

# Socio-environmental challenges in the Metropolis

## **The example of La Paz (Bolivia)**

*Paul van Lindert, Utrecht University (Netherlands)*

*São Paulo, 18-08-2011*

# Socio-environmental challenges in the Metropolis

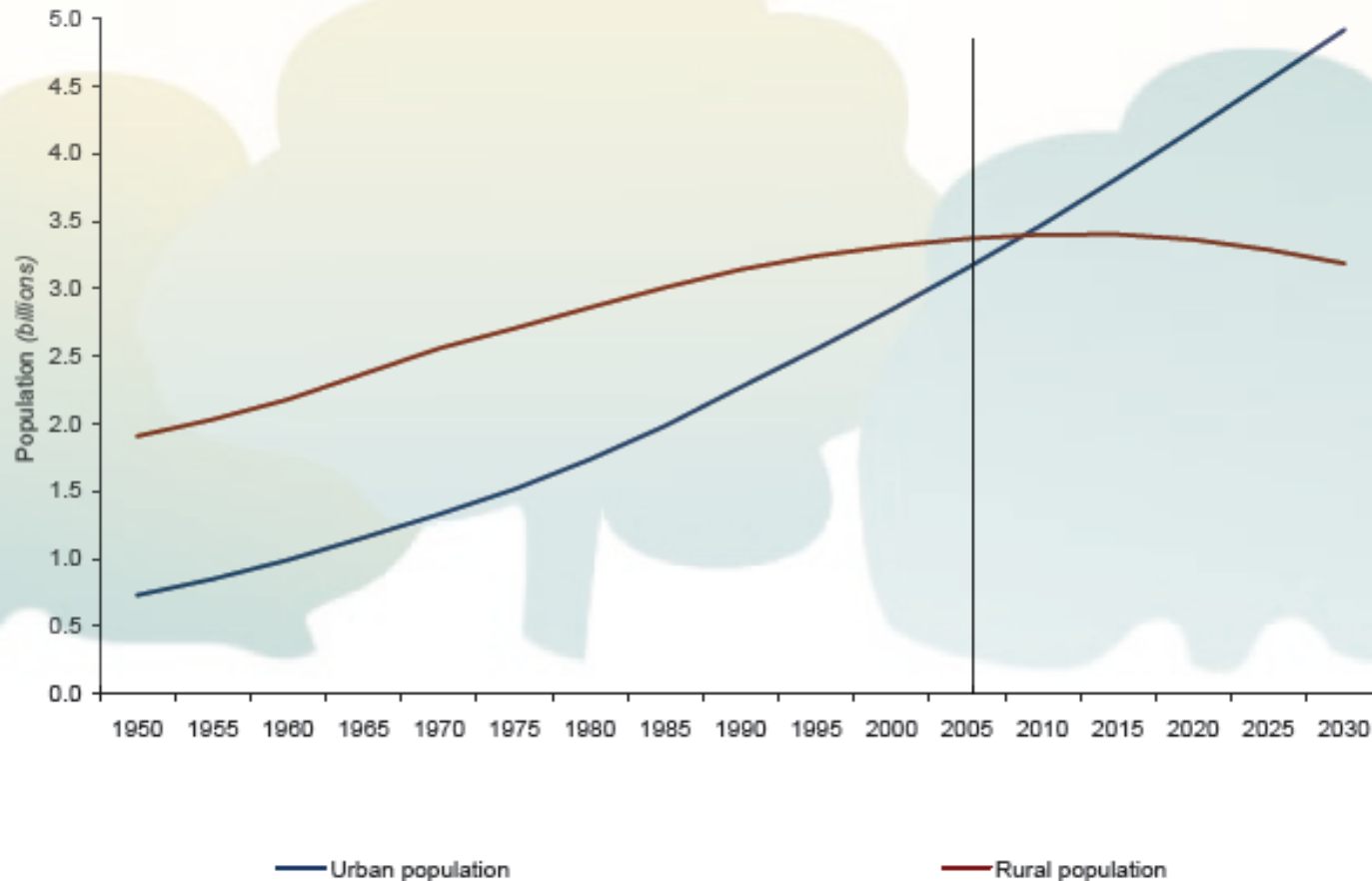
- Physical vs social factors
- The challenge of urbanization
- Changing land uses (esp. in peri-urban regions)
- “urbanization of poverty”
- The importance of urban planning

## Some basic demographic data:

- Total World Population: will increase from current 7 billion to 8.2 billion by 2030
- World Urban Population: is expected to increase from current 3.3 billion to about 5 billion by 2030 ( 60 %)

- As of 2008, half of the population is urban

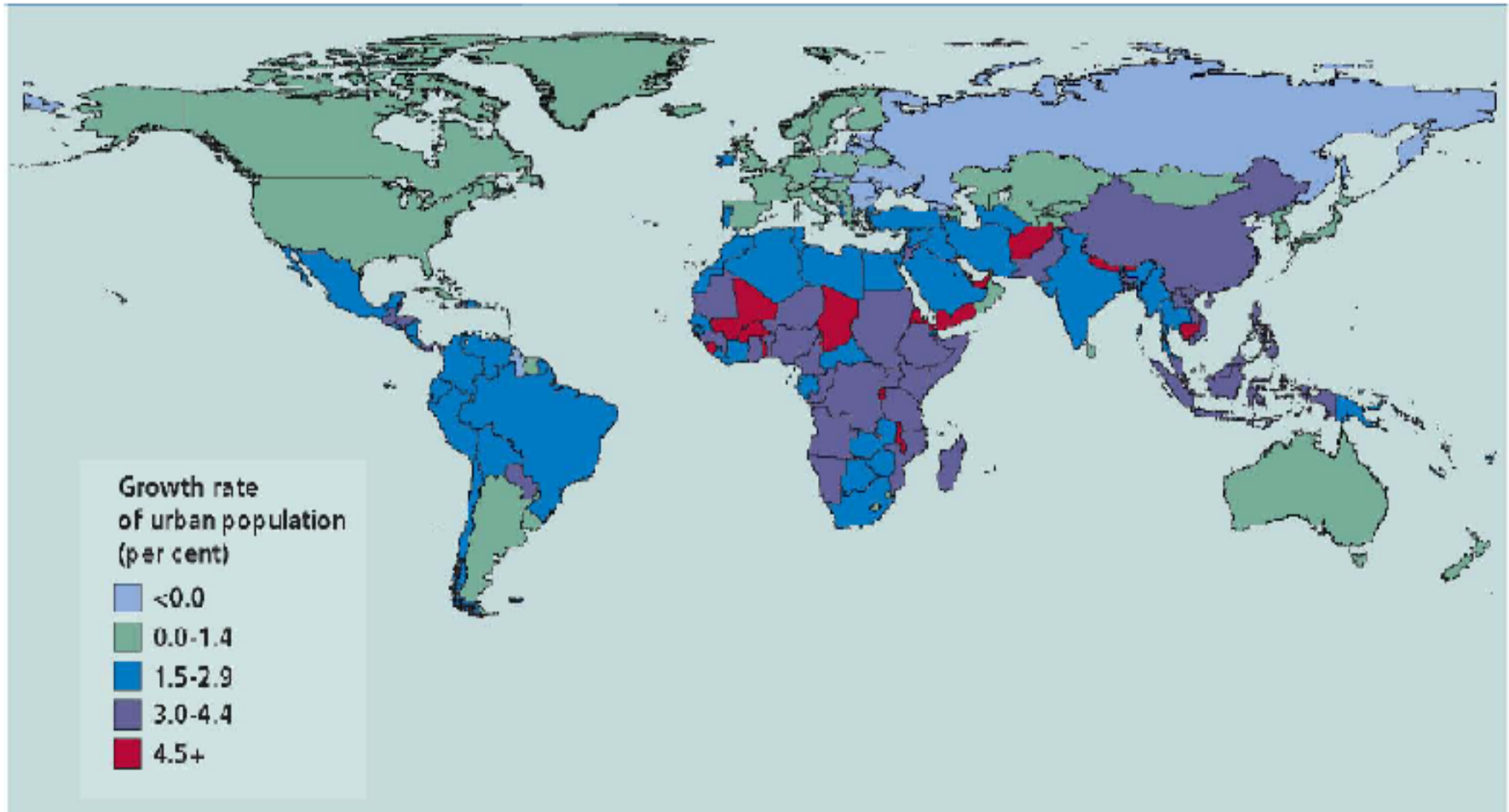
Figure 1. Urban and rural population of the world, 1950-2030



Source: United Nations, Department of Economic and Social Affairs, Population Division (2006). World Urbanization Prospects: The 2005 Revision. Working Paper No. ESA/P/WP/200.

# Growth rates of urban population will be greater in developing countries

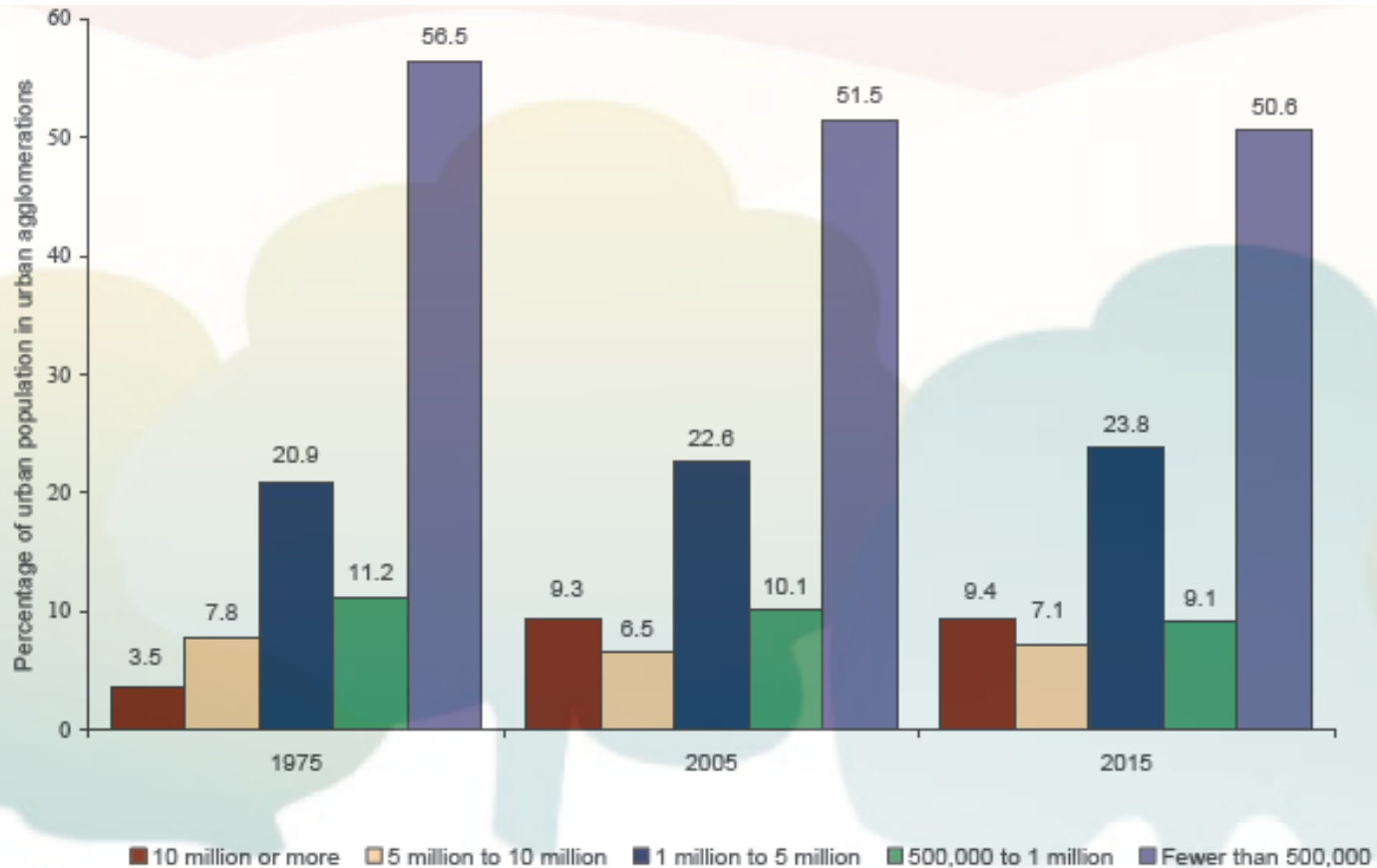
Figure 2. Average annual rate of change of the urban population, 2000-2005



Source: United Nations, Department of Economic and Social Affairs, Population Division (2006). World Urbanization Prospects: The 2005 Revision. Working Paper No. ESA/P/WP/200.

# Most of the urban population will continue residing in the smallest agglomerations

## Percentage of the urban population in urban agglomerations



Source: United Nations, Department of Economic and Social Affairs, Population Division (2006). World Urbanization Prospects: The 2005 Revision. Working Paper No. ESA/P/WP/200.

## Contrary to common belief...

**Natural increase** has a major role in the growth of cities

In fact:

- Most urban growth is actually due to **natural increase** (i.e. – more births than deaths)
- Natural increase: 60 %.
- Migration and classification of areas: 40%

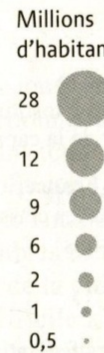
# The poor are not a small marginal minority in cities

In developing countries, the poor are a **majority in city growth**

- Poverty is increasing faster in cities. In Sub-Saharan Africa, urbanization is synonymous with the growth of ‘slums’.
- One billion people already live in such ‘slums’
- These housing conditions determine much of human misery



# Growth of metropolises, 1950-2010-2025



Los Angeles

New York

Mexico

Bogotá

Lima

São Paulo

Rio de Janeiro

Buenos Aires

Londres

Paris

Moscou

Istanbul

Le Caire

Lagos

Kinshasa

Karachi

Lahore

New Delhi

Bombay (Mumbai)

Madras (Chennai)

Calcutta

Chongqing

Shanghai

Pékin

Dacca

Shenzhen

Djakarta

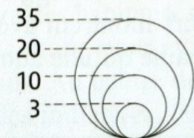
Tokyo

Osaka-Kobe

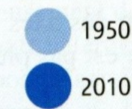
Manille

## Perspectives de croissance des agglomérations

Millions de citoyens



Evolution



2025 (projections des Nations unies)

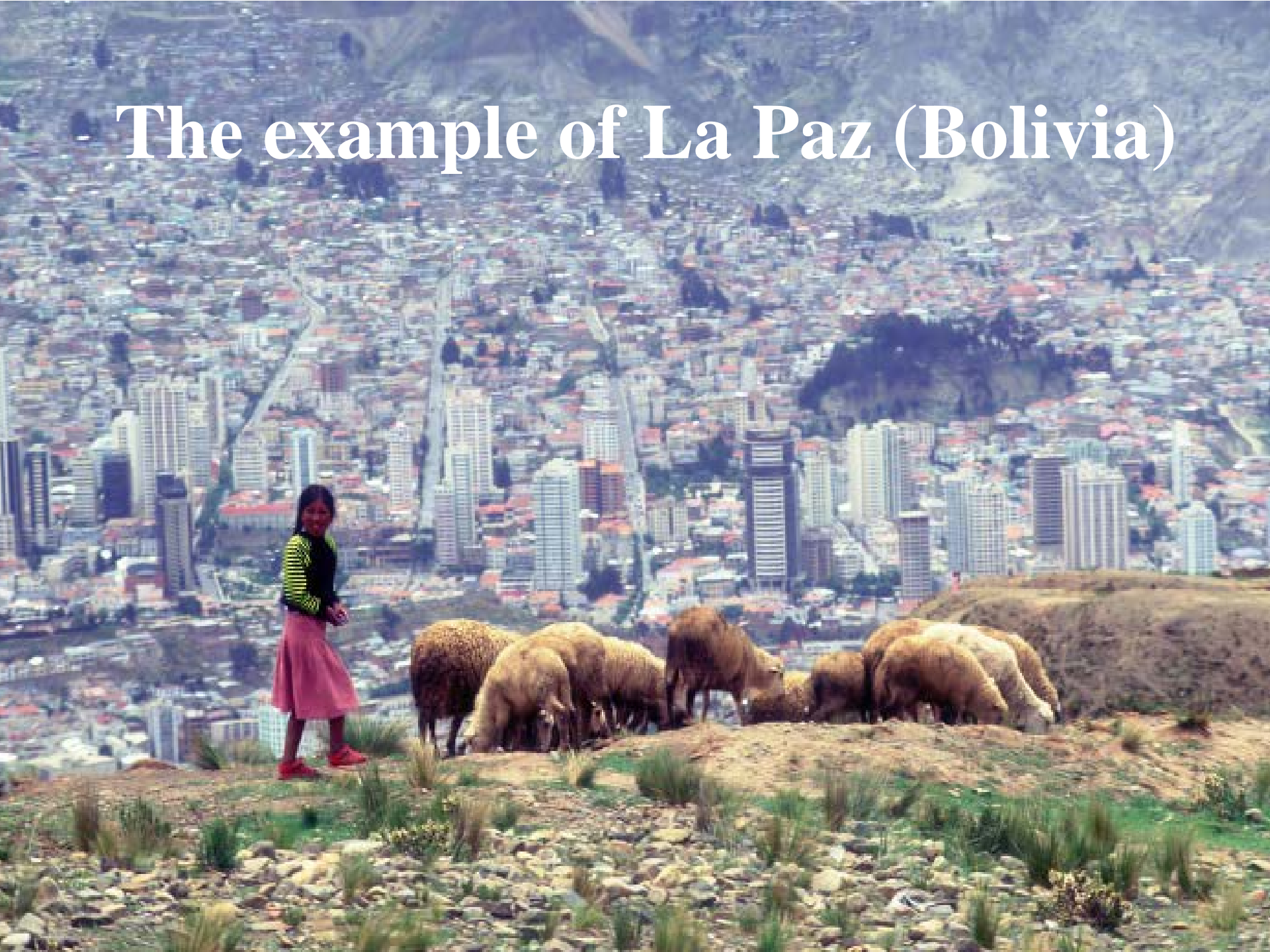
# The **5 Shelter deprivation indicators** used by the UN

- **Lack of durable housing**
- **Lack of sufficient living space**
- **Lack of access to safe drinking water**
- **Lack of access to improved sanitation**
- **Lack of secure tenure**

# MDG Targets & Indicators relevant to housing

- **Target 10:** halve the proportion of people without sustainable access to safe drinking water and sanitation by 2015
- **Target 11:** Achieve a significant improvement in the lives of at least 100 million slum dwellers
- **Indicator 30:** Proportion of people with sustainable access to improved water resources
- **Indicator 31:** Proportion of people with access to improved sanitation
- **Indicator 32:** Proportion of people with access to secure tenure

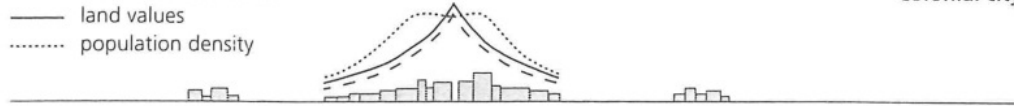
# - The example of La Paz (Bolivia)



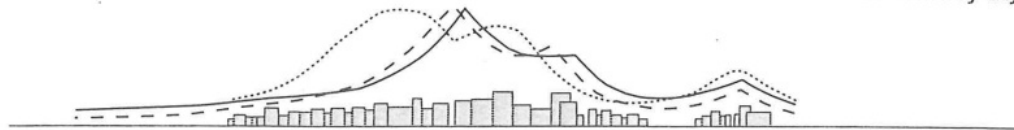


- - - socio-economic status  
 — land values  
 ..... population density

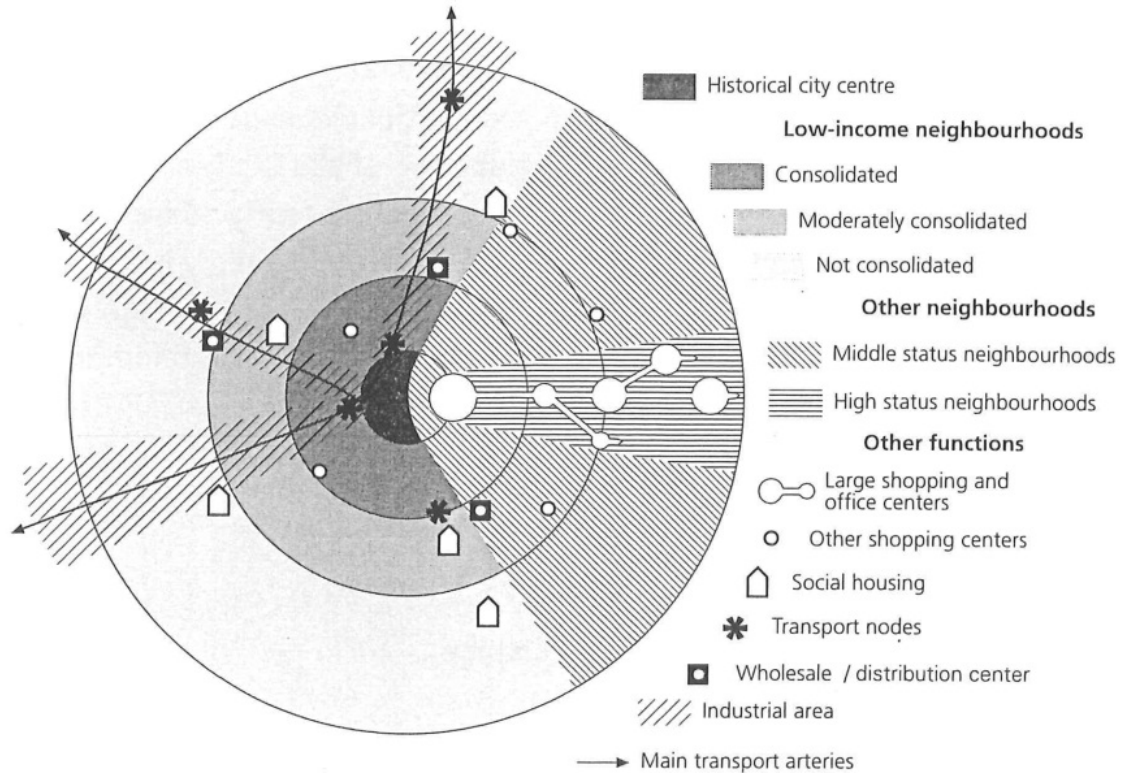
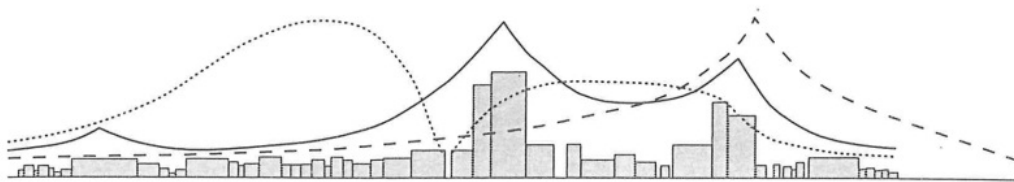
Colonial city

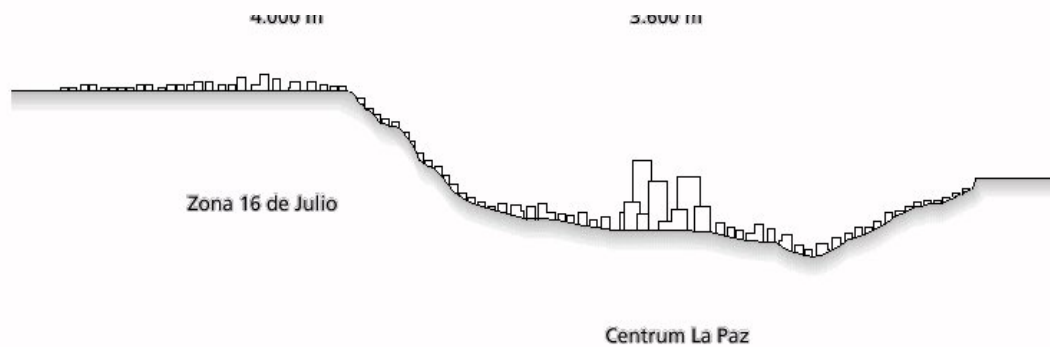
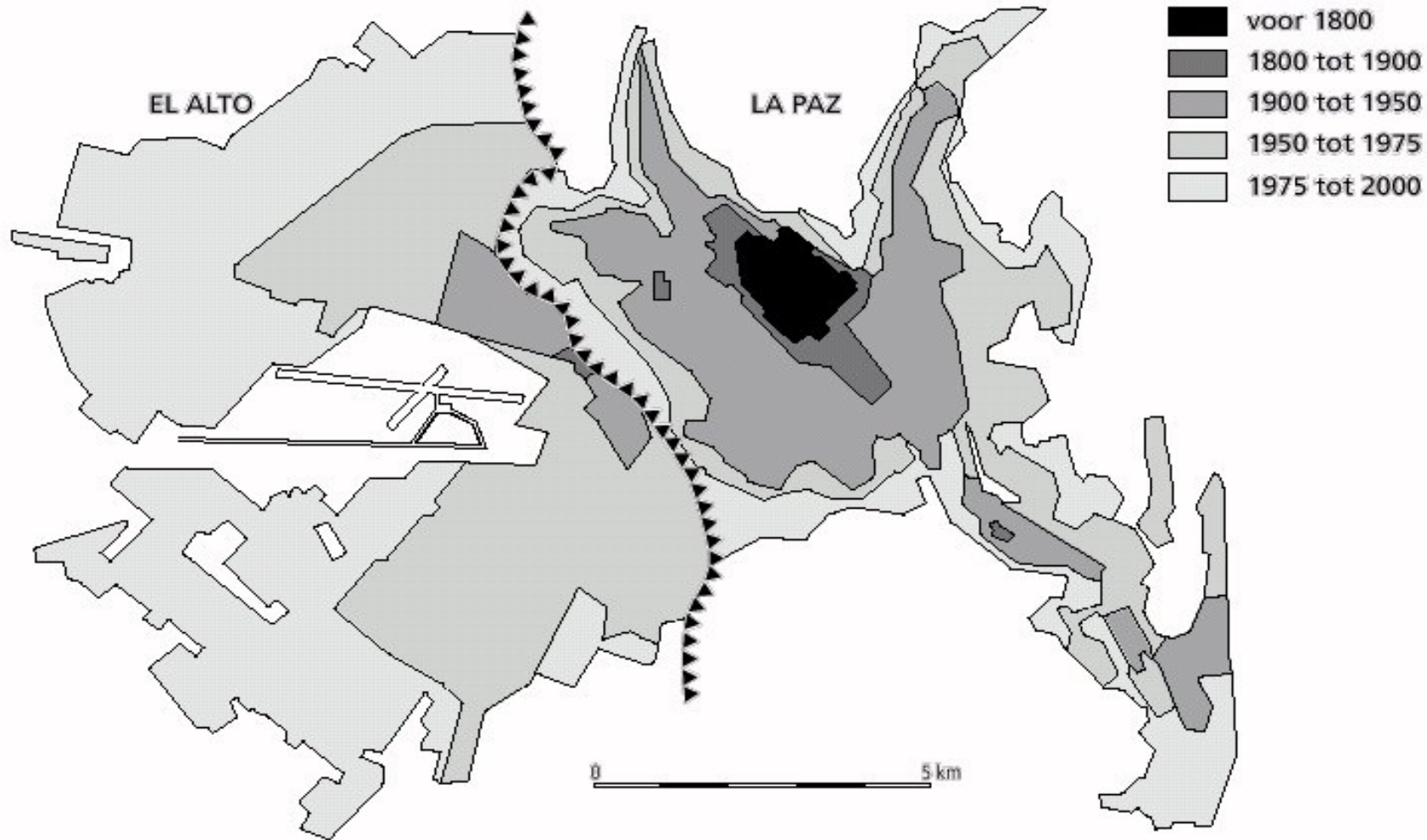


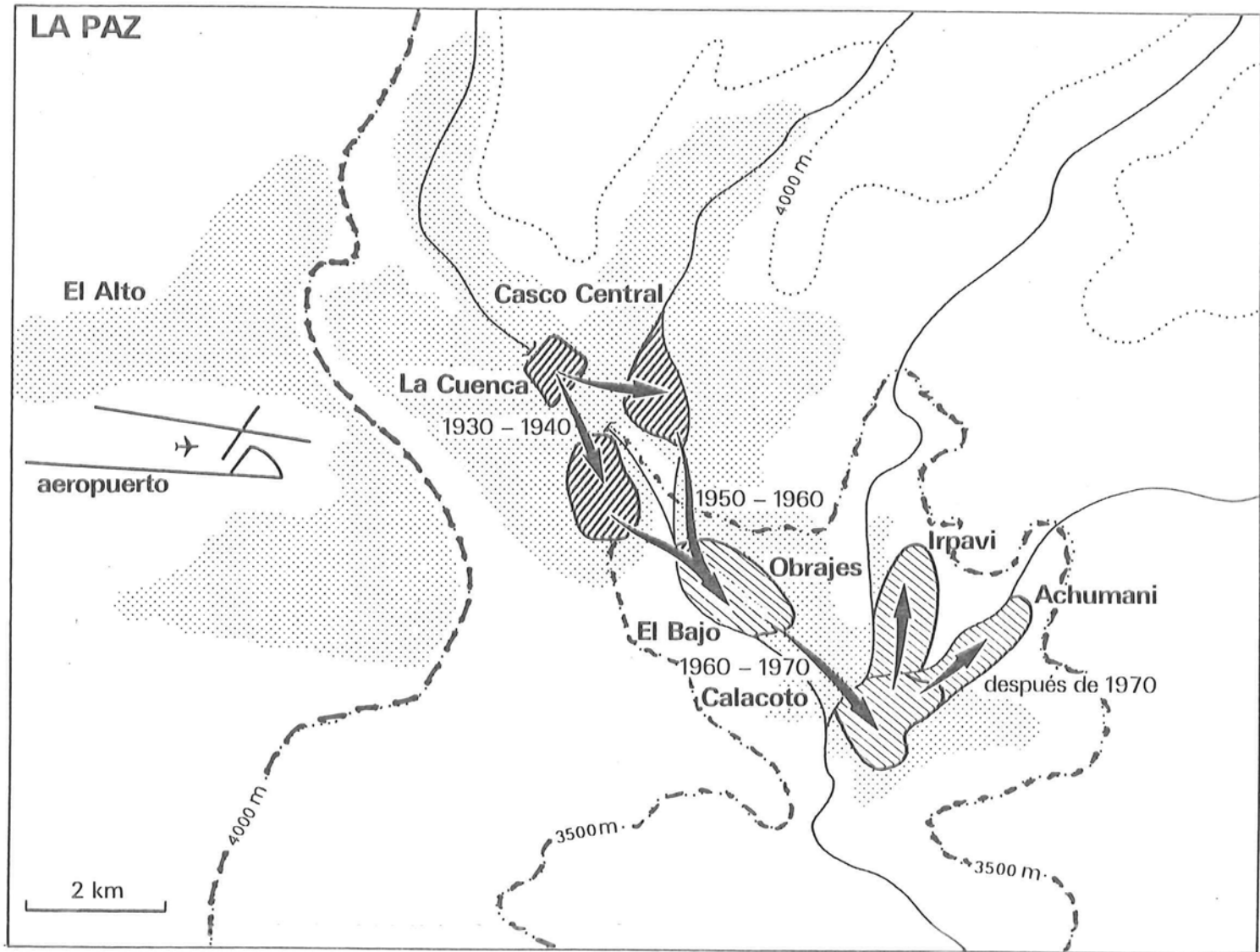
19<sup>e</sup> century city



Modern city







Upper class mobility



# Eje central (CBD)









COMUNIDAD  
DE FAMILIARES Y  
AMIGOS  
DE LA INSTITUCIÓN DE  
SANTO DOMINGO  
Calle 4 de Mayo



**Kretal**  
**HIPERMERCADOS**

**BCP**

**NIDO**

La Vida e

evolucion  
24  
Glada

**CHIVAS**

**Av. Bellavista**

**BCP**



Casco central









T/MC  
DEHVA 200V

08/07/05  
P250 EP2





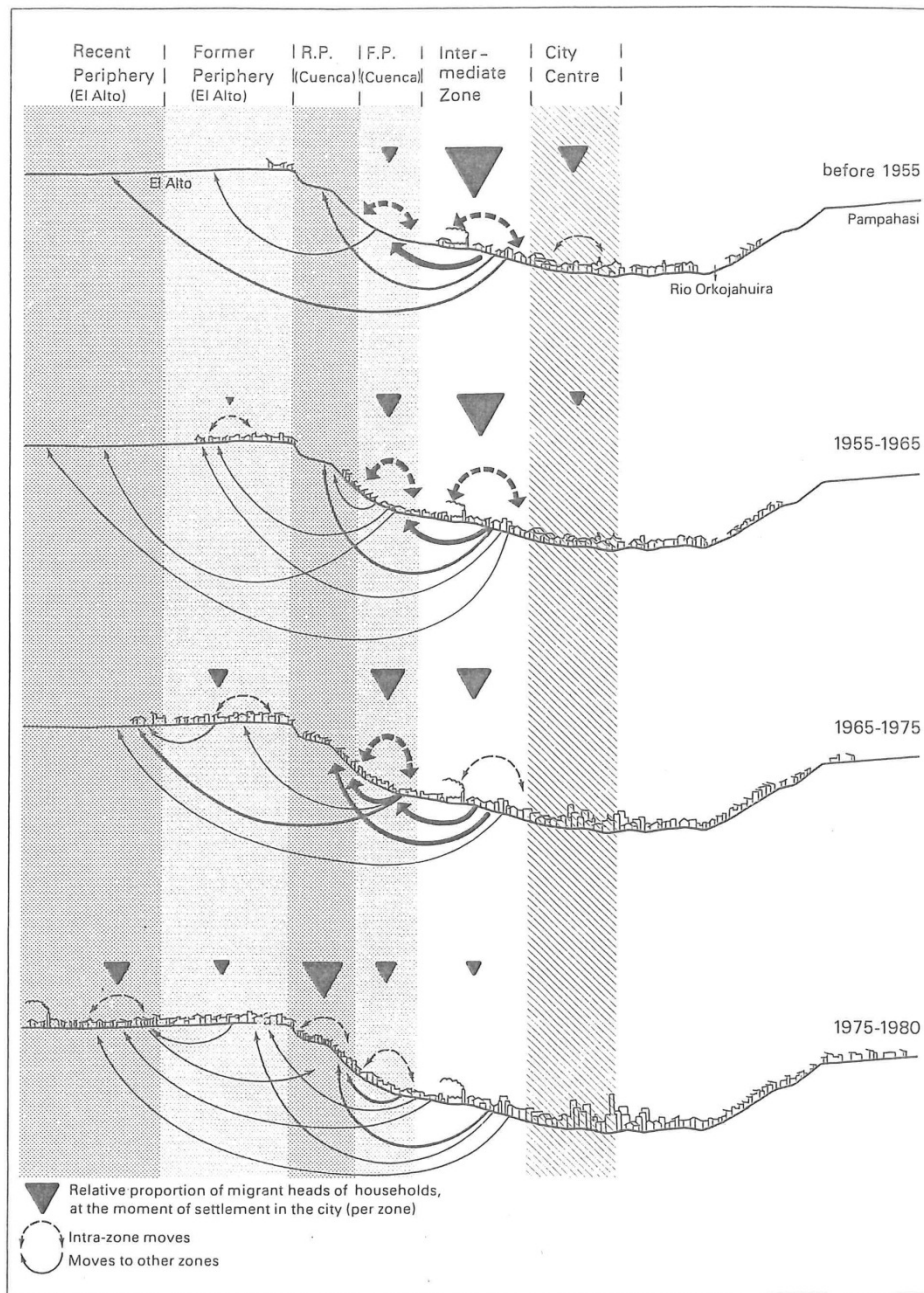


# El Alto









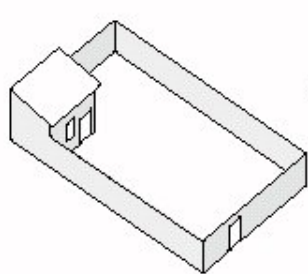
Migrant householders: main patterns of settlement and relocation in La Paz.



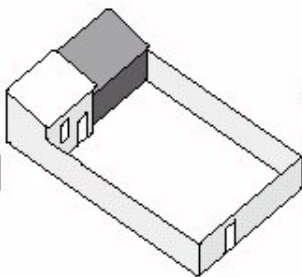




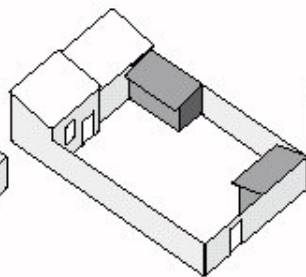
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DINERO 75112



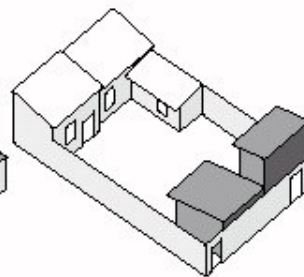
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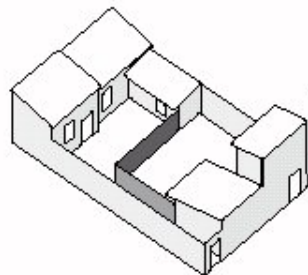
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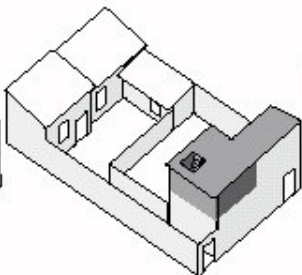
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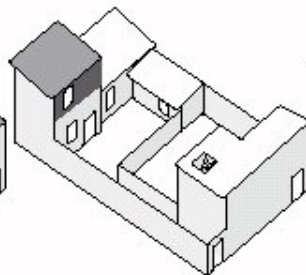
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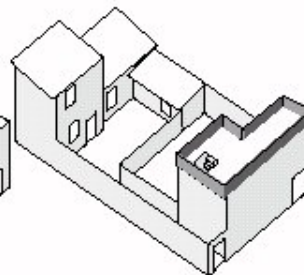
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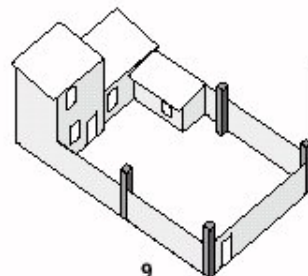
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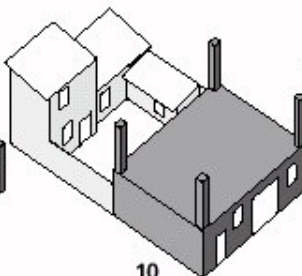
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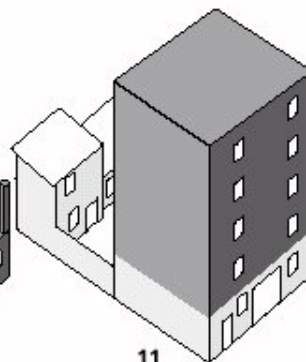
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10



11



















antino Lima

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IN PERU  
\$4.00







PEPSI

PEPSI

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SU TIENDA PREFERIDA

Fortaleza

SALON DE EVENTOS SOCIALES  
EL DORADO  
PAPA  
2008/09

LA PLATA  
COMERCIAL

LA PLATA

1911 DEL VAPOR

PEPSI

PEPSI



NY  
LOGIA

IMPORTACION  
WEST

AS

MAS CERCA  
DE SU CASA



gladiator FOREST GARDEN RIDGID

HERRAMIENTAS INDUSTRIALES

neó  
NEX

TECNOLOGÍA QUE DURA MÁS



LA ÚNICA  
CON  
DOBLE GARANTÍA







**CENTRO ESTEREO MARIBELLA**  
Especialistas en Discos

**ALON DE FIESTAS**

**ACENA**

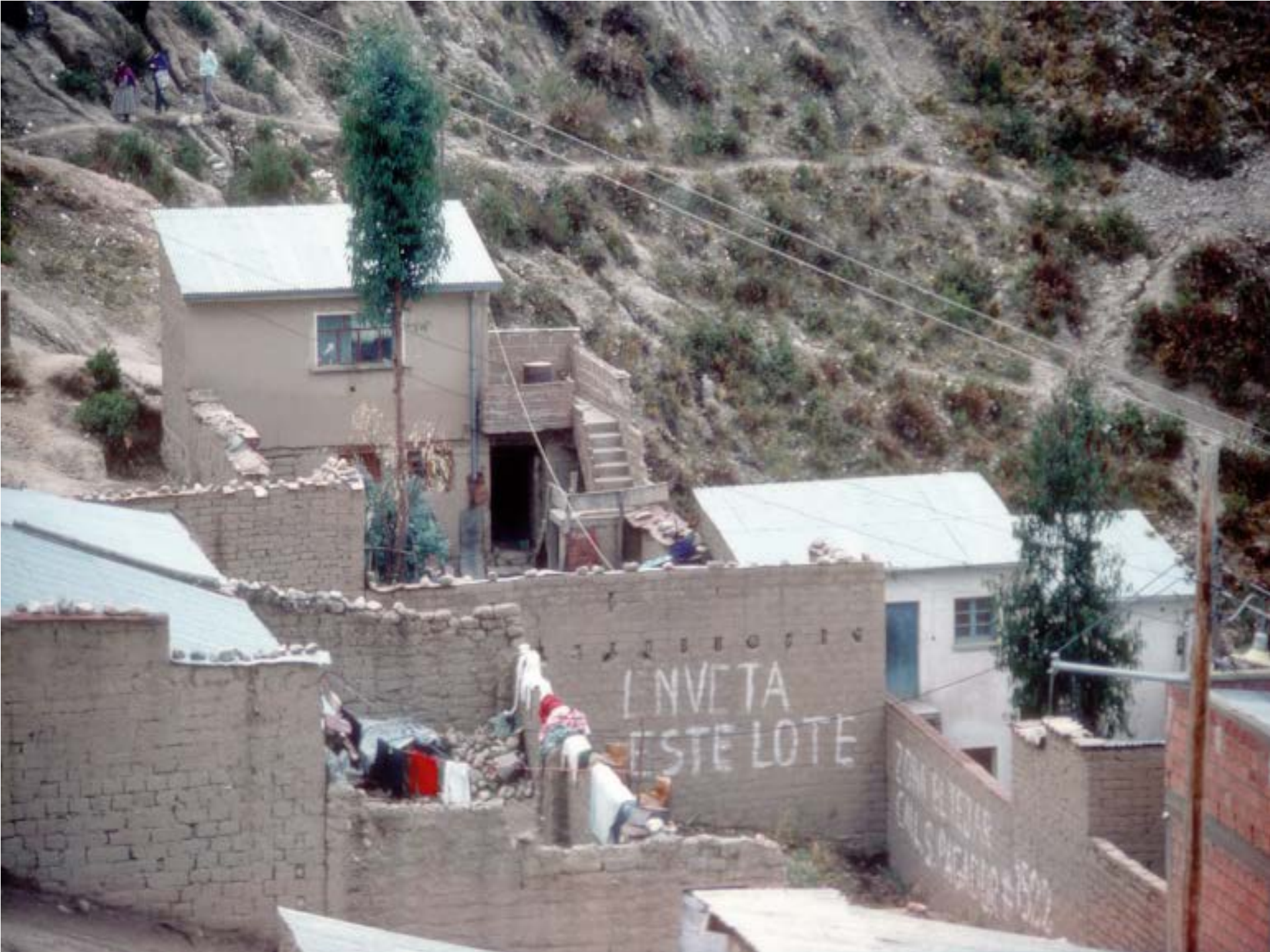
**fla**

**PELEZA**

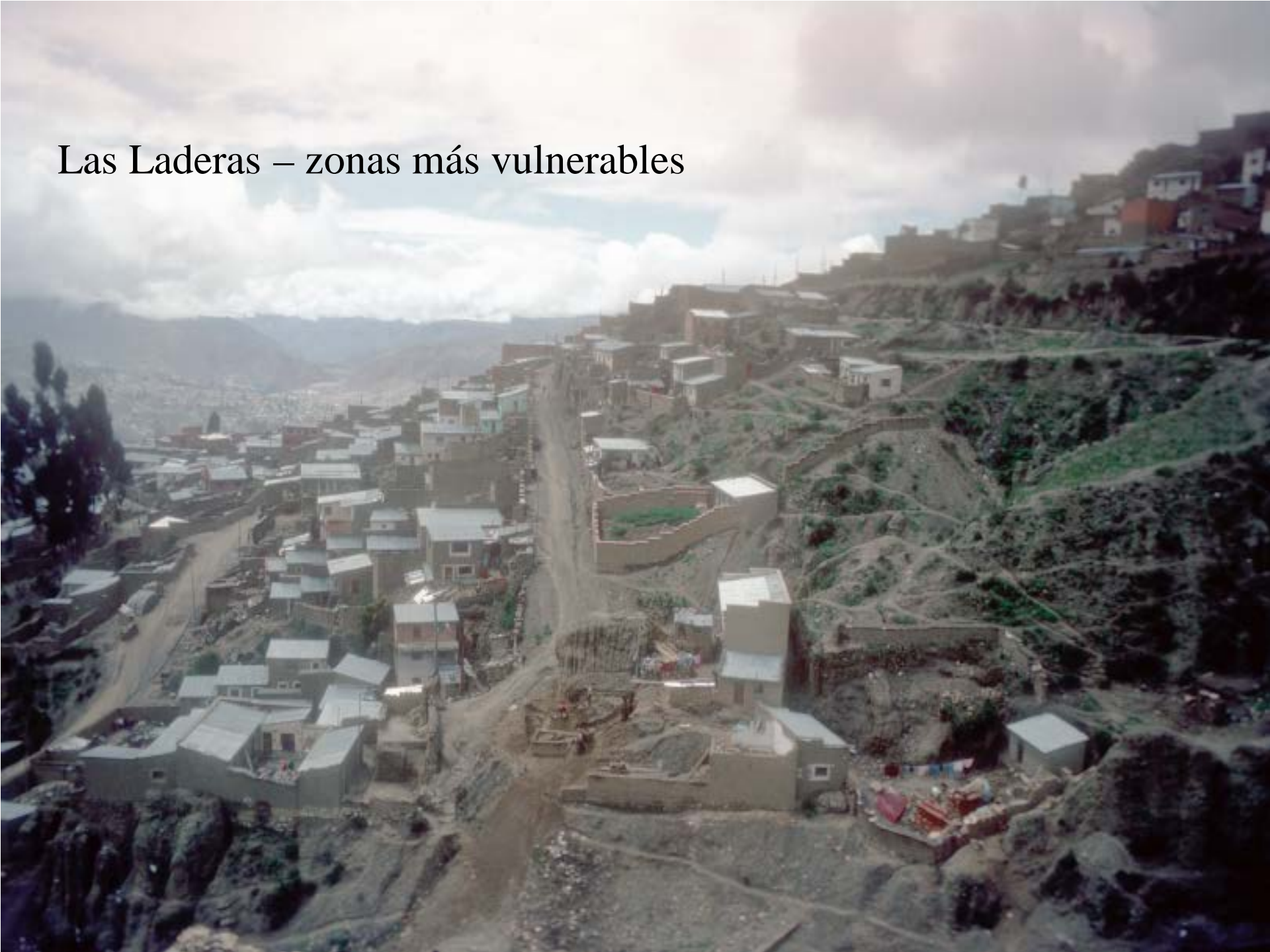
- CORTES
- BAÑOS
- TINTES
- DIBOS
- LAVADOS
- MASAJE
- MÓDULOS
- GRUPOS

TELÉFONO

**ALTA HINCA ORLON**



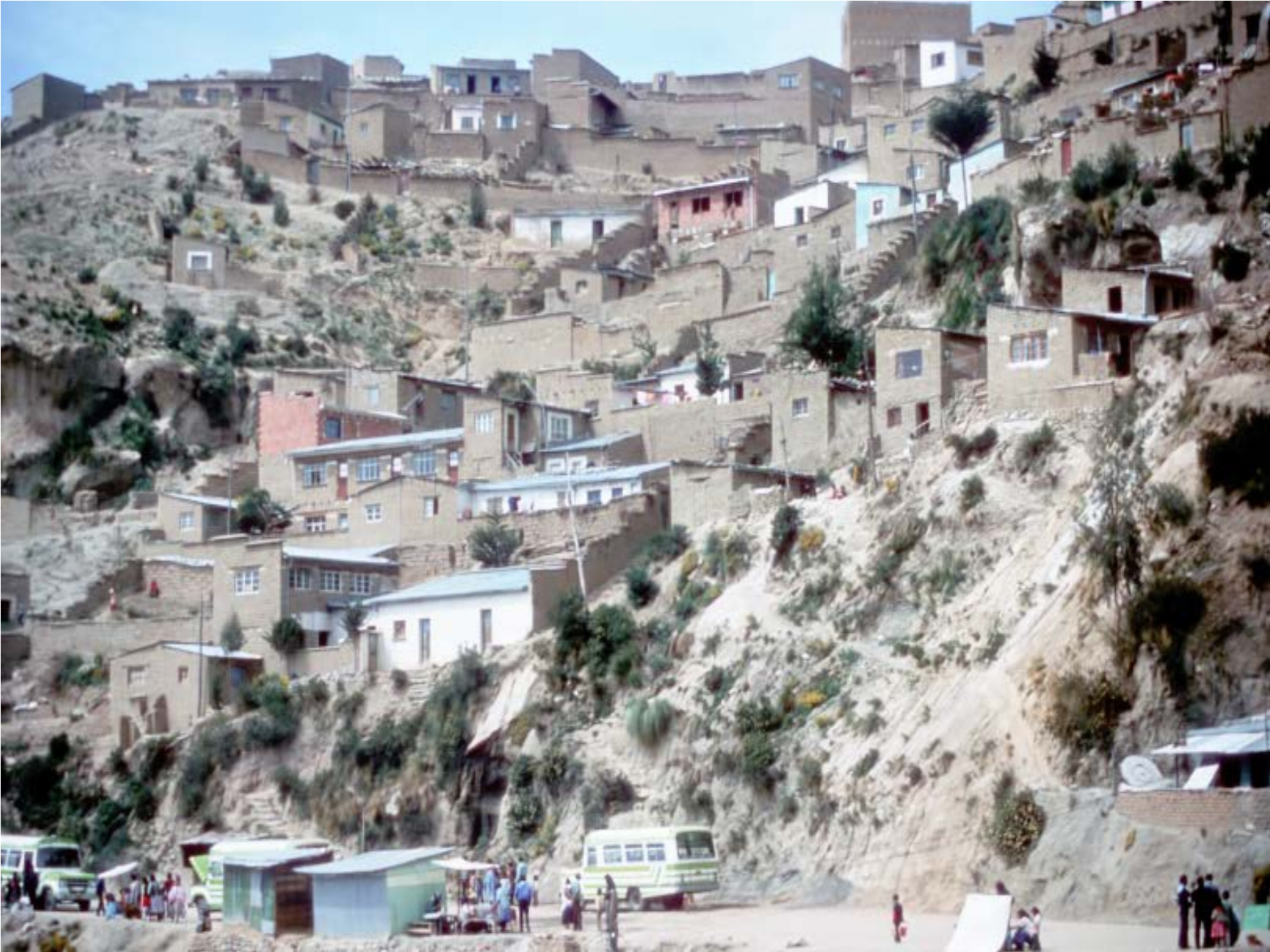
## Las Laderas – zonas más vulnerables





















**Laderas; zona Callapa**  
**- 26 de Febrero 2011**









AVENIDA  
PAZ TERNANDEZ







EMERGENCIAS GNL

2313ZCK























VENTA AL POR MAYOR

en esta... no te cueste nada y vale más que todo

EL INCA

Coca-Cola



# Socio-environmental challenges in La Paz; key factors:

- Population pressure
- Land tenure and self help building
- Lack of services and urban infrastructure
- Inadequate municipal planning