

***Cluster 3: Knowledge Management and Education:
Building a Culture of Resilient Communities***

EDUCATION FOR SUSTAINABLE DEVELOPMENT:

Towards Effective Disaster Reduction and
Enhancing Human Security

**Educational Aspects of Disaster Management:
Post-Earthquake experience
Iran Public Education and Awareness Program
and its Achievements**

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National Strategy for Earthquake Risk Reduction Program

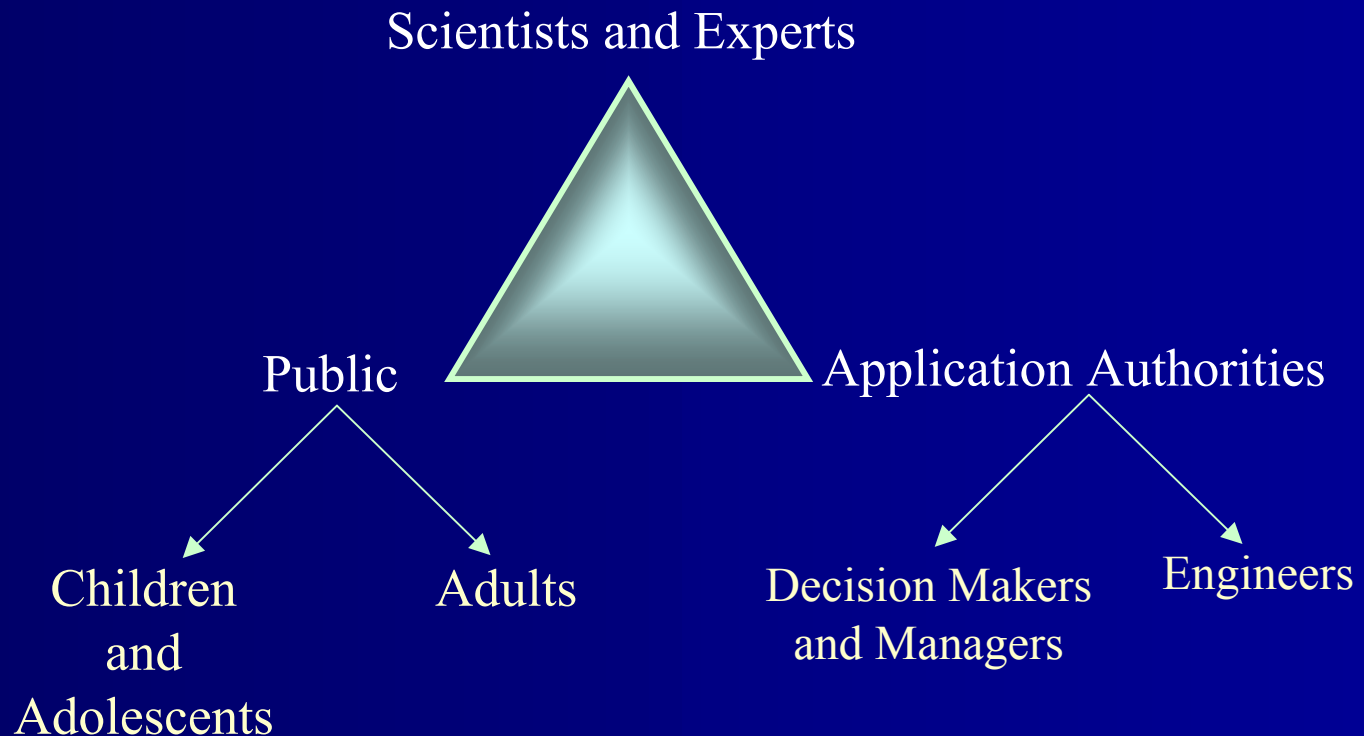
Revised after the Bam EQ

- ✓ Increasing the scientific and technical knowledge required for earthquake risk mitigation.
- ✓ Reducing the risk of all type of structures and making sure that all structures are build safer by full implementation of building codes with “Zero Tolerance” for any type of violation.
- ✓ Improving the quality of city planning and management.
- ✓ Increasing public awareness and promoting a collective prevention and safety culture.
- ✓ Improving the disaster response, management and implementing an effective plans for post earthquake Recovery and reconstruction.

Public Education and Awareness

Public Education and Awareness

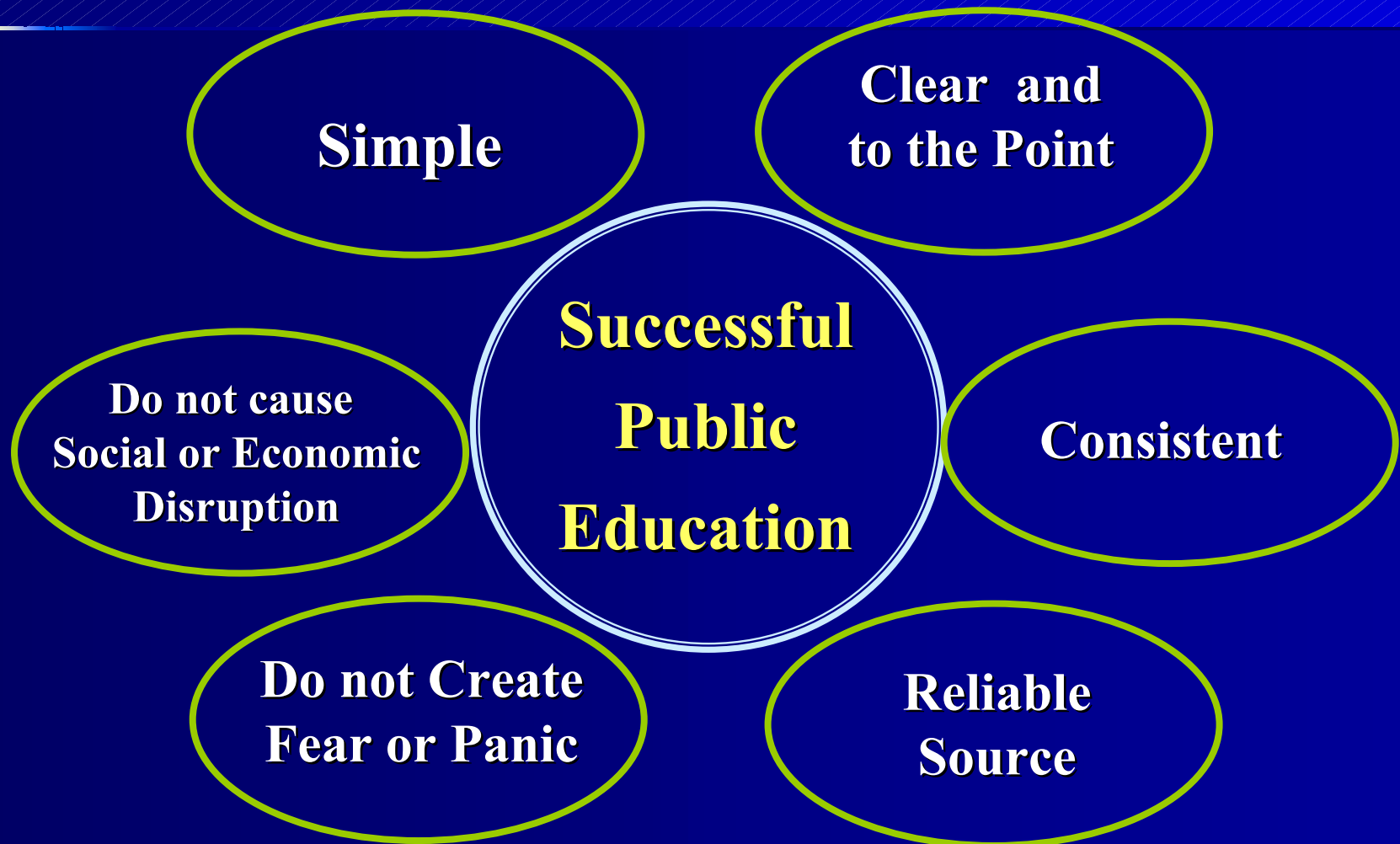
- **Raise Awareness and Preparedness**
- **Raise Public's General Knowledge**
- **Communicate the RISK**



Public Education and Awareness

**To Convert the Earthquake
Phenomenon, Preparedness and Safety
Into
Common and Understandable
Form Using All Media**

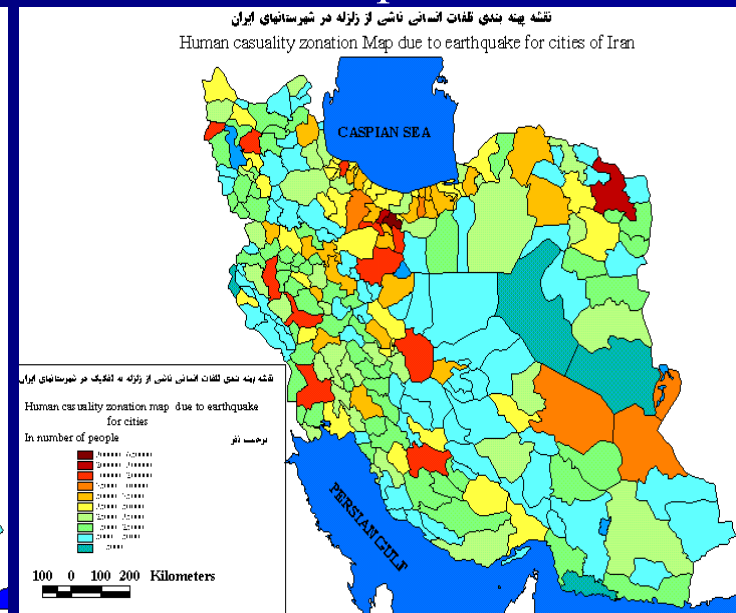
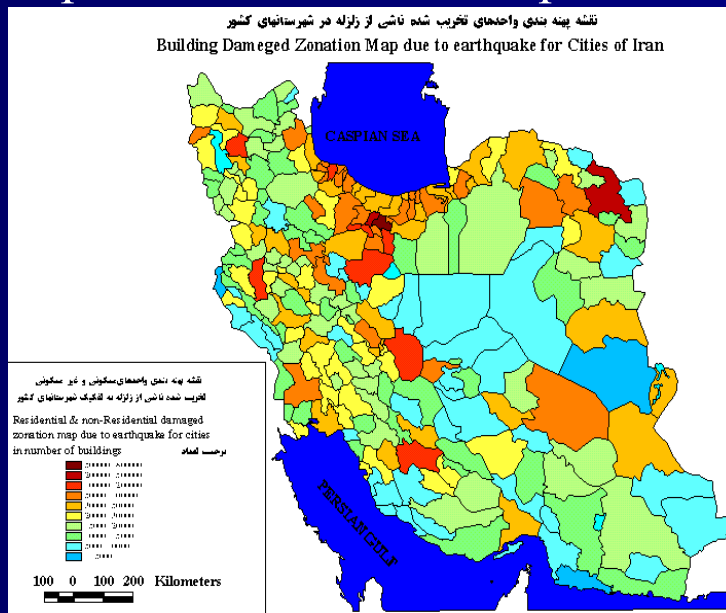
Principal Rules of Public Education



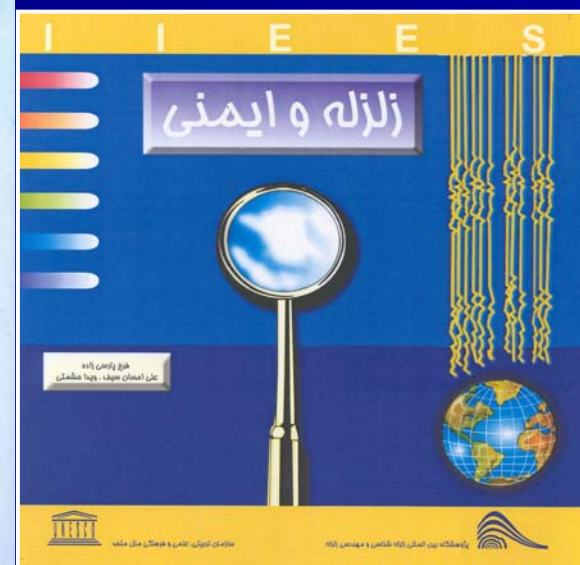
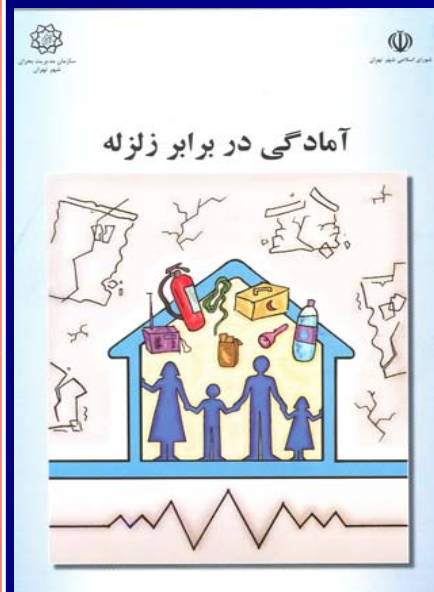
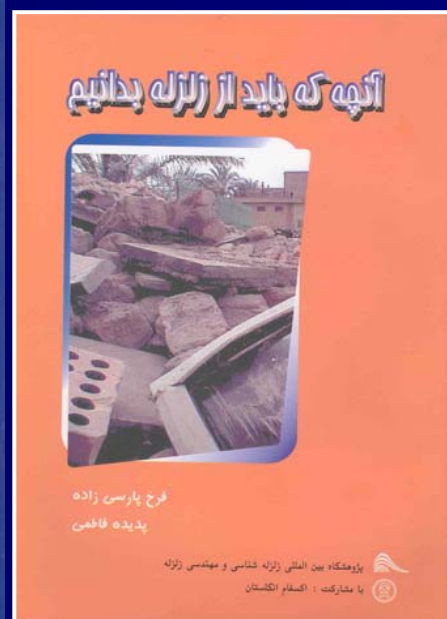
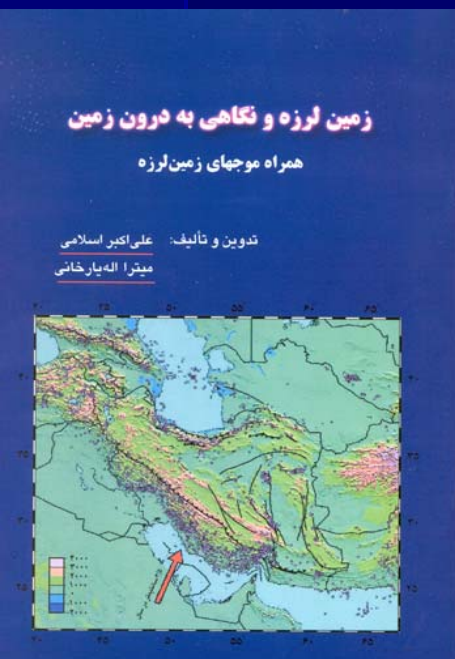
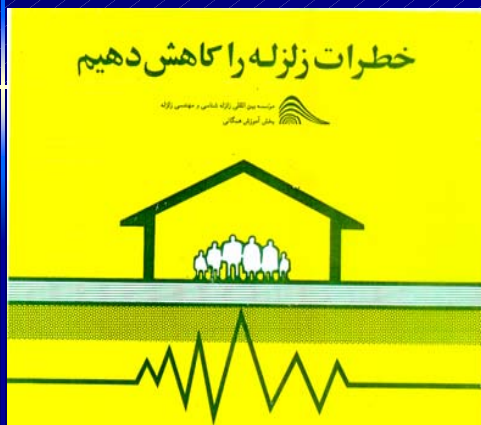
Disaster Management Education for the Managers

Objective:

Raising the awareness and concern of the city managers on important factors (seismic hazard, vulnerability, management, etc.) contributing to the earthquake risk (physical, human and economic) as well as the effective methods for its reduction and control. , special training program has been developed and it has been implemented almost in all of provinces.



General Public Education



General Public Education: Posters

[illegible][illegible]

ساختمان مسکونی

- خطرات زلزله و کاهشی دهیم
- خطرات آتش سوزی
- خطرات آلودگی هوا و آلودگی صوتی
- خطرات ایمنی

ساختمان تجاری

- خطرات زلزله و کاهشی دهیم
- خطرات آتش سوزی
- خطرات آلودگی هوا و آلودگی صوتی
- خطرات ایمنی

ساختمان صنعتی

- خطرات زلزله و کاهشی دهیم
- خطرات آتش سوزی
- خطرات آلودگی هوا و آلودگی صوتی
- خطرات ایمنی

General Public Education Billboards

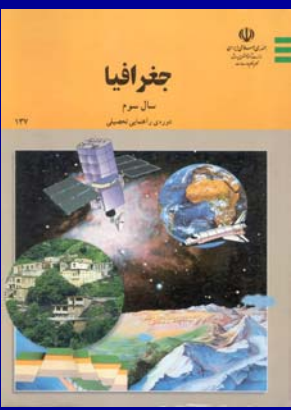
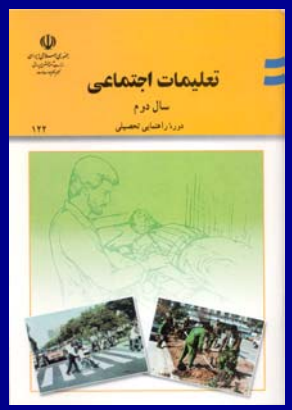
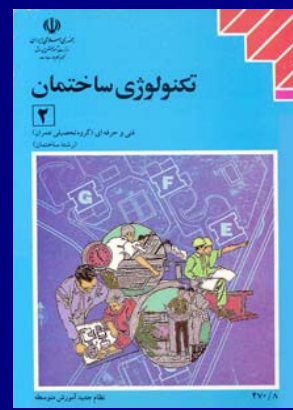
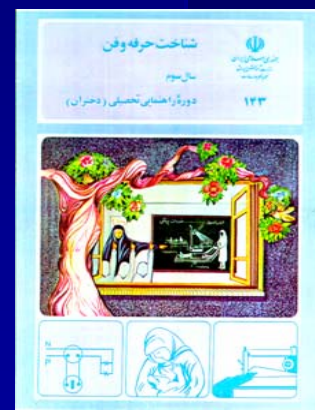
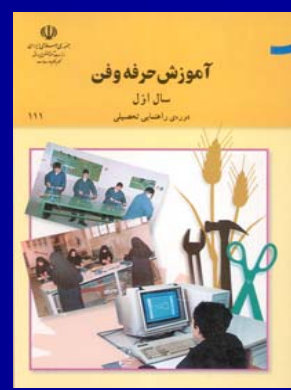
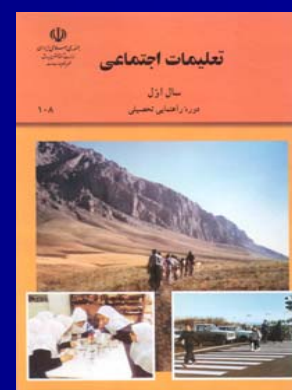
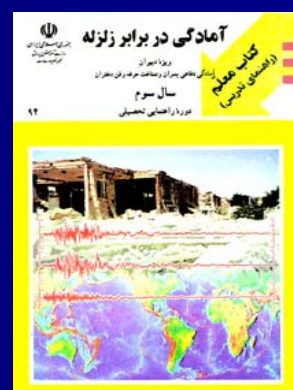
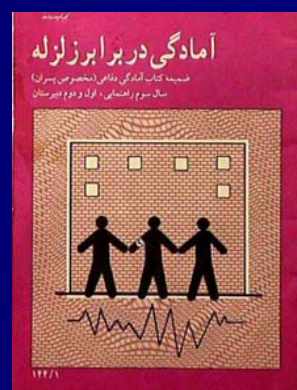
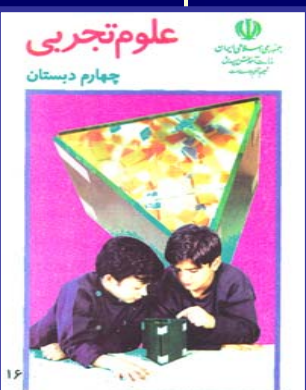


Children Education Through School

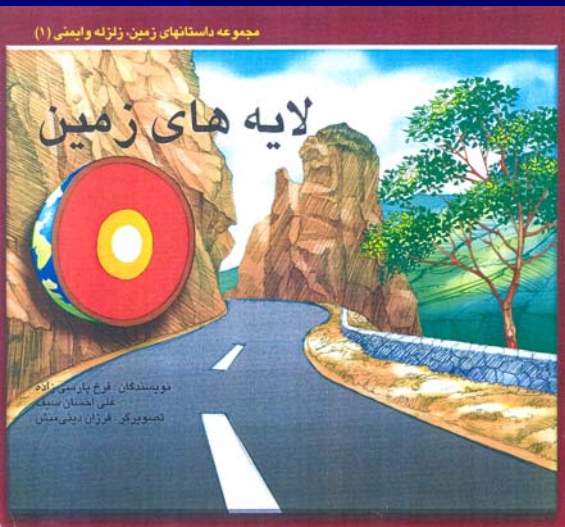
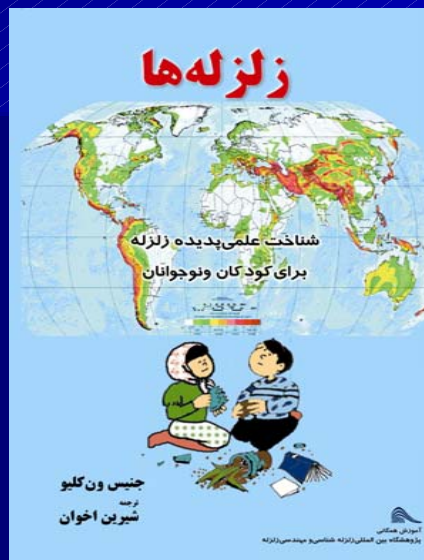
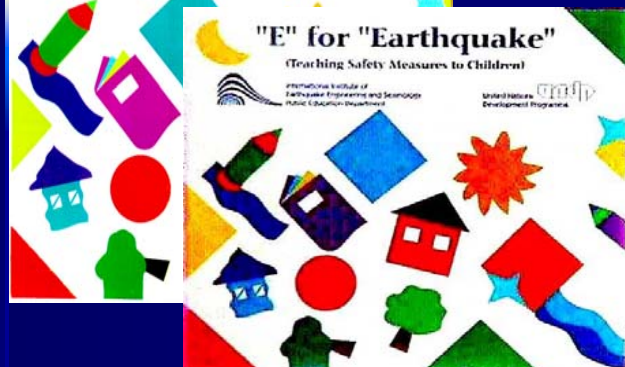
Why Children/Students

- ❖ 1/3 of Iran's Population
- ❖ One of the most vulnerable group of society
- ❖ High Capacity of Learning
- ❖ Play the Key role of Transferring Knowledge and can act as Safety Messenger
- ❖ They are the Futures

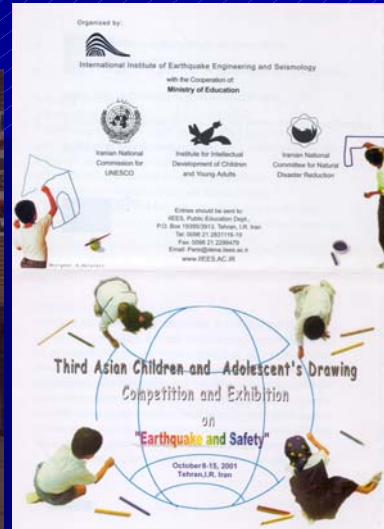
School's Earthquake Education Textbooks



School's Earthquake Education Booklets and Posters



School's Earthquake Education Writing and Painting Exhibitions



Children Understanding on Earthquake Phenomenon

What is Earthquake	Aged 6-8	Aged 9-12	Aged 13-15
I don't know	14.8	8.6	5.9
Destruction of Buildings	24.9	22.4	16.7
Ground Ruptures	6.9	8.6	12.1
Ground Motion	32.1	38.6	39.5
Loss of Life and Injury	6.8	9.5	8.3
It is Terrifying and Dangerous	1.7	1.7	3.6
It is Natural Phenomenon	5.9	7.2	11.6
It Relates to Volcano	-	2.1	1.8
Irrelevant Answers	6.9	1.3	0.5

School Safety Drill

Drill Preparation Process:

- ✓ Preparation and Distribution of drill guidelines to all schools.
- ✓ Production and Distribution of the educational posters.
- ✓ Broadcasting Preparation Program, specially the week before the drill.
- ✓ Delivering the “Earthquake and Safety” message by the students in each school.
- ✓ Broadcasting special program about the drill on November 29 from all Radio and TV channels.
- ✓ Broadcasting the “Earthquake & Safety” alarm from national radio for 30 seconds for the start of the Drill
- ✓ Performing the drill.



Development process of the School Earthquake Safety Drill

	Year	School Level	No of Schools	No of Students	Boys	Girls	Coverage
First Trial Drill	1996	Primary School	5	1000	600	400	Tehran
Second Trial Drill	1997	High school	3	-	-		Tehran
Tehran Training drill	1998	High school	1,059	527,237	266,890	260,480	Tehran
First National Drill	1999	High school	15,499	4,580,688	2,324,907	2,255,781	National
Second National Drill	2000	Secondary & High school	45,000	11,000,000	5,776,000	5,224,000	National
Third National Drill	2001	Secondary & High school	48,000	11,800,000	6,176,000	5,624,000	National
Fourth National Drill	2002	Secondary & High school	50,000	12,000,000	6,500,000	5,500,000	National
Fifth National Drill	2003	All Levels	110,000	16,027,000	8,297,000	7,730,000	National
Special Post Bam Eq.	2/2004	All Levels	110,000	16,000,000	8,300,000	7,700,000	National
Sixth National Drill	10/2004	All Levels	120,000	15,700,000	8,100,000	7,600,000	National

School's Earthquake Education Annual Drill



Pre-School Earthquake Education Children Rally For Earthquake Safety



Response of the People During Ardekul-Ghazvin Earthquake of 2002

Sex	Going Out- door	Running away	Helping Children	Taking Shelter	I did not Know	None	Total
Male	57	102	66	21	15	14	275
Row percentage	20.7	37.1	24	7.6	5.5	5.1	50.1
Column percent	51.8	56.7	44	51.7	57.7	33.3	
Female	53	78	84	20	11	28	274
Row percentage	19.3	28.5	30.7	7.3	4	10.2	49.9
Column percent	48.2	43.4	56	48.8	42.3	66.7	
Total number	110	180	150	41	26	42	549
percentage	20	32.8	27.3	7.5	4.7	7.7	100

Survived Students in Bam



توی این زلزله هیچ آسیبی ندیدین ؟

Table 4: The relation between sex and the first action taken at the time of the earthquake in Ardebil

Sex	Going out doors	Taking out the children	Praying	Taking out the animals	Helping others	Others	Taking shelter in safe places of house	Total
Male	223	33	4	5	90	164	6	525
Row percentage	42.5	6.3	0.8	1	17.1	31.2	1.1	78.4
Column percent	76.6	58.9	80	100	87.4	81.2	75	
Female	68	23	1		13	38	2	145
Row percentage	46.9	15.97	7		9	26.2	1.4	21.6
Column percent	23.4	41.1	20		12.6	18.8	25	
Total number	291	56	5	5	103	302	8	670
percentage	43.4	8.4	0.7	0.7	15.4	30.1	1.2	100

Achievements

Public Education and Awareness

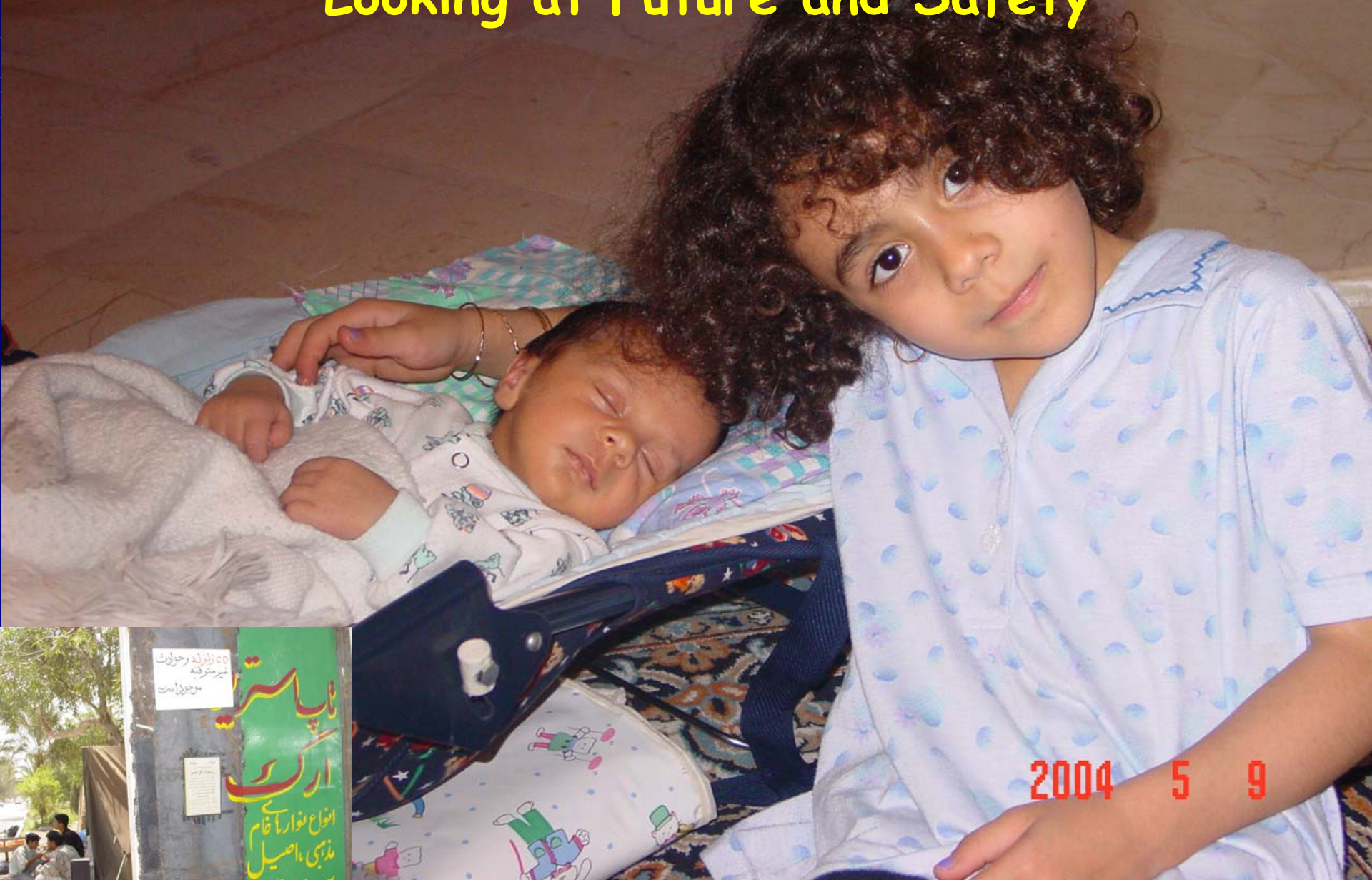
- Increasing public awareness and preparedness using all type of media.
- Educating children and youngsters about earthquake preparedness at all school levels by including materials in textbooks, films, conducting drill, exhibitions, drawing and writing competitions, posters, etc.
- Conducting annual national drill in schools on November 29th.
- Organizing annual art, painting and training exhibition
- Strengthening the key role of women in hazard mitigation program and promotion of seismic safety culture.
- posting street posters teaching the aseismic construction.

RESULTS: People are aware, more concerned
and still are little prepared.

Conclusion

- ✓ Achieving the final objective of reducing the risk to an acceptable and affordable level with good response team, requires a long term education and building a collective culture of safety in the society.
- ✓ Safety culture can be achieved through the sustainable process of education for raising the public awareness, to create sensitiveness and belief on the “Facts of Earthquake” in order to make an effective and appropriate actions.
- ✓ Well thought and planned risk management education program, not only create a safety culture, but also creates “Strong Public Will and Incentive” for an effective implementation of risk reduction actions in a country.

Children Life Continue by Looking at Future and Safety



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