WORKSHOP ON ECONOMIC DIVERSIFICATION TEHRAN, 18 – 19 OCTOBER 2003

ECONOMIC DIVERSIFICATION: GOVERNMENT INITIATIVES IN NIGERIA

Structure of Nigeria Economy

Nigeria economy is structured on the basis of resources generated from sectors including oil/energy Sector, agriculture, manufacturing, forestry, general Merchandise, tourism, ocean and marine resources, and freshwater resources.

Structure of the Energy Sector Conventional Energy Resources

Recent estimates of Nigeria's Conventional Energy Resources as shown in Table 1 indicate that:

Table 1: Nigeria's Conventional Energy Resources

Resource	Reserves	Reserves in Energy Units (Billion 1	Toe) % Total Conventional Energy
Crude Oil	23 Billion Barrels	3.128	21.0
Natural Gas	4,293 Billion m ³	3.679	24.8
Coal an Lignite	2.7 Billion Tonnes	1.882	12.7
Tar Sands	31 Billion Tonnes	4.216	28.4
Hydro Power	10,000Mw	1.965 (100 Years)	13.1
TOTAL		14.859	100

- As shown in the table, tar sands reserves constitute the highest with about 28.4% of the total and closely followed by natural gas and crude oil. Yet, attention has been focused, shortly after independence, on oil production.
- For sometimes now, Nigeria produces about 2.2 million barrels of oil per day (mbpd). The country ranks among the top ten in the production and exportation of oil. The export of oil accounts for about 95 per cent of Nigeria's export revenues and over 80 per cent of the Federal Government's revenues. Apparently Nigeria depends very much on oil sector which has been described as a machine that powers the economy of the country. It follows therefore that any policy towards reduction in consumption of oil by its international customers will not only affect the revenue generation but will also lead to further decline in the general standard of living of the populations.

Non-Conventional Energy Resources

The rural population, making up of over 60% of the country's population relies on the non-conventional energy resources. The structure of the non-conventional energy resources is shown in Table 2.

Table 2: Nigeria's Non-Conventional Energy Resources

Resource	Reserves	Reserves in Energy Units (Billion Toe) (Over 100 years)
Fuel Wood	43.3 million tonnes/year	1.64
Animal Wastes and Crop Residue	144 million tonnes/year	4.03
Small Scale Hydro-Power	734.2Mw	0.143
Solar Energy	5.25Kwim²/day	39,490
Wind	2.0 – 4.0 (19.8W/m² average)	772.7x10 ⁻⁹

For now, use of fuel wood for various purposes has been particularly intensive for many reasons ranging from poverty to lack of availability of other energy resources. Estimates have shown that over 90% of fural, and poor urban, households depend on fuel wood for domestic energy need. Consequently, the nations 15 million hectares of forest and woodland reserves could be depleted within the next fifty (50) years.

What we are saying here is that even within energy sector, economic diversification is still feasible. For instance, given appropriate technology,

 Exploration and exploitation of tar sands on a very large scale in the country can be undertaken;

•Petroleum associated gases can be exploited to cater for both local and international markets;

•Restoration of extensive coal and lignite mining;

 Construction of more and effective hydro-power plants with effective network distribution systems can be another important source of revenue generation in the country;

 Encourage Independent Power Producing (IPP) companies to be involved in power production to boost available energy availability;

 Rehabilitation of the existing generating power stations of the National Electric Power Authority;

Undertaking small scale hydro-power projects to cater for the needs of rural population;
 and

Promote accelerated development of solar energy and other renewable energy technologies.

Government Initiatives in Economic Diversification

Nigerian Government initiatives for economic diversification has not been based only on the realization of the potential negative impacts of the response measures of developed countries on energy in their bids to reduce emissions of greenhouse gases but more importantly, as a means for ensuring sustainable environmental and economic developments. The initiatives currently being taken by Nigeria Government include:

Energy sector

- In the last two weeks, the petroleum-downstream sector was deregulated by Government whereby oil subsidies have been removed
- Enacted Policy to stop gas flaring by the year 2008
- · Established stiff penalties for gas flaring
- Engaged in joint-financed projects with focus on reduction or elimination of gas flaring The Nigeria Liquefied Natural gas (NLNG) Company in Bonny, River State, began production in late 1999. This will ensure both internal and external markets for gas
- Establishment of Federal Ministry of Solid Minerals whose mandate consists of exploration and exploitation of solid minerals.
- Complete overhauling of existing hydro-power plants to boost electricity production

Other Sectors

Promotions of industrial culture whereby large scale industries depend on medium and small scale ones for their parts and components. Create environment conducive to both local and foreign investments. Increased subsidy on agricultural production in order to increase agricultural productivity for export. For now, Nigeria is looking for external market for cassava.

If all the initiatives materialized, earnings from sectors other than oil may make Nigeria less vulnerable to the potential impacts of response measures taken by the developed countries towards their meeting their emission reduction targets. Yet, these initiatives may be constrained by

- Lack of capital for investment in the energy sector;
- Lack of capital to purchase new equipment and repair the obsolete ones;
 Inadequate national capacity in energy planning and management;
- Inadequate national capacity in energy planning and management;
- Capacity development to harness maximally the hydro-power potential of the country;
 Inadequate technology to develop domestic energy resources through intensive exploration, research and development; and
- Intensive exploration, research and development; and
 Capacity and technology needs to explore the use of nuclear energy for peaceful uses in industry, agriculture, medicine and electricity generation.

 As provided for in the Convention, there is need to intensify discussions on Articles 4.8 and 4.9 in order to come to useful conclusions regarding necessary assistance for economic diversification in those countries whose economies are likely to be impacted as a result of response measures taken by the developed countries in meeting their emission reduction targets.