



# Housing Disaster Recovery and Reconstruction

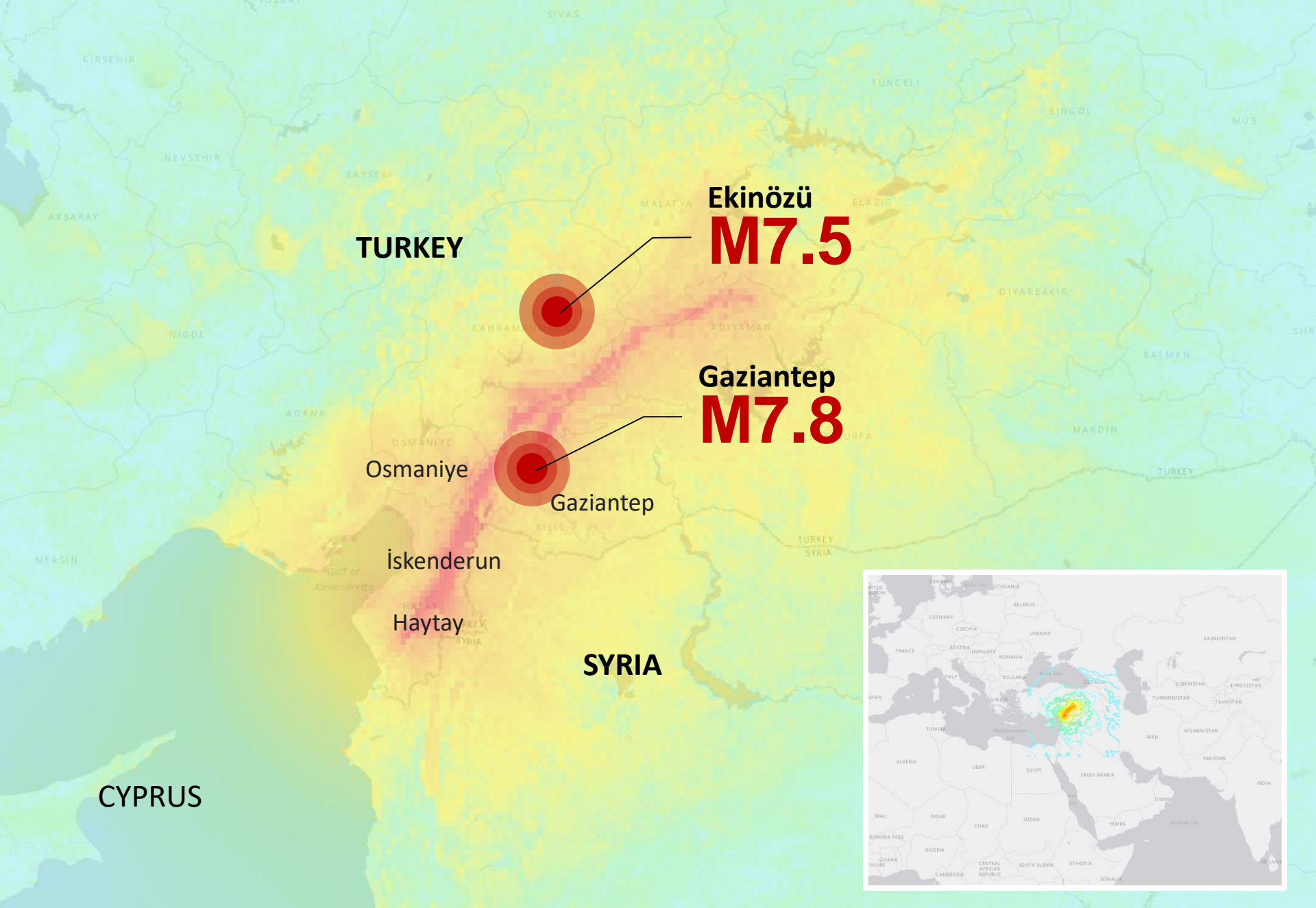
Dr. Kit Miyamoto  
Global CEO  
Humanitarian Coordinator

**miyamoto.**

Save lives, **impact** economies.

# Housing Reconstruction Principles

- Rapid Damage Assessment
- Identify repairable structures
- Community engagement
- Community approach
- Government engagement
- Private sector investment (PPP)
- Leave much money at local level by buying and hiring local; Create Jobs
- Respect culture and heritage
- Quality control of construction, capacity building
- Speed matters



**TURKEY**

**Ekinözü  
M7.5**

**Gaziantep  
M7.8**

Osmaniye

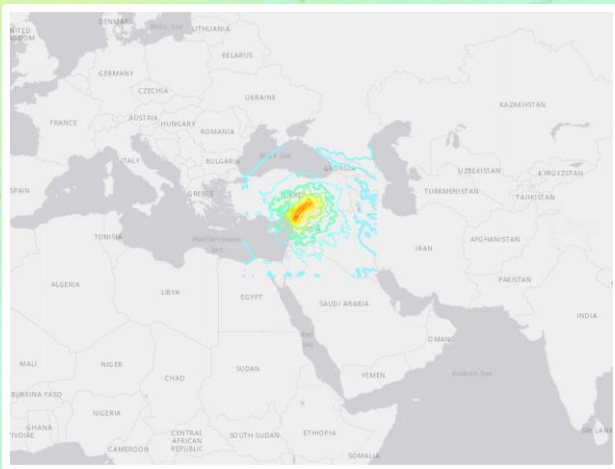
Gaziantep

İskenderun

Hayta

**SYRIA**

**CYPRUS**

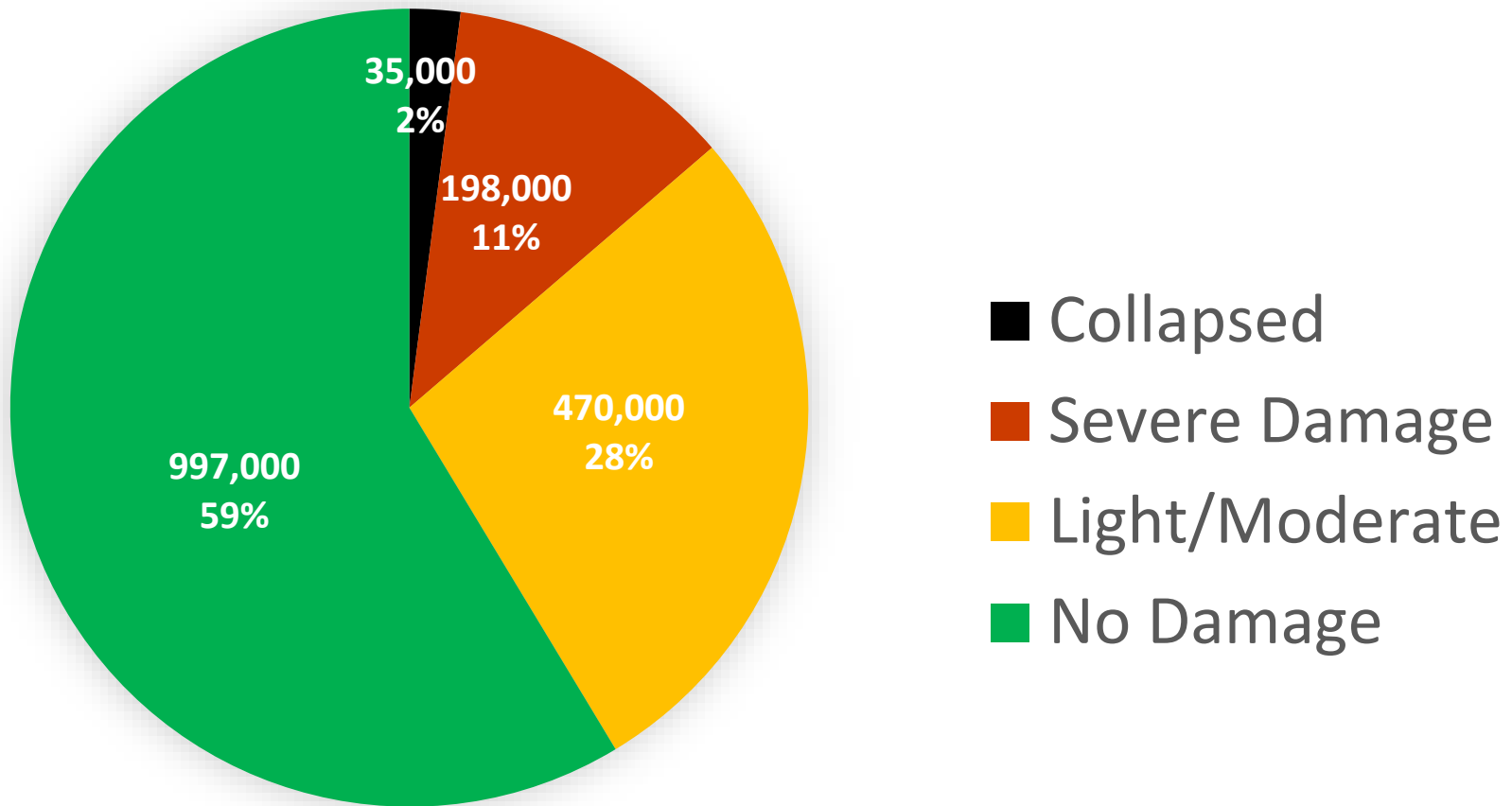




# Impact

- Affected 14M people
- 51,000 fatalities, 107,000 injuries
- 4.1M displaced people
- \$104 billion direct damage (9% of GDP)

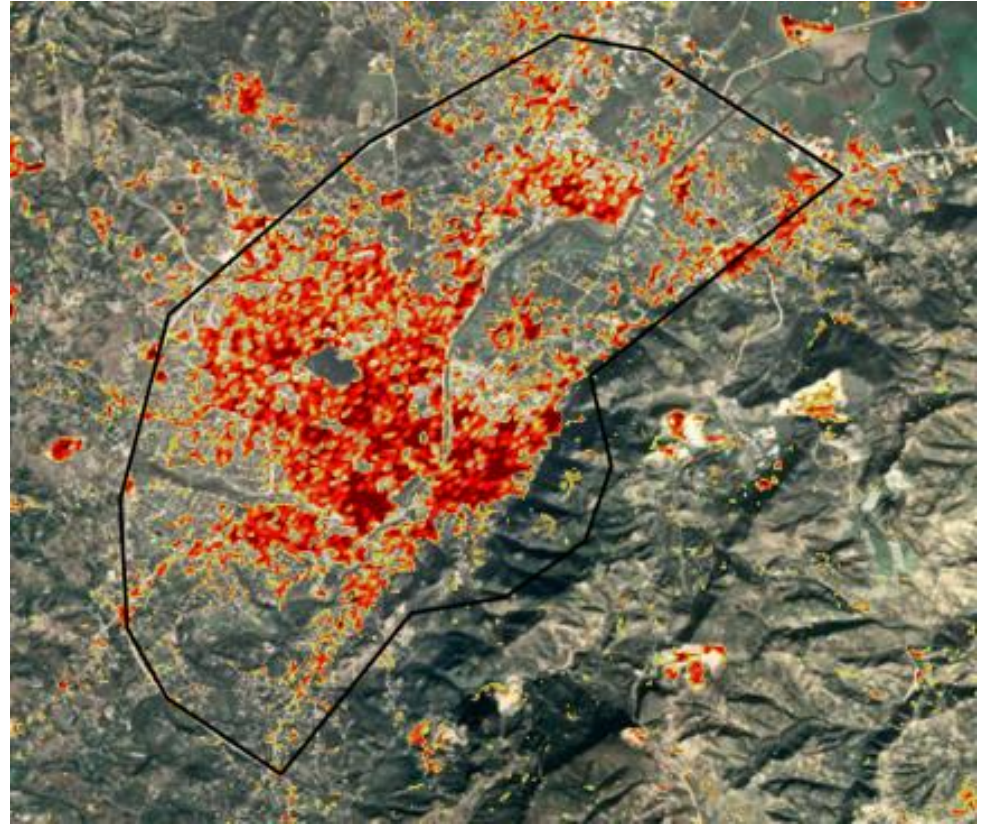
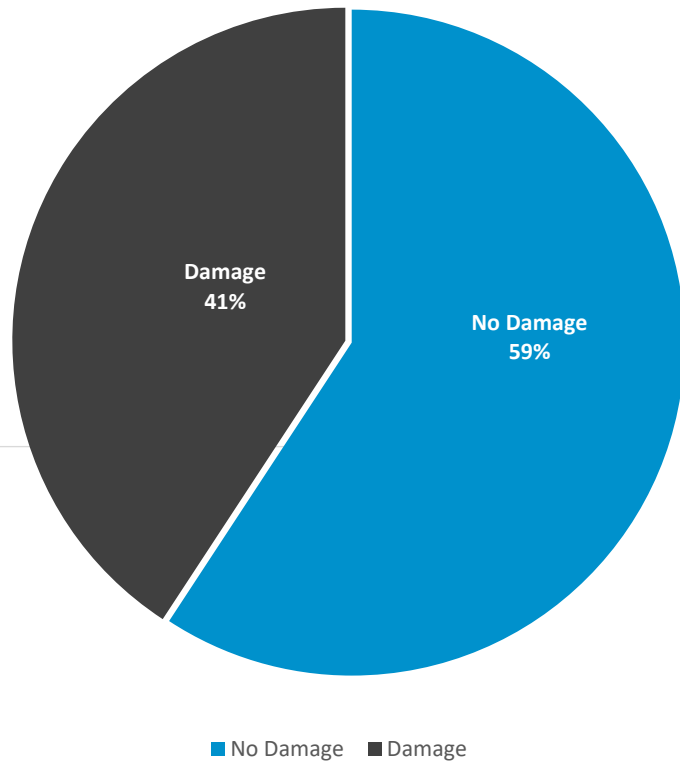
# Total affected buildings: 1,700,000



# Why?

- Turkish Building Code changed in 1998
- No license system for contractors
- No inspection required by engineers

# Hatay









# Rapid and Sustainable Shelter Solutions for Affected Communities

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**USAID**  
FROM THE AMERICAN PEOPLE



**Habitat for Humanity**

# Activities

- Reoccupation of repairable houses and apartments to decompress IDP
- Engagement with communities
- Engagement with government, private sector, and UN shelter sector

# Light/Moderate Damaged Buildings

- Rapid Reparability and BOQ Assessment by app; Survey123/ARCGIS
- Rapid Structural Vulnerability Assessment
- Green tag of undamaged buildings
- Affect 165,000 people

# KONTROL EDİLMİŞTİR

## İKAMETE UYGUNDUR

Bu bina aşağıda belirtildiği üzere incelenmiş ve görünürde yapısal bir hasar tespit edilmemiştir.

Tarih

Saat

İnceleyen kimliği / Kurumu

Binanın Adı ve Adresi

İnceleyen yorumları

Bu yapı mevcut koşullar altında görsel olarak

- Dışarıdan İncelenmiştir  
 İçeriden ve Dışarıdan İncelenmiştir

\* Tehlikeli durumları ilgili makama bildirin; tekrar kontrol gerekebilir !

adına kontrol edilmiştir.

\* Dikkat : İncelemeden sonraki artçı-depremler, hasar ve tehlikeyi artırabilir !

**miyamoto.PROTEK**

BÜYÜKŞEHİR  
GAZİANTEP  
GAZİANTEP BÜYÜKŞEHİR BELEDİYESİ

**Bu Belgeyi İlgili Makamdan İzin Almadan Kaldırmayınız, Değiştirmeyiniz, veya Üzerini Kapatmayınız !**

**miyamoto.**

An aerial photograph of a city at sunset. The sun is low in the sky, casting a warm glow over the buildings. A prominent church with a golden dome is visible on the left. The city is densely packed with multi-story buildings, some with red facades and others with grey. The sky is filled with soft, wispy clouds. The overall mood is peaceful and hopeful.

# Ukraine Reconstruction

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# More than 150,000 housing units have been damaged (June 2022)

- Housing \$69 billion
- Education \$9.2 billion
- Health \$15.1 billion

















# Asbestos









# Current Programs

- 100 schools repair
- 12,000 housing unit repair
- Asbestos-Debris guideline development
- UNOPS, IOM, ECHO, Japan, Center for Disaster Philanthropy



Total Building:2897

# Housing Repair in Ukraine Building Location



Date : 2023-05-11

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# Microdistrict Druzhby narodiv

- Apartment Buildings
- Schools
- Commercial Buildings

Kharkiv; Community based approach



Druzhby narodiv, 225  
Heavy damages  
Number of units – 126

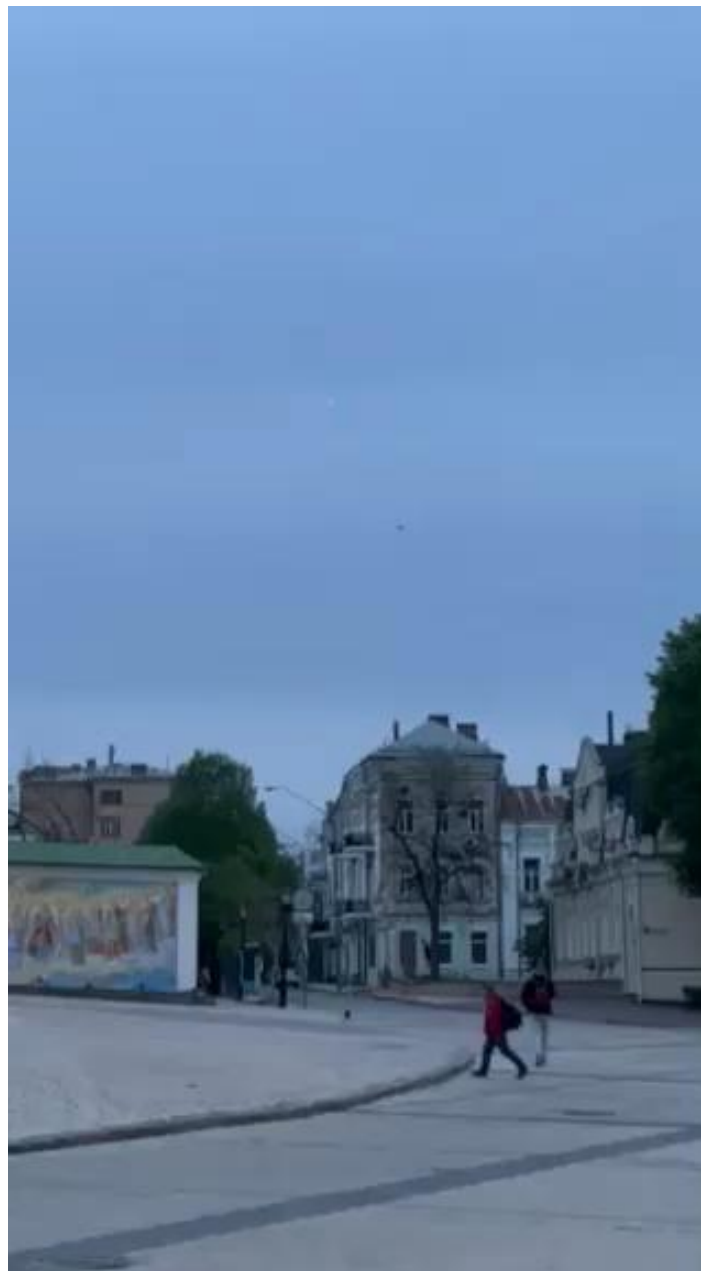


Druzhby narodiv, 227  
Light damages  
Number of units – 126



Kindergarten  
Light and Medium Damages

Kyiv, last week











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**ukraine**

ВІДНОВЛЕННЯ. ПЕРЕМОГА. ВІДБУДОВА.

**make the world a better, safer place**