## Demography-III

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### **Population growth**

- □The population of the world or any country grows according to two factors; **birth rate and death rate.**
- □The difference between them is called the **Rate**Of Natural Increase (RNI) which is always
  expressed as a percent (%) and is calculated

as: <u>CBR – CDR</u> or:

10

= <u>No. of births – No. of deaths in a year in a locality</u> X 100 Estimated mid year pop. of same year and locality

### **Population growth**

#### **Growth rate (GR)**

- □It takes into consideration not only births and deaths but also migration
- □GR = RNI + Net Migration Rate (Immigration –Emigration)
- □It is used to calculate how long at the current growth rate a population would take to double in size.
- □ Jordan growth rate in 2010 = 2.2

4

# Demographic transition model

### **Demographic transition model**

 The relationship between birth rate and death rate has been used to create a <u>Five Stage Model</u> of a country's population change called <u>Demographic Transition Model</u> or population change model

# Stages of the demographic transition model

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Stage 1 (High Fluctuation)
Stage 2 (Early Expanding)
Stage 3 (Late Expanding)
Stage 4 (Low Stationary)
Stage 5 (Declining)
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Stage	1 High stationary	2 Early expanding	3 Late expanding	4 Low stationary	5 ? Declining?
30- Birth and death rates 20- (per 1000 people per year)	Death rate	Birth rate	Natural increase		Natural decrease
0- Examples		Equat Vanua India	Brazil	USA, Japan France, UK	
Examples	A few remote groups	Egypt, Kenya, India	Dideii	our if supur i runce, or	Germany
	A few remote groups High	High	Falling	Low	Germany Very low
Birth rate					
Birth rate Death rate Natural	High	High	Falling	Low	Very low
Birth rate Death rate Natural increase Reasons for changes in birth rate	High High Stable or	High Falls rapidly Very rapid increase for farming, Many age, Religious/social	Falling Falls more slowly	Low Low Stable or	Very low Low Slow decrease Good health. of women.

http://www.geographyalltheway.com/igcse\_geography/population\_settlement/population/imagesetc/demographic\_transition\_det

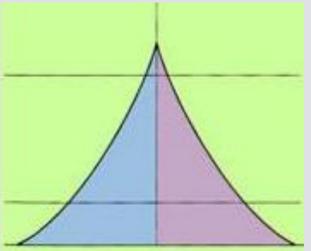
### **Link to Population Pyramids?**

Stage 1	Stage 2	Stage 3	Stage 4
Expansive.	Expansive.	Stationary.	Contractive.
Concave sides.	Straight sides.	Convex sides.	Convex sides.
High birth rate.	Still high birth rate.	Declining birth rate.	Low birth rate.
High death rate.	Falling death rate.	Low death rate.	Low death rate.
Short life expectancy.	Slightly longer life expectancy.	Long life expectancy.	Longer life expeactancy.
Rapid fall in each upward age group due to high DR.	Fall in DR so more people living into middle age.	An increasing proportion of the population is in the 65+ age group.	Higher dependency ratio.

### Stage 1 -High Stationary

- 1. High Birth Rates
- 2. High Death Rates

3. Population Growth Is Slow And Fluctuating.



#### **Reason?**

(10)

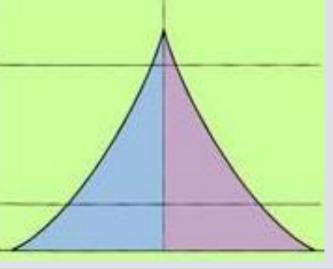
- 1. Need for workers in agriculture
- 2. Lack of clean water, sanitation, medical care, education
- 3. Religious beliefs and culture
- 4. Lack of family planning (use, access or need)



□Typical of Britain in the 18th century,

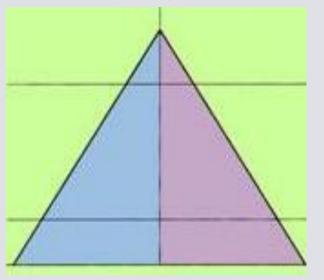
□Although NO country is currently in

stage one.



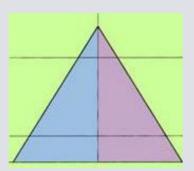
### Stage 2 – Early Expanding

- 1. Birth rate remains high
- 2. Death rate is falling
- 3. Population begins to rise steadily.



- **■**Beginnings of industrialization
- **□**Improvements in food supply
- □Improvements in medical care (smallpox vaccine) and sanitation
- □Cultural lag attitudes about large families not changing
- □Family planning still not widely used



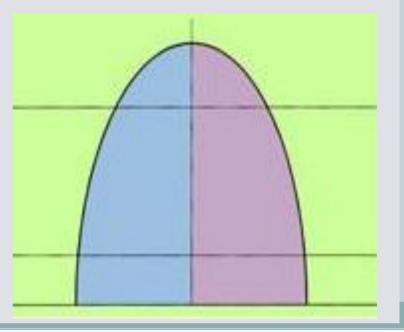


#### □Countries in this stage include Bangladesh, Yemen, Afghanistan and much of Sub-Saharan African

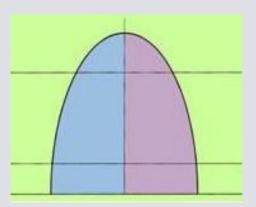
□ Do not include South Africa, Zimbabwe, Botswana, Swaziland, Lesotho, Namibia, Kenya and Ghana, which have begun to move into stage 3.

### Stage 3 – Late Expanding

- **□Birth rate starts to fall**
- **□** Death rate continues to fall
- **□**Population is rising.



- **□**Industrialization continues
- □Increase in urbanization
- □Cultural attitudes favoring small families take hold
- **□** Family planning available
- Health care and sanitation continue to improve (lower Infant Mortality Rate)
- **□**Increased standard of living
- **□**Changing status of women

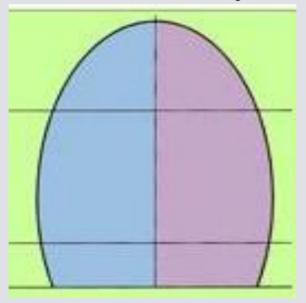


### □China, Brazil and Egypt

□ REMEMBER - South Africa, Zimbabwe, Botswana, Swaziland, Lesotho, Namibia, Kenya and Ghana, which have begun to move into stage 3.

### Stage 4 – Low Stationary

- Birth rate and death rate are both low.
- Population remains steady.

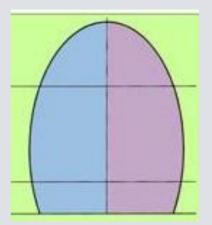


- **■**Excellent standard of living
- Universal access to healthcare and sanitation (long life expectancy)
- ☐ High percentage of individuals accessing birth control
- ■More women in the labor force = fewer children
- Cultural attitudes favor smaller families
- **■**Education more readily accessible

#### Where?

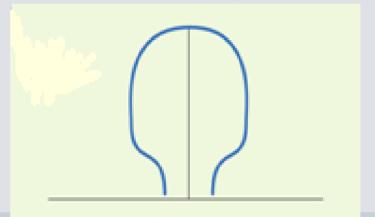
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- **□Canada**
- **□United States**
- □Japan
- **■Most of Europe**

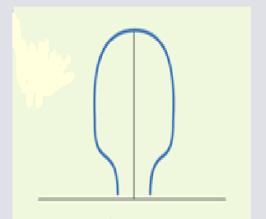


# Stage 5? Declining

- □Currently entering into the negative growth rate meaning that there are:
- □less births than deaths = country's population size is decreasing



- 1. Germany
- 2. Italy
- 3. Spain
- 4. Portugal
- 5. Greece
- 6. United Kingdom



## Selected demographic indicators of Jordan

### DEMOGRAPHIC INDICATORS, 2006 - 2010

Indicators	2006	2008	2010
Total population	5600000	5850000	6113000
Crude Birth Rate:	29.1	29.1	30.1
Crude Death Rate:	7.0	7.0	7.0
Population Growth Rate:	2.3	2.2	2.2
Dependency Ratio:	68.0	68.1	68.2
%population <15 years	37.3	36.9	37.3
Total Fertility Rate:	3.7	3.6	3.8

Sources: http://www.dos.gov.jo

DOS. Jordan in Figures (2006, 2008, 2010) (DOS). Jordan Population and Family Health Survey 2009. Amman, May 2010

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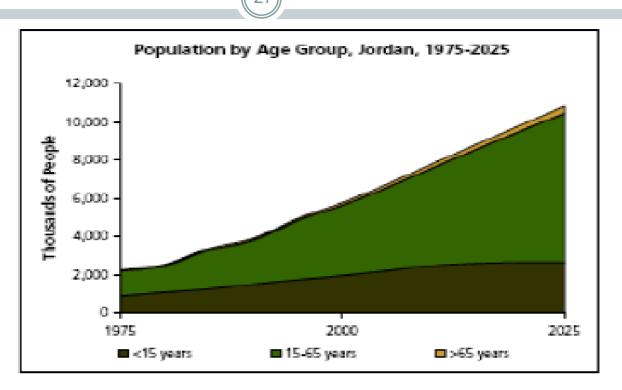
Demographic indicator	2020
CBR	20.6/1000
CDR	6.0/1000
FERTILITY RATE	2.77

- 1. The current population of Jordan is 10,234,708 as of Saturday, October 24, 2020, based on Worldometer elaboration of the latest United Nations data.
- 2. Jordan 2020 population is estimated at 10,203,134 people at mid year according to UN data.
- 3. Jordan population is equivalent to 0.13% of the total world population.
- 4. Jordan ranks number 88 in the list of countries (and dependencies) by population.
- 5. The population density in Jordan is 115 per Km2 (298 people per mi2).
- 6. The total land area is 88,780 Km2 (34,278 sq. miles)
- 7. 91.5 % of the population is urban (9,332,603 people in 2020)
- 8. The median age in Jordan is 23.8 years.

## Main demographic challenges in Jordan

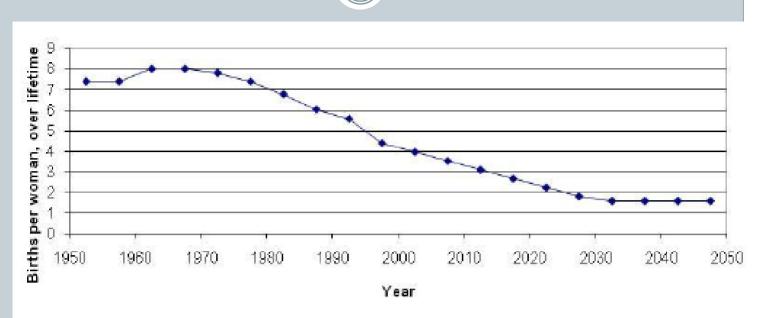
- 1. High growth rate due to high fertility rates and forced migration waves.
- 2. Increasing population that is aging.
- 3. Unplanned organization (about 50% of population live in greater Amman area)
- 4. Scarcity of water resources and Limited natural resources

### Population by age groups, Jordan, 1975-2025



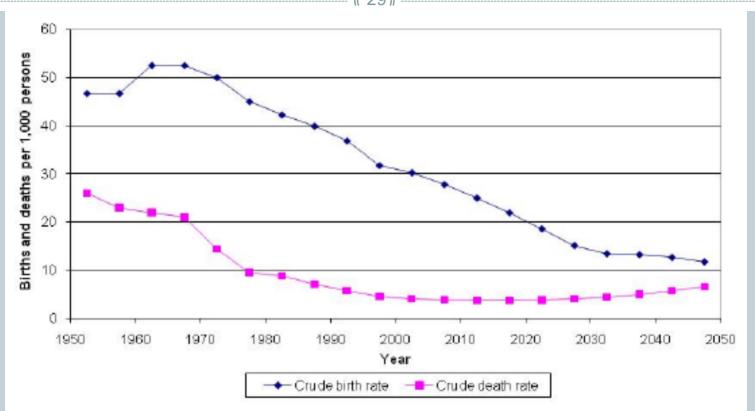
Source: Earth trends: http://earthtrends.wri.org

### **Total fertility rates Jordan**



Source: United Nations Population Division, 1998 World Population Prospects

### Crude birth and death rates, Jordan



Source: United Nations Population Division, 1998 World Population Prospects