

II. PRED RADAR GRAPHS

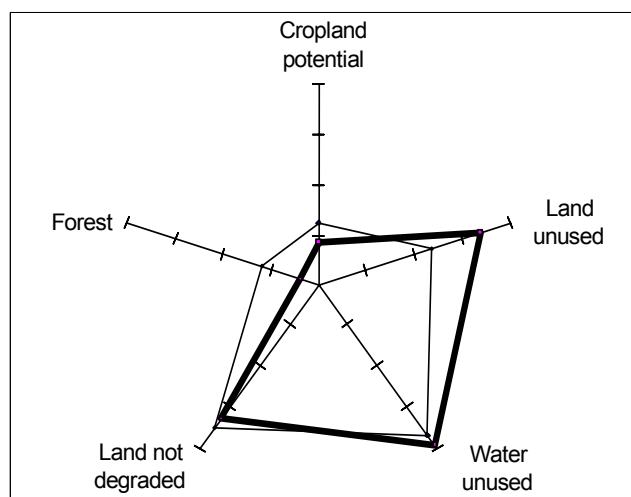
In order to illustrate the overall state of population, resources, environment and development in each country as the most recent years(s), two radars graphs are included in each country's profile. They are the Resource-Environment radar and the Population-Development radar.

The radar graph portrays relationships between socio-economic indicators included in the database. For the Resource-Environment radar graph, five variables are presented, one on each axis, and then connected with a bold line to form a pentagon. The variables are: land with crop production potential as percentage of land area ("Cropland potential"); difference between land with crop production potential and land in agricultural use ("Land unused"); difference between annual internal renewable water resources and water withdrawal ("Water unused"); percentage of land that is not moderately, strongly or extremely degraded ("Not degraded") and forest as a percentage of land area ("Forest"). The Population-Development radar graph incorporates six variables – life expectancy; the total fertility rate (TFR); urban population as a percentage of total population ("% Urban"); the percentage of the economically active population in non-agricultural jobs ("% Non-ag. labour"); Gross Domestic Product per capita, plotted on a logarithmic scale ("GDP/cap") and per capita calorie supply ("Calories/cap") – which are similarly connected with a bold line to construct a hexagon. The shape of the pentagon and hexagon can thus easily be compared with the reference group (world average), which is represented by a fine line. Any point outside the fine line represents a value below the world average. For the Resource-Environment radar, values towards the outside of the graph are those associated with greater abundance of or less pressure on the resources shown. For the Population-Development radar, values outside the fine line are those that tend to be associated with higher levels of development, namely: high life expectancy, low fertility, high percentage urban, high percentage in non-agricultural jobs, high daily calorie supply and high GDP per capita.

Ticks on the scale included in the graphs show, from the centre, one fourth, one half, three-fourths and 100 per cent of the data range plotted. That range is listed for each variable in section B below.

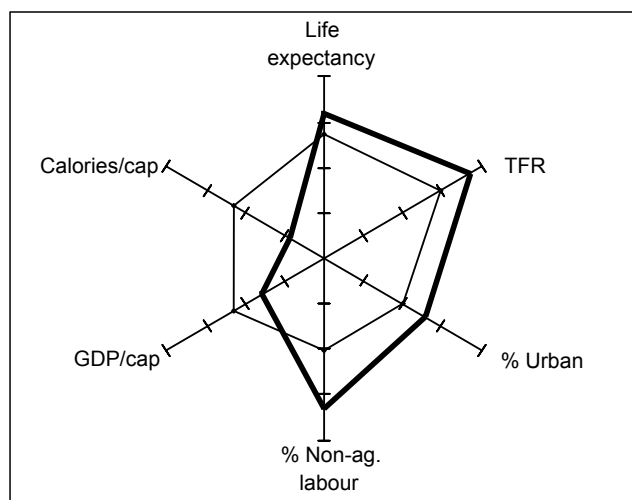
A. AN EXAMPLE OF PRED RADAR GRAPHS

1. Resource-Environment Radar



The proportion of this country's land that is suitable for agriculture is below the world average. However, a relatively high proportion of land potentially suitable for agriculture is not being used to grow crops. This country also has a below-average proportion of its land not degraded, and a relatively small proportion forest cover. The proportion of water endowments which are not used for agriculture or other human activities is very high and is above the world average.

2. *Population-Development Radar*



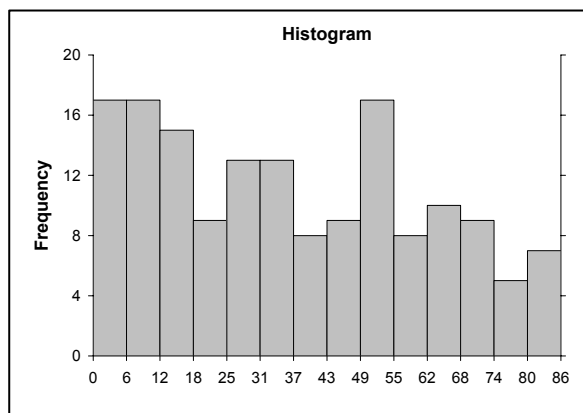
The country illustrated here has a larger proportion of its economically active population employed in non-agricultural work and a larger proportion of urban population than the world average. The GDP per capita for this country is below the world average. However, this country has both a lower total fertility rate and a higher life expectancy at birth than the world mean. The calorie supply per capita of this country is substantially below the world average.

B. VARIABLES IN PRED RADAR GRAPHS

Below are descriptions of variables in the PRED Radar graphs, including information on scale and data transformations as well as distributions of values across countries. The scale indicated below pertains to the range of values plotted for each variable, from the center to the periphery of each spoke of the radar graph. See chapter I for a more detailed definition of the variables.

1. *Resource-environment radar*

a. **Cropland potential:** Land with crop production potential as percentage of land area, 1994-1996

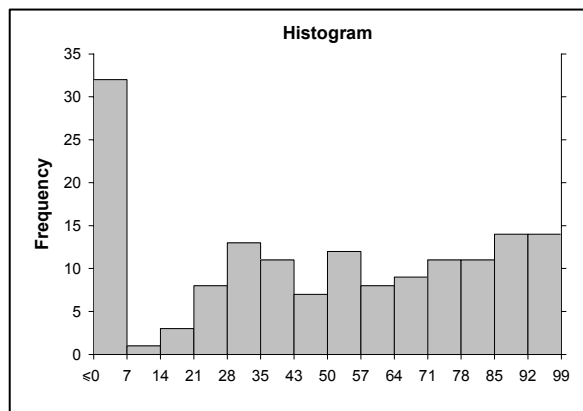


Variable: v47 of PRED Bank
Scale: 0 to 90 per cent

Distribution

N: 158 countries or areas
Missing: 34
Minimum: 0 per cent (Iceland)
Maximum: 86 per cent (Lithuania)
Mean: 28 per cent as calculated with land area (v42) as weight

b. **Land unused:** Difference between land with crop production potential and land in agricultural use, as percentage of land with crop production potential, 1994-1996



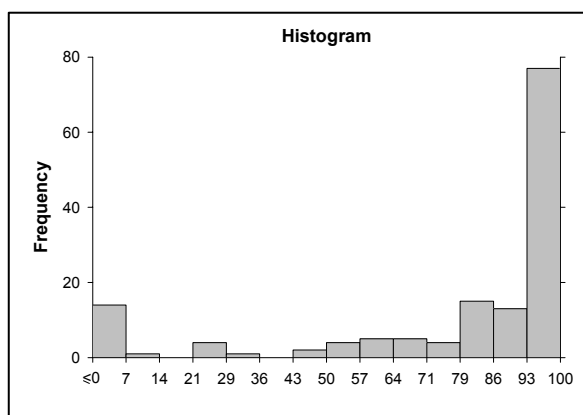
Variable: 100 - v49
Scale: 0 to 100

Distribution

N: 155 countries
Missing: 37
Minimum: 0 per cent (Afghanistan*)
Maximum: 99 per cent (Suriname)
Mean: 58 per cent calculated with land with crop production potential as weight

* The following countries have negative values: Afghanistan, Bhutan, Burundi, Egypt, El Salvador, Fiji, Haiti, Iran, Iraq, Jamaica, Jordan, Kazakhstan, Lebanon, Lesotho, Malaysia, Mongolia, Morocco, Nepal, Norway, Pakistan, Philippines, Rwanda, Saudi Arabia, Spain, Syrian Arab Republic, Tunisia, Yemen. For explanation, see technical notes for variables. For the PRED Radar, values less than zero were recoded to zero.

c. **Water unused:** Difference between annual internal renewable water resources and water withdrawal, as percentage, latest available year



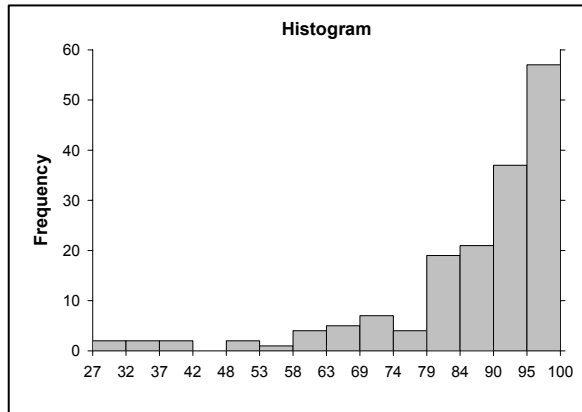
Variable: 100-V50
Scale: 0 to 100 per cent

Distribution

N: 145 countries
Missing: 47
Minimum: 0 per cent (Azerbaijan*)
Maximum: 100 per cent (Central African Republic, Congo)
Mean: 92 per cent as calculated with annual internal renewable water resources as weight

* The following countries have negative values, implying withdrawals at a rate exceeding annual replenishment: Azerbaijan, Egypt, Hungary, Iraq, Jordan, Libyan Arab Jamahiriya, Mauritania, Oman, Pakistan, Republic of Moldova, Saudi Arabia, Syrian Arab Republic, United Arab Emirates, Uzbekistan. For explanation, see technical notes for the variables. For the PRED Radar, values less than zero were recoded to zero.

d. **Not degraded:** Land that is not moderately, strongly or extremely degraded as percentage of land area, 1988-1989

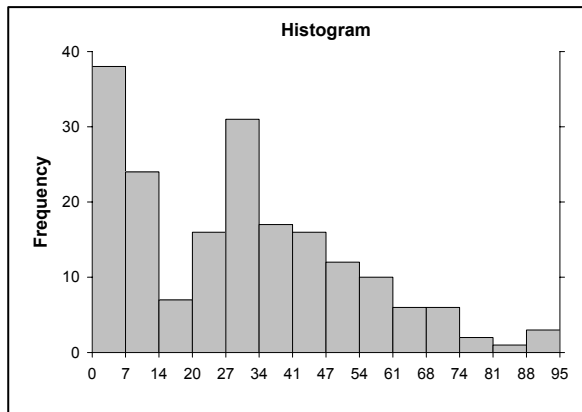


Variable: 100-v64-v65
Scale: 20 to 100 per cent

Distribution

N: 163 countries
Missing: 29
Minimum: 27 per cent (El Salvador)
Maximum: 100 per cent (Denmark, etc.)
Mean: 91 per cent as calculated with land area (v42) as weight

e. **Forest:** Forest as percentage of land area, 2005



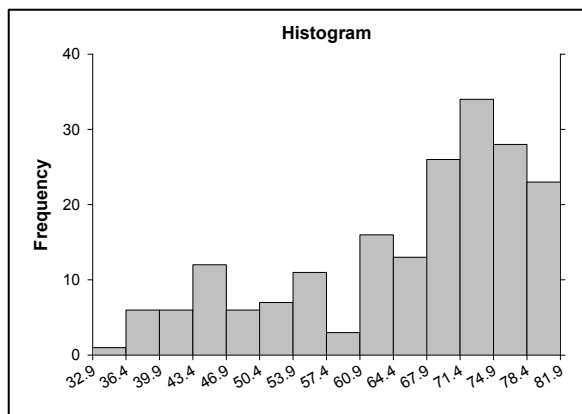
Variable: v45
Scale: 0 to 100 per cent

Distribution

N: 190 countries
Missing: 2
Minimum: 0 per cent (Oman, Qatar)
Maximum: 95 per cent (Suriname)
Mean: 30 per cent as calculated with land area (v42) as weight

2. Population-Development Radar

a. **Life expectancy:** Life expectancy at birth, 2000-2005

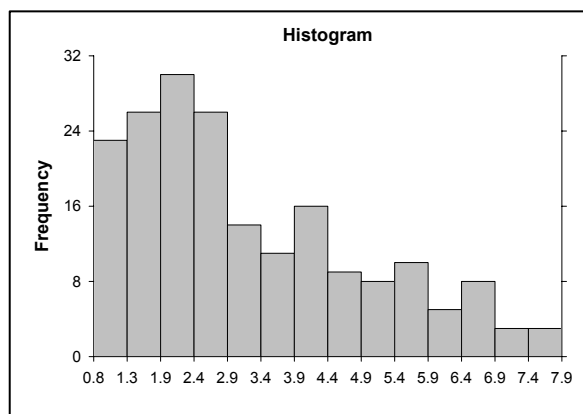


Variable: v24
Scale: 30 to 82 years

Distribution:

N: 192 countries
Missing: 0
Minimum: 32.9 years (Swaziland)
Maximum: 81.9 years (Japan)
Mean: 65.4 years (population-weighted: UN, 2005)

b. TFR: Total Fertility Rate, 2000-2005

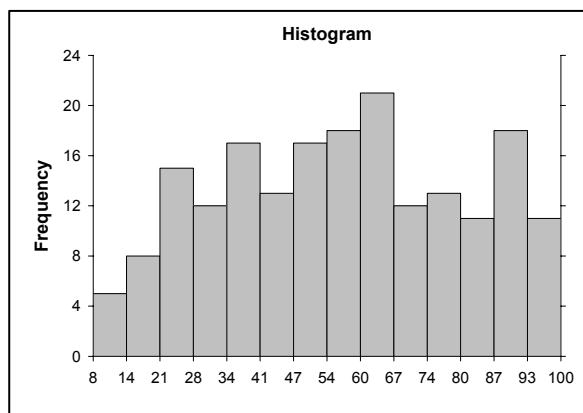


Variable: v20
Scale: 8.0 to 0.8 children per woman

Distribution:
N: 192 countries
Missing: 0
Minimum: 0.8 child (Macao SAR of China)
Maximum: 7.9 children (Niger)
Mean: 2.7 children (population-weighted: UN, 2005)

NOTE: In the PRED Radar graphs, this variable is plotted with higher values towards the centre and lower values, which tend to accompany higher levels of development, towards the outside of the graph.

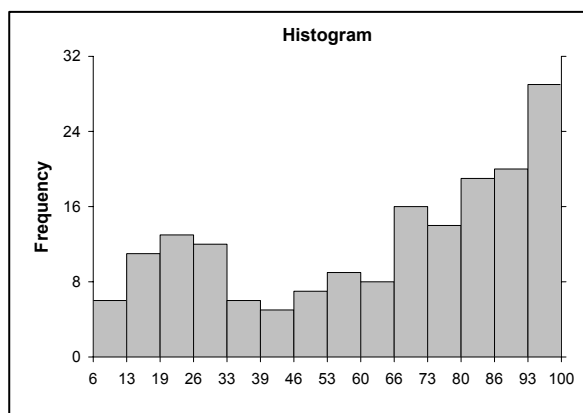
c. % Urban: Urban population as percentage of total population, 2005



Variable: v2
Scale: 0 to 100 per cent

Distribution
N: 192 countries
Missing: 0
Minimum: 8 per cent (Timor-Leste)
Maximum: 100 per cent (Singapore; China, Hong Kong SAR)
Mean: 49 per cent (population-weighted: UN, 2004e)

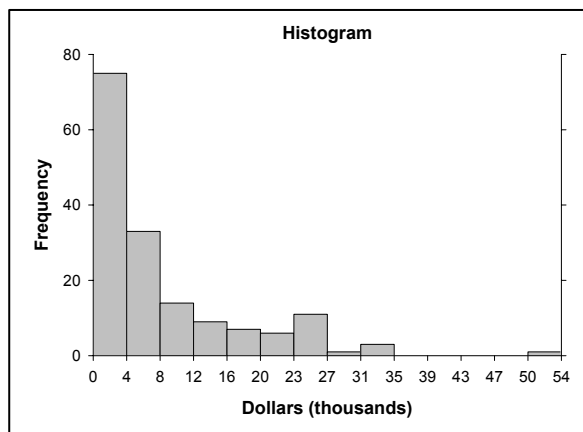
d. % Non-ag. labour: Non-agricultural economically active population as percentage of total economically active population, 1990



Variable: 100-V90
Scale: 0 to 100 per cent

Distribution
N: 176 countries
Missing: 16
Minimum: 6 per cent (Bhutan)
Maximum: 100 (China, Macao SAR)
Mean: 51 per cent (population-weighted: ILO, 1997)

e. **GDP/cap**: Gross domestic product per capita at purchasing power parity (PPP), 2002 (1995 constant international dollars)



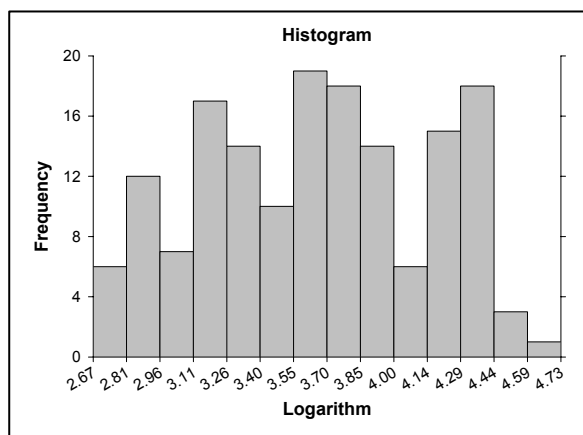
Variable: Logarithm of v79
Scale: 2.60 to 4.74

Distribution

N: 160 countries*
Missing: 32

Original data (the first graph):

Minimum: \$ 464 (Sierra Leone)
Maximum: \$ 54,201 (Luxembourg)
Mean: \$ 6,946 (population-weighted: World Bank, 2004)



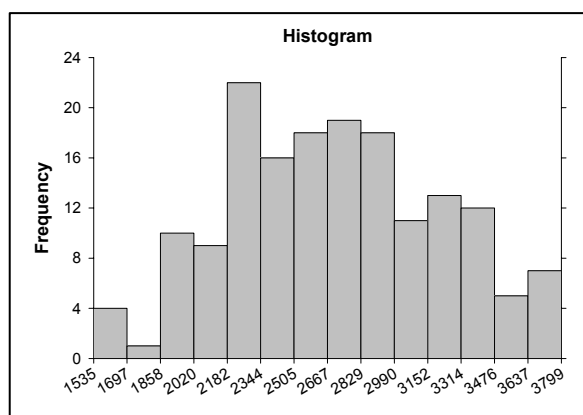
Transformed data (log₁₀, the second graph):

Minimum: 2.67 (Sierra Leone)
Maximum: 4.73 (Luxembourg)
Mean: 3.84

* Where data were available for 2000 but not 2002, data for 2000 were employed.

Note: The logarithm (base 10) of v79 is shown in the PRED Radar graph.

f. **Calories/cap**: Daily calorie supply per capita, 2001



Variable: v97
Scale: 1500 to 3800 kilocalories

Distribution:

N: 165 countries
Missing: 55 countries
Minimum: 1535 kcal (Democratic Rep. of Congo)
Maximum: 3799 kcal (Austria)
Mean: 2807 kcal (population-weighted: FAO, 2004)

III. COUNTRY PROFILES