গণপ্রজাতন্ত্রী বাংলাদেশ
REPUBLIC OF BANGLADESH
EXPOSURE MODEL

NATIONAL BUILDING INVENTORY

Population	Residential buildings	Commercial buildings	Industrial buildings	Educational buildings	Healthcare facilities	Exposed value
170 Million	30.1 Million	470,800	101,100	260,000	34,300	$420 Billion USD

Exposure model
Number of buildings
- < 5k units
- 5k – 10k units
- 10k – 20k units
- 20k – 40k units
- 40k – 60k units
- 60k – 80k units
- 80k – 100k units
- 100k – 125k units
- 125k – 150k units
- > 150k units

Exposure model
Buildings: Reinforced concrete
- < 5%
- 5 % – 7.5 %
- 7.5 % – 10 %
- 10 % – 15 %
- 15 % – 20 %
- 20 % – 25 %
- 25 % – 30 %
- 30 % – 40 %
- 40 % – 50 %
- > 50 %

Exposure model
Buildings: Other materials (MATO)
- < 5%
- 5 % – 7.5 %
- 7.5 % – 10 %
- 10 % – 15 %
- 15 % – 20 %
- 20 % – 25 %
- 25 % – 30 %
- 30 % – 40 %
- 40 % – 50 %
- > 50 %

Exposure model
Buildings: Unreinforced masonry
- < 5%
- 5 % – 7.5 %
- 7.5 % – 10 %
- 10 % – 15 %
- 15 % – 20 %
- 20 % – 25 %
- 25 % – 30 %
- 30 % – 40 %
- 40 % – 50 %
- > 50 %

EXPOSURE MODEL FOR THE 15 MOST POPULATED ZILAS

Zila	Population (Thousand)		Building units (Thousands)		Economic value (Million USD)	
Dhaka	14,274	8.4%	1,225	4.0%	68,723	16.4%
Chattogram	9,332	5.5%	1,258	4.1%	30,723	7.3%
Cumilla	6,432	3.8%	1,115	3.6%	12,994	3.1%
Mymensingh	6,105	3.6%	1,261	4.1%	12,236	2.9%
Gazipur	5,289	3.1%	703	2.3%	16,184	3.9%
Tangail	4,192	2.5%	901	2.9%	5,626	1.3%
Narayanganj	3,965	2.3%	562	1.8%	13,680	3.3%
Sylhet	3,953	2.3%	564	1.8%	9,089	2.2%
Bogura	3,884	2.3%	820	2.7%	10,806	2.6%
Noakhali	3,751	2.2%	698	2.3%	5,114	1.2%
Sirajganj	3,494	2.1%	771	2.5%	5,405	1.3%
Dinajpur	3,450	2.0%	653	2.1%	10,377	2.5%
Brahmanbaria	3,431	2.0%	582	1.9%	5,908	1.4%
Kishoreganj	3,386	2.0%	629	2.0%	4,561	1.1%
Rangpur	3,294	1.9%	731	2.4%	8,772	2.1%

BUILDING AND POPULATION CHARACTERISTICS

Buildings:
- WOOD 4.9%
- MASONRY 20.8%
- OTHERS 52.8%
- EARTH 8.7%
- REINFORCED CONCRETE 12.8%

Economic value:
- WOOD 3.1%
- MASONRY 22.2%
- OTHERS 10.8%
- EARTH 4.0%
- REINFORCED CONCRETE 59.9%

Urban, 31.7%
Rural, 68.3%
Total buildings 30.7 million

- 85 million women
- 86 million men
- 54 million children
- 10 million elderly

UNDRR — UN Office for Disaster Risk Reduction
UNITED NATIONS BANGLADESH
GEM — GLOBAL EARTHQUAKE MODEL working together to assess risk

More information about the development of the exposure model can be found in the document 'Seismic Risk Assessment for the Republic of Bangladesh at Upazila level' (https://www.globalquakemodel.org/proj/Bangladesh).