



IMPLICATIONS OF RENEWABLE ENERGY FUNDING FOR RURAL DEVELOPMENT IN NIGERIA.

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ABSTRACT

Energy has an all pervading impact on the socio - economic life of any nation. It plays a vital role in the economic, social and political development of nations. Inadequate supply of energy restricts socio - economic activities, limits economic growth and adversely affects the quality of life. Nigeria is endowed with great potentials of renewable energy resources. Sustained development, supply and utilization of these energy resources within the economy are essential especially for rural development. In this paper, the implications of renewable energy resources development for Nigeria are examined. The need for adequate funding of renewable energy resource development for socio-economic growth is highlighted. The implementations of such developments create employment opportunities and enhance rural development.

INTRODUCTION

Energy is the bedrock of civilization and very essential to life and survival of nations. Insufficient energy supply restricts socio-economic development of nations. Improvements in the standard of living of a people manifest and is therefore measured by energy availability. This is translated to increase in food production, industrialization, provision of efficient transportation, adequate shelter, security, healthcare and other human services. Thus, our future energy requirements will continue to grow with increase in living standards, industrialization and a host of other socio-economic factors, (FRN, 2002).

With the technological development in the world today, Nigeria envisions a peaceful and prosperous nation driven increasingly by energy sources such as renewable energy. The Renewable Energy Master Plan (REMP) articulates Nigeria's vision for increasing the role of renewable energy in achieving sustainable development. The REMP is anchored on the convergence of values, principles and targets as embedded in the National Economic Empowerment and Development Strategy (NEEDS), National Energy Policy, National Policy on Integrated Rural Development, the Millennium Development Goals (MDGs) and international conventions to reduce poverty and reverse global environmental change, (ECN 2005). For good governance, there is need to have clear cut guidelines on energy issues and the

funding. It is therefore imperative to ensure optimal, adequate, reliable and secure supply of energy and its efficient utilization in the country. For this to have positive impact it is essential to put in place, a co-ordinated, co-herent and comprehensive policy guidelines with provision for funding. The policy will serve as a blue print for the sustainable development, supply and utilization of energy resources within the economy, and for the use of such resources in international trade and co-operation, (FRN, 2002). Consequently, the need for funds in the management of energy industry cannot be over-emphasized. For instance, FRN (2002).states that fund requirements for the energy sector is substantial. It requires the availability of both financial and intellectual powers to be able to ensure proper management of national economy. Management of any national economy refers to set of activities and mechanisms through which the state, groups and individuals harness and organize the resources of the nation for the enhancement of the material welfare of the citizenry, (MAMSER 1992). Furthermore, the Nigerian Constitution directs the state to harness the resources of the nation and promote national prosperity and an efficient, dynamic and self-reliant economy; and Manage and control the national economy in such a manner as to secure the maximum welfare, freedom and happiness of every citizen on the basis of social justice, equality of status and opportunity.

Since it is obvious, that the constitution provides for the harnessing and management of national resources in particular the renewable energy sub-sector for the benefit of the citizens, the questions that informed this paper are fourfolds as, what does energy/ renewable energy policy stipulates? What are the implications of the utilization of renewable energy for rural development in Nigeria? What are the barriers to renewable energy utilization for rural development in Nigeria? What are the ways forward?

The objectives of this paper therefore are basically to Clarify the concepts, identify the impacts renewable energy could play for rural development in Nigeria; Ascertain the implications of renewable energy funding in Nigeria.

CONCEPTUAL CLARIFICATION

Funding

Hornby (2000) Defines funding as "Money for a particular purpose. It is the act of providing money for such purpose". Businesses, whether it is private, public or governmental, money is required for the provision of assets and materials, both as capital and for the recurrent expenditure. Funding is money set aside by an organization for meeting specific needs of such organization at any point in time, (Peters, 2006). An organization builds her funds in the budget of each year. It is from the budgetary provision that such money is provided for funding of specific project. Funds serve the industry as fuel serves the motor engine. Any organization or industry that lacked the necessary funding as required to build up its capital base will likely not survive. Funding from above is the money employed or employable in a business to enhance its operation or to enable the business meet its daily routine. Therefore, for proper development of the nation's natural resources in particular renewable energy financial provision is a pre-requisite.

Renewable Energy Policy

Policy is a principle or a group of related principles, along with their consequent rule(s) of action provided for the successful achievement of specific organizational objectives. It assists planning by integrating managerial functions, physical factors, and company personnel with organization objectives, (Thierauf et.al 1977). Energy Policy, according to FRN (2002) Serve as a blue print for the sustainable development,

supply and utilization of energy resources within the economy, and for the use of such resources in international trade and co-operation. Energy has a major impact on every aspect of Scio-economic activities of any people. It plays a vital role in the economic, social and political development of nations. As a public concern, renewable energy development requires a public statement which would show the fundamental laws, values, exertions and utilizations for the benefits of all the citizens of Nigeria. Such statement could be referred to as policy.

RENEWABLE ENERGY SOURCES (RES) AND THE ENERGY POLICY OF NIGERIA

The government, business owners as well as researchers are seeking new alternative energy sources and seriously investigating the costs versus the benefits of switching to cleaner yet cheaper alternatives, (Benromdhane, 2008). Due to the expensive nature of fuel and diesels in both households and manufacturing industries in Nigeria, the search for alternative sources of energy is imminent. At present renewable resources seem to be the best alternative. Greater emphasis should be laid on the promulgation and enforcement of laws/policies that would see to the exploitation, exploration, implementation, funding and utilization of renewable energy resources for the growth of rural areas in Nigeria. To make the environment conducive in the search and promote renewable energy resources in Nigeria, government should by policies encourage renewable energy utilization at public and domestic levels, especially in rural areas.

Nigeria is endowed with great potentials of renewable energy resources which when fully developed could contribute significantly to the socio-economic development of the nation. Among the renewable energy resources of Nigeria are Solar, Biomass, Small Hydro, Fuel Wood and Wind Energy.

ENERGY FUNDING

Energy plays key role in the socio-economic and political development of nations. Therefore, the importance funding for energy development can never be overestimated for any nation that wants to develop industrially. The money required for energy development in any nation is usually high. To harness nation's renewable energy resources, a greater percentage of the nations' budget will be required to develop renewable energy programme. FRN, (2002), opines that the required type of

financing is long-term and this involves both foreign and domestic financial supporters. It is of the opinion that, the inclusion of foreign investment capital, in addition to national foreign earnings, should provide the greater proportion of needed funds for the energy industry in Nigeria. It is required that the Government should provide adequate funds for the management and development of the energy sector. In Greece for instance, the government offers investment subsidies up to 40% to support Renewable Energy Sources. In addition, the Development Law provides subsidies and tax deductions up to 40% and 100% respectively, (Tsioliaridou and Bakos, 2008).

However, due to the multiplicity of needs, government alone may not continue to provide the major fund for the energy sector activities as well as other industrial sectors in Nigeria. Emekekwe (1996) adjoined economic principle to governmental activities and states that "Man's resources for attainment of satisfaction of want are always limited. As a result of this, management of resources available to man becomes imminent". Eric, (2004) added that "The reasons behind the management of fund are due to economic, social and environmental factors". Therefore, since there are other competing needs in the nation, it is required that private, industrial and foreign sources are employed in the energy sector to give it the much needed attention. The energy financing policy of the Federal Republic of Nigeria states that: The nation shall explore and adopt all viable financing options from local and international sources for cost effective exploitation of its energy resources and Government shall encourage private investments, both domestic and foreign, in the energy sector.

In the strategies adopted for the exploitation of energy resources in Nigeria, the need to have other bodies apart from the government was spelt out in the energy financing policy of the Federal Republic of Nigeria. The section stipulates reviewing the existing laws and regulating for the operation of energy sector industries so as to increase private sector participation in the industries, Establishing a favourable investment climate to attract investment in the energy sector, Providing adequate infrastructure facilities to enterprise involved in the development of energy sector, and Encouraging the establishment of offshore banking units to attract inflow of offshore investment funds, as well as activities of

international investment banking and brokerage firms.

Therefore, the funding of energy programme in Nigeria seemed to be given a priority attention through the policies stated above. The efforts so far made by the sectors have helped to provide means to access to capital, reduce significantly investors uncertainty and risks in Renewable Energy Technology (RET), and provide capital subsidies in form of soft loans, overdraft, grants etc. (ECN, 2005). However, in spite of these provisions, renewable energy technologies are found to be expensive. The funds needed for the running of the programme is inadequate and the use of renewable energy resources is low due to ignorance. It is imperative that renewable energy technology be made affordable through provision of adequate funding in order to make the technology alternative and available.

THE IMPLICATIONS OF RENEWABLE ENERGY FUNDING FOR RURAL DEVELOPMENT IN NIGERIA.

In a study by Okonkwo (2009), the impact, role and importance of alternative energy in sustainable development and poverty alleviation in the rural communities were emphasized. According to him, alternative energy sources have the potential to improve the economies with great effects in transforming rural livelihood. He further mentioned a number of alternative energy sources that requires minimum resource for utilization e.g. solar cooker for food preparation, solar water heater for hot water provision, solar egg Incubator and brooding systems for poultry production. There are still, opportunities of renewable energy technologies in the development of rural communities in Nigeria. At various levels, great impacts have been made on a number of ways. Okonkwo (2009), Ndegwa and Githinji (2008) identified some areas where the renewable energy resources have helped to reduce stress, poverty and lack of development in rural areas. The areas include Agriculture, Cottage Industries, Communications, Household Use, Social, entertainment facilities etc. These have some implications. Therefore, the implications of Renewable Energy for rural development in Nigeria are well spelt and could be enumerated as

Education/Awareness Creation

By funding and sponsoring renewable energy programmes awareness is being created. Through these many Nigerians could be educated on the uses of alternative energy technologies.

Government should include energy programme in the education curriculum of Nigeria. This would give sound knowledge of energy resources availability and their utilizations. The use of radio, television and print media for awareness creation is very important factor in awareness creation.

Legal Requirement

There is need for constitutional provision for proper policy direction to the development of energy sector. Financial provision programmes for rural development that could adapt the renewable technology may be evolved and encouraged.

Adequate Database

Alternative energy development is adversely affected when there is no accessible database, information on technological development locally and market trends. But with adequate funding, enough data will be available that could develop the rural energy needs of communities.

Research and Development Infrastructure

Though there is research and development centers, funding and infrastructure development pose a significant challenge to alternative energy development. Adequate funding will encourage more research studies and innovations in renewable energy technologies.

Manufacturing Infrastructure

Energy demand and supply, and the high cost importation of renewable energy technologies are challenges to the development of indigenous capacity to manufacturing RETs across sub-sectors. This is believed will create wealth, jobs and knowledge within the country, particularly, in rural areas.

Investment and employment Opportunities

Potential investors need to be assured that their assets, lives, businesses etc. are safe. There is need to constitutionally assure the investors (Local and Foreign) that the land would not devour them and their capital. The government should work out strategies to make the communities risks free for investors. Government, investors and communities should partner together for great socio-economic gains. While the use of renewable energy attracts investment in rural communities, the opportunity to employ workers will also be available. This will reduce the unemployment rate in Nigeria.

Modernization for farmers

With renewable energy, new techniques are employed by farmers in processing, storage, packaging of agricultural produce etc. Farmers may discard the ancient method to the new system aided by energy resources based on comparative advantages.

Urban Depopulation

The development of rural communities will attract the citizens who left for township in search of white-collar job to return. They may be employed or start their own businesses. The government will spend to accommodate the mass return of citizens.

SOCIAL and Entertainment Facilities

Funding of renewable energy would provide social and entertainment facilities since the issue of power supply are settled. The rural people would be able to learn and operate computers, watch television, read newspapers without power interruption. Recreational activities which will make life comfortable in the rural areas will be created.

THE BARRIERS TO RENEWABLE ENERGY FUNDING FOR RURAL DEVELOPMENT IN NIGERIA AND WAYS FORWARD

There are many problems confronting the development of renewable energy in Nigeria especially in rural areas. Okonkwo (2009) and, Ndegwa and Githinji (2008) highlighted the problems as Weak and inadequate implementation policies; Pricing and Financing bottlenecks; Poor product standards; Inadequate Database; Poor Research and Development Infrastructure; low Human Capacity Building; lack of Manufacturing Infrastructure; lack of Public Awareness and financial outlay of potential investors; Distortion of the environment; Human Dislocation and Resettlement; defacing of natural Esthetics; Bureaucratic bottlenecks; Political/Religious instability and ethnicity, Bribery and corruption.

Nigerian government should vehemently encourage and be in forefront for the promotion of renewable energy development and utilization in Nigeria as a way forward. Financial provisions should be made through legislation to enhance its availability. This would make renewable energy affordable and accessible to the grassroots in Nigeria. When this is done, the bottom-top approach to rural development which is the essence of the 1976 local government reform in

Nigeria would have been achieved, (Iwundu, Press Ltd. 2003)

CONCLUSION

This paper has been able to present useful information on the implications of renewable energy funding for rural development in Nigeria. The potentials of renewable energy for rural development in Nigeria can never be over-emphasized. With sound policy on hand renewable energy in Nigeria can be harnessed for the benefit of the rural dwellers. It is observed that government funding will encourage private, domestic and foreign investments in energy programmes and projects. Funding of renewable energy is fundamental for the overall development of Nigeria especially the rural areas. A good percentage of national budget should be set aside annually for the management and development of renewable energy in Nigeria. It is important to create awareness and stimulate Nigerians to begin to patronize renewable energy providers in Nigeria through financial provision. This will also help provide the right direction in the pursuit of the best energy practice towards our rural development. There is no doubt that the paper has created the need for funding renewable energy development for communities' development and utilizations. This baseline will enhance and significantly contribute towards Nigeria becoming one of the top economies in 2020.

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