Chapter 24
Trade Policies and Development of Technology in Africa

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ABSTRACT

Trade between nations is very crucial in the process of economic and technological growth. Directly or indirectly, trade facilitates the process of technology innovation, transfer and diffusion. It offers the trajectory to evaluate and understand how technology penetrates economies and remains a good indicator to measure national progress on technology creation and assimilation. The growth link between international trade and economic development could be traced to the classical trade theory of Adam Smith, and David Ricardo and the modern neoclassical trade model of Heckscher-Ohlin (H-O). While there is no single model that captures the route to economic development, this chapter explores how African countries working closely can harness and utilize technological advancements to improve their share of global trade so as to accelerate their overall economic growth and development.

INTRODUCTION

Trade between nations is very crucial in the process of economic and technological growth. The growth link between international trade and economic development could be traced to the classical trade theory of Adam Smith, and David Ricardo and the modern neoclassical trade model of Heckscher-Ohlin (H-O) model. The basic tenet of the trade theory is that welfare is generally enhanced through improvement in productivity and sectoral allocation of factors of production. Some of the benefits associated with trade include foreign exchange earnings needed in the importation of intermediate goods required in the industrial sector, increased competition, product specialization, and a broader avenue for technology transfer (World Bank, 1991). Studies by Bhagwati, (1978, Bhagwati and Srinivasan, 2002); Balassa (1982, 1985); Krueger (1978,1990,1997); and Edwards,(1993) confirm the positive relationship between exports and economic growth. In the African continent,

DOI: 10.4018/978-1-61692-006-7.ch024

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however, the trade policy of many countries was based on the doctrine of import-substitution industrialization. That policy gained wide acceptance as a viable policy package that would help many of these countries achieve structural transformation and subsequently lessen their dependence on primary products (UNCTAD, 2008). According to UNCTAD 2006 Report, African countries have not diversified their exports towards more dynamic primary commodities and manufacturing goods which are less prone to the vagaries of international markets and that Asia dominates trade between developing countries, accounting for more than half of all South-South commodities exports (UNCTAD, 2006). The impact of this weak export situation is more noticeable in the class the majority of African countries fall into according to World Bank categories of nations.

The World Bank has classified economies based on gross national income (GNI) per capita as low income, middle income, or high income World Bank (1993). The middle income group is further subdivided into lower middle and upper middle income. The low income economies are characterized by GNI per capita of $935 or less; lower middle income from $936 to $3,705; upper middle income, $3,706 to $11,455; and high income, $11,456 and above (World Bank, 2009). According to 2007 GNI per capita calculations, out of 47 Sub-Saharan African countries, only eight were classified as lower-middle-income, and three as upper-middle-income economies. In effect, only three countries South of Sahara, namely Gabon, Seychelles and South Africa meet the criterion of GNI per capita of $3,706 to $11,455 range. The situation should not surprise many people if technological innovation and application in most African countries is low.

While there is no single model that captures the route to economic development, this chapter explores how African countries working closely can harness and utilize technological advancements to improve their share of global trade so as to accelerate their overall economic growth and development. In that regard, one cannot but agree with Ekanem (1997) that African countries need to address their problem using a three-pronged approach, namely, establishing a stable sociopolitical environment, strengthening their economies, and the need to establish a strong scientific and technological base. Echoing the importance of technology Edoho (1997) argues that the failure of Africa to avail itself of access to technology would lead to increased marginalization by advanced industrial countries. Since that observation was made more than ten years ago, it becomes necessary at this point in time to assess the state of affairs as a guide to future action. In this chapter, it would be extremely difficult to cover all the countries in Africa hence most materials would come from the Sub-Saharan African (SSA) and North African countries. Where possible, however, trade and economic policies of member and non member countries in the two regions or Africa as a whole will be analyzed based on availability and relevance of data. The emphasis on SSA countries derives from the fact that the majority of member countries as opposed to the North African region fall into low income economies. This chapter is arranged in the following sequence: a brief review of Africa's economies in the late 1960s and after independence is followed by trade and economic policies of the 1970s and 1980s. That is closely followed by assessment of export trade performance of selected African countries after trade liberalization policies. External and internal problems militating against some of these nations were also identified. Policy options aimed at improving trade through application of sustainable economic and technological innovations are discussed, concluding with summary and recommendations.

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