



World Health Organization  
Country Office-the Islamic Republic of Iran

**Project Proposal for Improving the Health &  
Environmental Conditions  
in Earthquake Affected Areas  
of Lorestan Province,  
the Islamic Republic of Iran  
2006**



## **I. BACKGROUND**

On 31 March 2006 a series of earthquakes nearing 6 on the Richter scale shook many parts of Lorestan Province in the Islamic Republic of Iran, particularly the rural areas of Dorud and Boroujerd districts. Fortunately the tremors served as an early warning system and the people left their homes in time to prevent a large scale human disaster. According to government statistics, 72 people died and 1418 were injured, while 320 villages were damaged (10-100%). Sixty villages were completely destroyed. Nearly 15 000 buildings suffered damage of more than 50% in 8 affected cities of Lorestan. Some 33 000 units were destroyed or severely damaged in the affected villages. It is estimated that around 12 000 domestic animals, the key source of people's livelihood, were killed. The majority of the population in the affected villages were farmers or nomad animal breeders of low socioeconomic status with poor conditions for sanitation and hygiene.

The health system was seriously affected by the earthquake. Fifty-three different health facilities serving a total population of over 60 000 in 138 villages were affected in Dorud and 100 villages hosting over 50 000 in Boroujerd. The damage to the two main hospitals in Boroujerd, with a total bed capacity of over 200 (100 beds each), required evacuation of most of the injured victims to the nearby cities and provinces.

Being a disaster prone country, particularly for earthquakes, forces the Islamic Republic of Iran to face one of the main challenges in achieving sustainable health development. The most deprived areas of the country are taking the heaviest burden.

Among the most significant problems associated with the earthquake affected areas are deforestation, soil erosion, depletion and pollution of water resources, unhygienic conditions and precarious sanitation due to scarcity of safe drinking water, lack of latrines and showers. Other considerations include changes in the psychosocial and economic welfare of local communities during prolonged residency of the affected population in temporary settlements. These have impact on the physical and mental health which can alter the social context and habits of people on short and long term bases.

Although environmental concerns have taken a back seat to humanitarian needs at such times of crises, the close links between the well being of human populations along with quality of life and environmental health are being increasingly recognized.

In addition to the collapsed homes and dead animals, the water supply systems had been destroyed in some of the villages, posing serious threats to the health of the communities. Increased incidents of certain communicable diseases especially water-borne (eg. diarrhoeal diseases), and other enteric and zoonotic infections remain a major cause of ill-health particularly for women and children.

The rate of collection and removal of solid waste in the affected areas remains slow because of lack of appropriate and adequate mechanized procedures. Moreover, communities in the affected villages keep their domestic animals within or adjacent to the households resulting in serious health problems and poor environmental conditions. Environmental sanitation remains poor in spite of the efforts exerted by the local government.



## II. OVERALL RESPONSE

Despite the devastation caused by the disaster, the response of and cooperation between the Iranian authorities, Iranian Red Crescent Society (IRCS) and organized Forces was swift and exemplary. Various government agencies including the Ministry of Interior, Ministry of Health, the Army, Organized Forces (Army and Basidj) and the IRCS contributed to the rescue and relief operation.

The International Federation of Red Cross and Red Crescent (IFRC), the Iranian Red Crescent Society (IRCS) and some of the INGOs (ACF Spain, MSF France and Caritas Italy) active in the country mobilized quantities of relief items including: tents, blankets, hygiene kits, chlorine tablets and powder as well as technical support. The government and Caritas Italy provided a limited number of emergency latrines and showers to some of the most affected villages.

At present, all earthquake affected villages in both districts of Dorud and Boroujerd are witnessing a quick reconstruction movement, thanks to the loans given by the government for reconstruction of individual houses, expected to be concluded before fall of the next winter. However, the loan is barely sufficient for building of the residential area and no provision was made for construction of animal dwellings, contributing to the prevalent behaviour of animal breeders of keeping their domestic animals in their residence, hence maintaining the risk of transmission of zoonotic diseases.

The provincial and district governments exerted considerable effort to restore the safe water supply to affected areas by repairing the broken pipes, maintaining adequate chlorination and supply to needy areas by mobile tankers. However, environmental sanitation is still precarious. The main problem remains animal waste (dung) and garbage and the need for construction of latrines and showers which did not benefit from adequate attention from the local authorities nor the communities.

### **WHO IMMEDIATE RESPONSE TO THE EARTHQUAKE**

Within 24 hours of the earthquake, WHO deployed an emergency field officer, as part of the UN response team, to the affected area for rapid assessment of the situation. Later, WHO augmented its presence in the field with two more technical staff (program assistant and logistic officer) to assist the MOH and partners and to ensure effective coordination of health cluster response.

Soon after the rapid assessment, WHO dispatched two New Emergency Health Kits (NEHK), to the two main districts affected by the earthquake, Dorud and Boroujerd, sufficient to cover the health and medical needs of 20 000 for a period of 3 months.

To enhance access to quality primary health care services for the affected population, WHO managed to secure necessary funds to establish four fully equipped emergency health centers (HCs) by providing prefabricated containers and basic medical and general equipment and furniture. Two HCs were established in two of the most destroyed villages in each of Dorud and Boroujerd. Three villages in Dorud were also enforced with prefabricated containers to make two HHs functional.

### III. WHO IN THE ISLAMIC REPUBLIC OF IRAN IN BRIEF

WHO has six core functions built on its mandate:

- Providing leadership on matters critical to health and engaging in partnerships where joint action is needed.
- Shaping the research agenda and stimulating the generation, translation and dissemination of valuable knowledge.
- Setting norms and standards, and promoting and monitoring their implementation.
- Articulating ethical and evidence-based policy options.
- Providing technical support, catalysing change, and building sustainable institutional capacity.
- Monitoring the health situation and assessing health needs.

The Country Cooperation Strategy (CCS) was developed in June 2004. It is an analytical framework and agreed statement for WHO's cooperation with the national authorities highlighting what the WHO will do in the short to medium term and how it will operate to achieve its intended objectives. Six directions have been determined by the CCS for collaborative assistance:

- Promoting health as central to sustainable human and economic development;
- Enhancing leadership capacities for reforming the health system;
- Applying risk management approaches to effectively deal with behaviour-related disorders and conditions;
- Addressing the unfinished and emerging agenda for communicable diseases;
- Promoting a culture of research and technological development; and
- Strengthening institutional mechanisms for effective emergency and humanitarian action for health.

The programmes and activities supported by WHO include:

- Capacity building component, such as fellowships and trainings, for eligible Iranian professionals working in the health sector to pursue diploma courses and/or participate in national and international workshops.
- Fielding experts/consultants to provide technical assistance in specific areas
- Funding research, particularly operational research
- Exchanging information
- Promotion of health and quality of life of the local communities.

WHO works with other players including other UN agencies, donors, nongovernmental organizations, WHO collaborating centres, private sector and communities to promote the health and quality of life for the entire population.

**Among the WHO priority programmes supported is** the Community-Based Initiatives (CBIs) programme which aims at improving the health and quality of life of local communities through their involvement in different health, poverty alleviation and socioeconomic development activities.

The CBIs include Basic Development Needs (BDN), Healthy City Program (HCP), Healthy Village Program (HVP), and Women in Health and Development (WHD).

By end of 2005, the total coverage of CBI in the country was 19 healthy cities with a population of 5 036 488; 43 healthy villages with 78 856; and 17 BDN areas with 27 730 population.

WHO is facilitating the role and participation of the Islamic Republic of Iran in the newly established Commission on Social Determinants of Health (SDH) and for developing a national strategy for providing a solid evidence base for action on the SDH, and facilitating further work in reducing the health inequities.

The country is undergoing rapid industrialization in its food industry with over 5000 food manufacturers, many of whom export their products abroad. WHO is conducting a Food Safety Program, the objectives of which are increasing consumers' knowledge and awareness of food products and increasing the knowledge of technical experts and head of food industries on Hazard Analysis Critical Control Point.

#### **IV. RATIONALE**

Improving the environmental sanitation conditions will be highly beneficial in the affected areas. Hence poor sanitation and hygiene related diseases will be levelled out. Most of the infrastructures of health, water and sanitation facilities were destroyed during the earthquake. Although tremendous efforts were made for the rehabilitation process, services still remained inadequate. Therefore, water and sanitation intervention and hygiene promotion could rapidly improve community health status. Sufficient and safe drinking water supply, improved sanitation, access to sanitary means of human excreta disposal, hygienic living conditions of the people, healthy settings for markets and schools and quality health services are the major areas of work.

The earthquake has brought mental suffering as well as physical disabilities that may last for generations. The victims are still suffering from psychological difficulties resulting mostly from living in temporary housing and feeling powerless. The fear of increased level of mental disorders and substance abuse still remains. The provision of appropriate care and community access to appropriate forms of community based rehabilitation are badly needed.

#### **V. GENERAL OBJECTIVE**

- To improve environmental health conditions in ten villages within the two affected districts (Boroujerd and Dorud).

#### **VI. SPECIFIC OBJECTIVE**

- Reduce inequalities in health in the affected areas by focusing on improving the health and environmental conditions of poor people by addressing health problems related to communicable diseases and mental health.
- Improve access to community based rehabilitation programmes to reach and maintain the optimal level of health.
- Raise community awareness and standards of health through health education and promotion.
- Mobilize and organize communities, promoting self management and self reliance.

- Support communities for leadership roles and enhance the capabilities in this respect.
- Encourage communities to work as partners in the planning, implementation and monitoring of the development process.
- Identify and promote appropriate health-friendly technologies for sustainable health and community development and encouragement of healthy lifestyle within the communities.
- Encourage the government to develop effective collaboration within the departments involved in the project with civil society and other stakeholders in support of the planned interventions.

## **VII. PROJECT SUMMARY**

Improving the health situation as well as supporting poor families with income generation projects to increase their income, provide job opportunities and reduce the psychosocial stresses.

This project aims at promoting health in the affected areas, raising the community awareness, reducing the psychosocial stresses through attending the social needs of disabled and ensuring their integration within the community, as well as improving the quality of living and socioeconomic status of the people through community organization, and building their capacity to manage their development activities. Technical and financial support from the government sector and building partnerships add additional value. Working with affected populations, local communities and partner organizations seeks to minimize the environmental health impact of relief operations. Innovative, alternative solutions will be utilized through which affected populations will become more closely involved with environmental health management and rehabilitation.

Appropriate structures will be established at community level to coordinate the environmental health activities. The coordinating structure will consist of representatives from government and municipal departments, political leaders, NGOs and CBOs. To ensure the success of the project the following factors are given priority:

- Meticulous social mobilization at the grass roots level.
- Ensure participation of communities in decision-making in relation to project activities, and especially in key areas such as housing, water and sanitation, and health services.
- Raising the awareness of the communities in health and environmental related issues and producing Information, Education and Communication (IEC) materials in this regard.
- Continuous advocacy and promotion for more partnerships, to secure political commitment and mobilize additional resources.
- Provide technical support, including training; networking and information exchange.
- Work with Lorestan University of Medical Sciences (UMS) to develop appropriate research methodologies, including participatory research on effectiveness and efficiency of interventions.
- Encourage and support monitoring and evaluation of activities.
- Prepare progress reports on the implementation.

## VIII. PROJECT COST

Item	Cost in US\$
Mobilizing communities and government resources towards integrated sustainable health and socioeconomic development	3,000
Mobilizing and organizing communities, promoting self management, self reliance and self dependence	17,000
Networking and information exchange	60,000
Community based rehabilitation and harm reduction	100,000
Reduce inequalities in health by focusing on improving health and environmental conditions	80,000
Partnership development	15,000
Technical assistance	85,000
Program support cost	40,000
Total	<b>US \$ 400,000</b>

Details of the activities and budget break down are shown in the action plan.

- A continuous and robust monitoring system will be implemented as part of the project activities as indicated in the Plan of Action.
- A WHO consultant will be hired to provide technical support and assist in monitoring and evaluating the intervention. The reports will be shared with your mission in a timely manner.

## IX. PROJECT DURATION

The expected duration of the project is one full calendar year.

## X. REPORTING SYSTEM

- Mid-term financial and narrative report will be submitted after four months following initiation of the project.
- Final narrative and financial report will be submitted within two months after completion of the project.

## XI. MONITORING AND EVALUATION

- A continuous monitoring system will be implemented as part of project activities as indicated above
- Regular reviews and evaluation will be undertaken at four month intervals
- Monitoring and evaluation reports will be shared with donors and partners in a timely manner.

## XII. CONCLUSION

- Donation to this project is considered a great support to health and quality of life of the affected communities.
- WHO will ensure technical expertise and accountability for implementation of the project.
- In advocacy and media coverage, in-kind donation(s) for this project will be highlighted and reflected.

**Action Plan (Oct 06 – Sept 07):**

Objective	Activities	Responsibility	Time schedule	Estimated cost (US\$)	Expected outcome
Mobilizing communities and government resources towards integrated sustainable health and socioeconomic development	Advocacy and orientation meetings	Lorestan UMS/ National CBI secretariat/WHO	Oct 06	3,000	Resources mobilized for integrated sustainable health and socioeconomic development
Mobilizing and organizing communities, promoting self management and self reliance	Orientation meetings with communities	Lorestan UMS/ National CBI secretariat/WHO	Oct 06	2,000	Communities mobilized and organized
	Training of technical support teams and communities		Oct 06	15,000	
Networking and information exchange	Conduct need assessment surveys	Lorestan UMS/ National CBI secretariat	Dec 06	10,000	Functioning information centers. Experience and information exchanged between stakeholders. Documents and reports produced.
	Establish community information centres	Lorestan UMS	Dec 06	5,000	
	Documentation and reporting		Ongoing till Sep 07	10,000	
	Producing advocacy materials	WHO/ Lorestan UMS	Dec 06 – May 07	15,000	
	Supplies and equipment for information centres		Nov 06 - Feb 06	20,000	
Community based rehabilitation and harm reduction	Establishment of community development fund to support physically and mentally disabled	Community/Lorestan UMS/ National CBI secretariat/WHO	Nov 06 – June 07	70,000	Restore the functions of disabled and addicts and integration in their communities
	Supporting harm reduction activities			30,000	
Reduce inequalities in health by focusing on improving health and environment conditions	Support provision of safe water	Lorestan UMS/ National CBI secretariat/WHO/FAO	Nov06	25,000	Health and environment conditions improved
	Support to solid waste management		Dec 06	25,000	
	Awareness raising on health and environmental condition and hygiene education		Ongoing till Sep 07	10,000	
	Control of zoonotic diseases		Ongoing till June 07	10,000	
	Disseminate IE materials		Dec 06	10,000	
Partnership development	Routine meeting with different stakeholders	Lorestan UMS/ National CBI secretariat/WHO	Ongoing till Sep 07	5,000	Partnership developed and strengthened.
	Establishment of forum for having more interaction and experience sharing		Ongoing till June 07	0	
	Support to NGOs to train communities in skill development	WHO/ Lorestan UMS	Dec 06 – April 07	10,000	
Technical assistance	Consultants to provide technical support and assist in evaluating the intervention	WHO	Nov 06 – July 07	70,000	Interventions effectively and efficiently managed.
	Monitoring and Supervision	National CBI secretariat/WHO/ Lorestan UMS	Ongoing till June 07	15,000	
Program support cost				40,000	
<b>TOTAL</b>				<b>\$ 400,000</b>	

Map of Lorestan province, the Islamic Republic of Iran





World Health Organization  
Country Office- the Islamic Republic of Iran

**Address:**

**Building of the Ministry of Health and Medical Education; Simaya-e-Iran Street, Phase 5, Shahrak-e-Qods. Tehran, the Islamic Republic of Iran**

**Telephone: +9821-88363979-80-18**

**Fax: +9821-88364100**

**P.O. Box: 14665-1565**

**E-mail: [whotech@ira.emro.who.int](mailto:whotech@ira.emro.who.int)**