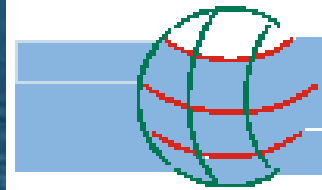


Kingdom Of Morocco
Ministry of housing and Urban Planning



World Conference on Disaster Reduction

18-22 January 2005, Kobe, Hyogo, Japan

THEMATIC SESSION 1-10

**Addressing the Root Causes of Vulnerability of Human Settlements in
Megacities**

20 January 2005 – 17:15 – 19:15

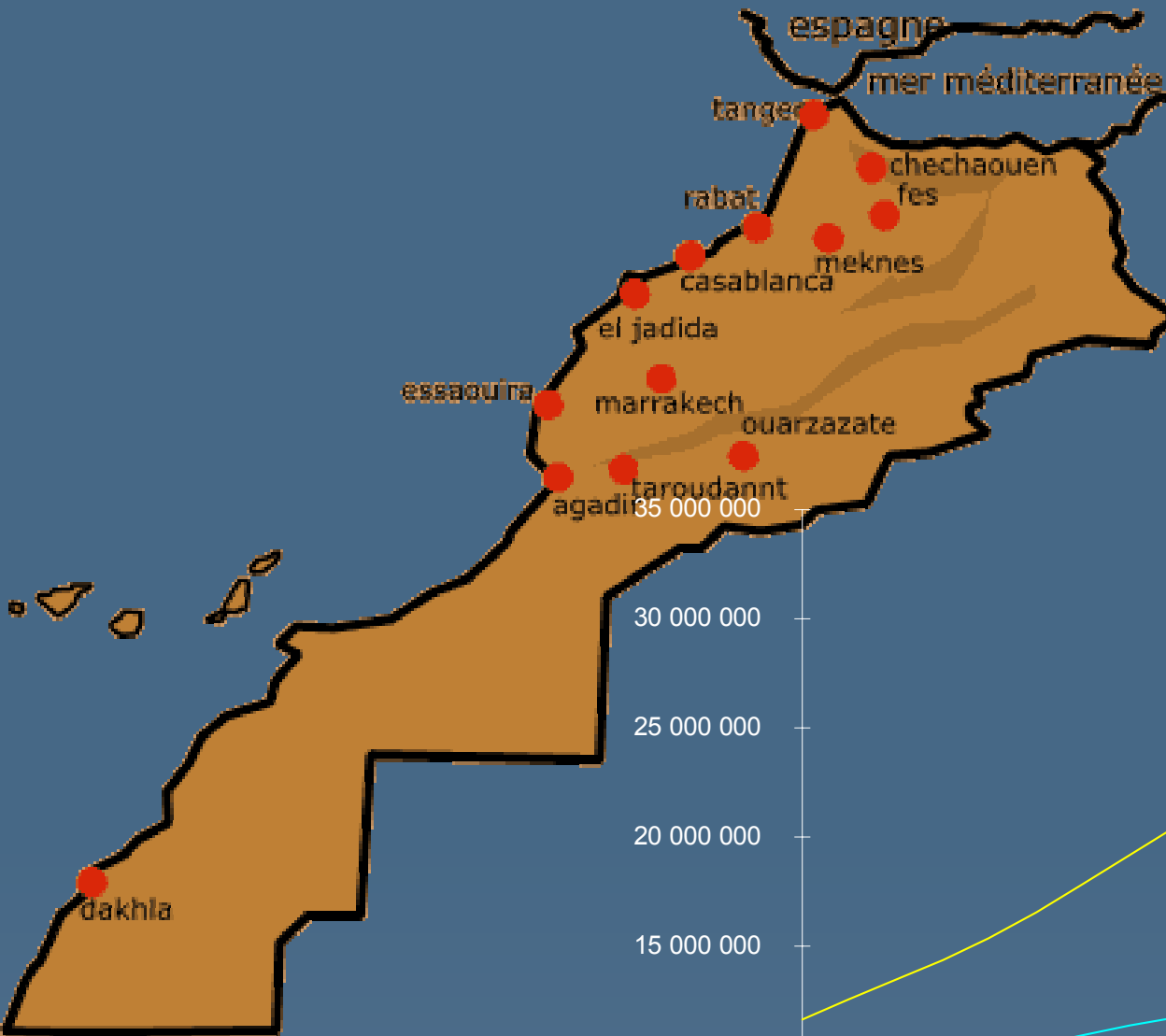
**Evaluating and reducing the vulnerability of
slums, traditional housing, and migrant
populations – Experience from Morocco**

Mr Ali GUEDIRA: Director, Technical Department

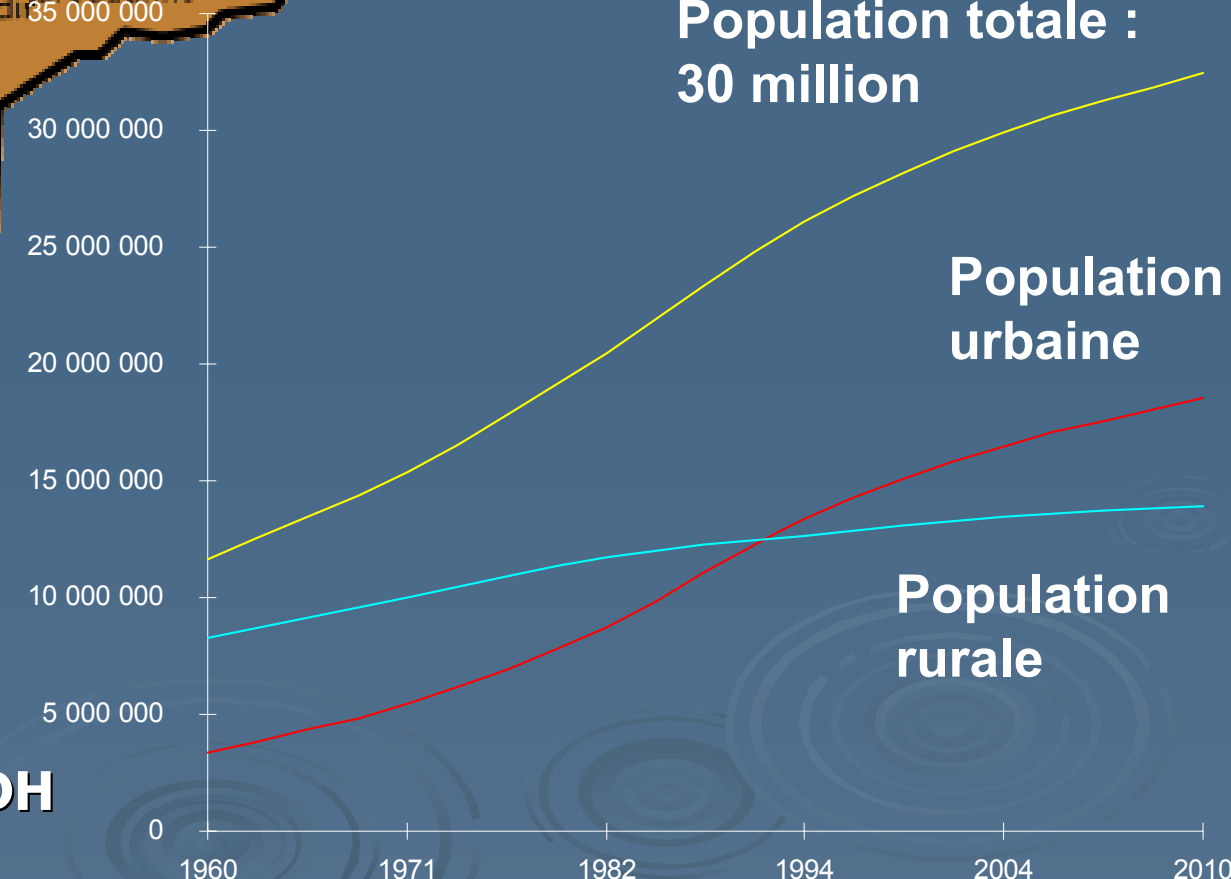
Mr Mohamed EL MALTI: Director, Urban Planning Dept.

SUMMARY

- Overview**
- Slums and Traditional Housing Constructio**
- Seismicity of Morocco**
- National Program of Vulnerability Reduction :
Towards a holistic integrated approach**
- Conclusions**



**Population totale :
30 million**



Area : 446.6 mille Km²

PIB : 418 655 Millions DH

Overview



Natural hazards in Morocco

- **Floods**
- **Earthquakes**
- **Landslides**
- **Forest fire**
- **Drought**
- **Locust Invasion**

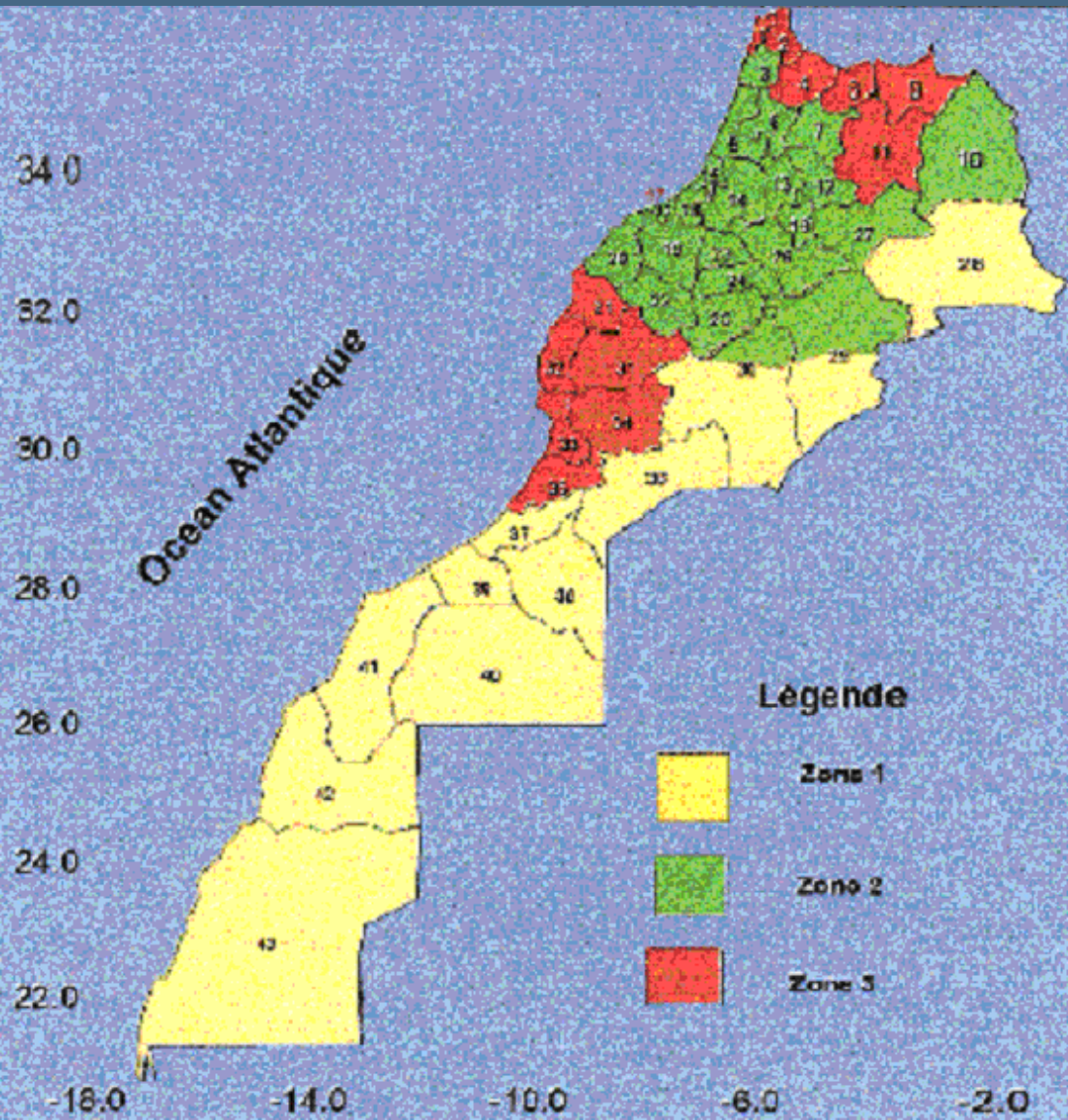
Seismic risk of Morocco

➤ The seismic building code defined three hazard zones (RPS2000)

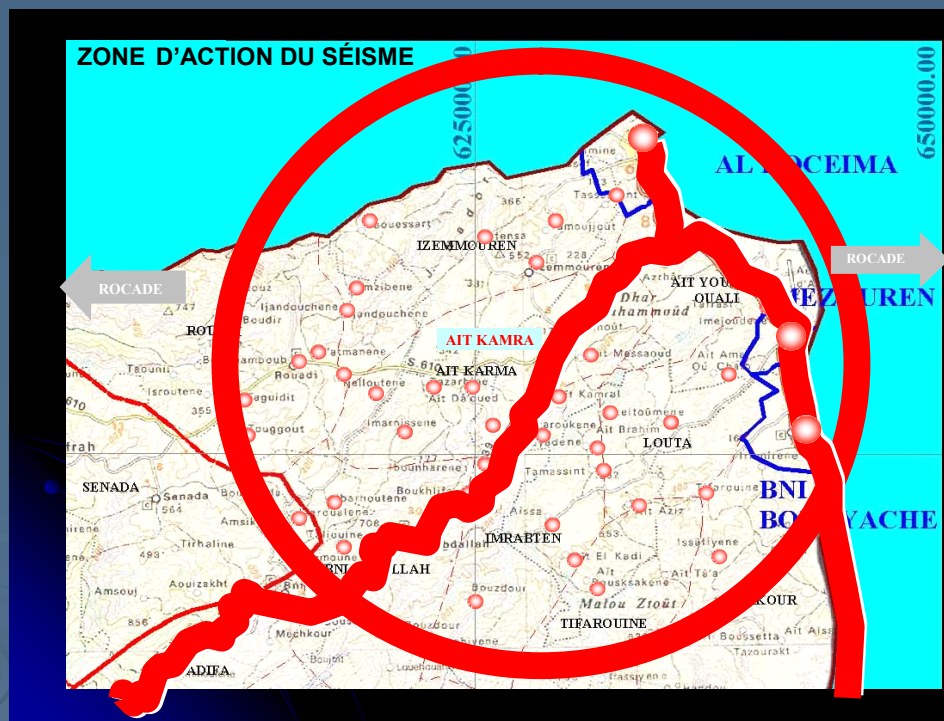
➤ $A_{max} / g = 0.01$ Zone I

➤ $A_{max} / g = 0.08$ Zone II

➤ $A_{max} / g = 0.16$ Zone III



- Agadir Earthquake of 9 February 1960 With M5,75 and a depth of 3km, severely damaged 70% of the dwellings and caused 12 000 deaths.
- Earthquake of 28 February 1994 with Atlantic origin had a magnitude of 7,3 caused the death of 6 persons and good damages
- The Al Hoceima Earthquake of February 24, 2004, M6.2 caused about 600 dead and significant material losses.
 - In urban area, the damages concerned constructions built with no conformity with the building standards
 - In rural area, traditional houses, built with stones, were greatly more destroyed.



Vulnerability of slums and ancient construction

- **Slums : Morocco counts about 1000 slum districts, grouping 212 000 families in 70 cities.**



- **Another 80,000 families live in illegal agglomerations, ancient cities, old houses, kasbas, and houses built in risk zones.**



**Rehabilitation in
the ancient city in
Fes by ADER**

**Famous Ksar Aït Benhaddou
(UNESCO World Heritage)**





**Illegal Housing in
Fez**

**Illegal housing in
Tétouan**





**Douar Hajjaa in
Rabat : Illicit district**

**Illegal district in
Tétouan**



Reasons of anarchic urbanization

- **Poverty**

- **Rural migration**

- **Aging of ancient cities**

- Faced with the day-to-day demand on housing, authorities cannot attend to the issue of ancient cities.
- Further, urban planning regulation lack comprehensiveness
- The vulnerability of these buildings is very high and often buildings collapse on their own.



National Program of Vulnerability Reduction

Towards a holistic integrated approach

- **Within the last few years, the government launched several programs to reduce the vulnerability of illicit construction, slums and ancient construction**

Urban governance Programs

- Program "*Cities without slums*" on the basis of "*city agreement*" (in the context with UN-HABITAT program)
- At the present time :
 - Signature of 18 cities agreements; 20 others are in negotiation – involving 64 370 families.
 - A total investment total is nearly 5,2 Billiards DH (or about US\$450 million)
 - A subvention from the State Solidarity Fund of housing is about 1,6 Billiard DH (US\$140 million) .

Urban governance Programs

- **Rehabilitation of most vulnerable houses (ancient cities, kasba, illegal development)**
- **Urban re-habilitation of illegal district**
- **This program had benefited of funds from the State Housing Solidarity Fund (207,8 MDH- US\$20m) and from the government (253,6 MDH – US\$25m).**

Urban governance Programs

Incentives for rural development

- **In order to slow the migration towards the big cities, new government programs encourage development in rural areas and in villages : architectural and technical assistance pact.**

Urban governance Programs

Social Housing

- **The goal of the government is to create houses in order to reduce the deficit by providing social housing: 100 000 houses per year.**
- **Involvement of private developers: fiscal incentives for those who produce 2500 social unities over a 5 year period.**

New Approach to Urban Planning

- **New urbanization zones:** The housing ministry initiated a program of suburban cities at the large cities by the creation of functional, operational and viable agglomerations. This action is made in partnership with local authorities and private sector
- **Public land grants:** In order to promote social unities and the prevention of illicit districts (Phase 1: 3400ha)

Urban planning

- **Elaboration of pilot project : Microzonation planning of Al Hoceima, to be used for the elaboration of the new master plan**
- **Step to generalize for the national territory**
 - **Monitoring and awareness about major risks in urban agglomerations**
 - **Geophysics center project**

Improvements in Regulation and its Enforcement

- **Project of law 04-04 aiming to :**
 - **Revise necessary urban planning documents in order to take into account natural risks**
 - **Reinforce the mechanism of control for constructions in risk zones**
 - **Enforcement fines in the case of not allowed construction built in risk zones**

Financial resources

- **1 billion DH (US\$100m) in 2004 from a yearly tax on cement**
- **Creation of 2 Guaranty to support low-income households and families with irregular income.**
- **Amelioration of bank system: 2 major public banks are being re-organized to support the social housing program.**



KEY ISSUES



Conclusions

- Ancient construction constitute an extreme vulnerability due to technical and financial difficulties
- The case of ancient construction is particularly difficult to deal with because it has significant historical value (thus cannot be demolished and replaced), but is very difficult and costly to retrofit
- Several programs have been launched in recent years to reduce the concentration of population in ancient cities and to replace slums with low cost housing
- Major progress has been made in reducing the vulnerability of slums.

Thank you