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Redefining Benefits and Beneficiaries of Duty and Tax Waiver on Imports of Solar Photovoltaic (PV) Technologies: The Case of Malawi

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Redefining Benefits and Beneficiaries of Duty and Tax Waiver on Imports of Solar Photovoltaic (PV) Technologies: The Case of Malawi

Abstract:

This paper is about the taxation of solar photovoltaic (PV) technologies in Malawi. It analyses and expose the reality about the benefits and beneficiaries of customs and excise duty waiver on these technologies. The principal aim for taxation is to raise revenue for the government, local authorities and other similar bodies. Taxes are also used to redistribute wealth whereby higher rates of income tax transfer wealth from the better-off to the state and the latter uses the resources to provide services to everyone. Sometimes, taxes are used to protect local industries from foreign competition. In such cases, the government levies duty on imported goods, which translates into higher prices. As a result of the high prices of the imports, people are forced to buy locally manufactured goods as substitutes. However, this analysis appears to be biased towards the end users of the technologies and completely ignores the suppliers, without whom there would be no solar PV market at all. This paper is therefore aimed at highlighting the shortcomings of this perspective and redefining the benefits and beneficiaries of such exemption.

1.0 INTRODUCTION

This paper is about the taxation of solar photovoltaic (PV) technologies in Malawi. It seeks to analyse and expose the reality about the benefits and beneficiaries of customs and excise duty waiver on these technologies. The paper is built on the findings of a previous study by Master Kajawo, whose view was that the benefits should be in the form of lower prices to end users. In fact, his conclusion was that the benefits of exempting solar PV imports from duty and tax do not trickle down to the end-users in Malawi (Kajawo, 2008). However, this analysis appears to be biased towards the end users of the technologies and completely ignores the suppliers, without whom there would be no solar PV market at all. This paper is therefore aimed at highlighting the shortcomings of this perspective and redefining the benefits and beneficiaries of such exemption.

2.0 DEFINITIONS

2.1 Solar Photovoltaic Technologies

Solar photovoltaic (PV) technologies encompass a wide range of gadgets that are used to harness energy from sunlight and convert it to electricity. The electricity can be used in various applications, depending on the capacity of the system. Thus, it can be used for lighting, powering small electrical appliances or even water pumping.

2.2 Tax

Tax is defined as "impositions by governing bodies on the income and wealth of persons under their jurisdiction" according to the Malawi College of Accountancy Students' Taxation Manual, (MCA, 2009). The manual goes further to define governing bodies as state, local authorities and central government. Taxation core purpose is to raise revenue for the state, authorities and other related bodies. Taxes are also used to redistribute wealth whereby higher rates of income tax transfer wealth from the better-off to the state and the latter uses the resources to provide services to everyone. Sometimes, taxes are

used to protect local industries from foreign competition. In such cases, the government levies duty on imported goods, which translates into higher prices. As a result of the high prices of the imports, people are forced to buy locally manufactured goods as substitutes. This also helps to preserve foreign exchange reserves of the country. Finally, taxation can be used to dissuade the consumption of certain products deemed to be undesirable or to regulate the economy by adjusting tax rates as a way of managing certain economic conditions (Gale 2014; Cobham 2005; Modebe et al 2014). For example, tax rates can be raised in times of inflation in order to reduce people's disposable income and so reduce their spending power. The opposite is also true. Tax rates can be reduced during recession so that people have higher disposable income and spending power. The ultimate objective is that the enhanced spending power will revive the economy.

There are various forms of taxes. These include income tax, rates, sales tax, wealth tax, corporate tax and customs and excise duty. For the sake of this paper, the discussion will mainly focus on customs and excise duty. Customs duty is tax which is imposed on imported goods. On the other hand, excise duty is levied on certain locally manufactured goods to dissuade the consumption of locally produced goods (Ezeudu et al 2019; Hashimzade N., et al 2014).

3.0 RATIONALE FOR DUTY AND TAX EXEMPTION

A waiver on duty and tax on specified imported goods exempts the concerned entity from paying duty and tax on those goods. This means that the goods enter the local market at the border price, consisting of only cost, insurance and freight. Often, the reason for such exemption is that the concerned goods or products are of strategic importance to the country and the economy and taxing them may prohibit wide access to them by the intended customers due to high prices. Therefore, the expectation of the government is that the market will operate in such a manner that the products will reach

customers at lower prices than would have been the case otherwise. The challenge, therefore, lies in the ability of the marketing system for those products so that the waiver achieves its intended purpose by way of lower prices charged to the customers. This, in turn, entails analysis of the macro-economic policies of the government, particularly those to do with economic liberalisation and price controls. It also entails close scrutiny of the ethics of the traders in the concerned market.

4.0 ARGUMENTS FOR DUTY AND TAX WAIVER ON SOLAR (PV) TECHNOLOGIES

Calls for governments of developing countries to remove duty and tax imposed on solar PV technologies started way back in the 1990s, when many of them, particularly in Sub-Saharan Africa, started promoting the utilisation of solar energy, mainly for lighting in rural areas. It was widely believed that the prices of the technologies, which are wholly imported except for very few countries which have developed local manufacturing capability, are prohibitively high considering the low incomes and poverty characteristic of rural areas in the developing world. For example, in his 1997 publication, Karekezi argued that one major reason for high RET prices is the taxes imposed on them by governments. Cumulative duty (import duties plus various surcharges on components) on Renewable Energy Technologies (RETs) in Malawi was estimated to be as high as 75 percent (Karekezi, 1994). In Zambia, a solar home lighting system with a value of US$934 attracted a sales tax and import duty amounting to about 70 percent of the price, while a solar water pumping system with a value of US$ 12,391 attracted sales tax and import duty amounting to about 56 percent (Sampa and Sichone, 1995).

Five years later, Fagbenle (2000) observed that " high consumer prices partly attributable to tax and duties on components, and partly to high transaction costs among dealers and distributors, and lack of suitable financing mechanisms still hamper the wide spread

dissemination of the technologies". This observation is shared by Miller (2011) who noted that many emerging markets levy both import duties and sales taxes on solar. Even more counterproductive is that they tax solar while subsidizing kerosene. This occurs in many emerging markets, because kerosene is a staple for cooking. If a policy maker's objective is to ensure that more people have access to high-quality lighting, and it is politically impossible to remove subsidies for kerosene, then at the very least, solar should not be taxed. Indeed, many economists, development planners, scholars and various stakeholders lobbied governments to minimise the prices by exempting the technologies from duty and other taxes.

5.0 THE CASE OF MALAWI

5.1 Historical Background

In Malawi, similar calls emerged in the mid 1980s during the formulation of the National Energy Plan (1988-97). The matter resurfaced at a Solar Energy Symposium, which was held in 1991, where a resolution was made for the then Department of Economic Planning and Development (EPD) to analyze whether the tariff and surtax structure for solar equipment and other system components brought a bias against the market penetration of solar systems (Malawi Government, 1991). Although there was no immediate response from the concerned parties, the lobby kept on simmering until the time of formulating the National Energy Policy (NEP), about ten years later. The Task Force that was set up to analyse the key issues pertaining to new and renewable sources which needed to be addressed in the policy having observed that all renewable energy technologies were subjected to very high import duties in addition to surtaxes. The Task Force on the Malawi Energy Policy estimated that 40 % of the total cost of RETs in Malawi was duty and surtax. At that time, Malawi had the highest cost of solar PV systems in terms of per watt-power (wp). It was reported that the cost was US$10.00/wp in Malawi while the average for the SADC region was US$6.00/wp, with Zimbabwe having the lowest cost at US$4.3/wp. The

Task Force urged the government to ensure that Malawi taxation on RETs is comparable to other SADC countries.

5.2 Enter Duty and Tax Waiver

In 1997, the Department of Energy Affairs launched a major renewable energy programme known as the National Sustainable and Renewable Energy Programme (NSREP). The programme aimed at improving the efficient and sustainable use and marketing of renewable energy sources in Malawi (Aldover and Gondwe 2008). As part of the NSREP activities, the Department of Energy Affairs carried out a baseline study to determine the level of renewable energy utilisation in the country. The study concluded that there was very little utilisation of renewable energy in Malawi. Among the key findings of the study was the fact that prices of the technologies were very high, in fact too high, for the majority of Malawians. Indeed, one of the factors that contributed to the high prices was customs duty and tax, in the form of value added tax (VAT). Taxation of renewable energy technologies was therefore seen to be a barrier to the greater utilisation of renewable energy in this country. Consequently, as part of the implementation strategy for NSREP, the government came up with a project to address the taxation issue as well as other barriers that had been identified during the study. The project was called Barrier Removal for Renewable Energy in Malawi (BARREM). One of the main outcomes of BARREM was the removal of customs duty on renewable energy technologies, particularly solar PV technologies. This was done around the year 2000. Table 1 below shows the taxation system after the duty waiver.

ITEM	TARRIF HEADING	DUTY RATE (%)	EXCISE RATE (%)	VAT RATE (%)
Solar panels	8541.40.00	0	0	16.5
Solar regulators	9032.81.90	5	0	16.5
Solar batteries	8506.80.10	0	0	16.5
Solar inverters	8504.40.20	0	0	16.5
Solar lights	9405.40.90	25	0	16.5
Solar lanterns	9405.40.30	0	0	16.5
Solar refrigerators	8418.21.00	25	20	16.5
Solar street lights	8539.21.10	5	0	16.5
Solar water pumps	8413.81.10	0	0	0
Solar wind generators (>375 kW)	8501.34.00	0	0	16.5
Solar cellular phone chargers	8504.40.00	5	0	16.5
Solar DC light fittings and tubes	9405.40.90	25	0	16.5
Solar voltage droppers	9032.81.90	5	0	16.5
Solar water pumping cables	8544.20.00	5	0	16.5
Solar switches	8535.50.00	10	0	16.5
Solar sockets	8536.69.00	10	0	16.5
Solar cables	8544.19.00	5		

Table 1: Duty and Tax Rates for Solar Photovoltaic Technologies

Source: Malawi Revenue Authority, February 2010.

As can be seen from the table, customs duty was completely removed on solar panels, batteries, inverters, solar lanterns, water pumps and solar/wind generators. All other solar technologies and accessories are subject to customs duty of between 5 and 25 percent. On the other hand, VAT was maintained at 16.5 percent on all technologies except for solar water pumps which was exempted. There is no excise duty on solar technologies except for solar refrigerators, which is rated at 20 percent.

When asked for reasons for the duty exemption, the Chief Energy Officer in the Department of Energy Affairs (DEA) responded that the main objective was to reduce the cost of renewable energy equipment. This was done after it was realised that 40 % of the total cost of renewable energy technologies is emanating from such duties and taxes imposed on the imported equipment.

It is therefore quite clear that the exemption was aimed at benefitting the end-users of the technologies through lower prices.

5.3 Implementation Strategy

5.3.1 Institutional Framework

There are three key government agencies involved in the execution of the duty and tax waiver. These are DEA, Malawi Revenue Authority (MRA) and the Malawi Energy Regulatory Authority (MERA). Of these, DEA is the lead agency in the implementation of the policy. It works closely with MERA to see to it that importers of solar technologies are duly screened, certified and registered with the Authority. Only the certified firms are granted the duty free-facility. The procedure is that the registered firms apply to the DEA for endorsement of their duty-free status. After that MRA comes in to provide all the necessary documents for duty-free importation. MERA updates the list of certified firms every year.

5.3.2 Eligibility

Initially only certified companies were allowed to import duty-free. All importations were being certified by DEA. All other importers had to pay duty. The aim was to encourage all solar PV traders to be certified by MERA so that they could be monitored in terms of the quality of their imports, among other things. However, this changed in 2010 when the renewable energy industry was liberalised, and anybody can import renewable energy technologies as long as they can prove ownership at the border.

5.3.3 Publicity

According to DEA, the duty and tax waiver was widely publicised on the public radio in a special programme to promote renewable energy. The programme, which was funded by DEA itself, was popularly known as "mphamvu za mbwezera" in the local language. It aired promotional messages, panel discussions and also had call-in sessions. These sessions provided opportunity to the general public to ask questions and learn more about renewable energy in general. Through the programme, government policies and other technical aspects of renewable energy technologies were discussed and disseminated.

5.4 Challenges Encountered

5.4.1 The Solar PV Marketing System in Malawi

The market structure for solar PV systems in this country is quite complex and rather difficult to comprehend. In the first place, there are suppliers. These are business people who import the solar systems for sale on the local market. Then there are installers. These are the firms with the technical capacity to install the systems. Ideally, customers are expected to purchase the technologies from the suppliers and get the installers to set up the complete systems. In this way, the consumers would pay the retail price of the various components or a complete system. Then they would pay installation charges at

the installation stage. In other words, there would be a demarcation between the cost of the system and the installation cost. Unfortunately, this is not the case most of the times. The fact of the matter is that most of the suppliers are also installers. For example, according to MERA, there were 31 registered solar firms in Malawi as of October, 2012. Out of these firms only 6 presented themselves as being exclusively installers. Thus, 25 firms double as suppliers and installers. What this means in practice is that when customers go to these companies to purchase solar PV systems, they are given a quotation which includes the system cost and installation charges. In this way, it is difficult for the customer to discern the actual cost of the system. Any negotiations for discounts or payment terms are based on the composite price. It is therefore difficult to relate the composite price to a duty-paid or duty-exempt commodity.

Even for the six firms that are only involved in installation, the common practice is that the customers are given similar quotations as above and the firms procure the system components from the suppliers. Therefore, even in this scenario, the customers rarely get to know the actual system cost. Again, in such situations, it is difficult to establish whether the cost of the system reflects the fact that the components are duty exempt.

Only one firm reported that some of its customers buy the system components on their own and pay for the installation. This is the closest scenario to what is expected of the market by the policy makers. Such a situation would lend itself easily to price monitoring by the authorities, if need be. However, there are no price controls for solar PV system components in Malawi. This is yet another challenge with focusing the duty waiver policy on end-users only.

5.4.2 Economic Liberalisation Policies

The Malawi government embarked on economic reforms in the 1980s within the framework of structural adjustment programmes driven by the World Bank and the International Monetary Fund (IMF). Since then, the national economy has undergone major changes in terms of participation in economic activities and the general policy and legal environment for doing business. Over the years, the government has introduced policies aimed at minimising or complete removal of its dominance in the business sector, thereby paving way for the private sector to come in and play a greater role. .Examples include the Public Enterprises (Privatisation) Act No. 7 of 1996 and the Competition and Fair Trading Act No. 43 of 1998. The Public Enterprises Act opened up the economy for greater involvement of the private sector through management buy-outs, commercialisation, concessions and outright sale of several state-owned enterprises. The Competition and Fair Trading Act seeks to encourage competition in the economy by prohibiting anti-competitive trade practices; among other things.

Within the framework of economic reforms, the country adopted price liberalisation policies, whereby the government refrained from rampant price controls and adopted free-market principles instead. This meant abandoning arbitrary setting and control of prices of goods and services by the government and leaving the forces of demand and supply to determine prices. The economic reforms have created an environment where prices for solar PV technologies can hardly be dictated and enforced by the government or its agencies. In fact, there are no legal provisions for the government to have any influence on the pricing of the technologies, despite its duty waiver gesture. Thus, whether or not the duty waiver is passed on to the customers very much depends on the goodwill of the traders. From an economic point of view, it is only competition which can help in driving prices down. This observation is shared by Karekezi and Ranja (1997)

who argue that an increase in the number of dealers in the market may be needed to create a competitive environment and drive prices down.

5.4.3 Public Awareness

According to Kajawo (2008), despite the publicity of the duty waiver on the public radio, 75 percent of a sample of 60 respondents did not know about the duty waiver on solar PV technologies in this country. This could be the case because the radio programme was aired just for a period of time in the early stages of NSREP. In this kind of situation, customers have no strong basis for price haggling and the traders take advantage of such ignorance.

6.0 TAKING A BROADER PERSPECTIVE OF THE POLICY

6.1 Solar Firms Do Suffer the Impact of Duties and Taxes on Solar PV Imports

While policymakers are mainly concerned with the cost of the technologies to end users, the reality is that the first category of people to be affected by the duty and taxes are the firms in the industry. They first feel the pinch at the border when their consignments are subjected to duty. They also have to add the prescribed VAT to their prices at the point of sale, thereby making their prices higher. The expectation is that the firms pass on or can pass on the cost to their customers by simply adding it to the retail price. However, this may not be always possible. According to Miller (2011) import duties and sales taxes have the same effect-they raise the cost of solar compared to alternatives. Although in theory a businessman can always pass on these taxes to the customer, in practice businessmen may not feel they are able to do so, and their margins will become unduly squeezed.

This means that policymakers should be equally concerned with the effect of duty or tax on the solar PV technologies on the profitability of the business as well, otherwise there will be nobody to supply the technologies on the market.

6.2 Traders Should Benefit From Duty or Tax Waiver

Based on the premise advanced in Section 6.1, there is an alternative perspective regarding the rationale for exempting solar PV technologies from duty and tax. This perspective is focusing on both the entrepreneurs, or traders, and the end users as the targeted beneficiaries. Miller (2011) has based most of his arguments for such exemption on the need to make the solar industry attractive enough for entrepreneurs through high profit margins. He places entrepreneurs at the center of the solar PV development across the globe for the simple reason that these are the ones who make the technologies available on the market. Therefore, emphasis is on building an effective solar PV supply chain first and foremost. This is achieved, among other factors, by ensuring attractive profit margins for the sellers of solar PV components.

Thus, the focus is on attractive profit margins rather than lower retail prices. This seems to be a more practical perspective as the impact of duty or tax waiver can be assessed relatively more comprehensively. Indeed, as observed by Miller, this view may not appeal to policymakers, particularly politicians, since they may be pre-occupied with enabling the low income rural households to buy the solar PV systems as these are the ones who need them most. However, it is in fact a more effective way of enabling the local solar PV industry to grow and deliver the required technologies on the local market efficiently.

6.3 Competitive Profit Margins Can Lead to Lower Prices

As more and more entrepreneurs get attracted into the industry by the high margins, competition will intensify. Eventually, it is the end users who will benefit from this competition. Even more the benefits can be in many forms, including more favourable terms of payment for the systems, free delivery of purchased systems within a certain radius and the much sought after lower prices. Surely, this is more beneficial to the end users than just focusing on lower prices only. For example, in reference to Indonesian entrepreneurs in the solar PV industry, Miller wrote: "In Indonesia, the entrepreneur was able to work with very low import duties. Indonesian officials were clear that while they desired in-country manufacturing of solar, they were not prepared to tax the solar module with an import duty. Partly as a result of his component selection , and partly as a result of facing lower duties, the Indonesian entrepreneur's margins were 30 percent, and his system price was 15-20 percent lower than that of the entrepreneurs in India."

Here, it is not just the customers benefitting from the exemption, the traders also benefit through better margins than would have been the case otherwise. This is the virtue of taking a wider view of the benefits and targets of duty and tax exemption in the solar PV industry.

6.4 Competition Required for Trickle-Down Effect

Competition is a key to the realisation of lower prices following duty or tax waiver on the imports in question. It can force the entrepreneur to maneuver within their profit margins to find room for price cuts for their customers. For this to materialize, there is need to have many sellers on the market to foster competition. Karekezi and Ranja seem to agree with this observation. They argued that it is incorrect, however, to believe that tax exemption on RET equipment on its own can lower prices. Dealers are sometimes reluctant to lower prices, so as to reap higher profits. Other factors such as institutional

mechanisms have to be strengthened. An increase in the number of dealers in the market may be needed to create competition and force prices down.

Locally, competition seems to have set into the solar PV industry nowadays. In response to a question as to whether his firm has any specific consideration for rural areas when setting prices for the components, one entrepreneur answered: "No! Due to competition on the market, the prices have already come down and the profit margin is very minimal". This is about twelve years after the removal of duty on the components. However, Kajawo spoke of high prices to end users, suggesting huge profits at the hand of the installer This could have been the case in 2008 as there were only about fifteen certified solar PV firms in the industry then. As we already saw above, there were thirty one of them by the end of 2012. Thus, competition might have risen over the four years, driving prices down in the process. Hence, lower prices can be achieved eventually.

7.0 CONCLUSION

This paper has redefined the benefits and beneficiaries of duty and tax waiver on solar PV technologies in this country. The analysis shows that where the perceived benefits are limited to lower prices and the targeted beneficiaries are the end users only, then the proponents of the duty and tax waiver policy are likely to be disappointed. This is so because the economic environment in the country, just like many other countries in the developing world, favours free market forces and not price controls. In keeping with the free market policies and principles, there is no law that would empower any entity to fix or monitor prices of solar PV technologies. In addition, lower prices do not come instantly. Rather, they are a result of a process of economic interactions in the solar PV industry. Sometimes the process can be a long one. There can therefore be a long time lag between the adoption of such policies and the actual fall in the retail prices of the technologies.

An alternative perspective, whereby the exemption is seen as targeting not just the end users but also the traders as beneficiaries, seems to be more realistic and sensible. This is so because lower or zero duties translate into higher profit margins and these attract entrepreneurs to enter the solar PV industry. This ensures a viable supply system for the technologies. In addition, as more and more firms enter the industry, competition ensues and, all things being equal, prices go down. Competition can also lead to more favourable offers to customers, including payment by installments, free maintenance services for a given period of time, in addition to mandatory warranty, where applicable.

Using the alternative view, the assessment of the benefits from the duty waiver on the solar PV technologies should not be confined to price alone. Rather, a much broader scope must be addressed, including the benefits to the solar firms themselves. Viewed from this perspective, there is no question of the government having to fix or monitor prices of the technologies on the market which, as already highlighted above, is almost impossible in a free market economy. It follows then that, in reality, the main reason for duty and tax waivers should be to ensure competitive profit margins for solar firms to enable the industry to get established and grow. Any secondary benefits, including lower prices for the technologies, should be considered as medium to long term phenomena.

8.0 RECOMMENDATIONS

8.1 General Recommendations

8.1.1 Include Traders as Beneficiaries

It is recommended that policymakers and other stakeholders should have the correct understanding of the concept of duty and tax waiver on solar PV technologies right from inception. They should include traders as beneficiaries rather than focusing on users

alone. Secondly, policy makers should see other potential benefits of duty and tax waiver in addition to lower consumer prices. Specifically, duty waivers should be aimed at building the industry first and foremost.

8.1.2 Provide for Competitive Profit Margins

Policy makers must appreciate the critical role that entrepreneurs in the solar PV industry play to import the technologies and supply them on the local market. In the current macro-economic environment, these people strive against all odds to ensure that the technologies are available on the market. It is therefore important that government policies should be aimed at ensuring that the industry offers investors competitive profit margins, lest they move to other sectors of the economy.

8.1.3 Promote Competition

The government and its agencies, particularly MERA, should promote competition in the industry. This can be achieved by certifying more and more firms, as long as they qualify. Let the industry stabilise automatically through the natural process of free entry and exit.

8.2 Specific Recommendations

8.2.1 Maintain Duty and Tax Waiver

Having accepted the general principle that duty and tax waivers should target both the traders and end-users of solar PV technologies, the government should not be swayed by those who claim that the waiver is not benefitting the latter. On the contrary, the government should be stronger in its resolve and maintain the waiver.

8.2.2 Broaden the Scope of Exemption

It does not make much sense to remove duty only on selected solar PV components and leave out other components which are necessary to make a complete system. The government should remove duty and VAT completely on the remaining components.

8.2.3 Remove Duty and Tax on Solar Refrigerators

It is also not very clear why there should be customs duty, excise duty and VAT on solar refrigerators. There is no justification for discouraging their use in the country. In fact, the government should be in the forefront encouraging those who do not have access to the grid electricity to go solar and use this type of refrigerators. This will contribute to the improvement of the quality of life in the rural areas.

REFERENCES

Aldover, R., and Gondwe, K., (2008). *Final Evaluation of the Renewable Energy Project MWI/00034063 (MLW/98/007) and An Outcome Evaluation of UNDP Assistance to the Malawi National Sustainable and Renewable Energy Programme (NSREP)*, Lilongwe, p.7.

Bhagavan, M., and Karekezi, S., (Editors), (1992). *Energy for Rural Development*, Zed Books Ltd., London.

Cobham A., (20015). *Taxation policy and development. Oxford Council on Good Governance*. Salisbury SP1 1JA United Kingdom.

Ezeudu et al, (2019). *Sustainable Production and Consumption of Paper and Paper Products in Nigeria: A Review. Resources* 2019, *8*(1), 53; https://doi.org/10.3390/resources8010053

Fagbenle, R., (2000). *Solar Photovoltaics in Africa, AFREPREN OCCASSIONAL PAPER No. 10:* Renewable Energy Technologies in Africa- An Energy Training Handbook, Nairobi.

Gale W. G and Samwick A. A., (2014). *Effects of Income Tax Changes on Economic Growth*. Economic Studies, The Brookings Institution.

Hashimzade N., et al (2014). *The Definition, Measurement, and Evaluation of Tax Expenditures and Tax Reliefs.* Tax Administration Research Centre. https://www.nao.org.uk/wp-content/uploads/2014/03/TARC-Tax-Expenditures-and-tax-reliefs-technical-paper.pdf

Italian Ministry of Environment and Italian Ministry of Industry, (1991). *International Symposium on Environmentally Sound Energy Technologies and their transfer to Developing Countries and European Economies in Transition (ESETT'91), Symposium Report*, Milan.

Kajawo, M., (2008). *The Impact of Duty and Surtax Waiver on Retail Prices of Solar Photovoltaiv Technologies in Malawi*, Mzuzu.

Karekezi, S., Kithyoma, W., and Majoro, L., (2001). *Renewable Energy Technologies in Africa- An Energy Training Course Handbook*, African Energy Policy Research Network, Nairobi.

Karekezi, S., and Ranja, T., (1997). *Renewable Energy Technologies in Africa*, Zed Books Ltd., London.

Malawi College of Accountancy, (2009). *Students' Taxation Manual and Income Tax: Malawi Income Tax, 2009/2010 Tax Year*, Delta Business Systems, Blantyre.

Malawi Government, (2000). *Competition and Fair Trading Act*, The Government Printer, Zomba.

Malawi Government, Department of Economic Planning and Development, Energy Planning Unit, (1988). *National Energy Plan*, The Government Printer, Zomba.

Malawi Government, Department of Economic Planning and Development, Energy Planning Unit, (1991). Solar *Energy Symposium, Proceedings and Action Plan*, Blantyre, February 7-8, 1991, Lilongwe.

Malawi Government, Department of Energy Affairs, (2003). *National Energy Policy*, Lilongwe.

Malawi Government, Department of Energy Affairs, (2004). *Other Renewable Energy Industry: Reform Strategy,* Lilongwe.

Malawi Government, The Privatisation Commission, (1996). *Privatisation Policy, Act and Regulations Booklet*, Montfort Press, Limbe.

Miller, D., (2011). Selling Solar: Diffusion of Renewable Energy in Emerging Markets, Earthscan, London

Mogotsi, B., and Bok, S., (Editors), (2001). *Energy for Rural Development in Botswana-Proceedings of a National Policy Seminar, 26th-27th October, 2000*, African Energy Policy Research Network, Nairobi.

Modebe N. et al, (2014). *The (ab)use of import duty waivers in Nigeria*. African Studies Centre, Working Paper 113 / 2014, Leiden, Netherlands.

Mwanza, P., and Pashkov, Y., (1995). *Renewable Sources of Energy in Africa: Status of Development and Future Contribution to the Energy Mix,* Journal of Energy in Southern Africa, vol.6, No.3, pp 143-150, Capetown.

Sampa R.C and Sichone E.C. (1995). *Mini and Micro-hydro Power in Zambia. A Draft Study Report on Dissemination of Renewable Energy Technologies*. AFREPREN, Nairobi.

Task Force on the Malawi Energy Policy, (undated), *Malawi Energy Policy, Issues: New and Renewable Energy*, Lilongwe.

Wilkins, G., (2002), *Technology Transfer for Renewable Energy: Overcoming Barriers in Developing Countries,* Earthscan Publications Ltd., London.