

Slides, graphs, tables, diagrams

I. Types of graphic representation

III. Lines and letters

IV. Useful phrases

I. Types of graphic representation

picture	obrázek
photograph	fotografie
figure	obrázek; číslo, číslice; částka
graph	graf
diagram	diagram
sketch	nákres, náčrtek, skica
schema	schema, nárys, diagram
schematic/schematic drawing/schematic representation	schema, schematický nákres
graphical representation	grafické znázornění
drawing	výkres, kresba
chart	tabulka, graf, schema, diagram
flow chart	vývojový diagram
pie chart	kruhový diagram
line graph	spojnicový diagram
bar graph/bar chart/histogram	sloupcový diagram, histogram
table	tabulka
curve	křivka
curve fitting	vynesení křivky
projection	výhled, promítnutí, projekce
trend	trend, tendence
axis (vertical/horizontal) (on/along the axis)	osa (x,y) (na ose)
peak	pík, vrchol, maximální hodnota
trough	minimální hodnota
levelling off/plateau	vyrovnaná, stejná hodnota

Notes:

- Distinguish between the following expressions:

- figure**
 - a drawing in academic materials that presents data (illustration, diagram, graph)
 - number, amount (*the inflation figure is 6.5 this year*)
 - a shape in mathematics (*a five-sided figure*)
- graph**
 - a picture that uses lines or curves to show the relationship between numbers or measurements that change
- diagram**
 - a drawing that explains something
- sketch**
 - a drawing made quickly that does not have many details
- schema**
 - a drawing/description/diagram that shows the main parts of something
- schematic**
 - short for "schematic drawing/representation"

chart a list/drawing/graph showing information in a way easy to understand

- Do not use “scheme” in the meaning of “**diagram**” as it is **most often used in the meaning of**

“a formal, official plan” (*a pension scheme*)

“a clever, dishonest plan” (*a scheme to escape taxes*)

You can also find it in the meaning of “a system of correlated things, parts, their arrangement” (e.g. *experimental measurement schemes*).

II. Verbs describing slides, graphs, tables, diagrams

to plot/draw/construct a graph	vynést graf
to plot <i>a</i> against <i>b</i>	vynést <i>a</i> v závislosti na <i>b</i>
to plot <i>a</i> as a function of <i>b</i>	vynést <i>a</i> jako funkci <i>b</i>
to read a value off/from a graph	odečítat hodnotu z diagramu
to fit a curve	proložit křivku
to tabulate	vynést do tabulky
to project (e.g. <i>x</i> is projected to rise)	promítnout si, předvídat, předpovídat možný vývoj/průběh křivky
to fluctuate	fluktuovat
to stand at (50%)	setrvávat na hodnotě (50%)
to remain constant (at)	zůstávat/být konstantní na (hodnotě ...)
to reach a peak of	dosáhnout maximální hodnoty, špičky
to level off (at)	setrvat na stejné hodnotě

III. Lines and letters

lettering	popis grafu, popisky
caption	název obrázku, titulek
dash/dashed line	čárkovaná čára
broken line	lomená/přerušovaná čára
dotted line	tečkovaná čára
dot-and-dash line	čerchovaná čára
light line	tenká čára
heavy/thick line	silná čára
bold type	tučné písmo
in bold/in bold print; boldface	tučným písmem
capital/capital letter, upper case/upper-case letter	velké písmeno
in upper case, in capitals/in capital letters	velkým písmem
small letter, lower case/lower-case letter	malé písmeno
in lower case, in small letters	malým písmem

IV. Phrases

General

I'd like to start by drawing your attention to ...

I'd like to focus your attention on ...

Let me point out that ...

What's really important here is ...

Let's look more closely at ...

Describing slides/pictures/figures/tables/charts/diagrams/graphs

This slide shows/describes/presents/depicts ...

on this slide, in this picture, in Fig. 1, in Table 2

on/in this chart, on/in this diagram, on/in this graph you can see

in the table below

As can be seen from this slide/chart/diagram/table/graph, ...

As you can see ... here/from this slide/in this diagram/in this table

It can be seen from this chart/diagram/table/graph that ...

In this photograph/diagram/table/picture/figure/chart/graph you can see ...

Here you can see ...

Here is ...

This is ...

As shown in ...

As follows from ..,

According to this ...

To illustrate this, let's have a closer look at ...

Let's now look at the next slide.

Explaining figures/tables/charts/diagrams/graphs

We entered the data on this chart/in this table.

We plotted the data/values.

On the left/on the right/at the top/at the bottom/in the middle/in the bottom left corner/in the top right corner/in the lower left corner/in the upper right corner/here you can see ...

The first/second/third column shows/represents/expresses/gives ...

The data in the fourth row was/were taken from ...

According to the curve on/in this graph ...

The table/diagram/chart shows that there was

a minimal/slight/small/slow/gradual/steady/marked/large/dramatic/significant/
substantial/steep/sharp/rapid

rise/increase/growth/decrease/decline/reduction/fall/drop

in (e.g. in the number of ... = pokles počtu)

of (e.g. of 50% = o 50%)

from – to (e.g. from 50% to 20% = z 50% na 20%)

The table/diagram/chart shows that the unemployment rate

increased/rose/went up

by (e.g. by 5% = o 5%)

from – to (e.g. from 8.5% to 10% = z 8.5% na 10%)

The table/diagram/chart shows that the unemployment rate

decreased/dropped/fell/declined/went down

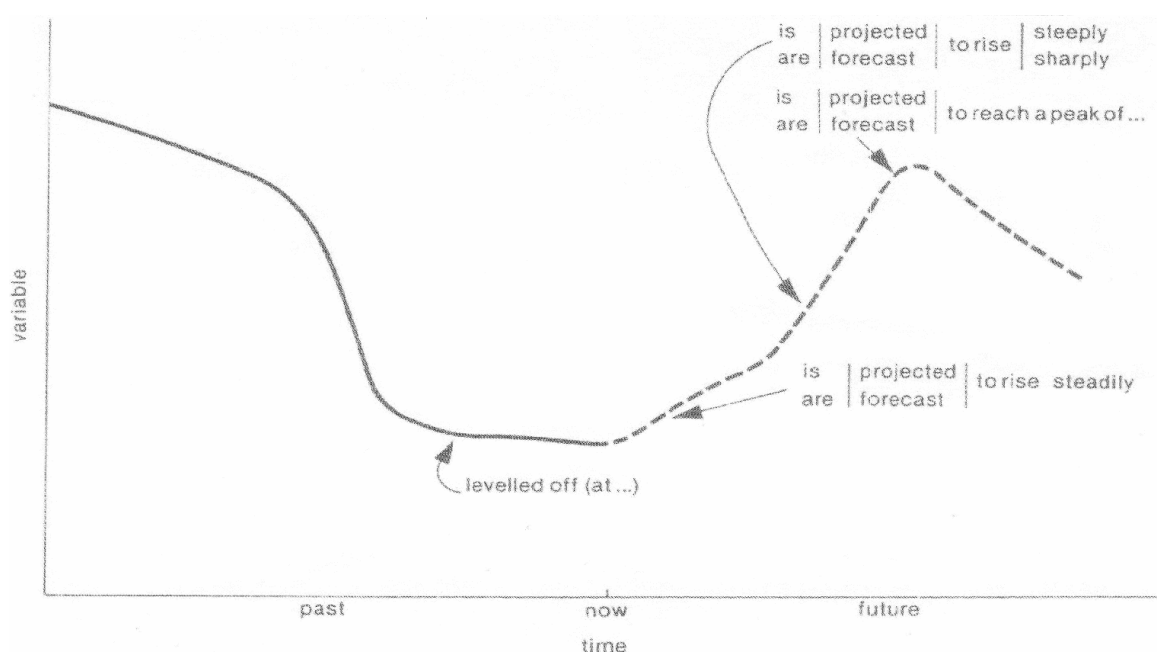
by (e.g. 5% = o 5%)

from – to (e.g. from 10% to 8.5% = z 10% na 8.5%)

The (red/dotted/dashed/upper/lower) curve shows the progression of ...
 Our experimental results are shown in red.
 By comparing the two graphs, we can see that...
 If we compare the graphs, we can see that...

EXERCISES

I. Describe the graph using the vocabulary you have learned. Some of the expressions are provided below.



.....

.....

.....

.....

.....

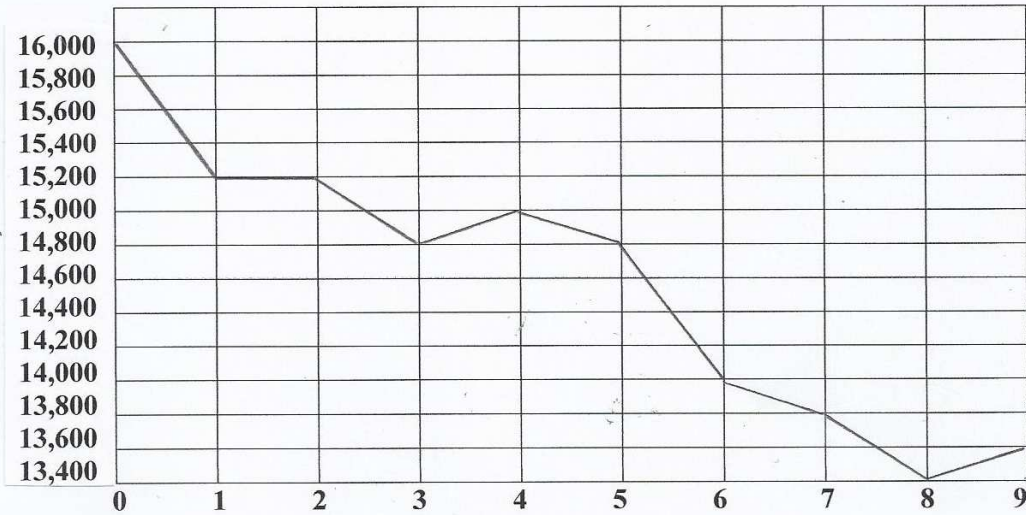
.....

.....

II. Look at the graph and complete the sentences by writing one word in each gap.

Capacity
in MW

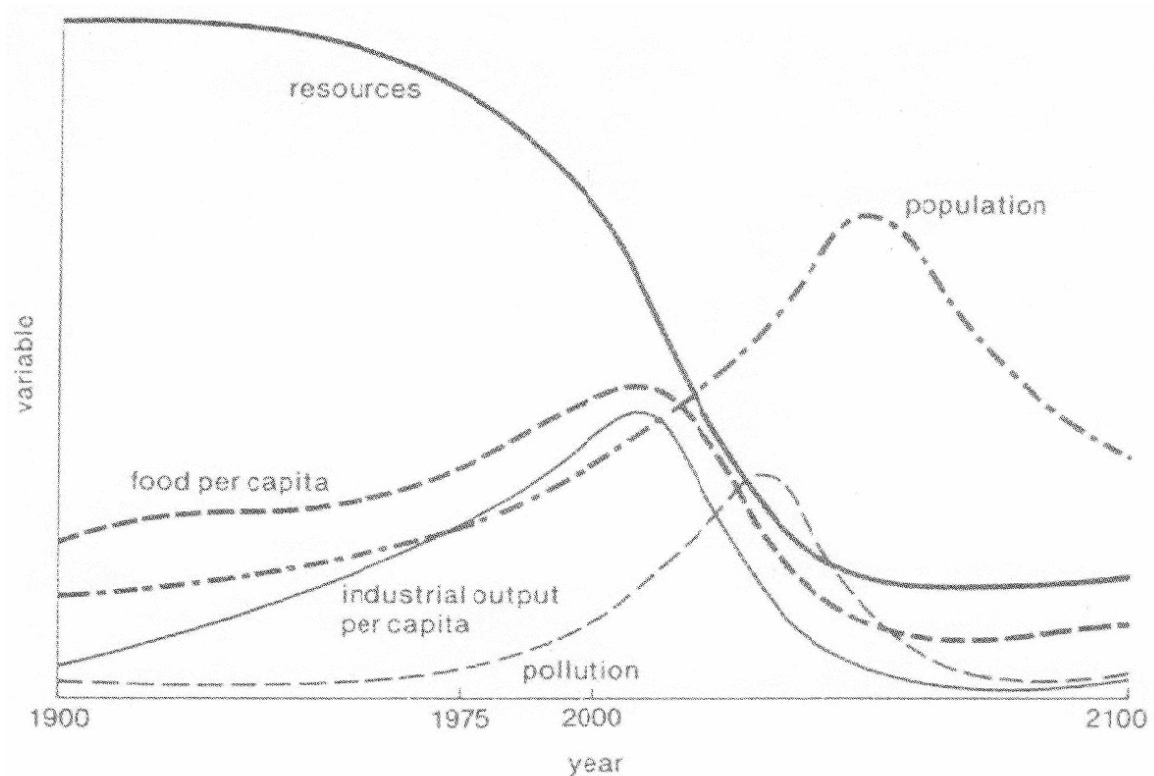
Electricity Generating Capacity



1. In year 1 it by 800MW.
2. In the 2nd year it constant 15,200MW
3. Then, in the 3rd year it 14,800MW.
4. And in year 4, we saw a small increase 200MW.
5. But in the 5th year capacity to 14,800MW.
6. This trend continued, and in the 6th year capacity substantially 800MW.
7. There was a further 200MW in the 7th year.
8. And in year 8 capacity 13,400 MW.
9. But in year 9 capacity showed a small 200MW.

III. Look at the following figure and use the hints to form a text.

1.1



1. The figure shows the relationships between resources, food per capita, industrial output per capita, population, and pollution from 1900 to the present day, and projections until the end of the 21st century.

2. Give comments on the data for resources.

Resources to the present day, and are projected to until, when

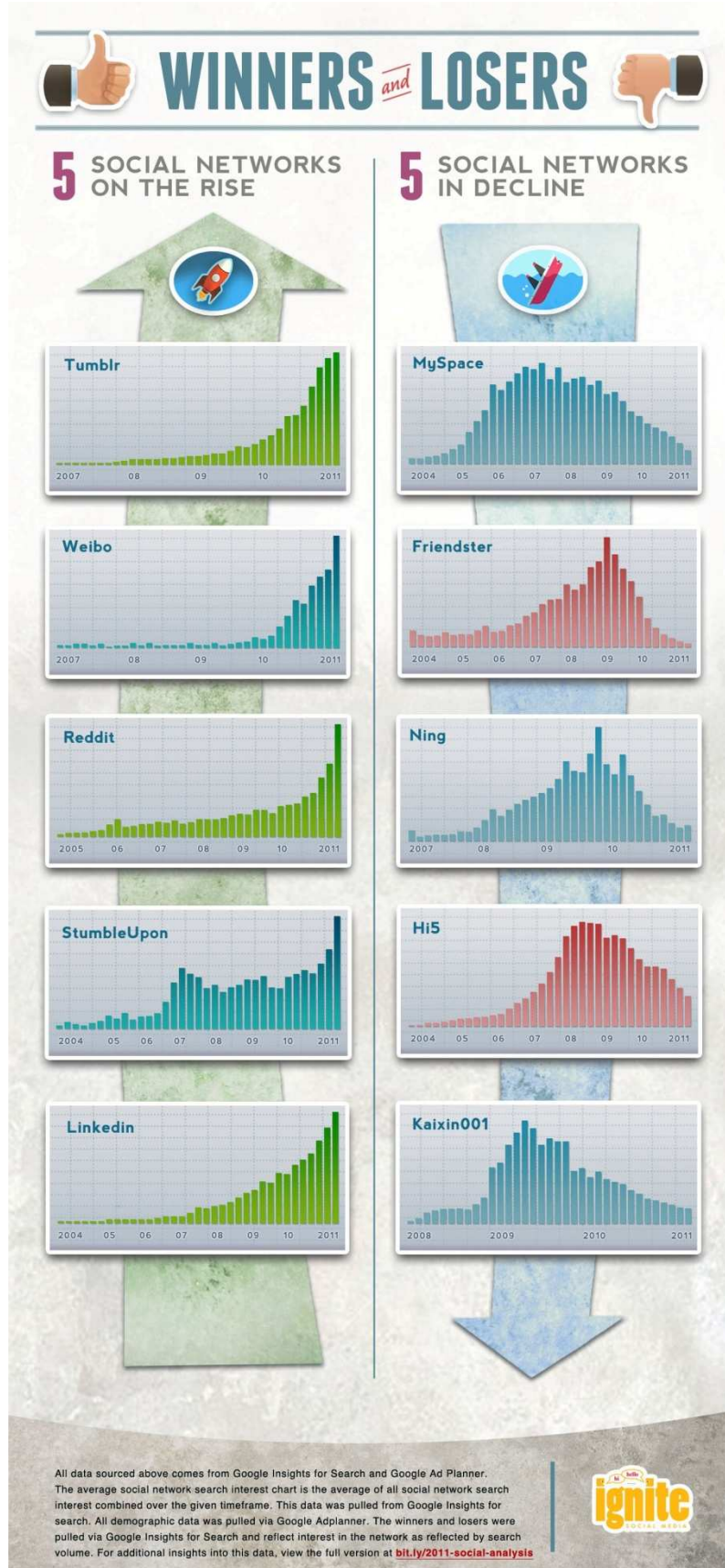
3. Comment on the pollution and population.

..... in parallel until now, and both saw This parallel rise is forecast, but pollution levels to peak sooner than,, after which both will

4. Comment on food and industrial output per capita.

..... are closely linked, both throughout the 20th century, and they are until the early decades of the 21st century. They will then both see which in the mid-21st century.

IV. Select 3 pairs of graphs representing the use of social networks and compare and comment on their changes over time.



V. Look at the following texts and diagrams and describe 1, 3 and 4.

Head Count

On Oct. 31, the 7 billionth person is projected to be born. What do our growing numbers mean for our future?

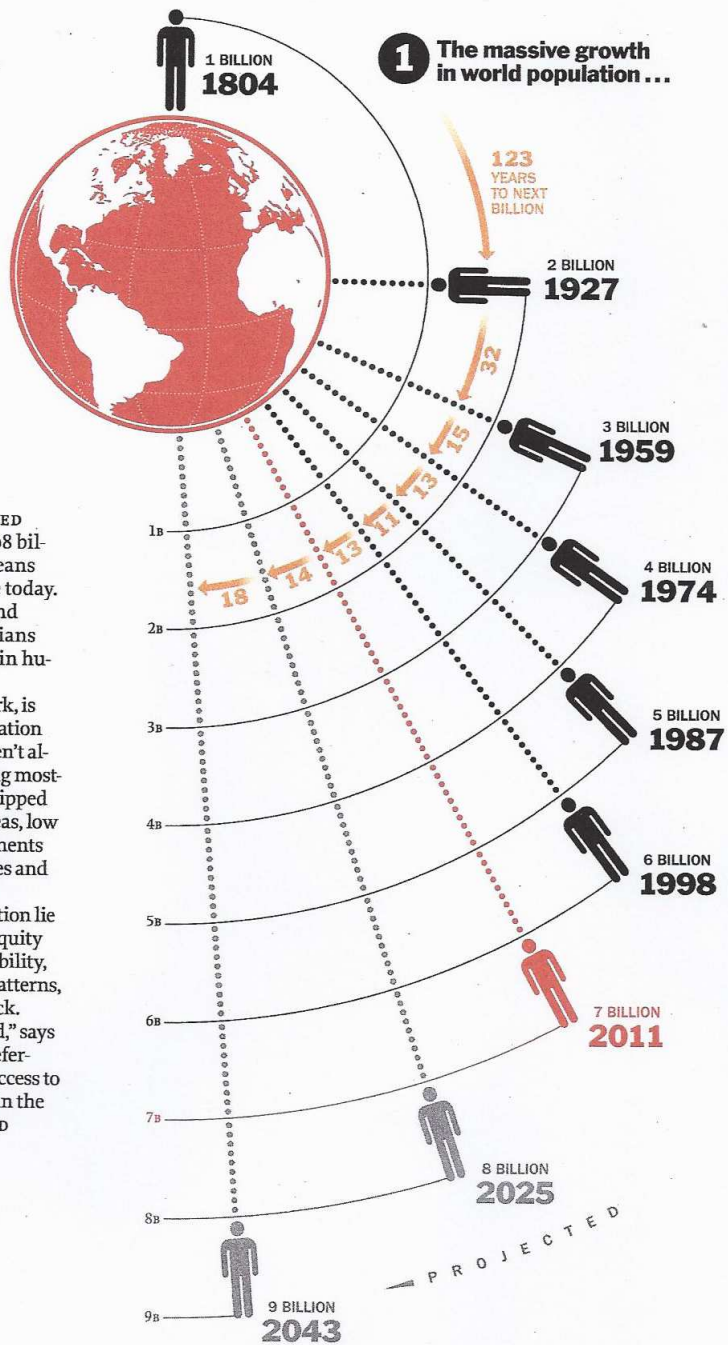
SINCE MODERN *HOMO SAPIENS* FIRST APPEARED around 50,000 B.C., an estimated total of 108 billion people have lived on earth—which means that about 6.5% of all humans ever born are alive today. That's a lot of bodies to feed, clothe and shelter, and economists, demographers, scientists and politicians have long fretted over our world's ability to sustain humanity as it multiplies.

The good news, as we approach the 7 billion mark, is that we likely have the resources to sustain a population of that size. The bad news is that those resources aren't always where the people are. Populations are booming mostly in the poorer regions of the planet—the least equipped to accommodate additional life—while in other areas, low fertility rates and increased life spans have governments concerned about maintaining productive economies and providing for the rising numbers of elderly people.

The challenges of the expanding human population lie not so much in curbing growth as in addressing inequity around the globe: finding ways to promote sustainability, support aging generations and adapt to migration patterns, all while keeping our footprint on the planet in check. "Generally speaking, countries do have enough food," says Carl Haub, senior demographer at the Population Reference Bureau. "It's just that many people don't have access to it because of poverty." That's something to work on in the 14 years between now and 8 billion. —ANDRÉA FORD



ALL TOGETHER
If you packed the world's population in at New York City's density, we would fit inside the state of Texas

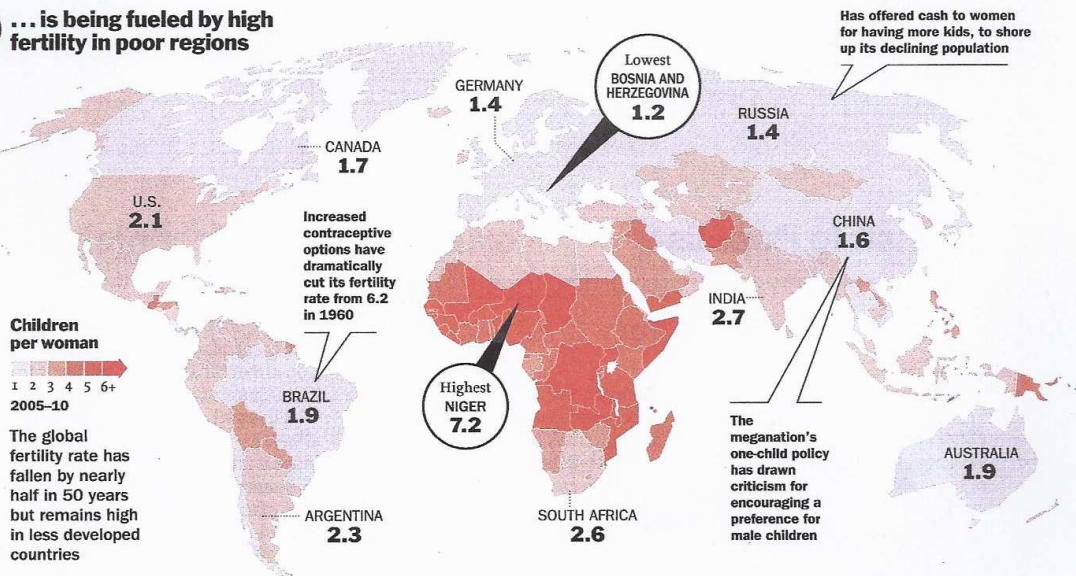


10 MOST POPULATED COUNTRIES ↑ = 15 MILLION

CHINA
1.3 BILLION

INDIA
1.2 BILLION

2 ... is being fueled by high fertility in poor regions

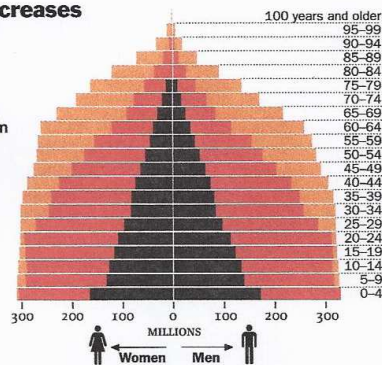


3 ... and by increases in life span

There were 12 working-age people for every person over 65 in 1950; by 2050 there will be 3

Population by age and sex

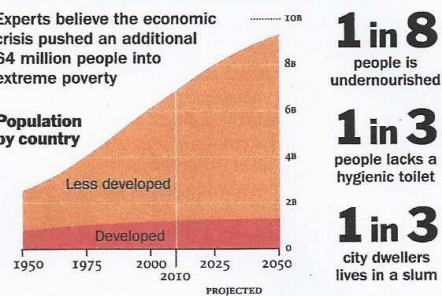
1950
2010
2050 (projected)



4 So the need for development will become even more critical

Experts believe the economic crisis pushed an additional 64 million people into extreme poverty

Population by country



Sources: U.N.; Population Reference Bureau; CIA World Factbook; TIME Graphic by Andrián Ford and Lon Tweeten

THE MOST REPRESENTATIVE EXAMPLE OF OUR 7 BILLION ...



Lives in China
19% of world population



Is Christian
33% of world population



Is male
50.4% of world population



Lives in a town or city
50.5% of world population



Is 29 years old
Median age of world population



Makes \$10,290 per year
Per capita gross world income



Does not use the Internet
73% of world population



From: Time Oct. 31, 2011

VI. Choose an interesting diagram from your own home reading and describe it in detail.