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Hazard Increasing

Source: Munich Re
Exposure Increasing

Population Billions

- Rural
- Urban

1900: 0.2
1950: 0.7
2000: 3.7
2050: 6.4
Vulnerability Increasing

3bn in substandard housing by 2030

Source: World Bank
Impacts Increasing

500,000 lost their homes

5,000,000 died

95,000,000 vulnerable people affected annually

Source: World Bank
Net Risk Increasing

Source: Swiss Re

USD bn
(in 2014)
Aid Gap Increasing

Economic Loss

Humanitarian Aid

Source: RMS, DFID
THE BIG ONE

Hazard Increasing
Exposure Increasing
Vulnerability Increasing
Impacts Increasing
Net Risk Increasing
Aid Gap Increasing
10 deaths in 100 years

250,000 deaths in one afternoon
DEVELOPMENT WITHOUT RISK

NO DEVELOPMENT

RISK
SUSTAINABLE DEVELOPMENT RISK-INFORMED
Vulnerability

15.6m
2019

25.7m
2030

Source: Build Change
Technology  Finance  Construction  Insurance  Resilient Housing
1990 Luzon
7.8 MW | Luzon
$930M saved

‘The Big One’
7.2 MW | E. Manila
$5.7B saved

Subduction
7.8 MW | E. Luzon
$7.3B saved
1990 Luzon
7.8 MW | Luzon
$930M saved

‘The Big One’
7.2 MW | E. Manila
$5.7B saved

Subduction
7.8 MW | E. Luzon
$7.3B saved

Mangkhut
270 km/h | 2018
$410M saved

Bophra
260 km/h | 2012
$960M saved

Haiyan
305 km/h | Manila?
$3.9B saved
2019: $10 Billion DRR Opportunity

- Earthquake: 2.00%, 1.00%, 0.40%, 0.20%, 0.10%
- Typhoon Wind

Billions: $10 B
2030: 860k Casualties avoided

- 180k Lives
- 290k Lives
- 510k Lives
- 640k Lives
- 860k Lives

Economic Savings ($B)

- 2.00%
- 1.00%
- 0.40%
- 0.20%
- 0.10%

Billions

Earthquake
Typhoon Wind
2030: 15m DALYs Saved

- **Earthquake**
  - 2m DALYs
  - 4m DALYs
  - 7m DALYs
  - 10m DALYs
  - 15m DALYs

- **Typhoon Wind**
  - 2m DALYs
  - 4m DALYs
  - 7m DALYs
  - 10m DALYs
  - 15m DALYs

- **Economic Savings ($B)**
  - 0.10%
  - 0.20%
  - 0.40%
  - 1.00%
  - 2.00%
2030: 113.7m Lives Impacted
Rural | 8.6m
$34bn
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<th>Share</th>
<th>Return</th>
<th>Earnings</th>
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<td>$2,300m</td>
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Rural | 8.6m

$34bn
### Rural | 8.6m

**$34bn**

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<td>5%</td>
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</table>

**PHP 763** on average per week

19% of weekly income of target market

4.5 yrs
Rural | 8.6m
$34bn

Urban | 7m
$26bn

ASA
TSPI
ASHI
Novadeci

CBB
City Governments
NHA / SHFC
NHMFC

Finance

PHP 763
19%
4.5 yrs

PHP 623
5%
4.5 - 9.5 yrs
Coverage based on traditional insurance products costs...

$150 p.a.

Unaffordable for homeowner
1: Attritional Cover

- Premium for 5% cover: ~$5 p.a.
- <1% of average loan repayment
- Triggered by moderate events

✓ Very affordable
✓ Provides frequent liquidity
✓ Builds trust in pay-outs
✓ Adjustable cover

2: Catastrophe Cover

- Premium for full re-build: ~$10 p.a.
- Triggered by hazard beyond design

✓ Very affordable
✓ Funds rebuild
✓ Quick pay-out
✓ Ensures resilience
LIQUIDITY FOR SMALLER TYPHOONS

RE-BUILD IF BUILD CHANGE HOME IS DESTROYED

VIA EXISTING MFI LOAN OFFICER

FREQUENT PAY-OUTS ENGENDER TRUST

LIQUIDITY FOR SMALLER TYPHOONS

VERY AFFORDABLE

INSURED

RE-TAINED

HIGH DATA QUALITY

FAMILIAR COVERAGE & STRUCTURE

LARGE PORTFOLIO

DIVERISFIED, MULTIPERIL PORTFOLIO

MULTIPLE DISTRIBUTION CHANNELS

DEMAND

SUPPLY