Country energy information
Gambia

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SIXTH FRAMEWORK PROGRAMME PRIORITY 3
Underpinning the economic potential and cohesion of a larger and more integrated EU

SPECIFIC SUPPORT ACTION

Project Acronym: RECIPES
Project full title: Renewable Energy in emerging and developing countries: Current situation, market Potential and recommendations for a win-win-win for EU industry, the Environment and local Socio-economic development
Contract number: 513733
Start date of contract: 1st January 2005

Introduction

The information in this report was gathered from publicly available sources (the source list is available at www.energyrecipes.org), like surveys, statistical data from the internet and books and other publications. The information consists of:

1. indicators and indices;
2. descriptions of the relevant energy items/subjects /themes.

Due to differences in availability of data per country the level of detail of these reports will differ.

For all the 114 developing and emerging countries of the INCO list a report like this is available. (see also www.energyrecipes.org for the countries) Except for the following 15 countries, where more detailled reports are available.

Argentina	China	Cameroon
Brazil	India	Ghana
Colombia	Indonesia	Niger
Mexico	Pacific Islands	South-Africa
Peru	Thailand	Uganda

The RECIPES project

The RECIPES project aims to contribute to the implementation of renewable energy in emerging and developing countries. The RECIPES project is financed under the 6th Framework Programme for Research and Technological Development of the European Commission.

The main objective of the RECIPES project is to provide the European Commission and other stakeholders with pragmatic information and recommendations facilitating appropriate action to further the implementation of renewable energy in emerging and developing countries, taking into account:

- The effects on the local socio-economic situation.
- The competitive position of European renewable energy industry.
- The impacts on the local and global environment.

Data collection on the situation and potential of renewable energy in emerging and developing countries is the core of the RECIPES project.

An identification of the RE market potential is carried out for 15 developing and emerging countries. Local experts gathered data for all of these countries. The results of these in-depth studies are extrapolated to 99 other developing and emerging countries for which data is gathered through desk research.

See the RECIPES website (www.energyrecipes.org) for relevant data collected and reports produced.

Environmental problems

Deforestation; desertification; water-borne diseases prevalent

Environment - international agreements

Party to: Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Endangered Species, Hazardous Wastes, Law of the Sea, Ozone Layer Protection, Ship Pollution, Wetlands
signed, but not ratified: none of the selected agreements

Energy situation

According to the Energy Balance of 2001, fuel wood remained the dominant energy resource, accounting for about 81% of total energy consumed; petroleum products, including liquefied petroleum gas (LPG), account for about 17%; electricity - 1%; and renewable energy - under 1%. Renewable energy and energy efficiency are relatively new concepts in The Gambia. Total installed electricity capacity is estimated to be 22 MW.[27]

The government is encouraging use of other energy sources and at the moment utilisation of solar PV equipment is increasing in the country for both industrial, commercial and domestic uses; use of biomass is also on the increase though confined to agricultural waste such as saw dust, groundnut shells and straw. Use of windmills for powering water pumps is also encouraged and is increasing throughout the country.[26]

Currently, the power sector is unable to meet power demands and is trying to expand to provide its customers. One cause of this is a 40% power loss due to bad transmission lines and power theft.[26]

In 2000 a rural electrification project was started, among others constructing 6 power plants and transmission lines to supply a large numbers of towns and villages[2].
That same year, a project was approved which consisted of the construction of six power stations (combined capacity of 6.2 MW), the installation of 141 miles (227 km) of transmission and distribution lines to supply power to 46 towns and villages. The total cost of the rural electrification project is estimated at $19 million, with the additional financing coming from international donors.[2]

Energy sector organisation

The National Water and Electricity Company (NAWEC) is the parastatal body responsible for the production and distribution of electricity and water. However, with an ever-worsening energy crisis in Gambia, NAWEC and the rest of the energy Directorate were transferred to the Office of the President.[27]

Renewable energy potential

The country enjoys year-round sunshine ideal for tapping solar energy for commercial and domestic purposes. There is potential to develop the wind and biomass sources.[26]
The feasibility of using hydro-power is being examined within a sub-regional framework, in collaboration with Senegal, Guinea Bissau and Guinea Conakry.[27]

Renewable energy

To further encourage the promotion of renewable energy and energy efficient systems, Government created the Gambia Renewable Energy Centre (GREC) in the mid-eighties, to conduct research, development and promotion of alternative energy sources such as solar PV, wind and biomass. To complement this effort, Government is determined to support the utilization of energy-efficient appliances through various intervention measures.[27]

Government has demonstrated its commitment to the promotion of the energy efficiency concept by preparing a draft National Energy Policy in which wide ranging measures are proposed for promoting renewable energy and energy efficiency. Government has over the years provided fiscal incentives in the form of duty and tax waivers for the importation of renewable energy items, while recommendations have been made in the Energy Policy for the granting of incentives to providers of energy efficient devices.[27]

	Gambia	Unit
General		
Population (2005)	1593256	
Country area	10689	km²
Total density of population (people/km2)	149.000	capita/km²
Growth of people % /year	2.930	%
Land use arable (%)	0.000	%
Land use perm crops (%)	0.500	%
Percentage of total people living in cities	26.100	%
HDI (2002)	0.452	
Social		
Illiteracy	40.100	%
Year of estimation	2003	
Corruption (CPI 2003) 0=high 10=low	2.500	
GDP in ppp mostly $ 2004 est	768	million
Economic		
Income /capita $ mostly 2004	1800	
Variability of income/capita GINI index (2004)	38.000	
Inflation rate (consumer prices) (%)	7.000	%
Year of estimation	2004	
Growth of economy	6.000	%
Year of estimation	2004	
Traditional fuel consumption (% of total energy requirements 2002) . Estimated consumption of fuel wood, charcoal, bagasse	71.400	

(sugar cane waste) and animal and vegetable wastes.		

Fossil fuel consumption

Oil consumption	1900.000	bbl/day

Fossil fuel consumption

Year of estimation	2001	
Coal consumption (Million Short Tons)	0.000	millions short tonnes/year
Nuclear power production (Billion Kilowatthours) 2003	0.000	billion kWh/year
Hydro electricity capacity (2003)	0.000	million kilowatts

Renewable energy situation

Geothermal, Solar, Wind, Wood and Waste Electricity Installed capacity (2003)	0.000	million kilowatts
RE energy electricity consumption (2003)	0.000	billion kWh/year
Total coal production (Million Short Tons)	0.000	millions short tonnes/year
Electricity consumption GWh (2003)	130.000	GWh