

Environment at a Glance 2004

Papua New Guinea



Introduction



Papua New Guinea is a Low Income country with per capita income of \$530. It is located in the East Asia and Pacific region. Its land area is 45,286 thousand hectares. Total population is 4.5 millions, of which 84% is rural. Population density is 12 people per sq. km.

Forest area accounts for 7% of total forests in East Asia and Pacific. Between 1990 and 2000 the deforestation rate has been 0.4% per year. Nationally protected areas cover 2.3% of the territory (the conventional target is 10%). Papua New Guinea is very rich in Biodiversity. It hosts 214 species of mammals and 414 species of birds. Papua New Guinea is among the ten countries with the highest number of threatened species. For example, there are 58 threatened species of mammals.

Fish catch is 42,751 tons per year.

This map was produced by the Map Design Unit of the World Bank. The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of the World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.

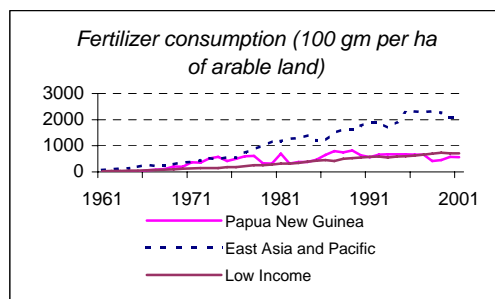
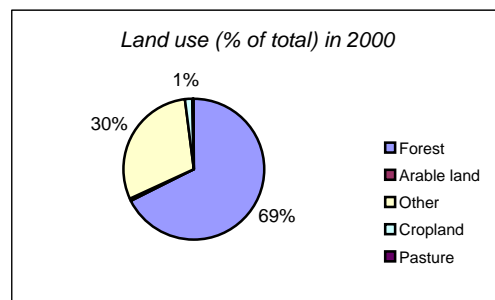
GOVERNMENT INVOLVEMENT: MULTINATIONAL AGREEMENTS

Vienna Convention (ozone)	1992
UNFCCC (climate change)	1993
UNCLOS (law of the sea)	1997
UNCCD (desertification treaty)	..
Ramsar Convention (wetlands)	1993
Kyoto Protocol (CO2 emissions)	2002
Convention on Biodiversity	1993
CMS (migratory species treaty)	..
CITES (species trade treaty)	1975

Freshwater resources per capita are abundant. Access to improved water source is 42%, which is below the regional and income group levels. Access to sanitation facilities is 82%, which is above the regional and income group levels.

Environment and Natural Resource Indicators

AGRICULTURE	Papua New Guinea		East Asia and Pacific	Low Income
	1995	2002	2002	2002
Population, total (millions)	4.5	5.4	1,839.2	2,269.7
Rural population (% of total)	83.8	82.1	61.8	69.4
	1995	2001	2001	2001
Land area (thousand ha)	45,286	45,286	..	..
Arable land (thousand ha)	194	210	..	..
Forest area (% of area)	70.1	67.6	27.2	27.1
Arable land (% of area)	0.4	0.5	13.3	12.5
Cropland (% of area)	1.3	1.4	2.7	1.5
Pasture (% of area)	0.4	0.4	34.4	28.5
Area under cereal production (thousand ha)	3	3	135,760	247,580
Irrigated land (thousand ha)	..	..	..	..
Fertilizer consumption (100 gm per ha of arable land)	670.1	561.9	2,076.9	709.8
Agriculture value added per worker (constant 1995 US\$)	837.1	792.9	..	389.0
Food production index (1989-91 = 100)	108.3	124.0	170.7	135.8



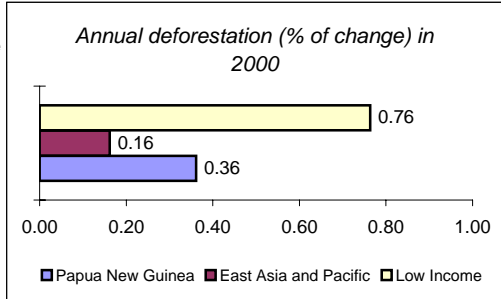
Environment at a Glance 2004

Papua New Guinea



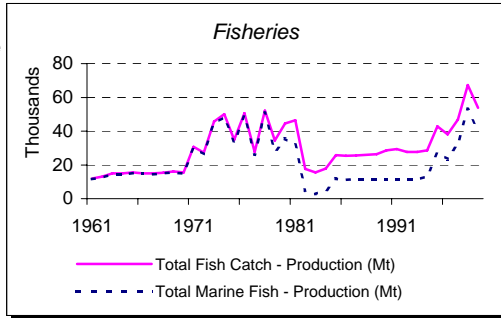
FORESTS

	Papua New Guinea		East Asia and Pacific	Low Income
	1990	2000	2000	2000
Forest area (sq km)	317,300	306,010	4,238,100	9,031,300
Forest area (% of area)	70.1	67.6	27.2	27.1
Deforestation (sq km per annum)	..	1,129	11,613	73,087
Annual deforestation (% of change)	..	0.36	0.16	0.76



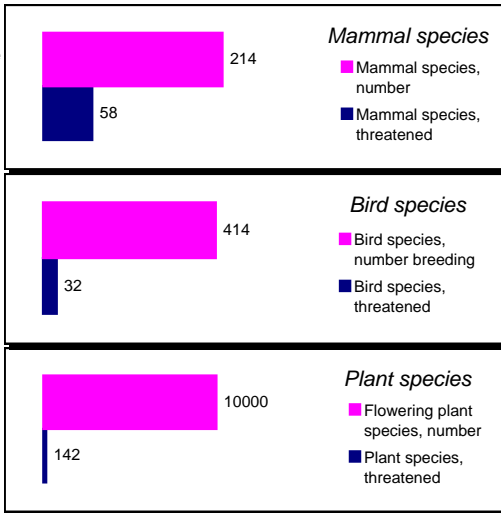
FISHERIES

	Papua New Guinea		East Asia and Pacific	Low Income
	1989	1995	1998	1999
Total Fish Catch - Production (Mt)	26,419	42,751	67,282	53,763
Total Fish Catch - Exports (Mt)	1,296	765	1,709	1,524
Total Fish Catch - Imports (Mt)	70	1	13	31
Total Marine Fish - Production (Mt)	11,300	27,080	53,115	39,796
Total Marine Fish - Exports (Mt)	80	44	390	649
Total Marine Fish - Imports (Mt)	20	-	4	12



BIODIVERSITY

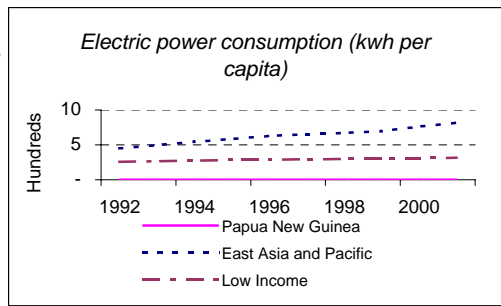
	Papua New Guinea		East Asia and Pacific	Low Income
	1996	2003	2003	2003
Nationally protected areas (% of total area)	..	2.3	..	9.1
Mammal species, number	..	214	..	..
Mammal species, number threatened	57	58	..	..
Bird species, number breeding	..	414	..	..
Bird species, number threatened	31	32	..	..
Fish species, number	..	858	..	..
Fish species, number threatened	13	13	..	..
Flowering plant species, number	10,000	..	..	..
Plant species, number threatened	..	142	..	..



Note: Flowering plant species, number is for 1999.

ENERGY

	Papua New Guinea		East Asia and Pacific	Low Income
	1995	2001	2001	2001
Electric power consumption (kwh in millions)
Electric power consumption (kwh per capita)	816	317
Electricity production (kwh in millions)	1,849,800	1,017,200
Electricity production from coal sources (% of total)	65.1	49.2

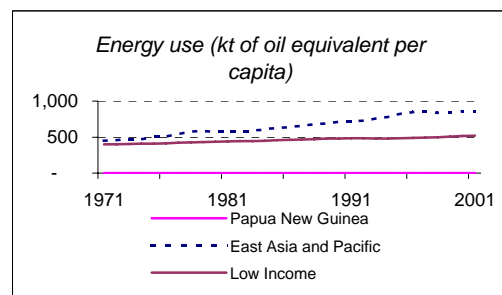


Environment at a Glance 2004

Papua New Guinea

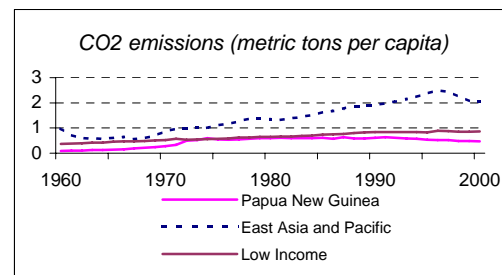


	1995	2001	2001	2001
Electricity production from hydroelectric sources (% of total)	18.3	22.7
Electricity production from natural gas sources (% of total)	9.5	16.4
Electricity production from nuclear sources (% of total)	0.9	2.1
Electricity production from oil sources (% of total)	5.2	8.8
Energy use (kt of oil equivalent)	1,550,600	1,233,400
Energy use (kg of oil equivalent per capita)	854	518
Energy production (kt of oil equivalent)	1,595,500	1,330,600
Combustible renewables and waste (% of total energy use)	21.0	46.2
GDP per unit of energy use (constant 1995 PPP \$ per kg of oil equivalent)	3.6
Private investment in energy (current US\$, millions)	3,730	1,697



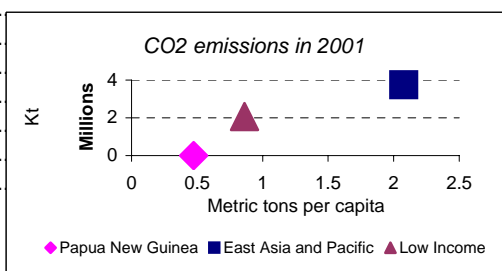
EMISSIONS and POLLUTION

	Papua New Guinea		East Asia and Pacific	Low Income
	1995	2000	2000	2000
CO2 emissions (kt)	2,407	2,407	4,061,000	1,793,400
CO2 emissions (metric tons per capita)	0.5	0.5	2.1	0.9
CO2 emissions (kg per 1995 US\$ of GDP)	0.5	0.5	2.1	1.8
Organic water pollutant (BOD) emissions (kg per day)	..	..	..	..
Organic water pollutant (BOD) emissions (kg per day per worker)	..	..	..	..



Water pollution by industry (% of total BOD emissions)

	1995	2000	2000	2000
Chemical	..	0.9	..	..
Clay
Food
Metal
Paper
Textile
Wood

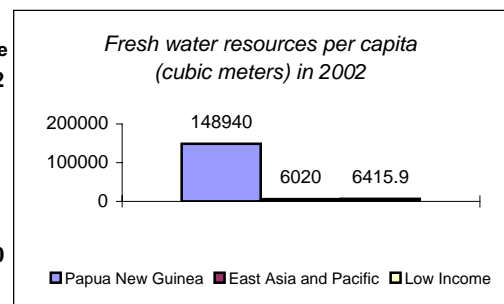


Environment at a Glance 2004

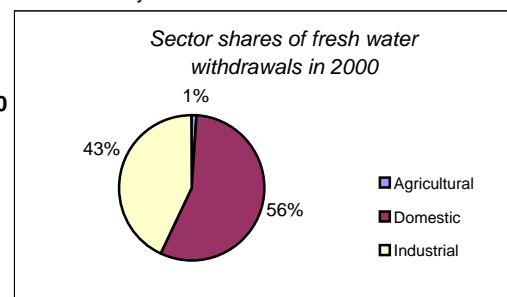
Papua New Guinea



WATER and SANITATION	Papua New Guinea		East Asia and Pacific	Low Income
	1990	2002	2002	2002
Freshwater resources per capita (cubic meters)	..	148,940	6,020	6,416
Freshwater use (% of total water resources)	..	0.0	7.2	6.5
Note: Freshwater use (% of total water resources) number for the country is for 2000.				
	1990	2000	2000	2000
Agricultural water use (%)	..	1.0	..	..
Domestic water use (%)	..	56.0	..	..
Industrial water use (%)	..	43.0	..	..
Access to improved water source	1990	2000	2000	2000
% of population with access	40.0	42.0	75.9	75.7
% of rural population with access	32.0	32.0	67.5	69.9
% of urban population with access	88.0	88.0	93.1	89.7
Access to improved sanitation facilities	1990	2000	2000	2000
% of population with access	82.0	82.0	47.1	42.6
% of rural population with access	80.0	80.0	35.8	30.9
% of urban population with access	92.0	92.0	72.4	70.6
Mortality rate, under-5 (per 1,000)	101	95	45	128
Private investment in water and sanitation (current US\$, mil)	..	..	94	236



Countries with the renewable fresh water annual resources below a 1,700 m³ per capita threshold, will experience water stress, below 1,000 m³ per capita threshold will experience water scarcity, and below 500 m³ per capita threshold will experience absolute water scarcity.



Note: Private investment in water and sanitation (current US\$) is for 1996 in the 1990 column.

NATIONAL ACCOUNTING AGGREGATES	Papua New Guinea		East Asia and Pacific	Low Income
	1995	2002	2002	2002
GDP (current US\$ billions)	4.6	2.8	1,833.1	1,123.9
GNI (current US\$ billions)	4.4	2.7	1,805.4	1,103.6
GNI per capita, Atlas method (current US\$)	1,100	530	960	430
Gross national savings, including NCTR (% of GNI)	40.8	..	36.3	22.2
Consumption of fixed capital (% of GNI)	9.5	8.6	9.2	8.4
Net national savings (% of GNI)	31.3	..	29.6	13.1
Education expenditure (% of GNI)	..	..	2.2	2.6
Energy depletion (% of GNI)	8.0	10.0	3.4	5.9
Mineral depletion (% of GNI)	19.2	4.2	0.3	0.4
Net forest depletion (% of GNI)	0.0	0.0	0.1	0.8
CO2 damage (% of GNI)	0.3	0.5	1.8	1.3
Particulate emission damage (% of GNI)	..	0.0	0.8	0.6
Adjusted net savings (% of GNI)	..	..	25.5	6.7

Adjusted net savings is a sustainability indicator that measures the true rate of savings in an economy after taking into account net national savings, investments in human capital, depletion of natural resources, and damage caused by pollution.

Note: for 1995, Adjusted net savings exclude particulate emissions damage.

Sources: WDI, FAO, FAO AQUASTAT, WRI, and IUCN.

The World Bank, Environment Department, 1818 H street, N.W. Washington D.C. 20433 USA

Environment Department, World Bank

November 2004

Contacts: eadvisor@worldbank.org