

Original Research Article

Evaluation of The Contribution of Manufacturing Support Interventions to Employment in The Manufacturing Sector Under Kenya's Bottom-Up Economic Transformation Agenda (BETA) (2022-2025)

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Abstract: Despite Kenya's several successive efforts to boost inclusive economic growth and job creation, unemployment continues to be one of the most severe socio-economic challenges the country is facing. The Government of Kenya has acknowledged the strategic importance of industrialization in creating productive jobs by developing the Bottom-Up Economic Transformation Agenda (BETA) (2022 – 2027) which prioritizes manufacturing as a key sector to enhance value addition, industrialization, enterprise development and create jobs. The study estimated the impact of BETA manufacturing support interventions on job creation in the manufacturing sector in Kenya for the period 2022-2025. Specifically, the study looked at how manufacturing support interventions are applied under BETA, looked at the trends in manufacturing sector and employment in Kenya, and looked at how much these manufacturing support interventions helped create employment. This study is based on the Developmental State Theory and is a desk-based research approach. It used only secondary data collated from government policy documents, Kenya National Bureau of Statistics (KNBS), Kenya Ministry of Investments, Trade and Industry, Kenya Association of Manufacturers (KAM), World Bank, International Labour Organisation (ILO), United Nations Industrial Development Organisation (UNIDO), African Development Bank (AfDB) and peer-reviewed scholarly publications. The analysis of data was done by documentary analysis, thematic content analysis and descriptive assessment of the trend of manufacturing and employment activities. The results show that manufacturing support interventions under BETA, such as County Aggregation and Industrial Parks (CAIPs), Special Economic Zones (SEZs), Export Processing Zones (EPZs), investment promotion, industrial infrastructure development, local value addition interventions, Technical and Vocational Education and Training (TVET) reforms and support for micro, small and medium-sized enterprises (MSMEs), have enhanced Kenya's manufacturing ecosystem and have had a positive impact on employment creation through both direct and

indirect employment opportunities. The research also showed that these interventions contributed to improved industrial investment, to enterprise development, to value addition and to labour absorption in the manufacturing value chains. Yet their potential for full employment has been hampered by continuing structural problems such as high production costs, access to cheap industrial finance, lack of infrastructure, technological inadequacies, regulatory delays, and growing competition in the international market. Finally, the study finds BETA has laid a solid policy ground to support the revival of the manufacturing sector and job creation in Kenya through smart state interventions. However, such measures as ongoing implementation, greater industrial investment, better public–private cooperation, better infrastructure, more accessible finance, and ongoing investment in technical skills training are key to unlocking the potential of the manufacturing sector to create productive, sustainable jobs for people.

Keywords: Bottom-Up Economic Transformation Agenda (Beta), Manufacturing Sector, Manufacturing Support Interventions, Employment, Industrial Policy, Developmental State Theory, Kenya.

Introduction

Manufacturing has been identified as a key industry to drive structural change, industrialization and productive employment, especially. Economic development theories are that countries can sustain economic growth by reallocating labour and resources from low productivity sectors (like subsistence agriculture) to high productivity sectors (like manufacturing and modern services) (Chenery, 1979; Lewis, 1954). In addition to its ability to boost production, the manufacturing sector has backward and forward linkages with agriculture, transport, finance, trade and technology, fostering innovation, value addition, export competitiveness and wide-ranging economic development (United Nations Industrial Development Organization [UNIDO], 2022). In developing economies, like Kenya, enhancing manufacturing is key to reducing the high rates of unemployment and promoting inclusive and sustainable growth.

Although technology has changed and automation has risen, manufacturing still remains vital in creating employment opportunities globally. The International Labour Organization (ILO, 2024) states that manufacturing is one of the biggest providers of formal work, with millions of workers in the world being employed in the sector, especially in emerging economies where industrial growth has been linked with the increase in income and reduction in poverty. The United Nations Industrial Development Organization (UNIDO, 2024) also asserts that competitive manufacturing industries make a major contribution to job creation through enterprise development, industrial innovation, technology upgrading and participation in global value chains. Finally, countries like China, Vietnam, South Korea, and Malaysia have found that government policies and investments for manufacturing, including industrial policies, infrastructure investments, skills

development, and export promotion, can significantly boost job creation and support the economic resilience of manufacturing sectors (World Bank, 2024).

Despite the growing urbanization and population expansion however, in Africa, manufacturing continues to lag behind its potential. The African Development Bank Group (AfDB, 2024) states that manufacturing accounts for less than 15 percent of the gross domestic product (GDP) in most African economies and has been characterized by low levels of productivity, production levels in manufacturing are underdeveloped, limited industrial diversification, high production costs, and limited access to cheap financing. This makes it difficult for many African countries to accommodate an increasing labor population today into productive jobs, leading to high unemployment and underemployment rates. African industrialization is still essential for transforming African economies as it provides better quality jobs than most informal sector activities, and opportunities for innovation and entrepreneurship for the youth (African Union, 2023).

The manufacturing sector has consistently been identified as one of the crucial sectors to drive national development and economic transformation in Kenya. Several industrial development policy programmes have been put in place since the adoption of Kenya Vision 2030, all geared towards enhancing industrial output, value addition, export and job creation (Government of Kenya, 2007). The sector accounts for around 7–8 percent of Kenya's Gross Domestic Product (GDP) and is a significant source of formal jobs in agro-processing, food manufacturing, textiles and apparel, chemicals, pharmaceuticals, furniture, leather products and metal fabrication (Kenya National Bureau of Statistics [KNBS], 2025). The sector is relatively underdeveloped, with its growth being hindered by increased costs of production, fluctuating energy supply, low adoption of technologies, poor infrastructure, import competition and limited access to industrial finance (KNBS, 2025; World Bank, 2023).

One of the major socioeconomic issues in Kenya is unemployment. Despite the fact that thousands of people enter the workforce every year, the number of formal jobs created has not grown at the same rate as the labour force in Kenya (Kenya National Bureau of Statistics [KNBS], 2025). As a result, the government has come to see the process of industrialization and expansion of manufacturing activities as vital tools for creating productive jobs to meet the needs of an increasing population. The Bottom-Up Economic Transformation Agenda (BETA) was launched by the Government of Kenya as its overall development framework following the general elections in 2022 to expedite inclusive economic growth, poverty reduction, enterprise development and job creation (Government of Kenya, 2022). While the focus of the previous policy was macro-economic growth, BETA focuses more on boosting productivity at the grassroots level by investing in activities that directly improve the livelihoods of households, micro, small and medium enterprises, farmers and local industries.

Manufacturing is one of the priority productive sectors listed in the agenda that can contribute to economic transformation through value addition, import substitution, export expansion, technological upgrading and employment creation. To achieve these goals, the

government has put in place various interventions for manufacturing between 2022 and 2025. These involve, inter alia, extending affordable credit facilities through the Hustler Fund and other enterprise financing modalities; supporting local value addition under the "Buy Kenya, Build Kenya" programme; strengthening Special Economic Zones (SEZs) and Export Processing Zones (EPZs); investing in industrial parks and County Aggregation and Industrial Parks (CAIPs); improving the competitiveness of manufacturing; strengthening Technical and Vocational Education and Training (TVET) institutions to improve industrial skills; promoting textile and apparel manufacturing under the African Growth and Opportunity Act (AGOA) and the African Continental Free Trade Area (AfCFTA); investing in agro-processing industries; and improving industrial infrastructure through enhanced energy, transport and logistics systems (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024). These interventions aim at stimulating production in the industry but also creating more decent jobs for Kenyans.

Statement of the Problem

Government initiatives to create jobs and ensure inclusive economic growth have yet to curb the problem of unemployment in Kenya. Manufacturing is known to be a major source of industrialization and absorption of labour, but has not performed well in terms of providing sustainable employment opportunities. The Government of Kenya, in response, has put in place the Bottom-Up Economic Transformation Agenda (BETA) (2022–2027) which focuses on manufacturing, including through County Aggregation and Industrial Parks (CAIPs), Special Economic Zones (SEZs), Export Processing Zones (EPZs), value addition, investment promotion, industrial infrastructure development, TVET reforms and supporting micro, small and medium-sized enterprises (MSMEs) (Government of Kenya, 2022).

Despite these interventions, manufacturing remains a sector with some operational challenges such as high production costs, lack of access to affordable finance, lack of infrastructure and technological constraints which could limit its ability to create employment for the youth (KNBS, 2025; KAM, 2024). Moreover, only limited empirical evidence exists that assesses the effectiveness of manufacturing support interventions that have been put in place from 2022 (when BETA was introduced) as a driver of employment. This lack of knowledge restricts the policymaker's ability to judge the job prospects that the interventions are expected to yield. Thus, the objective of this study is to evaluate manufacturing support interventions in relation to employment creation in manufacturing sector from 2022 to 2025 under the Kenya Bottom-Up Economic Transformation Agenda (BETA).

General Objective

To evaluate the impact of manufacturing support interventions within the framework of Kenya's Bottom-Up Economic Transformation Agenda (BETA) on the creation of employment opportunities in manufacturing in Kenya across the period of 2022 to 2025.

Literature Review

2.1 Conceptual Review

The conceptual review helps to understand the key concepts of the study.

2.1.1 Manufacturing Support Interventions

Manufacturing support interventions are planned policy actions, institutional programmes or government policies that aim at improving the competitiveness, productivity, sustainability and growth of manufacturing industries. These interventions aim at mitigating market failures hindering the ability of firms to be developed, such as limited access to finance, infrastructure, technology, skilled labour, markets, innovation, and regulatory support (Rodrik, 2008; Stiglitz & Greenwald, 2014). The importance of industrial policy for manufacturing is emphasized by industrial policy scholars who argue that manufacturing sectors generally cannot become competitive in the long run without any strategic policy support, as markets do not give long-term industrial investment, technological upgrading and enterprise development sufficient incentive (Aiginger & Rodrik, 2020). UNIDO (2022) defines manufacturing support interventions as a set of coordinated public policies that aim to improve the capacities of industries by promoting investments, transferring technology, building innovation systems, developing enterprises, strengthening infrastructure and human capital development. In the same way, the Organisation for Economic Co-operation and Development (OECD, 2023) defines manufacturing support interventions as policy measures that are designed to ease production bottlenecks and boost the competitiveness and productivity of manufacturing. These interventions typically involve fiscal measures, such as subsidies; finance, including subsidized loans; tax measures; export promotion measures; industrial parks; research and development support; skills training; digitalization; and regulatory measures. Manufacturing support interventions is mainly theorized because of the existence of market failures. Stiglitz and Greenwald (2014) argue that manufacturing companies are not able to achieve socially optimal investment due to imperfect capital markets, information asymmetry, externalities, coordination failures and technological spillovers.

Governments therefore intervene in many ways to offer public goods, to lower transaction costs, to foster innovation and to stimulate investment by the private sector. In the modern era, industrial policy should also aim to discover productive sectors that offer high employment prospects, and provide an environment that enables firms to innovate, grow production, and compete internationally, according to Rodrik (2016). All of these interventions aim at enhancing manufacturing productivity and creating employment opportunities for those entering the labour market. The study conceptualizes support interventions in the manufacturing sector as policy measures, institutional programmes, financial mechanisms, infrastructural investment, skills development and regulatory reforms being implemented by the Government of Kenya under the Bottom-Up Economic Transformation Agenda (BETA) between 2022 and 2025, to enhance manufacturing performance and job creation. Their impact is measured based on their contribution to

industrialization, business development, job creation and sustainable jobs in Kenya's manufacturing sector.

2.1.2 Bottom-Up Economic Transformation Agenda (BETA)

The Bottom Up Economic Transformation Agenda is Kenya's national economic development agenda, launched by the Government after the general elections in 2022. The agenda aims to promote inclusive economic growth through the support of productive sectors that will increase incomes of households, create jobs, alleviate poverty and boost enterprise development (Government of Kenya, 2022). The BETA approach is different from previous development models which focused on trickle-down growth and economic development, starting with strengthening the economies of micro, small and medium enterprises, farmers, informal sectors, women and youth at the grassroots. BETA has identified five strategic pillars: agricultural transformation, micro, small and medium enterprise development, affordable housing, healthcare and the digital and creative economy, whilst manufacturing has been identified as a cross-cutting sector that provides support for value addition, industrialization, export promotion, and job creation (Government of Kenya, 2022). In this context, manufacturing is envisaged to stimulate local production, decrease reliance on imports, help to improve competitiveness and create productive jobs based on investment in value-added sectors such as agro-processing, textiles, leather, pharmaceuticals, construction materials, automotive assembly and other industry sectors. The overall objective of this study is to conceptualize BETA as a framework of policy interventions that specifically target manufacturing, aimed at improving manufacturing growth and employment opportunities, to be rolled out by the Government of Kenya between 2022 and 2025.

2.1.3 Employment

Employment is a multidimensional phenomenon, which includes availability of people in productive, remunerative and decent work in the labour market. It is not just about finding a job but the quality, stability, productivity and sustainability of employment opportunities. As a result of the rapid expansion of the population, and the failure of the labour markets to provide adequate quality jobs, unemployment has become a central policy concern worldwide. As per the United Nations (2023), most of the unemployed population lives in the developing countries and although the demographic dividend in the countries offers opportunities for economic growth, it can be considered as a huge burden for the socioeconomic sectors if the countries are unable to generate sufficient employment opportunities. According to the ILO (2024), low labour market experience, a lack of skills, labour market discrimination and structural economic constraints are all factors that make the unemployed more likely to be unemployed, underemployed, employed in the informal sector or insecurely employed.

The meaning of employment has changed significantly throughout the years. The earlier views emphasized mainly on the reduction of unemployment rates by enhancing participation in the labour market. Today, however, the concept of decent work also focuses on productive work, fair wages, social security, occupational safety and security, equal

opportunities and career advancement (ILO, 1999; ILO, 2024). Good jobs can help individuals to increase their incomes, build up their human capital assets, achieve financial autonomy and make a meaningful impact on national economic development. Governments are now more interested in the quality of the jobs created as well as the sustainability of jobs, leading to an emphasis on quality and sustainability. In addition to the fact that manufacturing was the sector with the highest level of labour absorption, the opportunities for acquiring skills and for productivity growth in manufacturing make it an attractive sector for development economists to promote employment. The industrialization process allows for the reallocation of excess labor (EL) from low productivity agriculture to higher productivity sectors such as manufacturing, thereby boosting income and economic growth, as Lewis (1954) argues. Likewise, Chenery (1979) states that during a structural transformation period, an increase in manufacturing activity generates a significant amount of jobs not only in manufacturing factories but also through the chain of supply, transportation, logistics, marketing, and business support services.

The Bottom Up Economic Transformation Agenda gives special attention to manufacturing due to its productive and sustainable employment generating role. Government support such as affordable enterprise financing, industrial infrastructure development, investment promotion and export facilitation, and support for value addition, under BETA, is anticipated to boost manufacturing output and create jobs for people (Ministry of Investments, Trade and Industry, 2024). Another objective of these interventions is to increase the opportunities for entrepreneurship through access to industry markets, production equipment, credit, and business development services. Even with these policy initiatives, however, some structural challenges still remain that limit employment in Kenya's manufacturing sector. Some of these are: low level of industrial diversification, poor access to finance, technological mismatch, skills shortages, high production costs, low level of innovation and comparatively low growth of the private sector (World Bank, 2024). In addition, there is little empirical evidence on the impact of manufacturing support interventions under BETA on people's employment. This study therefore conceptualizes employment as the dependent variable, that is the number of people who can be employed through manufacturing support interventions to create jobs, improve job quality, be employed, start businesses, earn an income and sustain livelihoods between 2022 and 2025 within the manufacturing sector in Kenya.

2.1.4 Manufacturing Sector

Manufacturing sector: part of the economy that produces, by mechanical, chemical, physical or technological means, goods or products from a raw material or component which requires further processing to become a finished or semi-finished product. It is seen as a major contributor to the structural transformation, technological progress, export competitiveness and job creation of the countries and one of the most important productive sectors in the national economic development of these countries (United Nations Industrial Development Organization [UNIDO], 2022). Manufacturing is defined under the International Standard Industrial Classification (ISIC Revision 4) as a wide array of manufacturing activities such as food processing, textiles and apparel, leather

manufacturing, chemicals, pharmaceuticals, machinery and metal fabrication, plastics, paper, furniture, electronics, motor vehicle manufacturing and other manufacturing processes (United Nations Statistics Division, 2008).

The manufacturing sector plays a strategic role in economic development since it has strong backward and forward linkages with other sectors of the economy. There are backward linkages that give rise to demand for agricultural products as well as for minerals, energy, transport, financial services and forward linkages leading to processed goods for domestic consumption, exports and industrial production (Hirschman, 1958). These connections are able to create multiplier effects that boost investments, production, innovation, income and employment in various sectors. This explains why countries with strong manufacturing sectors tend to grow at a faster pace, and undergo more structural change than those relying heavily on primary commodity exports (UNIDO, 2022). The importance of manufacturing has been stressed by the development economists consistently in the past. According to Lewis (1954) manufacturing helps to shift labour from the less productive traditional sectors to the more productive industrial sectors, which would result in higher wages, productivity and national income. This position is echoed by Chenery (1979), who argues that industrialization allows countries to diversify their economies, increase technological prowess and increase productive employment opportunities.

Manufacturing sector has been a priority sector in Kenya since independence. The Government has embarked on industrialization policies include: Import Substitution Industrialization (ISI), Structural Adjustment (SA), Vision 2030, Kenya Industrial Transformation Programme (KITP), the Big Four Agenda, and the Bottom-Up Economic Transformation Agenda (Government of Kenya, 2007, 2017, 2022). The policy measures are directed towards the following objectives: to promote value addition, to promote exports, to improve industrial competitiveness, to attract investments and employment opportunities. Manufacturing accounts for about 7-8 percent of Kenya's Gross Domestic Product (GDP) and continues to be one of the biggest contributors of formal jobs in Kenya (Kenya National Bureau of Statistics [KNBS], 2025). The sector consists of agro-processing, food & beverages, textiles & apparel, leather processing, pharmaceuticals, chemicals, cement, metal fabrication, furniture, plastics, paper products, automotive assembly, and manufacturing of consumer goods. They are the backbone of millions of lives, having a direct impact on job creation as well as on the broad supply chains they represent, including agriculture, transport and logistics, trade, and professional services (KNBS, 2025; UNIDO, 2022).

However, Kenya's industrial sector still grapples with a myriad of problems. These encompass high energy costs, costly credit, insufficient industrial infrastructure, competition from imported goods, lack of research and innovation, outdated technologies, logistics inefficiencies and regulatory delays (World Bank, 2023; KNBS, 2025). They make industry less competitive and limit the industry's capacity to grow production and to gain employment. In response to these challenges, the Bottom-Up Economic Transformation Agenda states that manufacturing is a “cross-cutting” agent for economic transformation (Government of Kenya, 2022). The interventions by the government between 2022 and

2025 have been geared towards boosting local production, value addition, support for industrial parks, improvement of Special Economic Zones, extension of Export Processing Zones, access to low-cost finance, technology adoption, strengthening Technical and Vocational Education and Training, and industrial exports under the African Continental Free Trade Area (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024). These interventions are to drive the productivity of manufacturing and create jobs. In this study the manufacturing sector is defined as the set of industries that process raw materials to produce value added products in the formal industrial sector in Kenya. It is the backdrop against which the Bottom-Up Economic Transformation Agenda manufacturing support interventions are applied and their impact on job creation measured for the duration of 2022 to 2025.

2.2 Theoretical Literature Review

Developmental State Theory

The current study is based on Developmental State Theory (DST), which offers a strong theoretical backing for understanding the role of government in facilitating the industrialization process, structural transformation and employment creation through policy and programmatic interventions. The concept was developed on the basis of analysis of the fast-track industrialization of the economies of the East Asian countries which actively used the state to plan and implement industrial policies. Chalmers Johnson (1982) in his classic analysis of the industrial transformation of Japan after World War II, found that the Japanese state in its strategic role in coordinating investment, industrial policy, technological development, and private sector activities played a critical role in the country's rapid economic growth. In contrast to neoliberal views which emphasize a minimal role for government in economic development, Developmental State Theory has held that it has a basic role in economic development through intervention to correct market failures, in coordinating investment, in supporting industries with strategic potential, and in establishing a favorable industrial environment for long-term competitiveness (Johnson, 1982).

One of the main ideas of Developmental State Theory is that the sustained economic transformation cannot happen spontaneously or automatically on the market, but it needs an effective, capable and autonomous state that deliberately allocates resources to the high developmental potential sectors. Johnson (1982) believes that a developmental state has the institutional capacity to design sound industrial policies, resource mobilization, public-private coordination of investments and long-term development planning that promotes industrial development. The argument has been continued by Evans (1995) who has coined the term embedded autonomy, which implies that the state is sufficiently autonomous to have a national development agenda, but is also able to work closely with the private sector, financial institutions, research institutes and other stakeholders. This cooperation helps Governments to understand the industrial constraints, design policy interventions for these constraints and establish the enabling environment for enterprise development and employment creation.

Developmental State Theory also claims that industrialization is the major force driving economic development due to its ability to provide productivity gains, technological innovations and export competitiveness, and create jobs in large numbers. Amsden (1989) argues that the successful industrializing countries did not use the free market exclusively; they also implemented strategic industrial policies that included subsidized credit, investment incentives, export promotion, acquisition of technology, building infrastructure, and investing in human capital. Likewise, Wade (1990) shows that in the countries with rapid industrialization, governments actively organized the financial systems, industrial investments, technological upgrading, and export-oriented production to speed up the process of economic transformation. Together these scholars maintain that the state should intervene in the market where it is not doing so adequately in order to provide a suitable incentive for long-term investment in industry and innovation. A key contribution of Developmental State Theory is to provide an explanation of market failure and the justification for government intervention. Information asymmetry, coordination failures, externalities, imperfect capital markets, insufficient investment in technological innovation and inadequate infrastructure are all factors that can prevent markets from making an efficient allocation of resources (Stiglitz & Greenwald, 2014). Manufacturing industries, in particular, tend to be very vulnerable to such failures due to the need for significant amounts of capital, long investment cycles, sophisticated technologies, and trained workforce and integrated supply chains.

Thus, governments intervene via industrial policies that lower production costs, assistance to access affordable finance, better infrastructure, technological upgrading, research and innovation, and better institutional coordination. This helps to improve the competitiveness of the firms and promote industrial growth and private investment. Modern advocates of Developmental State Theory continue to stress the importance of development states in fostering industrial competitiveness in the context of globalization. You can read the arguments for the continued relevance of industrial policy by Rodrik (2008) and again by Rodrik (2016), which state that governments are the only ones that can see industries with potential and recognize that institutional conditions affect industrial development. Instead of supplanting markets, governments should support markets with targeted interventions to boost productivity growth, employment, innovation, and export diversification in industries that can provide these benefits. Similarly, the United Nations Industrial Development Organization (UNIDO, 2022) states that the implementation of an effective industrial policy has to rely on coordinated investments in infrastructure, technology, skills development, innovation systems and enterprise financing to boost the competitiveness of manufacturing and inclusive industrial development.

The significance of Developmental State Theory goes beyond the growth of industries to employment creation. Deliberate government interventions in manufacturing that promote growth, such as enterprise establishment, industrial diversification, value added, exports and productivity growth, also boost labour demand (UNIDO, 2022). The International Labour Organization (ILO, 2024) also notes that nations with robust manufacturing bases tend to create more productive, stable and formal job opportunities

than those heavily reliant on informal or less productive sectors. Therefore, a manufacturing subsector is expected to grow in response to Government support in the sector, which will lead to the growth of industrial investment and the creation of sustainable jobs.

The theory has become increasingly topical in the African development discourse as countries have been looking to getting industrialization going and pulling out of the primary commodity export business. The African Development Bank (AfDB, 2024) reports that Africa has a number of countries that have established industrial policy frameworks focused on value addition, local industry production, export competitiveness, technology upgrading and jobs creation. The success of these interventions, however, relies heavily on the quality of institutions, policy coherence, capacity and governance and coordination of different actors in the public and private sector by the state. Reversing the trend of developmental states in Africa requires strengthening institutions, better policy implementation, increasing domestic investment and promoting industrial innovation (Mkandawire, 2001).

In the Kenyan context, Developmental State Theory offers an interesting account of why industrial policy moved from Vision 2030 to the Bottom-Up Economic Transformation Agenda (BETA). The successive governments have identified manufacturing as a strategic sector that can drive economic growth, improve exports, value addition and job creation. Push for Industrial expansion, modernization of technologies and competitiveness was a key sector identified in Vision 2030 as a priority for the transformation of Kenya into a middle income country through industrialization (Government of Kenya, 2007). On this basis, the Bottom-Up Economic Transformation Agenda adopted a more focused strategy by focusing on productive sectors that will lead to inclusive economic growth and job creation at the grassroot level (Government of Kenya, 2022). The Government has introduced a series of interventions in manufacturing, as per the tenets of the Developmental State Theory, under BETA.

Value adding through establishment of County Aggregation and Industrial Parks, expansion of SEZ and EPZ to attract local and foreign investors, affordable funding of enterprises through Hustler Fund and other investment support mechanisms, investment in industrial infrastructure, modernization of TVET institutions to build industrial skills, strengthening local manufacturing through the Buy Kenya, Build Kenya initiative, enabling exports under the African Continental Free Trade Area (AfCFTA) and enactment of industrial competitiveness investment incentives (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024). These interventions are a reflection of the developmental state's role in creating an enabling environment which encourages industrial investment, development of enterprises and employment. These manufacturing support interventions are conceptualized as the independent variable that affects employment in Kenya's manufacturing sector in the present study.

Based on this theory, Developmental State Theory suggests that good industrial policies can boost industrial growth by easing production constraints, attracting private

investment, boosting productivity and increasing competitiveness. Labour demand rises with the expansion of manufacturing firms' production and investment, resulting in an increase in employment opportunities. The theory thus offers a logical argumentation of the causal sequence in which state-led manufacturing support interventions are likely to affect youth employment outcomes under the Bottom-up Economic Transformation Agenda. Although it is a very important theory, there are some criticisms to Developmental State Theory. Critics have said that the theory relies on a number of things: that governments have adequate institutional capacity, administrative skills, and political will to effectively implement industrial policies. In most developing countries, the quality of institutions, the extent of corruption, the level of bureaucratic inefficiency, the inconsistency of policies and the general lack of fiscal resources hamper the state's capacity to effectively undertake developmental tasks (Leftwich, 1995). Others argue that globalization, liberalized trade frameworks and international market competition have made governments' capacity to protect and develop industries more difficult through old industrial policy tools (Rodrik, 2011).

Moreover, if effective monitoring and accountability systems are not in place, poorly designed industrial interventions could lead to market distortion, rent-seeking behaviour or sub-optimal use of public resources. However, Developmental State Theory is still relevant to the current study as it directly explains the relationship between government intervention in the manufacture and creation of jobs, which is the core of the study. In contrast, theories focusing on the mobility of labour or the acquisition of individual skills don't directly focus on how strategic government policy, institutional coordination, industrial investment and targeted support for manufacturing can boost enterprise growth and create productive work. Developmental State Theory focuses specifically on the policy instruments and other factors that can spur enterprise growth and create productive employment. The Bottom-Up Economic Transformation Agenda is a state-led industrial development agenda that prioritizes manufacturing and employment, making the Developmental State Theory the best lens to examine if the interventions in manufacturing development that were implemented between 2022 and 2025 have helped create jobs in Kenya's manufacturing sector.

Relevance of Theory to Study Linkage

This study is guided by Developmental State Theory which seeks to explain the causal relationship existing between the independent variable (manufacturing support interventions under BETA) and dependent variable (employment creation in the manufacturing sector in Kenya). The theory is that if the state consciously invests in industrial infrastructure, enterprise financing and technology, skills development, investment promotion and supportive regulatory frameworks, the manufacturing industries become more competitive, expand output and absorb labour. This theoretical proposition is consistent with the study objective of establishing if the manufacturing support interventions under the Bottom-Up Economic Transformation Agenda have improved employment opportunities in Kenya (2022-2025). Therefore, Developmental State Theory

serves as the analytical tools to assess the effectiveness of BETA's manufacturing interventions in inclusive industrialization and sustainable employment.

2.3 Empirical Literature Review

2.3.1 Global Evidence on Manufacturing Support Interventions and Employment

Empirical evidence around the world has proven that manufacturing support interventions are one of the most successful policy tools in supporting the development of industry and jobs. In many developed and developing countries, governments have been increasingly turning to the adoption of a combination of measures that include fiscal measures, industrial financing, infrastructure development, technological innovation, skills development, and export promotion, in order to promote manufacturing competitiveness and labour absorption. Based on the assumption that the multiplier effects of manufacturing are stronger than those of many other sectors, as manufacturing creates direct employment in the industries while also providing indirect jobs in the supply chain, logistics, transport, and marketing, and business support services (UNIDO, 2022; Hirschman, 1958).

There is some of the strongest empirical backing for state-led manufacturing interventions from evidence of East Asian economies. Research on the experience of Japan, South Korea, Taiwan, Singapore, and China consistently shows that government policies through subsidized credit, export assistance, industrial clusters, technology acquisition, and coordinated industrial planning played an important role in providing a big boost to manufacturing growth and job creation (Amsden, 1989; Wade, 1990; Rodrik, 2008). For example, South Korea has pushed for targeted industrial policies to shift the country's labour-intensive industrial base into global competitive industries and generate millions of jobs (Amsden, 1989). Likewise, for the Chinese, Special Economic Zones, investment incentives, infrastructure investment, and export-oriented industrialization enabled a considerable decrease in unemployment and poverty, even as the country was able to absorb a rapidly expanding workforce (Rodrik, 2008; World Bank, 2024).

There is also a recent international body of evidence that suggests manufacturing is still a viable line of business to pursue for employment, even in the era of automation and digitalization. The ILO Global Employment Trends 2024 show that targeted employment interventions that address the intersection of skills development, entrepreneurship support, employment services and productive sector investment have considerable positive impact on employment, especially in LMICs. The report also reveals that it is the integrated programmes that are related to productive sectors (such as manufacturing) that produce stronger and more sustainable labour market outcomes, compared to isolated employment programmes (International Labour Organization [ILO], 2024).

The empirical literature, however, also contains some significant weaknesses. A systematic review of technological change and employment by Hötte, Somers and Theodorakopoulos (2022) claims that although technological innovation in general leads to more jobs at the aggregate level due to productivity gains and the creation of new industries, automation can lead to a decline in demand for routine manufacturing jobs,

especially in the low-skilled category. Governments are thus urged to go further than the industrial modernization and to continuously upskill and reskill their workforce to reap the benefits of technological progress instead of losing them (Hötte et al., 2022).

2.3.2 African Evidence on the Effectiveness of Vocational Training Programs

Industrialization is increasingly recognized as a potential industrial development strategy in Africa to tackle continued high unemployment and structural economic transformation. Although the continent has one of the world's largest population, it's not enough to find jobs for the rising labour force. In Africa, the African Development Bank (AfDB) estimates that every year between 10 and 12 million people join the work force but only a small proportion can find formal employment, leaving the rest to informal activities and contributing to high unemployment and underemployment rates (African Development Bank [AfDB], 2024).

Empirical research shows that manufacturing has significant employment potential to solve this employment problem. UNIDO's evaluation of the manufacturing industry in Africa suggests that industrial development generates employment opportunities, in the sense of enterprise creation, value addition, technology transfer, and skills learning. However, the manufacturing industry still has weak industrial ecosystems, poor infrastructure, high production costs and a lack of industrial financing and technical skills, the organization says (UNIDO, 2022).

A World Bank regional study on employment in sub-Saharan Africa also finds that various interventions that can boost productivity, such as investments in infrastructure, provision of credit for enterprises, industrial policy and support for manufacturing companies, can significantly increase employment in the region. The report, however, notes that industrial policies are more effective if accompanied by institutional changes, skills development, better governance, and increased involvement of the private sector (World Bank, 2024).

The experience in Ghana is a good example of the possibilities and constraints of employment interventions. The review of employment programmes in Ghana by Lambon-Quayefio et al. (2023) revealed that those that included technical skills training, business development services, seed capital, and provision of support for the enterprise had an impact on employability and entrepreneurial activity among youth. Likewise, research on employment programmes in Nigeria has found that governments have put in place a number of programmes aimed at encouraging entrepreneurship, industrial development, and employment; however, a lack of institutional capacity, poor policy implementation, insufficient funding, and governance problems have hampered the effectiveness of programmes. Omoju et al. (2023) have come to the conclusion that employment programmes have more impact when they are part of a longer-term series of industrial development rather than individual stand-alone programmes.

In summary, the empirical evidence from Africa suggests that manufacturing support interventions in general have the potential to make a large impact on employment

creation in the presence of coordinated industrial policies, sufficient funding, conducive infrastructure and good institutional implementation by the government (AfDB, 2024; UNIDO, 2022; World Bank, 2024). Much of the current evidence, however, has been based on general industrialization strategies or on broad employment programmes, and not on the employment impacts of specific interventions in the field of manufacturing support within the context of recent national development agendas. This means there are few data on BETA interventions in Kenya.

2.3.3 Kenyan Evidence on Manufacturing Support Interventions and Employment

In the past few years, Kenya has been championing manufacturing-led development in various policy documents such as Vision 2030, Kenya Industrial Transformation Programme, Big Four Agenda, and recently the Bottom-Up Economic Transformation Agenda. The empirical evidence tends to confirm the hypothesis that manufacturing is an important driver of economic growth, industrial diversification and employment generation. But the question remains if current industrial policies have created enough job opportunities (Government of Kenya, 2007, 2017, 2022; KNBS, 2025).

The Kenya Country Brief by the International Labour Organization also indicates that Kenya has been slowly improving in its labour market results after the COVID-19 pandemic, but there are still structural issues to address. These encompass skill mismatches, low rates of formal employment, high levels of informality and lack of sufficient job creation in the industries. The report calls for enhancing manufacturing, enterprise development and industrial investment, as well as the institutions of the labour market in order to create employment opportunities for young people (ILO, 2024).

The Bottom-Up Economic Transformation Agenda (BETA) in 2022 was a major turnaround in Kenya's industrial policy, highlighting the need to start economic empowerment from the grassroots, expand the manufacturing sector, support MSMEs, develop County Aggregation and Industrial Parks, undertake local value addition and promotion of investments, provide affordable financing for enterprises, and promote export competitiveness (Government of Kenya, 2022). All of these interventions are deliberately targeted at enhancing manufacturing expansion and employment creation.

2.4 Manufacturing Support Interventions identified under Kenya's Bottom-Up Economic Transformation Agenda (BETA) (2022-2025).

The Kenya Kwanza Government which was elected in 2022 introduced the Bottom-Up Economic Transformation Agenda as the country's overall socioeconomic development policy for the 2022 to 2027 period. The agenda aims to boost inclusive economic growth through the expansion of productive sectors to create jobs, decrease poverty, improve household incomes and encourage enterprise development. BETA takes a different approach to policy formulation from the past, which focused mainly on macroeconomic growth, and emphasizes investments at the grassroots level that benefit micro, small and medium enterprises, farmers, local manufacturers, and young entrepreneurs (Government of Kenya, 2022). In this context, manufacturing is recognized

as a key driver of economic transformation due to its ability to boost value addition, industrial diversification, export competitiveness, technological innovation and job creation (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024).

The manufacturing agenda under BETA was built on Kenya's long established industrialization goals set out in Vision 2030 with increased emphasis on decentralization of industrialization, increased domestic production, more import substitution and building industrial labour-intensive industries. The Government's targets involve boosting manufacturing's contribution to Gross Domestic Product (GDP), expanding industrial investment, building up robust domestic value chains and providing productive employment opportunities, especially for women and youth. The overall vision aligns with the objectives of the Fourth Medium-Term Plan (2023 – 2027) which recognizes manufacturing as a horizontal enabler that supports agriculture, affordable housing, MSME development, infrastructure development and export promotion (Government of Kenya, 2007; Government of Kenya, 2022).

The most important manufacturing intervention in the framework of BETA is the creation of County Aggregation and Industrial Parks. These parks are conceived as a means of spreading out industrialization by having value-addition and processing units located within counties that process agricultural and natural resources that are grown in those counties before entering domestic or international markets. The project aims to minimize post-harvest losses, boost farmers' income, encourage agro-processing industries, enhance the industrial development of the region and generate employment opportunities along the value chains. The Government, through the Ministry of Investments, Trade and Industry, has partnered with the counties and development partners and the private sector to set up CAIPs in various counties to foster geographically distributed industrialization and private investment in the non-metro areas (Ministry of Investments, Trade and Industry, 2024).

Special Economic Zones and Export Processing Zones are also important interventions that need to be expanded and strengthened. The industrial zones offer tax advantages, quality infrastructure, less cumbersome procedures and better access to export markets for investors. The aim is to draw domestic and foreign direct investment, promote export manufacturing, promote technology transfer and create jobs in industry. The Government has focused on filling up the existing industrial areas and creating new manufacturing hubs in counties that have potential for industrial development under BETA. The spread of these zones is anticipated to improve regional and global competitiveness for Kenya in value chains and provide job opportunities to trained and semi-trained workers (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024).

BETA also emphasizes the importance of investment promotion and industrial financing as tools for enhancing the competitiveness of manufacturing. The Government has embarked on changes that will enhance the investment climate to address excessive bureaucracy, enhance investor facilitation services, and encourage both domestic and foreign investment. Kenya has been trying to make Industrial investment a favorable option in the country through the State Department for Investment Promotion and other

promotional bodies to facilitate growth of manufacturing activities that would provide jobs. Enhanced access to finance for MSMEs and manufacturing companies, such as affordable credit schemes, is aimed at addressing funding barriers often faced by manufacturing industry and enterprise expansion (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024).

BETA understands that industrial competitiveness is hinged on productive human capital and hence gives immense attention to skills development and the Technical and Vocational Education and Training. Vocational education reforms aim at enhancing technical skills needed in contemporary manufacturing by linking it with the demand of industrial labour market. The investments in TVET institutions, in apprenticeship programmes, in industrial attachment and in competency-based training are supposed to mitigate skills mismatch and boost the employability of persons entering into manufacturing. These interventions complement the overall manufacturing interventions by making available machineries with a skilled manpower to upgrade technology and boost industrial productivity (Government of Kenya, 2022; Ministry of Education, 2023).

Another key pillar of the BETA manufacturing support is the promotion of local value addition and import substitution. The Government offers incentives for agro-processing, leather, textiles and apparel, pharmaceuticals, edible oils, construction materials, coffee, tea, dairy, meat processing and mineral value addition, instead of exporting raw agricultural commodities. The interventions aim to preserve value within the domestic economy, build up local industry, decrease reliance on manufactured imports, enhance export revenues, and generate jobs in manufacturing value chain. BETA intends to boost industrial resilience and inclusive economic growth through encouraging domestic production (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024).

Manufacturing support for BETA is also supported by investments in industrial infrastructure such as transport, logistics, industrial parks, energy infrastructure, digital connectivity and industrial services. Industrial infrastructure decreases production costs, makes market access easier, makes supply-chain more efficient, and makes domestic production more competitive. In the view of development economists, investment in infrastructure represents one of the most crucial factors affecting industrial productivity, since it reduces the cost of doing business and promotes private investment (Rodrik, 2008; Stiglitz & Greenwald, 2014). The Government thus continues to be putting emphasis on infrastructure expansion which is considered as a stepping stone for sustainable industrialization and job creation (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024).

A second strategic intervention is to build the manufacturing value chain by integration with regional and external markets. The domestic manufacturers will benefit from access to the African Continental Free Trade Area, which will make the market significantly bigger, providing opportunities for expanding production, diversifying exports, and achieving economies of scale in Kenya. Therefore, BETA supports

export-oriented manufacturing, raises industrial standards, promotes competitiveness of enterprises, and enables them to engage in regional value chains, complementing regional trade integration. As export prospects improve, so will the prospects for industrial investment and job creation in manufacturing industries (Government of Kenya, 2022; African Union, 2018).

2.5 Labour Market and Skills Shortages

Relationship between manufacturing development and employment has been the subject of much attention in the field of development economics, labour economics and industrial policy. Manufacturing is also seen as one of the most labour-intensive and productivity-enhancing sectors of the economy as it employs workers directly in manufacturing processes as well as indirectly in the supply chains of agriculture, transport, logistics, trade, finance, technology and business services. Governments around the world, therefore, increasingly see manufacturing as a key contributor to the challenges of unemployment and to inclusive economic growth and structural transformation (UNIDO, 2022). The theoretical underpinning of the link between manufacturing and employment is based on the idea that manufacturing industries have more powerful employment multipliers than some of the primary sectors. According to Hirschman (1958), backward and forward economic linkages are both created by manufacturing: backward linkages result from an increase in the demand for raw materials and intermediate goods, while forward linkages occur through the provision of finished goods to the domestic and export markets.

These inter-sectoral linkages generate a variety of job and placement opportunities other than factory production, such as transport, warehousing, distribution, engineering, marketing, maintenance, financial, and business support. Manufacturing, therefore, has a positive effect on manufacturing employment, but also on the growth of the overall labour market. Empirical evidence across the board has shown that manufacturing plays an important role in employment creation through enterprise growth, technological upgrading, productivity growth and industrial diversification. Manufacturing creates relatively high-quality jobs compared to most informal sector jobs, as it offers opportunities for formal jobs, skills development, technological learning, career advancement and productivity (United Nations Industrial Development Organization (UNIDO), 2022). In addition, manufacturing generates significant multiplier effects by increasing demand for products and services offered by other sectors of the economy, resulting in the creation of indirect jobs in industrial value chains (Hirschman, 1958; UNIDO, 2022).

Labour-intensive sectors like textiles, apparel, food processing, furniture production, leather processing, construction materials, metal fabrication, agro-processing, etc., are often hiring workers entering the labour market and at the same time offering a platform to impart technical skills, train young people in apprenticeship and impart skills. In general, the more industrial experience a worker gains, the more productive he or she will be, earning more and becoming more employable and mobile. Manufacturing is thus seen as an important provider of productive employment by the International Labour Organization (ILO, 2024).

The role of government is a big boost to the manufacturing-employment link. According to the Developmental State Theory, manufacturing industries do not grow consistently without public efforts for strategic intervention in their growth due to the absence of adequate infrastructure, finance, technology and industrial coordination in the market (Johnson, 1982; Evans, 1995). For this reason, governments boost manufacturing by establishing industrial parks, offering investment incentives, promoting exports, providing manufacturing finance, funding research and innovation, building infrastructure, and providing skills development programmes. These interventions have a positive impact on improving the competitiveness of the firms, encouraging business growth, stimulating industrial investment and consequently labour demand. The study shows that interventions focused on the productive sector, and associated with manufacturing and enterprise development have a more sustainable employment impact than labour market interventions that are detached (UNIDO, 2022; Rodrik, 2008).

Though these are positive results, the link between manufacturing and jobs has changed over time because of technological progress. Automation, robotics, artificial intelligence and digital manufacturing have led to a decline in demand for some routine production jobs, while also driving a growth in demand for skilled technicians, engineers, digital specialists and technology-oriented workers. Hötte, Somers and Theodorakopoulos (2022) conducted a systematic review, which revealed that the net impact of technological change on employment is still positive, even if some routine manufacturing jobs are displaced by these changes, as the productivity gains encourage investment, business expansion and the creation of new occupations. The authors do, however, stress that the governments must continue to provide reskilling and upskilling programmes to keep workers competitive for technologically advanced manufacturing systems.

There is also a predicted rise in employment opportunities following the growth of manufacturing businesses, either directly through jobs created within companies, as entrepreneurs, via apprenticeships, industrial services and related supply chain activities. But the size of these employment impacts will rely on the effectiveness of policy implementation, institutional coordination, financing availability, infrastructure quality, technological capability and skills of the workforce (UNIDO, 2022; ILO, 2024). In this context, the current study examines the effect of manufacturing support interventions under Kenya's Bottom-Up Economic Transformation Agenda (BETA) 2022 – 2025, on employment creation in the manufacturing industry.

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology used to evaluate the impact of manufacturing support interventions on youth employment creation in the manufacturing sector in Kenya from 2022 to 2025, under the Bottom-Up Economic Transformation Agenda (BETA) framework. Specifically, the chapter provides research design, research data sources, methods of data collection, data analysis techniques. The study uses entirely secondary data and documentary analysis is used as the main method of data collection. This approach is

suitable because the study is based on the existing government reports, official statistics, government policy documents and scholarly literature that were used to assess the newly implemented national policy framework.

3.2 Research Design

The study uses descriptive research design: The descriptive research design is defined as a research design that aims to describe, explain, and interpret the existing phenomena and cannot manipulate the study variables (Kothari, 2004). The design is suitable for the present study because it allows the researcher to analyze the implementation of manufacturing support interventions, and evaluate the contribution of manufacturing support interventions to employment of youth on the basis of existing documentary evidence.

The desk-based method is based exclusively on secondary information from official government reports, institutional reports, statistical data, policy documents and peer-reviewed literature. The design enables the researcher to assess policy practices over time, as the information in the design comes from various authoritative sources. Using this method is becoming more common in the evaluation of public policies because it offers sound evidence at a lower cost and at a reduced time compared to collecting primary data (Bowen, 2009).

3.3 Data Sources

All secondary data sources are used: Secondary data refers to data that are collected, processed and published by other researchers, governments, institutions or organizations for other purposes than the study at hand (Johnston, 2017). However, secondary data are especially well suited for policy evaluation, as they offer more comprehensive, reliable and longitudinal information that would perhaps be more difficult to collect via primary data.

The study utilizes secondary data from the following sources: Government of Kenya policy documents, BETA policy framework, Kenya Vision 2030 reports., Fourth Medium-Term Plan (2023–2027), Kenya National Bureau of Statistics (KNBS) Economic Surveys, Ministry of Investments, Trade and Industry reports, Kenya Association of Manufacturers publications, Export Processing Zones Authority reports, Special Economic Zones Authority reports, Kenya Investment Authority publications, World Bank publications, International Labour Organization reports, United Nations Industrial Development Organization reports, African Development Bank reports, Organisation for Economic Co-operation and Development publications, Peer-reviewed journal articles. These will give details on manufacturing performance, industrial investment, employment trends, government support programmes and the implementation of BETA.

3.4 Method of Data Collection

The study uses only one method of data collection, namely documentary research (document analysis). Document Analysis is a process that involves reading, reviewing, interpreting and synthesizing print and electronic documents in a systematic way to produce information relevant to a research question (Bowen, 2009). A major reason for this has

been that governments and international organizations are frequently concerned with releasing trustworthy administrative records, policy documents, implementation reports and statistical databases, all of which can be analyzed.

4. Findings and Discussions

4.1 Overview of Manufacturing Support Interventions under BETA (2022–2025)

Document analysis shows that manufacturing is at the heart of Kenya's Bottom-Up Economic Transformation Agenda (BUEA) of 2022 as the Government's flagship socioeconomic development policy. BETAs approach differs from the previous policies that focused primarily on economic growth, with a bottom up strategy that places focus on the productive sectors that can create jobs, boost the incomes of households, foster enterprise growth and poverty alleviation. Manufacturing is one of the strategic sectors that is expected to be a source of driving inclusive economic transformation through value addition, industrial diversification, export promotion and job creation (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024).

The reviewed documents also show that the development of CAIPs is financed jointly by the National Government and county governments, indicating a collaborative approach to industrial decentralization. The programme aims to boost the contribution of manufacturing to Gross Domestic Product from about 7-8% to 15% by 2027 and into 20% by 2030 and create jobs through local manufacturing and agro processing industries. Progress reports show that implementation of the CAIP programme has been ongoing in the counties and significant efforts have been made on the investment in industrial infrastructure, common user processing facilities and the attraction of investors (Ministry of Investments, Trade and Industry, 2024; Government of Kenya, 2025).

The evidence reviewed in general indicates that BETA implements an integrated approach to manufacturing support: building industrial infrastructure, promoting investments, establishing industrial parks, promoting exports, providing enterprise assistance, value addition and skills development. These interventions are in line with the tenets of Developmental State Theory that posits that government is expected to play an active role in the industrial development through a coordinated action of policy interventions as opposed to relying on the market (Johnson, 1982; Evans, 1995; Rodrik, 2008). The Government's policy is a conscious attempt to eliminate the structural bottlenecks in the manufacturing sector and to put in place an enabling policy framework of enterprise development, industrial competitiveness and employment generation (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024).

While there has been some success in implementation, this also illustrates a number of factors impacting on the speed and impact of manufacturing support interventions. These include high energy costs, limited access to affordable industrial finance, regulatory bottlenecks, infrastructure gaps in some counties, and delays in operationalization of some industrial projects. This can slow the pace of manufacturing interventions and the resulting employment growth and should reinforce the need for ongoing policy enactment,

institutional coordination and monitoring to meet employment goals set by BETA (KNBS, 2024; Ministry of Investments, Trade and Industry, 2024).

4.2 The manufacturing sector in Kenya shows positive growth indicators in 2022–2025.

Data analysis shows that Kenya's manufacturing sector continued to be one of the productive sectors in the country from 2022 to 2025, as part of the implementation of the Bottom-Up Economic Transformation Agenda (BETA). The sector grew in modest fashion when compared with the high performance service sectors like financial services and information and communication technology, but this sector was still providing a strategic contribution to value addition, industrial production, export earnings and formal employment. Manufacturing is always included in the priority sectors mentioned in the government policy documents in the context of BETA inclusive economic growth, structural transformation and employment creation (KNBS, 2023, 2024, 2025; Government of Kenya, 2022).

The KNBS Economic Surveys' review indicates that manufacturing performance during the study period was a result of the positive policy interventions as well as the continued existence of structural constraints. Since the adoption of BETA in 2022, the Government has ramped up investment in County Aggregation and Industrial Parks, Special Economic Zones, Export Processing Zones, industrial infrastructure, enterprise financing and investment promotion. The interventions were designed to increase industrial productivity, boost local and national production, value-addition and make locally produced products competitive. These were gradually rolled out and helped improve investor confidence and growth of key manufacturing sub sectors, notably agro-processing, food, pharmaceutical, construction materials, textiles and leather, and edible oils (KNBS, 2023, 2024, 2025; Ministry of Investments, Trade and Industry, 2024).

But the problems of manufacturing industry did not diminish. High electricity tariffs, high industrial credit rates, fluctuations in exchange rates, industrial cost increases, competitive pressure from imported manufactured goods and interruption in international supply chains are some of the factors that limited industrial development for a large part of the study period. These factors restricted the ability of numerous manufacturing companies to expand their production and employment, even in the face of government's encouragement. As a result, manufacturing expansion has been relatively high but not the ambitious targets set in BETA (KNBS, 2024, 2025; Ministry of Investments, Trade and Industry, 2024).

In general, the evidence reviewed indicates gradual recovery and growth of the manufacturing sector in Kenya while BETA was implemented. The growth rate was not in line with the Government's long term goal for industrialization in the country but manufacturing still had significant potential to contribute to economic diversification, export growth, enterprise development and employment generation. Sustained industrial growth, as observed, is in line with Developmental State Theory which holds that there is a need for the government to intervene in the economy, in a deliberate manner, through

strategic investment, industrial policy, infrastructure development, and institutional coordination (Johnson, 1982; Evans, 1995; Rodrik, 2008).

4.3 Industrial employment trends

The secondary data analysis shows that employment continued to be one of the major socioeconomic challenges in Kenya during BETA implementation period of 2022-2025. While manufacturing remained one of the largest sectors of employment for the country, the number of people entering the labour market remained more than the number of good industrial jobs available. In the light of government's effort in encouraging industrial growth, this resulted in the fact that many people were not able to find jobs or work in sectors which are able to offer better income or livelihood, but rather in sectors that are not productive enough and therefore cannot reduce their working hours. This is why many people still found themselves without jobs or underemployed, even though the government was trying to stimulate industrial growth (KNBS, 2023, 2024, 2025; International Labour Organization [ILO], 2024).

This challenge was acknowledged by the Government as a way to increase productive employment opportunities through BETA by prioritizing manufacturing. Based on the analysis of policy documents, it was observed that the interventions to support manufacturing had a specific objective of stimulating the demand for labour by promoting investments in industry, enterprise expansion, value addition, MSMEs and competitiveness of industries. These interventions were anticipated to create both direct jobs in manufacturing companies as well as indirect jobs through industrial supply chains namely agriculture, transport, logistics, trade, construction and business services (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024; UNIDO, 2022).

Documentary review indicates that during the study period agro-processing industries offered substantial employment opportunities. The creation of the County Aggregation and Industrial Parks created a demand for employees in the food processing, packaging, warehousing, quality control, transportation, machinery operation and marketing sectors. These activities were labour intensive and therefore important as they demanded different degrees of skill and thus provided jobs for skilled and semi-skilled (Ministry of Investments, Trade and Industry, 2024; UNIDO, 2022).

Reviewed evidence indicated that there were some differences in employment outcomes among manufacturing subsectors. Industries with relatively high employment generation rates were the labour intensive industries like food processing, textiles, furniture manufacturing, leather processing and construction materials industries. This result is in line with earlier research that has contended that labour intensive manufacturing is still one of the most promising ways of solving unemployment problems in the developing world (UNIDO, 2022; ILO, 2024).

In overall terms, the analysis suggests that interventions in manufacturing under BETA had a positive effect on improving the environment for employment through their potential to stimulate industrial investment, enterprise development, value addition and

skills development. However, by 2025, the impact of these measures on full employment was still being felt, as many of the industrial projects were being implemented, while structural issues affecting manufacturing such as production costs, access to finance, technology obstacles, and infrastructure deficiencies persisted. The findings agree with Developmental State Theory which has suggested that government induced industrial policies must be implemented continuously over a period of time, must be coordinated institutionally and must be sustained over the long term before the full employment benefits can be realized (Johnson, 1982; Evans, 1995; Rodrik, 2008).

4.4 Contribution of Manufacturing Support Interventions under BETA Employment Creation

The overall aim of this study was to evaluate the impact of manufacturing support interventions under Bottom-Up Economic Transformation Agenda (BETA) in the creation of employment opportunities in manufacturing sector for the period 2022-2025. The secondary data analysis suggests that these interventions have been helpful in enhancing the manufacturing ecosystem and creating jobs. The analysis also shows, however, that the amount of work created has been inconsistent along the different interventions and has been mitigated by structural factors such as high production costs, limited availability of cheap industrial finance, technological shifts and infrastructure deficits (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024; KNBS, 2025).

4.4.1 County Aggregation and Industrial Parks

The documentary analysis shows that the creation of County Aggregation and Industrial Parks is part of one of the flagship manufacturing interventions under BETA. The programme aims to create industrial parks in every 47 counties to foster agro-processing, local value addition, industrial decentralization and enterprise development. The government's implementation reports indicate a transition towards CAIPs playing a critical role in the strengthening of manufacturing in counties and job creation for the rural and peri-urban people. The program's objectives are to increase manufacturing, improve competitiveness of Kenyan products, boost exports and create over one million jobs per annum directly and indirectly in manufacturing and value chain (Ministry of Investments, Trade and Industry, 2024; Government of Kenya, 2025).

The review shows that the employment opportunities have been improved in a few ways as a result of the CAIPs. Industrial parks provided jobs in civil works and infrastructure development, and functional parks provided permanent jobs in agro-processing, food production, packaging, storage, quality control, machinery control, transportation, and business support services. The parks have also had an indirect positive employment effect by establishing markets for farmers, transport companies, raw material suppliers for the industrial companies, and small businesses offering complementary services to the industrial companies (Ministry of Investments, Trade and Industry, 2024; UNIDO, 2022).

Nevertheless, implementation varied from one county to another due to infrastructure readiness and availability, land availability, investment mobilization, and the capacity of institutions. While significant strides have been made, targets for implementation were lowered in some counties because projects are not being built as quickly as originally planned; government performance reports indicate that the implementation benefits of CAIPs will likely be realized over the medium and long-term (Government of Kenya, 2025; Ministry of Investments, Trade and Industry, 2024).

4.4.2 Special Economic Zones (SEZs) and Export Processing Zones (EPZs)

The results show that, SEZs and EPZs are still working well in attracting manufacturing investment and employment. The Government has increased the support for these industrial zones through the improvement of infrastructure, providing fiscal incentives, simplifying investment process and providing access to export markets. The interventions brought foreign and domestic investments to the textile and apparel, leather, pharmaceuticals, food processing, plastics and light engineering industries (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024; Export Processing Zones Authority [EPZA], 2023).

The analysis indicates that SEZs and EPZs helped create jobs by attracting labour-intensive manufacturing to the site, where most of the workers are employed. In addition to direct factory jobs, the industrial areas provided indirect employment opportunities in the transport and logistics, construction, maintenance, catering, security, packaging and supply-chain sectors. Enhanced industrial investments also promoted technology transfer and technical skills development of young workers through industrial training and work-based learning., but the data suggests that SEZs and EPZs continued to struggle to expand jobs due to rising competition in the global marketplace, high production costs and infrastructure issues in certain industrial areas. The impact of these measures has been to bolster manufacturing jobs, but they have not fully achieved their employment goals (EPZA, 2023; Ministry of Investments, Trade and Industry, 2024).

4.4.3 Investment Promotion and Industrial Financing

Another major manufacturing support intervention under BETA was investment promotion, as shown in the documentary review. To enhance the investment climate in Kenya, the Government implemented changes that were aimed at streamlining the process of registering businesses, providing a conducive environment for investors, strengthening public-private partnerships and fostering domestic and foreign direct investment (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024).

As a result of increased investment promotion, manufacturing capacity grew through the establishment of new enterprises and through increased expansion of manufacturing industries. Increased manufacturing investment led to more jobs for engineers, technicians, machine operators, quality control workers, manufacturing supervisors, logistics workers, and administrative workers. Additionally, the increased demand for local industrial inputs due to investment promotion reinforced employment

along industrial value chains (Ministry of Investments, Trade and Industry, 2024; UNIDO, 2022).

However, the results indicate that the lack of access to affordable industrial finance continued to be one of the biggest challenges for manufacturing enterprises, especially Micro Small and Medium Enterprises (MSMEs). Lending rates and availability of long-term industrial credit were high and low, respectively, hampering business growth and limiting firms to adding new employees. Hence investment promotion boosted the investment environment and financial constraints curtailed the rate of manufacturing employment growth (KNBS, 2024, 2025; Ministry of Investments, Trade and Industry, 2024).

4.4.4 Value Addition and Agro-Processing

The study further suggests that value-addition programmes played a significant role in employment during the study period. BETA focuses on domestic processing of goods, to transform the economies of surplus export of raw material, towards export of value-added goods, and to boost export earnings and competitiveness of the industry. Agro-processing industries benefited from government support in the production of jobs in dairies, coffee processing, tea packing, edible oils, meat processing, horticulture processing, grain milling, leather processing and textiles. These sectors provided jobs to people with different levels of education and encouraged entrepreneurial activities of agricultural value chain actors (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024).

The result also shows that value addition programmes had a positive impact on strengthening backward and forward linkages in the economy. The upswing in the demand for agricultural raw materials boosted farmers' income along with the generation of jobs in the transportation and storage, packaging, marketing, equipment maintenance, and export logistics sectors. The overall employment contribution of manufacturing was much larger than the direct employment of manufacturing because of these multiplier effects (Hirschman, 1958; UNIDO, 2022).

4.4.5 Skills Development and Technical Training

The results show that Government investment in Technical and Vocational Education and Training (TVET), apprenticeship programmes, industrial attachment and competency-based training enhanced young people employability in manufacturing industries. Skill development interventions aimed at labour market mismatches, developing practical skills needed for modern manufacturing (Government of Kenya, 2022; Ministry of Education, 2023).

The review reveals that businesses are increasingly favoring technically competent employees with the ability to work in a contemporary industrial setting, with the use of digitalization in production systems, quality control technologies and automated manufacturing. As a result, technical training progressed to provide better employment opportunities for the youth and also to boost the productivity of the industry (Ministry of Education, 2023; ILO, 2024).

The results align with the current international evidence that has been found regarding the positive results of a combination of industrial development and workforce skills programmes, when compared to the impact of each intervention alone, on youth employment (ILO, 2024; UNIDO, 2022).

4.4.6 Development of MSME's and Enterprise Support

Although MSMEs were not the focus of BETA's employment strategy, the documentary evidence shows that they continue to be relevant as they make up a significant portion of manufacturing enterprises in Kenya. The growth of manufacturing enterprises was boosted through government interventions on enterprise financing, entrepreneurship development, business incubation, capacity building and market access. Many entrepreneurs were able to start or expand light manufacturing activities such as food processing, furniture manufacturing, garment manufacturing, leather manufacturing, metal fabrication, building materials, through the support of MSMEs. These businesses created new jobs and offered self-employment opportunities. Empowerment of MSMEs and manufacturing linkages are also highlighted as key aspects of BETA's employment strategy in government reviews (Government of Kenya, 2022; Ministry of Investments, Trade and Industry, 2024; KNBS, 2025).

4.4.7 Overall Contribution to Employment

Overall, the results indicate that manufacturing support interventions under BETA had a positive impact on employment generation through enhanced industrial competitiveness, increased manufacturing investment, enterprise development, value addition, technical skills and manufacturing support for MSMEs. The interventions created jobs, both directly in manufacturing companies and indirectly in various agricultural value chains, logistics, construction, transport and business support services (Government of Kenya, 2022; UNIDO, 2022; Ministry of Investments, Trade and Industry, 2024).

The analysis, however, shows the full employment impact was not fully felt by 2025 as some landmark manufacturing projects were still being implemented. Staggering high electricity prices, inadequate industrial financing, lack of infrastructure facilities, imported competition and technological change also had continued impact on the limitation of manufacturing growth and labour absorption (KNBS, 2024, 2025; Ministry of Investments, Trade and Industry, 2024).

The results confirm strongly the Developmental State Theory which states that the strategic role of government in the field of industrial policy, infrastructure investments and institutional coordination and support for enterprises can help stimulate industrial growth and employment creation. The evidence shows that BETA's manufacturing support interventions have laid the groundwork for employment in the long term, but further implementation, enhanced coordination among institutions and greater investment will be needed to meet the Government's ambitious manufacturing and employment goals (Johnson, 1982; Evans, 1995; Rodrik, 2008; Government of Kenya, 2022).

5.1 Conclusion

The study evaluated the impact of the manufacturing support interventions in the Kenya Bottom-Up Economic Transformation Agenda (BETA) on job creation in manufacturing sector between 2022 and 2025. The study analyzed whether government-led industrial interventions have helped create job opportunities through the use of secondary data from government reports, policy documents, publications by the Kenya National Bureau of Statistics (KNBS) and by international organizations, guided by the Developmental State Theory.

The results show that manufacturing is one of the most strategic sectors to boost inclusive economic growth and tackle unemployment in Kenya. The rollout of BETA has strengthened Government's commitment to industrialization through interventions like County Aggregation, Industrial Parks, SEZs, Export Processing Zones, investment promotion, industrial infrastructure development, industrialization through local value addition, enterprise support, and TVET reforms. All of these interventions have helped build the manufacturing ecosystem by creating a conducive business environment, attracting investment, encouraging value addition, boosting industrial competitiveness, and creating increased opportunities to join in manufacturing value chains.

Based on these findings, the study finds a positive contribution of manufacturing support intervention to employment creation both directly and indirectly. This has created jobs in manufacturing companies as a result of industrial growth and expansion of businesses and also jobs in backward and forward linkages in agriculture, transport, logistics, packaging, trade and other business support services. Regional economic development is increasingly inclusive as a result of the promotion of the agro-processing and industrialization of counties, especially in rural and peri-urban areas.

The results further validate the applicability of the Developmental State Theory in the study of the Kenya's industrialization policy under BETA. The Government's active involvement in coordinating industrial policy, investment in infrastructure, enterprise development, value addition and strengthening industrial institutions shows that strategic state intervention is a key element in addressing market failures and driving industrial change. BETA is not a purely market-driven approach, but rather a coordinated public investment and policy approach to build an enabling environment for manufacturing growth and employment creation.

While these are positive changes, the study finds that the value of manufacturing support interventions to employment has not been fully realized yet. The structural problems that have faced the manufacturing sector in the past, such as high energy costs, high industrial credit costs, lack of technological capacity, infrastructure weakness, regulatory delays, import competition, and skills mismatch, remain a drag on manufacturing competitiveness, and are continuing to limit the ability of firms to take up the steadily increasing numbers of people moving into the workforce. The study overall concludes that BETA has laid a solid policy ground on the revitalization of Kenya's manufacturing sector and improving employment. But long-term implementation is needed,

along with effective institutional coordination, ongoing investment in industrial development and targeted policy changes to tap the sector's potential for productive and sustainable jobs.

5.2 Recommendations

Based on the findings and conclusions of the study, the following recommendations are proposed to strengthen the contribution of manufacturing support interventions under BETA to employment creation.

5.2.1 Promote the implementation of County Aggregation and Industrial Parks; The Government should make more efforts to complete and operate the County Aggregation and Industrial Parks in all counties. Well-developed industrial zones and the availability of quality infrastructure, processing facilities and logistics will boost local industrial production, draw private investment and provide sustainable job opportunities.

5.2.2 Enhance access to affordable industrial finance; The National Government, commercial banks and development finance institutions should increase access to affordable financing for manufacturing enterprises, especially Micro, Small and Medium Enterprises (MSMEs). Reduced interest rates and greater availability of long-term credit will facilitate expansion of production, new technology, more young hires.

5.2.3 Strengthen Technical and Vocational Skills Development; The Government shall continue to enhance Technical and Vocational Education and Training (TVET) through the integration of the curricula with emerging technologies used in the manufacturing sector and the demands of the job market. Increase collaboration between TVET institutions and manufacturing companies in the form of apprenticeships, industrial attachments and work based learning programmes to enhance the employability of youth.

5.2.4 Reduce the Cost of Manufacturing; Policy steps should be taken to bring down the cost of production including reduction in electricity tariff for manufacturers, improvement in transport infrastructure, efficiency in logistics and ease of regulatory procedures. The lower production costs will help make industries more competitive, attract business growth as well as create job opportunities in the manufacturing activities. Support agro-processing, mineral beneficiation, textile production, leather processing, pharmaceuticals and other labour intensive manufacturing industries to strengthen incentives for value addition.

5.2.5 The Government should enhance incentives for value addition by supporting agro-processing, mineral beneficiation, textile production, leather processing, pharmaceuticals, and other labour intensive manufacturing industries. Further research and development, innovation and technology transfer and industrial modernization will enhance productivity and generate better jobs.

5.2.6 Improve public private partnership; Better cooperation between government institutions, private manufacturers, development partners, financial institutions, universities and research institutes should be encouraged to facilitate industrial investment, technology transfer, innovation and skills development. Good public-private partnerships will improve the effectiveness of implementation and boost industrial development.

5.2.7 Enhance monitoring and evaluation of BETA Manufacturing interventions; The Ministry of Investments, Trade and Industry should develop a robust monitoring and evaluation system to routinely monitor and evaluate the implementation, outcomes and impacts of manufacturing support interventions. Measurable indicators should be included in the framework, including manufacturing output, level of investment, number of enterprises, job creation for the youth, productivity and value addition. Ongoing evaluation will allow for evidence-informed policy adaptations, and work to enhance the effectiveness of programmes.

5.2.8 Improve Coordination between County and National Government; Ensure that national and county governments are well-coordinated in order to ensure timely implementation of manufacturing projects, harmonization of industrial policies and efficient utilization of financial resources. Better intergovernmental cooperation will help minimize delays in implementation and maximize the effectiveness of industrialization programmes at the county level.

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