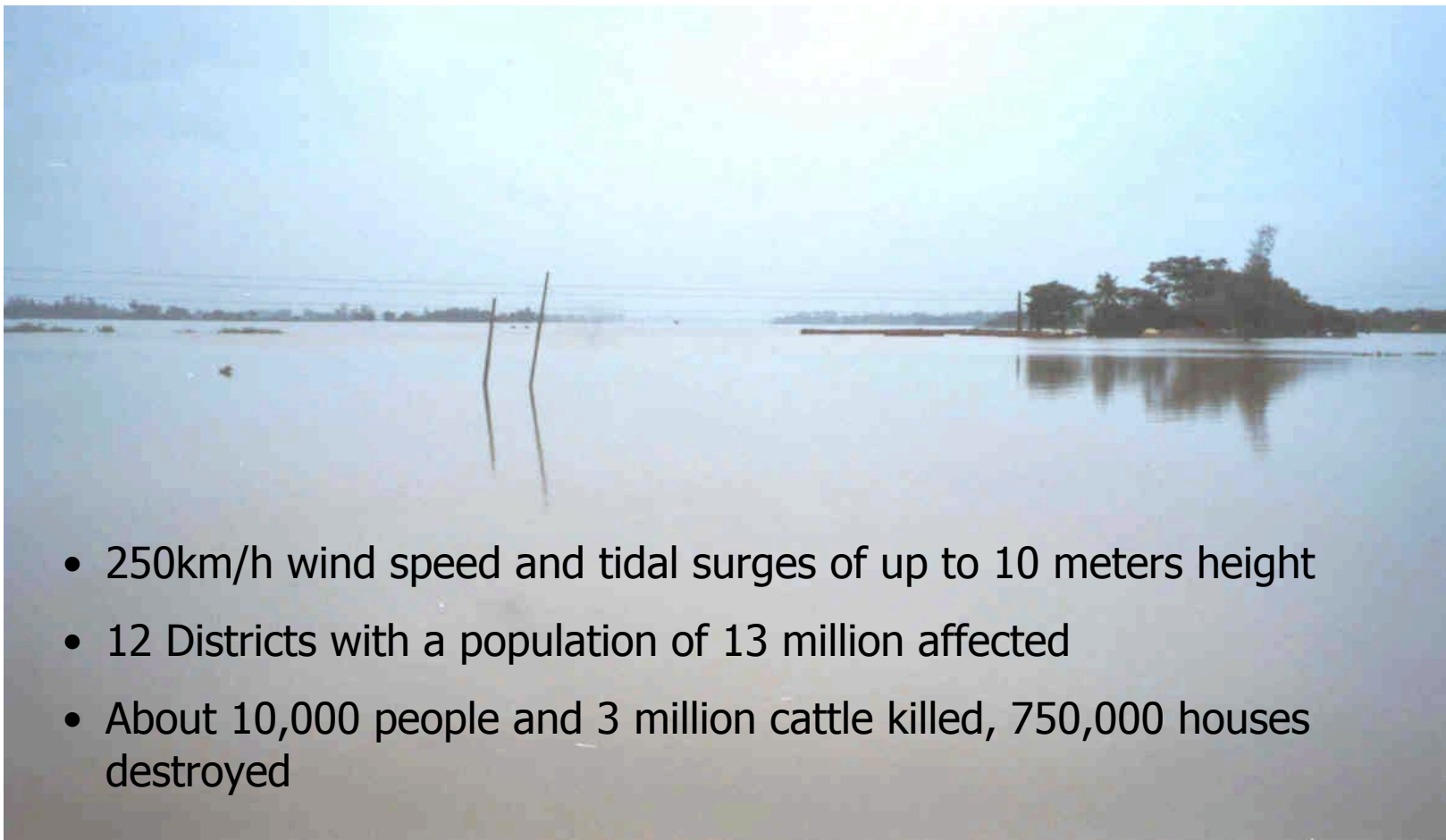
Heiner Gloor and Anindya Sarkar, Swiss Agency for Development and Cooperation



- SDC has got a range of experiences in Asia in the last 20 years in Disaster Preparedness and Mitigation (Building Back Better)
- The Lessons Learned with its “Community Based Disaster Preparedness” (CBDP) programme in Orissa (India) after the Super Cyclone of 1999 , stand as examples for similar projects in other Asian countries (Bangladesh, Pakistan, Iran and Central Asia).
- The impact of the Orissa Project was assessed in 2007.
- The following Presentation will focus on the outcome of this Project



Background: On October 29, 1999 a Super Cyclone hit coastal Orissa



- 250km/h wind speed and tidal surges of up to 10 meters height
- 12 Districts with a population of 13 million affected
- About 10,000 people and 3 million cattle killed, 750,000 houses destroyed



SDC's responses after the Super Cyclone 1999



- **Temporary Shelter + Relief material**
- **Livelihood restoration support**
(e.g. agriculture, Livestock, pisciculture)
- **Construction of 32 School cum Multi-purpose School cum Cyclone Shelters**
integrated in a **CBDP** programme
- **Promotion of AT** - Appropriate Technologies for disaster-resistant houses together with UNDP



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Building a Multi-purpose Disaster Shelter integrated with Community-Based Disaster Preparedness programme was first implemented by SDC in the coastal villages of Orissa.

This became a pioneering concept in India.



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Multi-purpose Disaster Shelter Design Options in Orissa



Stilted shelter design option
for highly flood prone areas



Shelter on a raised platform in
areas prone to low level floods



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Low-Tech Low-Maintenance Innovative Design Features



Rounded skirtings with outlets on floors and roof facilitate proper maintenance

Glass Bottles as emergency day-light system



Emergency Toilet provision on upper floors for stilted design (privacy ensured through screens)

Roof –Top Rain Water Harvesting





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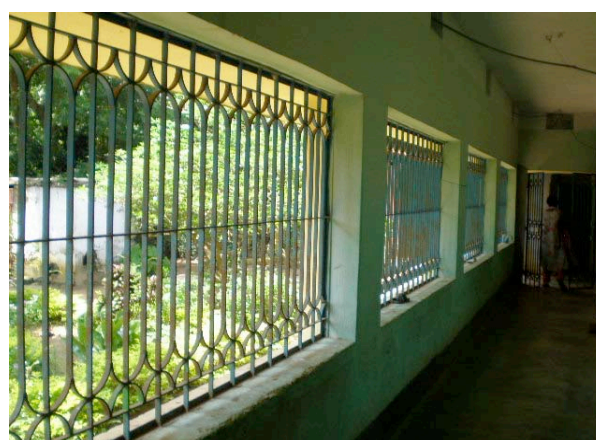
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Expansion and Future Use of the Shelters



Shelter design provided scope for and inspired:

- improvements and space for expansion
- additional uses specific to village needs
- water supply and electrical connections
- developing open spaces and gardens around the building



All the above through community contribution



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Ownership and Scope for Empowerment



A Multipurpose Shelter is a place where people meet and develop new ways for income generating activities





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The Integrated Community Based Disaster Preparedness Programme should include:



- Village Mapping
- Risk Mapping
- Contingency Planning
- Forming of Disaster Management Team's (DMT)
- Training and Equipping of Disaster Management Teams

eventually Construction of a safe Shelter for the Community (Life-line Building)



1st SDC's Lesson learned from Orissa-project

An effective CBDP in poor hazard prone areas will be one of the first steps towards poverty alleviation.

- simply because it helps to save life and limits the amount of injured people during a natural disaster.
- therefore people will be in a better condition for restarting their livelihood after the natural hazard.



2nd SDC's Lesson learned from Orissa



- get the community involved in the CBDP Programme!
- adopt solutions which can be understood by the target-population with their skills and knowledge
- for the implementation of a CBDP, use actors having knowledge at grassroot level



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3rd SDC's Lesson learned from Orissa



- CBDP has to become a part of the daily life of a community
- involve an existing group or body of villagers with the maintenance of the building and the equipments



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4th SDC's Lesson learned from Orissa



- form village DMTs where women and men are equally trained and equipped
- organize regularly the DMT-refresher trainings and the possibilities to share gained experiences
- involve the whole community in mock drills with the DMT



5th SDC's Lesson learned from Orissa



- in regions prone to Floods or Cyclones there is a need to link the CBDP with the construction of a Multipurpose Shelter for safety during the emergency
- find an appropriate use of this shelter accepted by all in the community



6th SDC's Lesson learned from Orissa



In a well established CBDP the Multipurpose Shelter will serve the community as a further step towards Poverty Alleviation since:

- It is a place for meetings for the villagers and village-committee, for DMT-meetings/trainings, for women SHG's, IT-trainings, income-generating activities etc. and serves even for public and private festivities. (e.g. weddings)
- It is a tool for capacity building, even for local masons hands-on during the construction process. These trained masons go on to build safer houses for the rural poor.



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7th SDC's Lesson learned from Orissa

A safe shelter keeps the people in the community and reduces the migration





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SDC's Experiences from Bangladesh 1988





SDCs Lesson learned from Bangladesh 1988



Following the traditional model of Killas in Bangladesh, SDC built a hill with the Safe shelter at the central core between the 2 sweet water ponds.

Core settlement was built around the ponds, which the people expanded and developed on their own.



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SDC's Lesson learned from Bangladesh 1987



The Killas built by SDC in 1988 are still serving the villagers and gave them an opportunity, during the last twenty years, to improve their life on a safer place.



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Thank you for your attention ...