

Housing Finance, Risk Mitigation And Post-disaster Reconstruction

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Framing the Issue

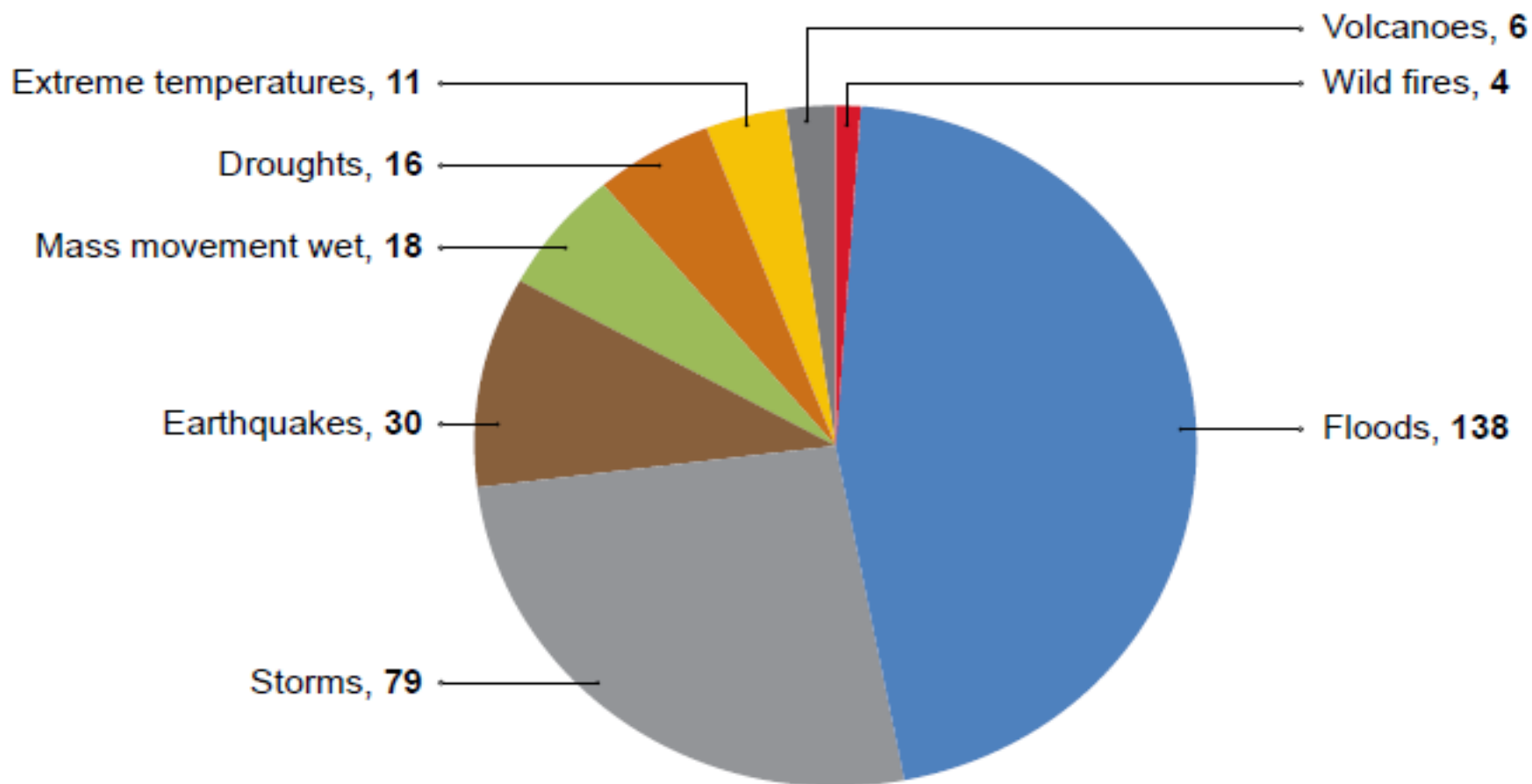
1. The world is increasingly urban >50% -- 60% by 2025

- Collateral damage of natural disasters is much larger in urban areas
 - Damage to **housing stock 60 to 80% of total costs of disasters**
- Reconstruction after disasters more complex-- tenure issues (renters, squatters, property rights); logistics; governance

2. Enter climate change --increased frequency and severity of disasters

- **Floods, hurricanes** affects densely populated urban coastal areas disproportionately – and therefore the **housing stock**
- In both developed and developing nations
- **Droughts** cause resettlement in fragile urban environments

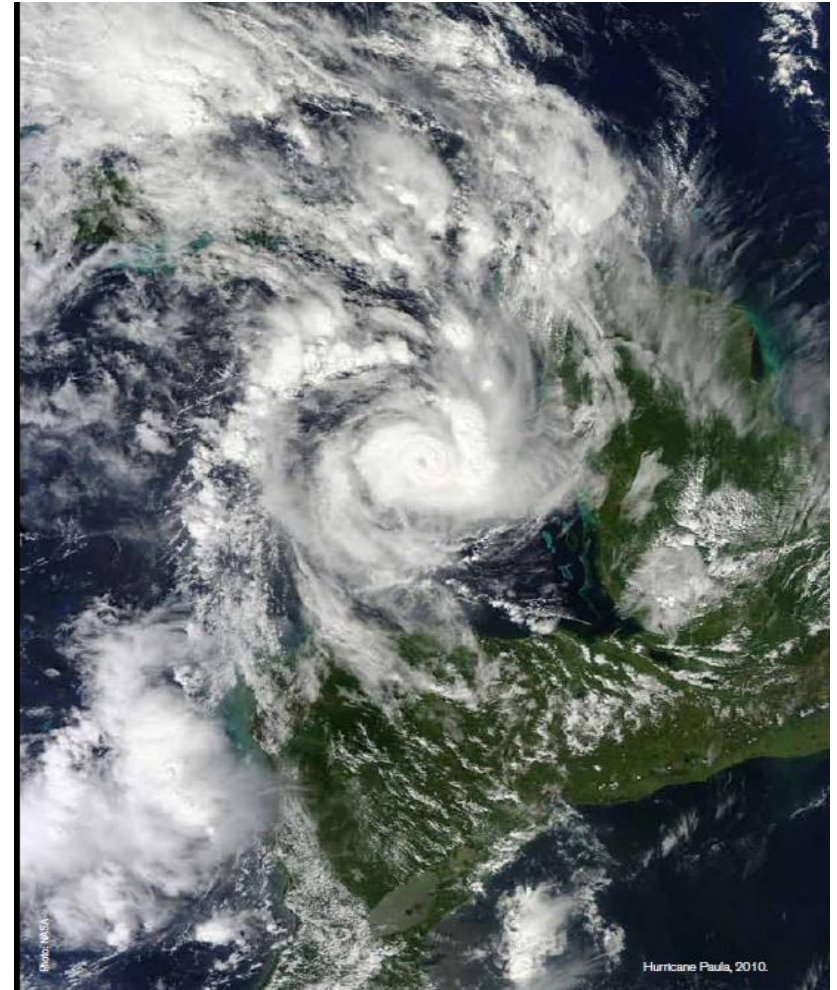
Frequency of Natural Disasters in 2011



Framing the Issue

3. Low/middle income countries most severely impacted

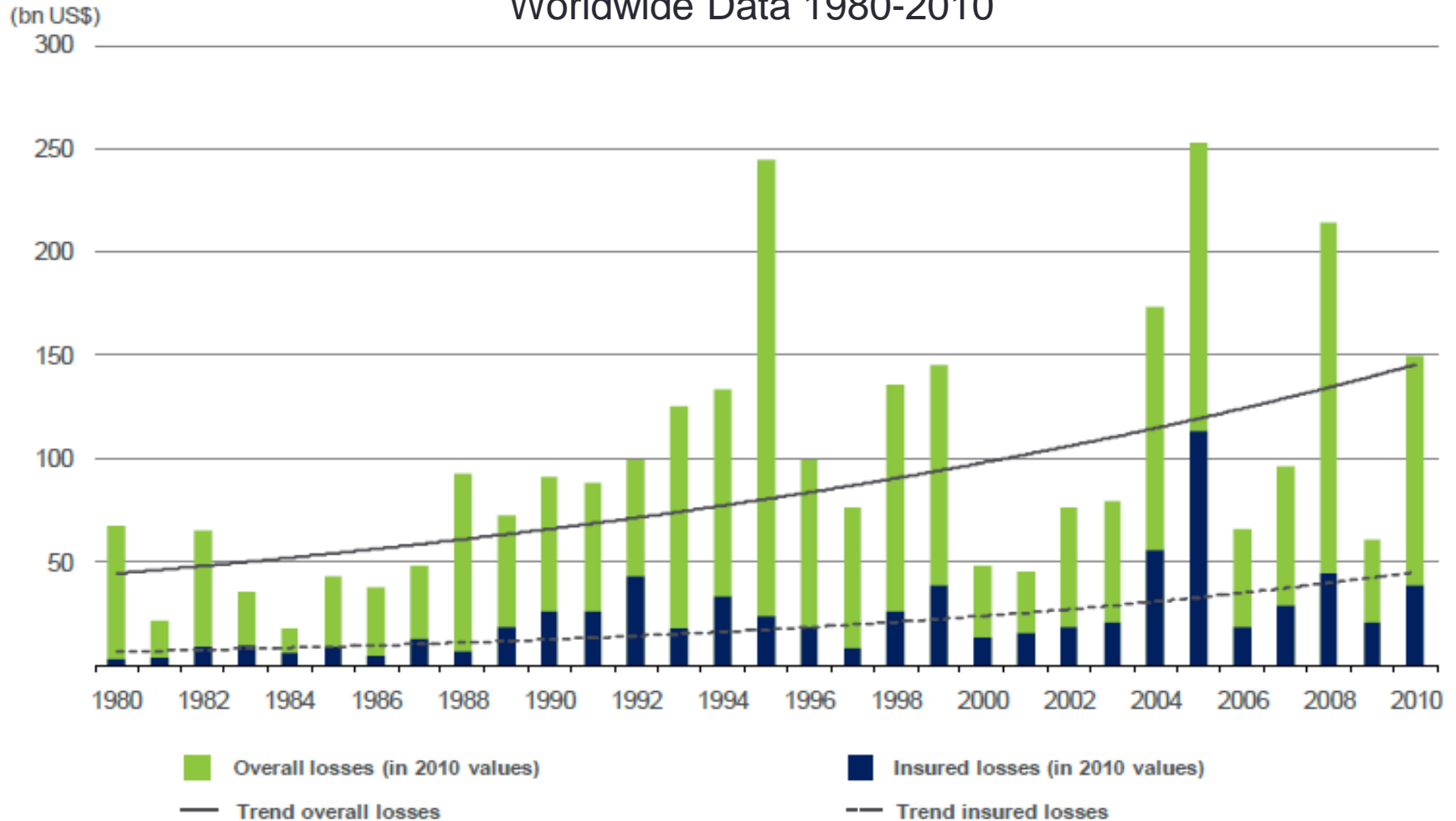
- Lag between increased urbanization and increase in GDP per capita
- ➔ **Inequality** in housing stock
- ➔ **High risk location** of low-income housing -- flood plains, steep slopes
- ➔ Small proportion of **earthquake/ flood, hurricane resistant buildings**
- ➔ Low ex-ante **institutional readiness**
- ➔ Few public & private resources to apply post-disaster



Hurricane Paula, 2010.

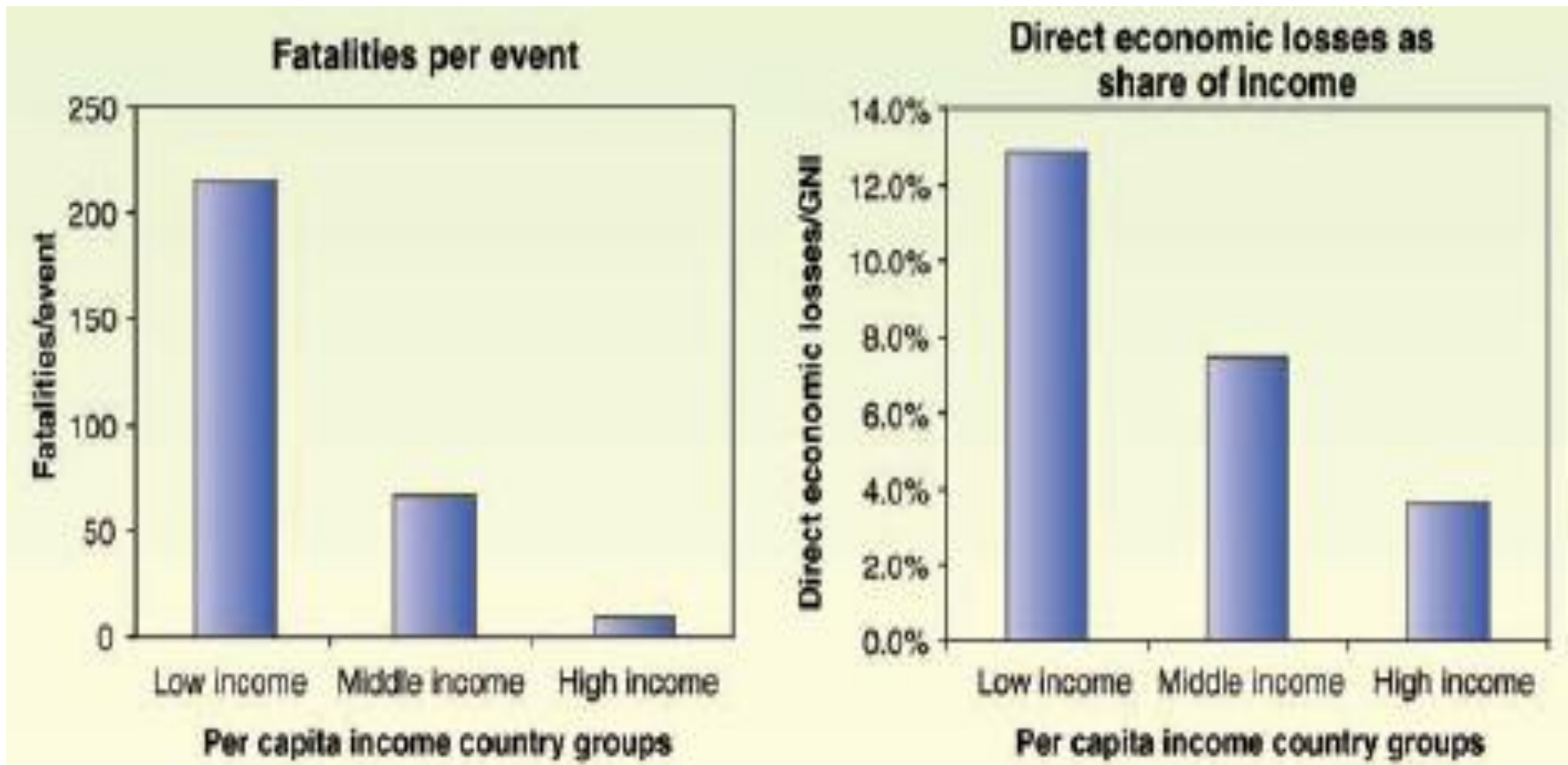
Cost of Natural Catastrophes Increases-- Small Proportion Covered by Insurance

Worldwide Data 1980-2010



Sources: Munich Re Geo Risks Research

Fatalities per Event and Direct Economic Losses as a Share of National Income Show Stress on Low-Income Countries: 1980 - 2004



Source: Linnerooth-Bayer et.a. *Refocusing Disaster Aid*, Science 309, 2005

Humanitarian Natural Disaster Funding Is Small Proportion of Cost of Disaster Damage

	Humanitarian disaster funding/year (\$ billions) ³¹⁹	Estimated damage from natural disasters/year (\$ billions) ³²⁰	Funding/damage %
2004	0.59	136.20	0.43
2005	7.62	214.20	3.56
2006	0.26	34.10	0.76
2007	0.82	74.40	1.10
2008	1.40	190.50	0.73
2009	0.31	41.30	0.75
2010	6.43	123.90	5.19
2011	1.45	366.00	0.40
Average	2.36	147.58	1.62

Source: *The Year that Shook the Rich*. Brookings-LSE. 2012

Disparity Between Pledging and Delivery of AID after Disasters

Crisis	Amount pledged (\$)	Amount delivered (\$)
Cambodian war rehabilitation ¹³⁹	880 m by June 1992	460 m by 1995
Rwandan genocide ¹⁴⁰	707 m in January 1995	<71 m by July 1995
Hurricane Mitch, Central America ¹⁴¹	9 bn in 1998	<4.5 bn, December 2004
Bam earthquake, Iran*	1 bn in January 2004	116 m December 2004
Haiti earthquake ¹⁴² **	508 m in August 2010	134.2 m August 2010

Source: Brookings 2011

Consequence: It takes low- and middle income countries a long time to recover and build back!

Increased Stress on Resources Requires New Ex-Ante and Ex-Post Disaster Approaches

New Approaches to **transfer risks and decrease dependency on donor funds:**

- Risk-transfer **CAT-insurance pool or bond** systems in some middle income high risk countries, e.g. Mexico, Turkey
 - MX focused on government risks and costs and linked to government risk reduction measures
 - Turkey **individual property owners' insurance supported by WB, but not connected to programs to retrofit buildings**
- OECD countries focus on **disaster related property insurance**
- Prop insurance not yet feasible at scale in developing countries/
micro-credit insurance proven somewhat successful

Missing! Financing mechanisms to extend housing reconstruction and risk reduction programs other than donor funds

Access to Housing Finance Increases Resilience to Disasters – Ex-Ante

- Preparedness/Adaptation: having the right policies in place **ex ante—DRR works but costly!**
 - Reducing exposure (land-use planning/resettlement ex-ante)
 - Reducing vulnerability (retrofitting high risk buildings)--
 - Using Benefit/Cost ratios to target improvements with highest pay-offs
 - Providing incentives to implement high B/C ratio improvements (vouchers, serviced land in safe locations)
 - Creating institutions to improve response
 - Enabling insurance for residual risk; limited in poor countries
- Requires **savings and credit systems -mortgage, micro, construction-** to complement DRR subsidies/incentives
- But few governments think probabilistically/ long-term=
myopic, after major disaster has occurred

Access to Housing Finance Increases Resilience to Disasters – Ex-Poste 1

Housing finance responses differ during different stages

- Relief and on site recovery
- Reconstruction, new permanent housing development

1. Short-term relief and recovery:

- temporary housing and host family grants (Indonesia)
- cash grants + self help/management + material supply for repairs
=> requires supervision on standards
=> most appropriate in rural, semi rural areas where such aid can lead to sustainable settlements in the right location
- rental grants (but put pressure on rents in the market)
- **loans are mostly unfeasible** during this early stage
- often multiple approaches by donors in absence of strong govt. guidance

Access to Housing Finance Increases Resilience to Disasters – Ex-Poste 2

2. Reconstruction phase requires DRR rethink

- Focus shifts to long term planning and housing market development – “built back better”
- But donor funding decreases
- Need to **leverage owner contributions** – labor, savings and credit (mortgage or micro) / leverage investment by rental housing owners
- Requires a coordinated “smart” finance linked subsidy approach that loops into long term **adaptation strategies**

Reality: government/donors continue to develop a multitude of subsidy systems, including free “transitional” & permanent houses

- Little systematic leverage of own contributions/credit that lead to a continuing investment in housing
- Reach an unnecessary **small percentage of deserving households**
- Disaster not used as a DRR opportunity!

Why Resistance to Use Housing Finance in Post-Disaster Situations

- Belief that majority of affected households cannot handle credit
- Belief that lenders will not make loans to affected population
- Lack of credit infrastructure/institutions
- A multitude of legal and institutional issues (titles)
- Lack of time; donors need to show results/leave

All legitimate issues; But what are the facts and **what can be done?**

Collect real facts early by specialized financial professionals:

- **Data on potential beneficiary groups according to:**
 - location and house condition
 - ability to pay and potential to access credit, contribute labor
 - appropriateness and preference to rent
- **Understand lender constraints and discuss incentives needed to increase lending**
- **Find rental investors – private, employer—discuss needed incentives**
- **Explore whether community organizations can intermediate credit programs**

Income/Finance Affordability in Haiti

Household Income quintiles extrapolated from 2001 (CPI),
assuming same income distribution/total pop

*Income Quintiles	Q1	Q2	Q3	Q4	Q5
**Mean monthly household income per quintile \$USD 2010	\$73.38	\$236.87	\$461.28	\$868.26	\$3,589.48
Borrowing capacity	10%	10%	15%	20%	20%
Monthly pmt.capacity	7	24	69	174	718
Commission/guarantee fees	5%	5%	5%	5%	5%
Loan repayment capacity	7	23	66	165	682
Loan term	3	5	7	10	20
Nominal interest rate	36%	36%	18%	12.0%	9.5%
Affordable loan	152	623	3,127	11,498	73,166
Down-payment/sweat equity (Upfront subsidy)	10%	10%	15%	20%	20%
Afford with loan alone	152	623	3,127	11,498	73,166
Afford with down-pmt	169	692	3,679	14,373	91,457
Afford with down pmt & subsidy					
*Income quintile distribution data obtained from Ministere de la Planification et de la Cooperation Externe, Inegalites et Pauvrete en Haiti (March 2006), p.i5; based on 2001 data					
**CPI Index figures were used to extrapolate 2001 income distribution data to 2010, by quintile					
The change in CPI from 2001-2010 (69%) was applied to the mean monthly household income in 2001 to determine 2010 figures.					

Experience?

Households can and will take on credit if available (El Salvador, Indonesia, see also UNOCHA 1982 rather than more recent study)

- Appropriate savings and credit products and procedures

Micro/Mortgage Lenders will come in with right incentives:

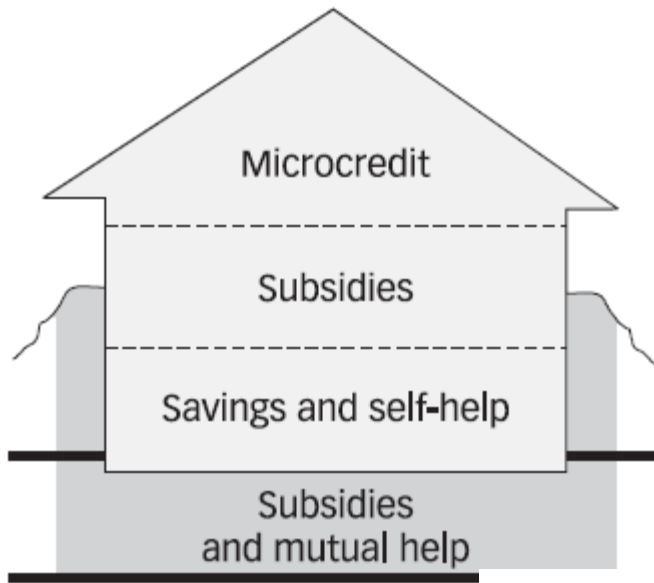
- Guarantees and default insurance; insurance on property
- Access to funds for micro-lenders (but lending at market rate)
- Appropriate credit-linked subsidy systems; e.g., upfront subsidies rather than interest rate subsidies
- Use inter-lender Management Unit to facilitate **fast track titling, credit checking of informal hh**, and help create pipeline of projects
- But government/donor finance entities often crowd out private sector (Indonesia?)

Experience?

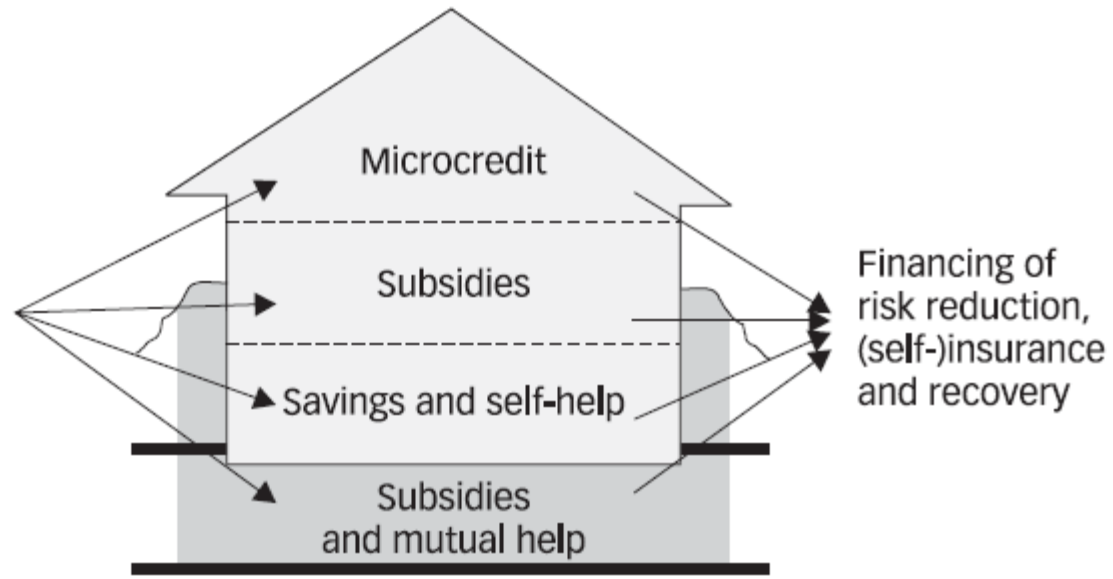
- **Communities** can be mobilized:
 - Use of **flexible community funds** and community allocation systems
 - Will leverage **community labor** and other contributions and **local government** contributions
 - Require authentic community leadership

When done correctly improved access to finance forms a **virtuous loop with long-term impact on Disaster Risk Reduction and improvement of the housing market**

Home-owner Support and Self Mobilization Including Finance



Integration of risk and loss financing



Incremental housing

Rental Housing the Missing Component in Post Disaster Housing Strategies

- How to locate **multi-unit rental landlords**?
- What are constraints for them to (re)build?
 - Costly removal of rubble?
 - No access to finance for rental housing?
 - Strict tenant regulations/ rent control?
 - New building guidelines/permits/density?
 - Expense of property insurance?
- Can **employers** construct rental housing?
- Can **room-rental** be made part of new housing programs?

What incentives do different types of rental investors need to “build back better”?

See next presentation

Conclusion

- **Ex-ante development of financial and insurance systems** that give households resources to improve their house, are also critical for quickly providing access to funds after a disaster hits
- Improvement of Donor /Government coordination on post-disaster housing subsidies and housing finance in the reconstruction phase is paramount going forward --
- Given the size of housing sector damage in natural disaster events, should there be an Inter-Agency Standing Committee **“cluster”** on Housing Finance and Housing Support in situations of Natural Disaster to facilitate coordination?
- Money needs to be set aside for Monitoring and Evaluation of Housing Finance Programs/ Lack of detailed case studies