



**Asia-Pacific
Economic Cooperation**

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Typhoon Haiyan - Lessons for Business Continuity Management

Submitted by: Philippines



**Workshop on Improving Global Supply Chain
Resilience: Advancing the Seven APEC
Principles in Your Organization
Christchurch, New Zealand
26-28 March 2014**

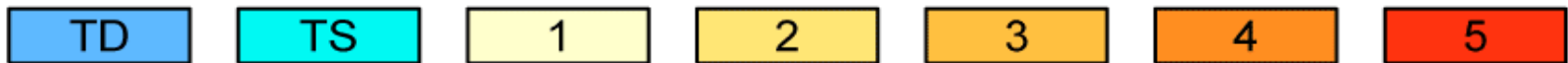
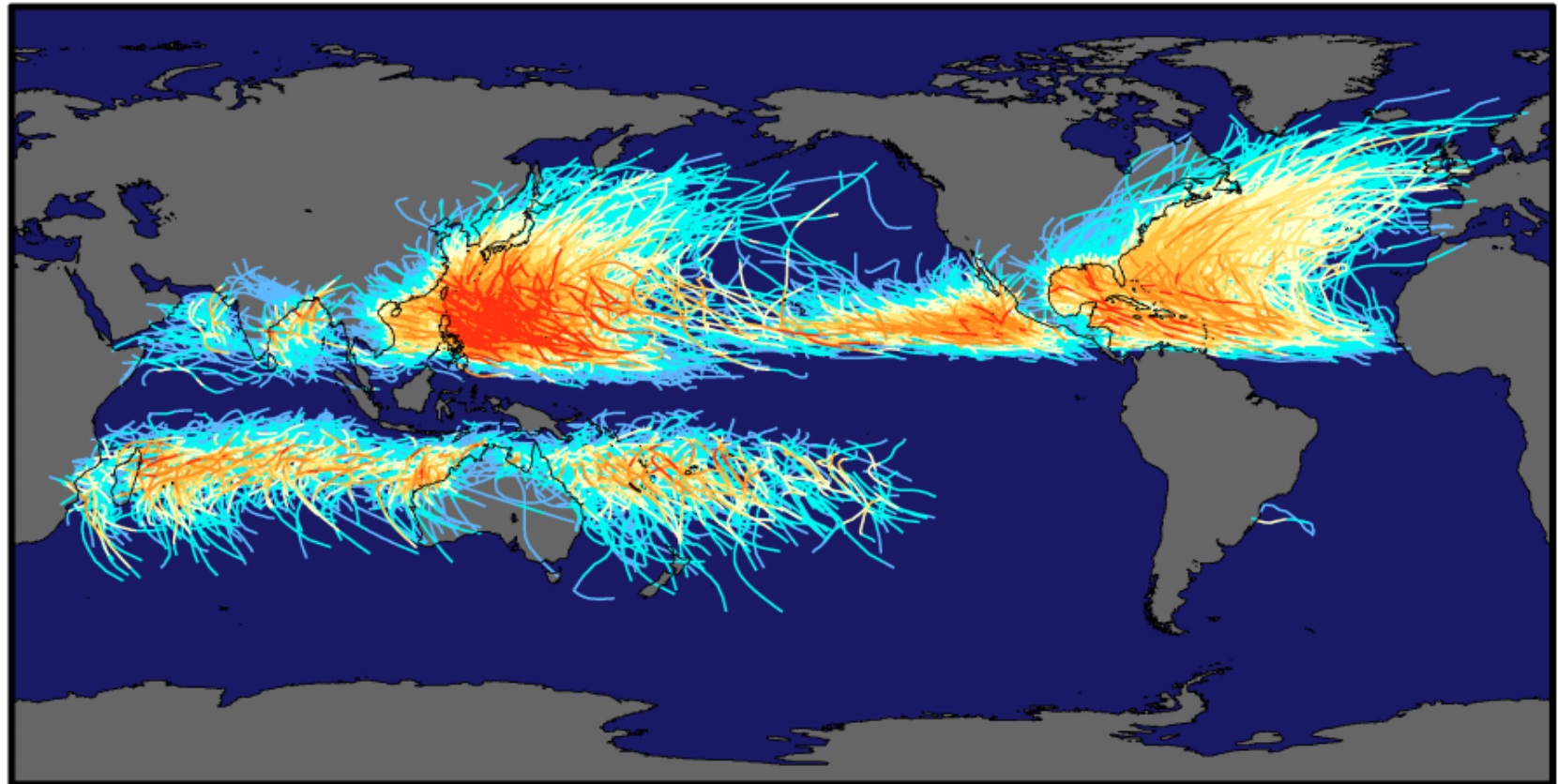
TYPHOON HAIYAN

Lessons for Business Continuity Management

The logo for the Corporate Network for Disaster Response (CNDR). It features the letters 'CNDR' in a bold, sans-serif font. The 'C' and 'N' are dark blue, while the 'D' is a lighter blue and the 'R' is dark blue. The letters are closely spaced.

CORPORATE NETWORK
FOR DISASTER RESPONSE

Tracks and Intensity of All Tropical Storms



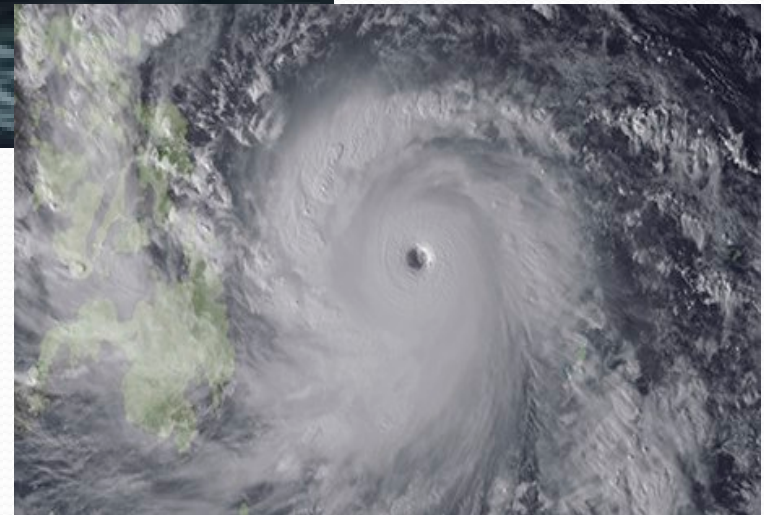
Saffir-Simpson Hurricane Intensity Scale

Typhoon tracks of the last 150 years.

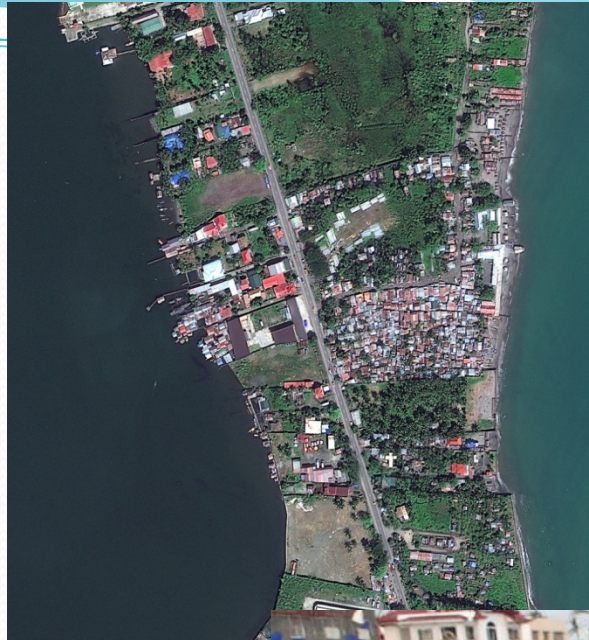
Source: <http://earthobservatory.nasa.gov/IOTD/view.php?id=7079>

W Super Typhoon Haiyan

- Estimated Sustained Winds: 195mph
 - Estimated Wind Gusts: 235mph
 - Estimated Low Pressure: <880mb
- Possibly The Strongest Storm
On Record To Hit Land...**



Tacloban before and after



2013 Yolanda

Loss of lives



No food and water



No Power/Electricity



No communication

Extending a Helping Hand

Together with our partners, namely, the Department of Social Welfare and Development (DSWD), Department of Education (DepEd), World Vision and Land Bank of the Philippines, over 6,300 Petron *Tulong Aral* elementary and high school scholars continued to receive the gift of education. This project provides books, school supplies, uniforms, and daily meal allowances for our scholars. Of the 1,137 scholars that graduated from the program in 2008, around 140 students were given recognition for academic excellence.

We are also actively involved in providing the infrastructure essential for learning. In partnership with USAID, we constructed 34 classrooms in 17 schools, mostly in the Mindanao region. Two USAID-Petron schools were inaugurated in early 2009: one in Paglat, Maguindanao and another in Malapatan, Sarangani, bringing to 44 our total school buildings nationwide. Through this school-building program, we hope to make basic education more accessible and, thus, contribute to peace and development in the region.

We forged a partnership with the Municipality of Limay and the Technical Education and Skills Development Authority (TESDA) to help residents acquire more skills such as welding, pipefitting and instrumentation. Through these training programs, we create more opportunities

for the local community, particularly its youth, to enter the workforce through the projects being implemented in our Bataan refinery. We also helped refurbish the existing TESDA Center at Limay to support the local skills training requirements.

In the same municipality, we expanded our existing reforestation program by 30 hectares, bringing the total land area under our care to 330 hectares. The project has a livelihood component to benefit local farmers. Through this initiative, we also expect to restore and preserve the watershed supplying surrounding *barangays*. The reforestation of the Lamao watershed forms part of Petron's efforts to contribute in the fight against climate change.

We continued to have a lead role in the Bataan Integrated Coastal Management Program (BICMP). Through the Bataan Coastal Care Foundation, which is composed of 17 members of the business community, we implemented the Bataan Coastal Land-and-Sea-Use Zoning plan. The BICMP has become a model for public-private partnerships in environmental management.

In the City of Manila, we helped establish the Petron Health Community Center to provide specialized health services to indigent families. We also conducted nearly 50 soup kitchens in 2009, serving around 36,000 people in Pandacan. In a parallel effort, we worked with Caritas Manila on a six-month feeding program for 200 undernourished children.

Our mariculture program in Guimaras, has been successful in providing a viable alternative livelihood to local fishermen and in improving their socio-economic status. In partnership with the Southeast Asian Fisheries Development Center and Citi Philippines/Citi Foundation, the second phase of the mariculture program was started. This allowed three other *barangays* to replicate this initiative and provide livelihood to 120 fishermen from the four *barangays*. We also continued to support 47 Self-Employment Assistance *Kawadante* or Sea-K associations for seaweed farming. Based on a DSWD report, this has become a source of additional income for the beneficiaries.

Being There When It Counts



Petron helped out in the national relief efforts for the victims of Typhoon Ondoy. Our soup kitchens reached out to over 29,000 of our countrymen in the most severely affected areas. In the aftermath of the storm, our employees and business partners continued volunteer efforts to reach out to displaced families, even as the company also took care of hundreds of its own workforce who were affected by the calamity. Our service stations also served as drop-off points for cash and relief goods donated by a very supportive public. Our Petron Car Care Centers and stations in affected areas provided 24-hour service for the duration of the crisis.

Before Disaster Strikes

Planning Stage

Compliant facility design and construction

Optimal, reliable depot & station network design

Operating and business planning

Contingency, crisis planning and training

Interface, train and do CSR – LGUs, community, NGOs, security forces

As Disaster Unfolds

Emergency, contingency measures

Secure depot, station personnel and facilities

Communicate emergency, contingency plans

Activate emergency response team

Active monitoring of events, update to management

Extend assistance to community



After a Disaster

Relief, Recovery, Resumption

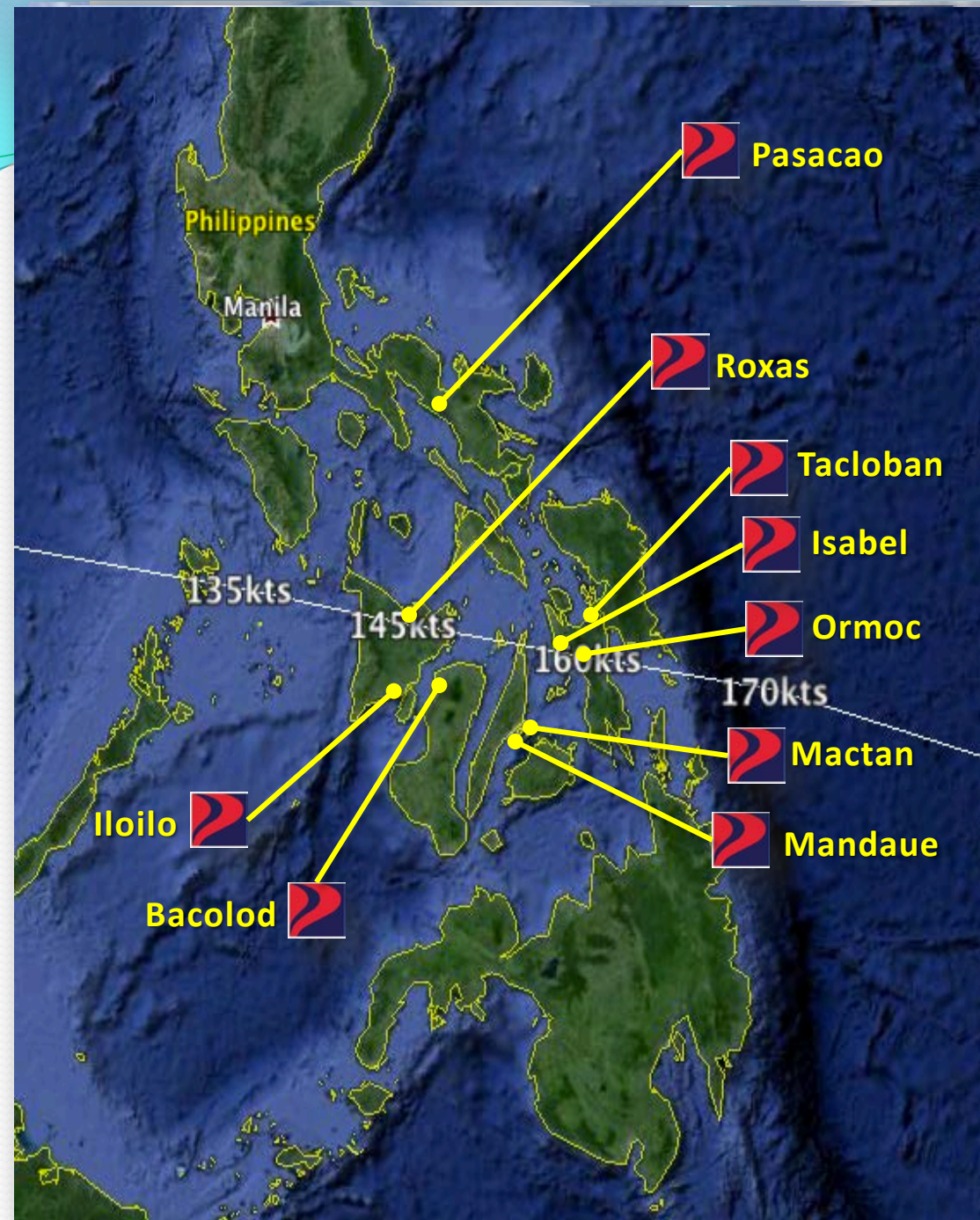
Assess damages, injury;
do temporary repairs

Implement contingency
plan; use backup depots

Resume operations,
ensuring safety, security

Assist responding
agencies, community

Engage community in
recovery, restoration
and rebuilding



Learning Lessons: Preparing for Future Disasters

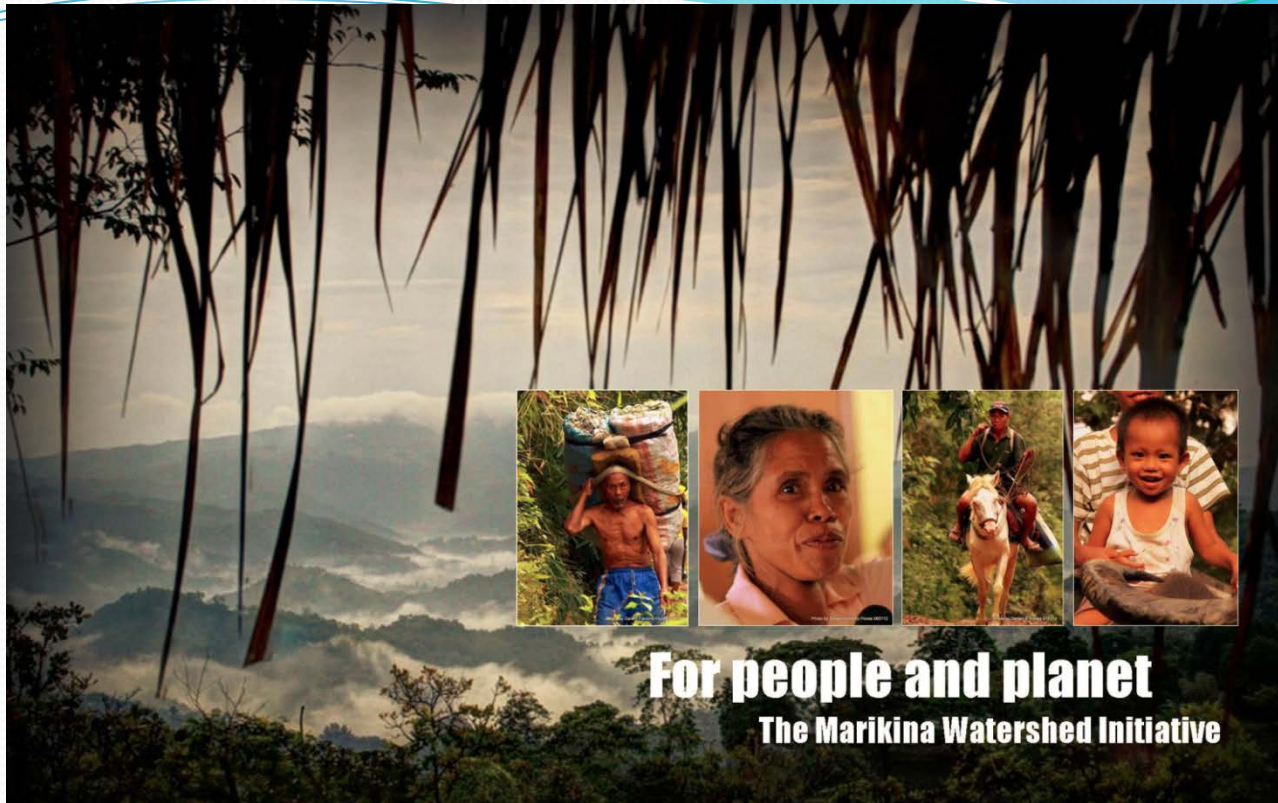
- **Improving communication, power facilities**
 - Provision of satellite phones
 - Explore use of portable power packs
- **Mobile Fuel Supply Solutions**
 - Ongoing design of mobile service stations
 - Evaluation of mobile fuel storage tanks
- **Increasing Alternate Supply Points**
 - Possible construction of additional depots
 - Supply arrangements with industry
 - Realigning tributary areas of depots
- **Added design considerations for facilities**
 - Flood protection of depots
 - Increased elevation of facilities



VIEW A



VIEW B



Bringing the experience of
Marikina watershed to Yolanda

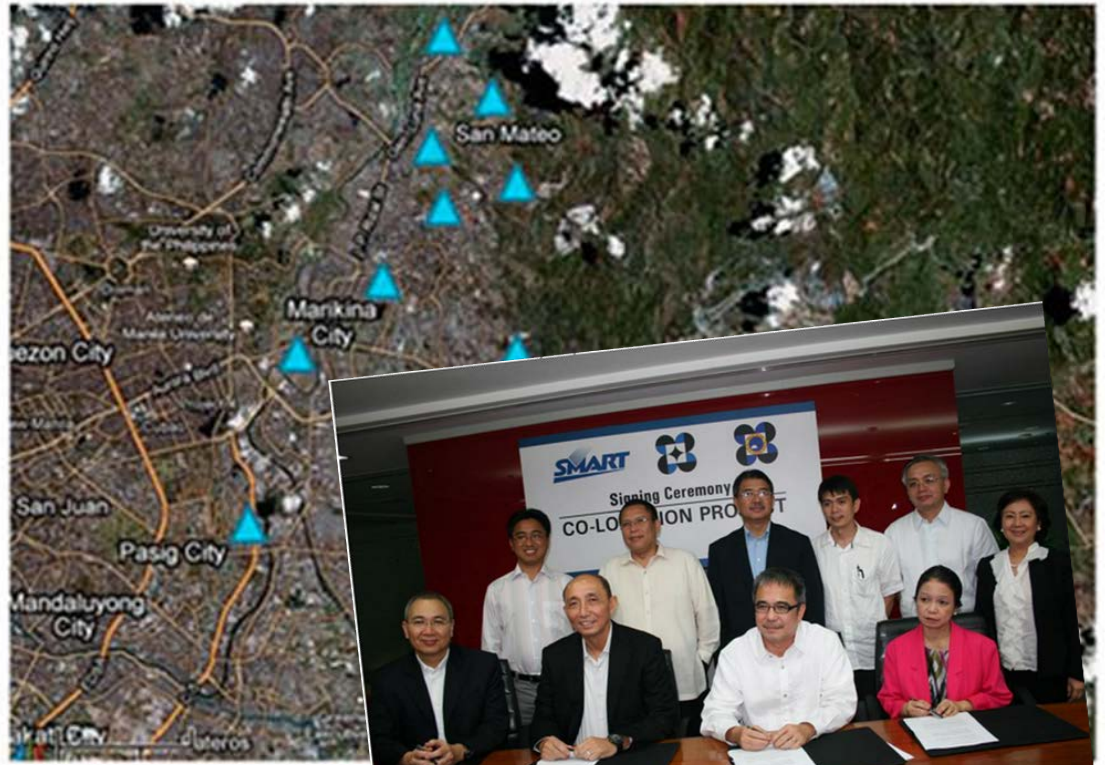


Use of mangroves and beach forests to reduce wave energy





Includes: SMS messaging solution,
apps development support, text
broadcast



Co-location agreement for weather
instruments in cellsites

Support for early warning system



- P200M budget for Marikina watershed in 2013 from central government
- Heightened public awareness of the importance of watersheds
- Engagement in CDO for replication
- Sustainability mindset of (Smart) employees
- Spread of use of technology solutions for DRR and disaster response
- Zero casualties in Malabon City, more cities getting into Noah's Ark Project
- Improved reputation for the company

Results so far

Key Points: Lessons Learned

The People component – critical in any BCM effort

- Continuous education to build competency and expertise, executive management commitment, good BCM awareness, strong program management
- Whole of government, whole of business, and whole of society approaches toward preparedness
- People participation in planning

Technology – learn it, use it, adopt it and adapt to it.

- Use of social media – fast reach even if less accurate
- Use of cloud computing
- Move toward cash-lite society
- Use of barangay level hazards-mapping to prepare for future scenarios (graphic, high resolution, collaborative)

Good Practices

- Petron: institutionalize BM; include in vision/mission, plans, programs
- Coca-Cola: responsibility for accounting for our families
- UN OCHA: effectively coordinated response with private sector and government, media messages, setting standards
- Albay: build BCM into plan; simulate; bridge, not create gaps; give people what they need

**THE FILIPINO
SPIRIT is
STRONGER
THAN ANY TYPHOON**

#StrongerDU