

In The Quest for Semi-Industrialized and Middle-Income Economy: Strategies for Agricultural-Based Industrialization through Co-operatives in Tanzania

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Abstract

Promoting the industrial sector has been among the key development strategies in most developing countries including Tanzania. The government recognizes co-operatives as key development partners in the current move towards a middle income and semi-industrialized status. This calls for sorting out clearly how co-operatives can engage in the industrialization process. This paper aims to share experiences on practical and theoretical strategies regarding how best co-operatives can engage directly and indirectly in the industrialization process in Tanzania. The authors adapted a systematic literature review approach in this paper. Content analysis was used to analyse collected qualitative data from reviewed works. Secondary data were also collected from various studies including Government reports to cement discussions. With notable examples, the discussion has centred itself on various strategies that co-operatives can, directly and indirectly, engage in the industrialization process. The paper also describes the mechanisms that may be used to finance the industrialization process through co-operative and possible constraints to such investments. It can be concluded that there are direct and indirect options that co-operatives may apply to enter into the industrialization process and in financing the process

Keywords: *Middle income, Co-operatives, industrialization, Agriculture, strategies*

1. Introduction

The path to a developed state undoubtedly involves the industrialization process. Globally, industrialization has at all times been the main subject of development thinking since WWII (Stiglitz *et al.*, 2017). It involves the shift from a former dominantly agricultural society towards an industrial one. In such transition small, medium and large-scale industries become the most characteristic form of production, a form in which lead to simplification of work and replacement of manual labour by machines. Britain was the first country to industrialize in the late 18th century (Lapperre, 2001) then later other West Europe, North America and Asia followed (Chang, 2007)

Tanzania like many African countries still depends on the agrarian economy which employs over 63% of the population (URT, 2016b). However, efforts towards industrialization have been taken for several years. The country inherited a very small and undiversified industrial sector at independence in 1961 (Wangwe *et al.*, 2014). Many efforts have been directed at ensuring that the country moves on to middle-income status before 2025. The fifth government under President John Pombe Magufuli has sustained previous efforts and initiated efforts to promote new industries. Among the efforts done so far include; investing in transport infrastructure (mostly roads and railways), reducing trade barriers and improving policies to attract foreign and domestic investments. The government approaches towards re-industrialization among others involves the revival of the abandoned privatized industries and building new industries.

Co-operative industrialization faced challenges in the mid-1970s during the implementation of the Ujamaa and Villagization Act of 1975. The Act abolished primary co-operatives and their Unions (including their assets and investments). Each village was turned into a co-operative and the Crop Marketing Boards were formed to undertake functions of previous primary co-operatives and Unions (Mruma, 2014). The processing industries once managed by co-operative Unions were handed to crop boards such as those for coffee, cotton and tea. Some examples of these co-operative industries include; Kivuki Industrial Co-operative (Moshi), Uhandisi Industrial Co-operative (Arusha), Mwangaza Industrial Co-operative (Arusha) and Iringa Soap Making Industrial Co-operative (Iringa). With the failure of the Boards to operate the co-operative business and meet members' needs, co-operative industries experienced operational challenges, hence some collapsed.

In most cases, the industrial co-operatives were promoted by the government which provided them with resources support including initial investment capital. Like in non-cooperative industries, the state control of production and later coming of market liberalization affected the

performance of industrial co-operatives. Currently, there is a growing voice, including from the government emphasizing the involvement of co-operatives in building the industrial economy. This calls for the need to strategize on the best ways to undertake industrial development and management by co-operatives. This paper, therefore, intends to share various theoretical and experience-based strategies that may be employed to promote co-operative involvement in the industrial economy given the prevailing opportunities. It also discusses means to finance co-operative industrialization and possible challenges to the industrialization process.

2. Data and Methods

This paper has adopted a qualitative approach to present issues related to industrialization through co-operative organizations. The approach has enabled authors to make gain in-depth review and discussion of issues on the matter of co-operative involvement in the industrial process. A critical review of 36 kinds of literature in the field of co-operatives and industrialization was done. This involved scrutiny of academic papers, government reports, policies and internet sources in building sound presentation and discussion of the subject matter of this paper. Making phones calls has also been used as a method to collect data for this paper. The authors also made some phone calls to interview various stakeholders in the existing industries and those with knowledge on existing co-operative with industrial investments. By groups, the stakeholders contacted include; Board members of co-operative industries, Moshi Co-operative University (MoCU) Programme Officers in regional offices, staff in co-operative joint enterprises and District Co-operative Officers.

Some of the data obtained include the name of industries, shareholding and processing capacity. Content analysis has been applied to analyze the reviewed qualitative data. This involved creation of a specific pattern of analytical themes which were later grouped to develop meaningful statements that support the discussions of different thematic issues presented in various sections in this paper. In some cases, secondary numerical data have been included to support the qualitative data. The sources for specific data have been cited in the various subsection of the paper. The tables and graphs have also been used to present some data from different sources and their discussion made.

3. Results and Discussion

3.1. An Overview of opportunities for Tanzanian co-operatives

3.1.1. Investment opportunities

Agricultural-based industries are potentially critical in promoting the Tanzanian economy. As the country is still dependent on agriculture, which gives livelihood to over 66.3% of the population (URT, 2018b), then establishing industries targeting the sector is crucial. The individual farmers and those organized in groups and co-operatives form a foundation for agro-processing as suppliers of raw materials and as investors on the other side. Given the high production of various agricultural commodities mostly in rural areas, there is a big opportunity to establish new, expand or revive industries to process the commodities or manufacture goods in high demand. For instance, co-operatives can engage in industries dealing with sugar production, meat and fish processing and packaging, cereal flour production, milk processing and packaging. There are also opportunities in the forestry sector such as timber production and manufacturing of honey products. There are opportunities also in processing and manufacturing product from cash crops such as coffee, tea, tobacco, sisal, cotton, pyrethrum, cashew nut and others. For instance, currently, there are only 12 industries processing cashew nuts (each with an average of 10,000 tons annually) while the cashew nut output is 260,000 tons annually (habarileo.co.tz). This indicated that more industries are needed to cover this gap. Further, speedy urbanization and growing incomes have to lead to more demand for value-added products in the agriculture sector but underdeveloped agro-processing firms have failed to provide significant levels of import substitution for the urban food market. This lead to an increase in the country's food import bill, for instance, to USD 963.9 million between 2006 and 2013 (URT, 2016a). Co-operative involvement in the industrial economy can help to reduce importation.

There are also prospects for investing in the processing of farm produce (and producing finished goods) such as cereals and milk. For instance, over the past 50 years, the outputs for maize and rice have increased to about 1.5 and 2.0 tons/ha, respectively (URT, 2016b). There are opportunities also to invest in meat processing due to large number of livestock in the country. For instance, there are over 21.3 million cattle, 15.2 million goats, 6.4 million sheep, 1.9 million pigs, 35.1 million indigenous and 23 million exotic chicken (URT, 2016a). In the dairy sub-sector, the average milk production is about 2.7 billion litres annually where only 30 percent is being processed by local factories while the rest is sold in informal markets while over 20 million litres of milk are also imported annually. There is also a significant increase in farm yield for food and cash crops countrywide due to improved farming practices, favourable climate, price stability, access to extension services, credits, fertilizers and other inputs. For instance, cash

crops production increased to 14.2% in 2017 compared to a decrease of 13% in 2016 (URT, 2018b). All these provide a great opportunity for co-operatives to have plenty of access to raw materials and invest in processing farm produce and animal products for local, regional and internal markets

3.1.2. Economic and Market opportunities

There are many economic and market opportunities locally and internationally that may attract co-operative involvement in industrialization. Among these include the increase in average income, population growth, the rise of the middle class and changing consumer preferences. Also, the existing and upcoming regional economic blocks (like EAC and SADC), fair trade markets and other bilateral and multilateral trade agreements give a great opportunity for co-operatives to engage directly or indirectly in the industrialization process to capture the markets (EAC, 2012). The population of Tanzania has been increasing fast where currently it is over 52 million people (URT, 2018b). In 2017, the per capita income of Tanzania was equivalent to US Dollar 1,021 compared to US Dollar 958 in 2016, equivalent to an increase of 6.5% (URT, 2018b). Also globally, the middle class is expected to double between 2009 and 2030, from 1.8 billion to almost 5 billion i.e. 60 % of the world population (ESPAS, 2015) while the global population is expected to increase from 7.4 billion people in 2016 to 8.6 billion in 2030, 9.6 billion in 2050 and 11.2 billion in 2100 (Kay and Nagesha, 2016) leading to the high demand of goods and services to meet needs of the middle class and the general population.

In Sub Saharan Africa, the population is expected to grow from 1 Billion people in 2015 to 3.9 Billion people (34.8% of the world population) by 2100 (Stiglitz *et al.*, 2017). The co-operatives have the opportunity to engage directly and directly in the production and distribution of goods and services needed by the middle class and general population (Anania and Bee, 2018) which including food products, beverages and other agricultural products. Co-operatives have also the chance to invest in industries due to improved trade relations with neighbouring countries and trade agreements in regional blocks. For instance, in 2017 the East Africa Community (EAC) established the “One-Stop Border Posts” to implement the Single Customs Territory where under the Common Market pillar, a total of 106 East African Standards were approved and gazetted for; textile products, leather and leather products, cereals, and nutritional and dairy products packaging. Further, the Southern African Development Community (SADC) during the 37th Ordinary Summit of the Heads of State and Government endorsed the plan to work with the private sector in developing industry and trade including agro-processing. These are market opportunities for goods from co-operative industries and their other joint investments.

3.1.3. Political opportunities

There is political will from the current government which is investing heavily in the industrialization agenda. The government of Tanzania has for decades continued to promote co-operatives as partners in socio-economic development. Currently, there is a promising political will of the regime in supporting co-operatives in the country. The government is urging various stakeholders to engage in the industrialization process where co-operatives are also taken on board. The presence of a supportive political system and the prevailing call for more stakeholders' involvement in industrialization, gives co-operatives a green light to engage in the process too. In recent years the government has shown interest to revive former collapsed and low performing industries including those owned by co-operatives. There is also a strong government move against corruption and other misuses of resources done by leaders in co-operatives. This involves trial for corrupt co-operatives leaders and the return of stolen assets and funds. The five years' manifesto of the ruling party has also prioritized co-operative development in Tanzania. All these efforts are given assurances to co-operatives on the safety, sustainability and everlasting government support on their industrial investments.

3.1.4. Policy and legislative environment

The government has been improving the policy and legislative environment for co-operatives. This includes the legal transformation from the state control era (the 1960s to 1970s) to the free-market era (1980s up to date) where cooperatives are given more autonomy to operate. The changes in co-operative laws and policies have been taking into considerations the needs of the co-operative environment and changing business environment where co-operatives operate. For instance, after the market liberalization, the policy and legal frameworks for co-operatives have changed from the Co-operative Societies Act of 1982 to the Act of 1991, Co-operative Development Policy of 1997 to the Policy of 2002 then the Co-operative Societies Act of 2003 and the Regulations of 2004. In 2013, the government enacted a new Co-operative Societies Act with its Regulations of 2014 (Anania and Bee, 2018)

3.2. Strategies for co-operatives to utilize opportunities for industrialization

Co-operative enterprises in Tanzania can enter into industrial investment through two main approaches. They can directly invest in industries themselves or they can support industrial investments done by other co-operatives, individuals, communities or the general public. The discussion on these strategies follows below.

3.2.1. Direct strategies for industrialization

The co-operatives in Tanzania can enter directly into industrial investment by applying the following strategies.

Self co-operative initiatives for industrialization

Under this strategy, a single co-operative society takes an initiative to establish its industry to produce commodities goods. The industries (to be) established by co-operatives can take two main forms; either organized at the organizational level by all co-operative members or, individual members or in groups can have their small industries. If industries are formed at the level of the organization means, members will contribute to the capital to establish and operate their industries. The co-operative Board members and Managers will assume the technical and supervisory role to manage all daily activities in the industry e.g. supply of inputs, raw materials, processing, production of goods, storage, marketing and distribution of goods. If such industries are formed by individual members or groups, then a co-operative can become a technical centre where members can be assisted to get; technologies, processing and other value added services, marketing, transportation, organization of inputs/raw materials, search for financing, branding and other technical services.

Whether industries are set at individual/group or organizational level it should be clear as to how the benefits and risks will be shared between members and their organization. For example, through received donor funding, some dairy co-operative in Hai district initiated their factories to develop milk products. For instance, Nronga Women Dairy Co-operative (processes 200 litres of milk daily) and Kalali Women Dairy Co-operative (processes 450 litres of milk daily). In Kigoma, Kasulu Beekeepers Co-operative Society has invested in processing quality bee products, including honey. There is also an opportunity for a co-operative to register directly as an industrial co-operative rather than doing it and subsidiary business. In this approach industrial co-operatives can deal with one or more agricultural products or become multi-task societies. For instance in the Rombo district, Tarakea Women Sawmill (TAWOSA) co-operative deals with sawmilling activities such as timber harvest, transportation and selling of timber (Sumari, 2007) and also harvest maize processing unit to produce flour.

Co-operative-to-Co-operative Strategy

The co-operatives in Tanzania have the chance to cooperate among themselves for industrialization purpose. This opportunity was missing for the year but the current Co-operative Societies Act of 2013 has allowed co-operatives to conduct joint businesses (Anania and Bee, 2018). Therefore, in line with such legal opportunity, co-operatives can engage in

industrialization through joint efforts. Two or more co-operatives in a given district or region can join hands to establish various kinds of industries viable in their areas or based on national and global demand. A strategy can work well whether individual co-operative has no adequate resource, management and technological capacity to engage in industries. Through joint efforts, co-operatives can establish industries through sharing financial, human, physical and technical resources required. The strategy can also help to spread risks in investment, ease repayment of external capital, improve capacity to access external technical services, marketing, distribution of goods and supply of needed raw materials and other inputs.

Co-operatives in a jointly formed industry, however, should agree on the best operational and organizational structure, shareholding, distribution of risks and returns on investment and other processes associated with the joint industry. Among the co-operative industries established by this strategy includes Kanyovu Coffee Curing Co-operative Joint Enterprise Ltd (KCCCJE). The Joint enterprise is made of 11 primary coffees co-operative from Kibondo, Kasulu and Kigoma districts in the Kigoma region. In the Kilimanjaro region, some joint enterprises have been initiated such as Kilimanjaro Dairy Co-operative Joint Enterprise (KDCJE) made of 16 dairy co-operatives and also Uru East and Mruwia Joint Venture and Western Mruwia Joint Venture for coffee (Anania and Towo, 2016). Although none of these owns industries they lay a good foundation to undertake industrial investments dealing with produce from their members.

Also, there is Tanganyika Coffee Curing Company (TCCCo) Ltd in Moshi municipality. In shareholding structure, the company is owned by Kilimanjaro Native Co-operative Union (KNCU Ltd) with 54%. Other owners are; Tanganyika Coffee Growers Association (TCGA, 31%), Arusha Co-operative Union (ACU, 10%), VUASU (2%), Tanga Region Co-operative Union (TARECU, 1.5%), Morogoro Region Co-operative (MORECU, 0.5%), Rift Valley Co-operative Union (RIVACU, 0.5%) and Kanyovu AMCOS (0.5%). In support, USDA, (2005) indicated that co-operative joint business helps to strengthen manufacturing and marketing functions, enlarge market outlets and distribute the financial risks associated with the business.

Co-operative-Government partnerships

For decades, the government of Tanzania has been a partner in the national co-operative movement playing the role of promoting, supervising and capacity building through its co-operative support institutions. Given that the government has shown interest to promote both industrialization and co-operative development, then the government can enter into partnership with co-operatives at primary, Union or federation levels to establish and operate various industries. However, there should be agreement on shareholding issues, contributions required and management structure without compromising the co-operative principle of “autonomy and

independence”. Also, the industry can be formed solely by co-operatives then sell shares to the government or the government can sell shares to co-operatives to be a partner in industries formed by the government. For instance, Mbozi Coffee Curing Company Ltd (MCCCo Ltd) located in Mlowo industrial area in Mbozi District operates under this model. Its ownership comprises 68.27% of shares by coffee farmers (through various Co-operative Unions) while the government of Tanzania owns 31.73%. MCCCo Ltd processes about 21,000 tons of raw coffee annually. The co-operative-government partnership model can also be applied in the current revival and establishment of new industries across the country.

Co-operative-private partnership

Tanzanian Co-operative Societies Act of 2013 has also allowed co-operatives to engage in a partnership business with private actors being individual or companies. In this case, co-operatives can use this chance to establish industries through a partnership with private investors. In this strategy, different approaches can be applied, for instance; co-operatives can identify a private partner to invest with and establish industries by sharing resources. Also either a co-operative or private investor can establish the industry then later invite the other through selling shares. Further, based on the “Co-operative business participation model”, co-operatives can assign some of their activities to the private actor. Therefore, co-operatives can establish industries on their own then commission some of the activities to private actors and make them partners in investment for instance supply of inputs/raw materials, processing and marketing of the goods.

In Tanzania, Tanga Fresh Ltd is one of the examples of co-operative-private owned industries. Through Tanga Dairy Co-operative Union (TDCU) Ltd, dairy co-operatives own 42.5% of share in the factory while the rest are owned by private investors. The co-operative-private partnership has its advantages to co-operatives. In Zambia, sugarcane farmers co-operative partnered with a processing company where they acquired some company’s shares, got Board seats and had access to technology, capital, managerial competence and market from investors (Ruete, 2014; Anania and Bee, 2018). In the USA, the Mountain States Lamb Co-operative and Midwest Elderberry Co-operative have included private investors as partners. They have a special shareholding system for instance they sell A class shares to members (for patronage) and annual membership fee then has B class shares are sold to investors co-operatives control majority shares and decision making (Grashuis, 2018). Therefore, co-operatives interest to establish new industries or revive and expand existing industries may opt to co-invest with private investors to operate their business.

Industrialization through vertical co-operative organizations

Co-operatives also can engage in industrialization through vertical organizations (secondary and tertiary structures) such as Unions and the Federation, respectively. Through this strategy, industries can be established in two ways. First, the Unions (in districts/regions) and the Federation can establish industries by mobilizing resources on their own or through external sources. Co-operatives can then join as shareholders to the industries. Second, primary co-operatives can mobilize internal and/or external resources and establish industries at the Union or Federation level where all involved co-operatives will be shareholders while Unions and/or Federations become custodians and managers of the businesses. This style existed for years, mostly before market liberalization where primary co-operatives had industries at Union levels. Some examples in this strategy include the Maize milling factory by Njombe Region Co-operative Union (NJORECU) where the Union undertakes the business on behalf of its primary co-operatives. Kagera Co-operative Union (KCU) Ltd also established BUKOP Ltd for a coffee curing factory. Also currently, Tandahimba and Newala Co-operative Union (TANECU) Ltd is building a factory for processing cashew nut from members in its primary co-operatives. Simiyu Co-operative Union (SIMCU) Ltd is another example where it owns two cotton ginneries for cotton processing.

Multi-stakeholders (Tripartite) approach to industrialization

This strategy is similar to the co-operative-private strategy however it includes more actors in the process. The strategy brings on board the co-operatives, government institutions and private investors (organizations, groups or/and individuals). The investing partners will contribute capital of industrial investments and decides on the shareholding structure for the investment. Co-operatives (primary or Union) should maintain the majority of shares in the investment. The involvement of the private sector is beneficial in terms of capital contribution, technology transfer and innovation and also management capacity for the investment. The practical example of this strategy is Tanganyika Instant Coffee Public Limited Company (TANICA) in the Kagera region. Annually it produces about 500 tons of instant coffee and currently also produce bottled drinking water. From the year 2005, the company ownership changed from majority government shareholding into other investors i.e. Kagera Co-operative Union (KCU) Ltd and Karagwe District Co-operative Union (KDCU) Ltd. Other shareholders also include; Tanzania Federation of Co-operatives (TFC), Government Treasury and TANICA workers.

Formation of Pure Industrial Co-operatives

This strategy is almost similar to the “co-operative self-initiative strategy” above but it slightly differs as here, a co-operative register and operates purely as industrial co-operatives. The registered industrial co-operative may perform one or multiple activities such as processing commodities from other suppliers/producers including agricultural co-operatives and groups or producing finished commodities for consumption. They may also be producing types of equipment that may be used in different activities throughout the different agricultural value chain. Some of these pure co-operative industries are; Dar es Salaam Small Industries Co-operative (DASICO) in Dar es Salaam and Uhunzi Co-operative Society and Wajamaa Trading and Engineering Contracting (WATECCO) Co-operative Society in the Mbeya region. Apart from producing facilities and equipment for farming activities, there are also prospects to invest in the production of equipment to improve fishing activities. For instance (URT, 2016a) argued that Tanzania has vast fishery resources with marine water covering 64,000 square kilometres and a coastal line of 1,424 km while freshwater fisheries cover 62,000 square kilometres. But still, the fishery sector mostly consists of small fishers and fish farmers who usually apply traditional technology.

3.2.2. Indirect strategies

In case co-operatives don't establish industries on their own, they can also participate in industrialization indirectly i.e. give support to established industries by other co-operatives, public or private sector. The indirect strategies include the following:

Supply of inputs for industrial production

Co-operatives can support industrial development by being major suppliers of raw materials. Raw materials are crucial for sustaining industrial production (Andreoni, 2017). Co-operatives need to utilize the opportunities available in terms of raw material demand different processors and manufacturers. Agricultural based co-operatives can supply their crops and animal products to the firms using such materials to produce different goods. For instance, dairy co-operatives can maximize output and sell to milk processor and reduce milk importation, horticultural co-operatives can supply fruits to industries producing juice and other beverages. Livestock keeping co-operatives can supply livestock to meat processors and animal skins to firms producing bags, shoes etc. The same can be done to co-operatives producing cereal crops and cash crops like tea, coffee, cotton, sisal and tobacco by making the reliable supply of such raw materials to domestic industries to minimize imports of raw materials.

Co-operatives may also engage in the business of supplying types of equipment, machinery and other facilities needed by local industries. For instance, some co-operatives can work as agents for imports needed by domestic industries, supply machinery and spare parts needed for local industries. Some notable examples in this strategy are the dairy co-operatives and groups in the Njombe region which have been among potential suppliers of raw milk to Asasi Dairy Factory in the Iringa region. Also in Lupembe, Njombe a co-operative joint enterprise known as *Muungano wa Vyama vya Ushirika Lupembe* (MUVYULU) Ltd has been supplying tea leaves through its tea farms to Lupembe Tea Estate (a tea processing factory). Similarly, in the Rungwe district (Mbeya) the tea processors rely also on the supply of tea leaves from farmers such as the Rungwe Small Tea Growers Association (RSTGA). In Arusha city, most of the food processing industries have been relying much on the supply of raw materials from agricultural marketing co-operatives in nearby regions include Manyara.

Further, the Annual Survey of Industrial Production of 2015 indicated that most of the manufacturers in firms that use agricultural produce as raw materials still import a large share of such materials rather though the amount of locally produced raw materials is still high. For instance, Table 3 shows the amount spent in procuring raw materials for foreign and local suppliers. This indicates the need for co-operatives to act fast in capturing this gap by investing more in producing quality and affordable raw materials for local firms.

Table 3: Raw Materials Purchased in Tanzania Mainland

S/N	Product category	Raw materials Purchased (in TZS “000”)		Total
		Imported	Local	
1	Products of agriculture, horticulture and market gardening	692,344,398	782,027,615	1,474,372,013
2	Live animals and animal products	113,909	39,788,749	39,902,658
3	Forestry and logging products	14,844,474	20,494,477	35,338,951
4	Fish and other fishing products	124,827	26,831,719	26,956,546
5	Meat, fish, fruit, vegetables, oils and fats	10,692,459	48,628,429	59,320,888
6	Dairy products	-	1,591,584	1,591,584
7	Grain mill products, starches and starch products; other food products	47,490,854	229,976,653	277,467,507
8	Beverages	50,157,999	10,791,662	60,949,661
TOTAL (computed by authors)		815,768,920 (41.3%)	1,160,130,888 (58.7%)	1,975,899,808

Source: URT, (2018a)-Annual Survey of Industrial Production (ASIP), 2015

Financing co-operatives

The process of securing financing is among the difficult stages in any investment. Co-operatives in Tanzania can help in industrialization by acting as sources of funds for small and even medium industries in the country. This can be done in different ways; first primary co-operatives or Unions can assign part of their net income to support small scale industries in their areas. This can either be part of their “social responsibility” or give such funds as loans or grant to local industries in their areas. Second, financial co-operatives such as savings and credit co-operatives (SACCOS) and co-operative banks can act as a source of capital to finance the establishment and expansion of local industries by co-operatives or private people in their areas. Once such industries have stabilized, these financial institutions can get loan term borrowers or even making future partnerships in investment. Supporting local industries financially may help circulate idle money in some financial co-operatives and increase capital base through lending to potential borrowers such as industries.

Market coordination

Another indirect strategy for co-operatives to support industrialization is by coordinating marketing role for the goods produced by other co-operatives or private local producers. In this case, co-operatives can act as marketing agents and get paid services commissions from manufactures or processors they support. The co-operatives can act as marketing agents by seeking customers both locally and globally then handle the distribution function and even export role for the produced goods from local firms. However, this strategy needs to be applied by a specialized co-operative which will mostly engage in marketing issues and have enough competent manpower to handle such activities locally and internationally. Also, clear agreements should be made on payment of commission or sharing of benefits, distribution risk and performance criteria for the marketing co-operatives. In the USA, the dairy bargaining co-operatives play this role by marketing milk from other producers (USDA, 2005).

Insurance services

Further, co-operatives can support industrialization by engaging as an insurance service provider to local firms. The co-operative insurance sub-sector in Tanzania is almost not existing, giving opportunities for co-operatives to enter this business and insure local industries. The established local industries (will) need insurance services to protect their assets, human resources, products in the distribution channels etc. Co-operatives can invest to offer services to industries such as; workers’ health insurance, asset insurance (e.g. vehicles, machinery, warehouse and other assets) and the goods moved from industries to the final markets. For instance, Dar es Salaam Small Industries Co-operative (DASICO) has enabled its members to access health services and it

provides them with insurance cover against sickness and death. Co-operative Insurance firms are highly needed to offer insurance services to industrial co-operatives and other small and medium industries owned solely or joint by co-operatives.

3.3. Financing options

Financing industrialization through co-operative societies can be done in different ways. Among the options of financing the process is by engaging large financial co-operatives such as SACCOS and Co-operative banks to offer capital for establishment and expansion or revival of co-operative-owned industries. The existing banks such as Tanzania Agricultural Development Bank (TADB) and Tanzania Investment Bank (TIB) are directly connected to industrial investment and agriculture. The commercial banks may also take part in this move. They all need to put more resources to support the establishment of industries by co-operatives. Also the government, through Ministries responsible for agriculture and industries as well as the Local Government Authorities (LGAs) need to set a significant portion of their budgets for promoting establishment, expansion or revival of small and medium scale industries including those for co-operatives.

Further, there are options for the participation of private sectors to fund the formation and/or expansion of co-operative industries. The community donation approach can also be used to finance co-operative industrialization. Communities may donate funds and become shareholders in a given established co-operative industry and get the cake of the benefits (including profits) to be created. Where possible, donor funding may also be useful in supporting the establishment and expansion or revival of industries owned by co-operatives.

3.4. Possible Drawbacks for Effective Co-operative Involvement in Industrialization

In our opinions, we envisage that effective involvement of co-operatives in the industrial economy may be hindered by some reasons. It is widely clear that operating industrial activities requires adequate capital to operate sustainability. Costs for establishments, raw materials, labour, utilities, processing, marketing and others need adequate financing and other assets such as machinery and land. Sustainable co-operative involvement in industrialization may be affected with minimal capital to initiate and operate and even expanding their industrial activities. Some studies show that unlike the Investor-Owned Firms (IOFs) whose growth depends much on diversification and advertising strategies, the growth of co-operative industries depends on much of capital structure and intensity (Oustapassidis *et al.*,1998). Even from the experience of the earliest industrial co-operatives in Western countries, their growth was mainly affected by the shortage of capital (Shirom, 2008).

Favourable development policies and plans need to be in place to promote the involvement of co-operatives in the industrialization process. The existing policies (such as SIDP, 2020) and national development plans such as the; National Five-Year Development Plan (FYDP II) 2021/22 to 2025/26, Mini Tiger Plan 2020, Agricultural Sector Development Programme (ASDP II, 2016), Tanzania Long Terms Perspective Plan (2010/12 to 2025/26), Co-operative Development Policy of 2002, just a few to mention, have not considered about co-operatives' involvement in national industrialization move. Rather the call for co-operatives involvement in the process has been highly spoken by politicians and other government officials.

Lack of competent manpower is also likely to affect industrial development through co-operatives. Like in the Investor-Owned Firms (IOFs), co-operative industries need highly competent staff that can perform their activities effectively and efficiently. Competent managers are also highly needed to run co-operative industries; hence putting a more attractive environment may bring onboard motivated competent managers to work with co-operatives. Nyoni, (2006) argued that educated staff have more exposure and contacts hence may be able to run the business properly. Competent human resources also help in promoting innovation in emerging enterprises and adapting the use of ICT (Wangwe *et al.*, 2014). Competent management and other staff help in adapting to market challenges and brings transformations in industrial co-operatives (Tapiero, 1989).

Better technologies are highly needed to promote strong co-operative industries. Most co-operative industries existing today have been established several years ago making them technologically backward to some extent. Continuous update of their technologies for processing, production, packaging, storage, marketing and other operations are crucial. In the current move to promote co-operative involvement in industrialization, technological improvement may make such industries competitive (Wangwe *et al.*, 2014; Katundu, 2018). With improved technologies to empower manufacturing, co-operatives and other industries in small towns can create more jobs and income (Aeroe, 1992). Technological capacity will also help in expanding capacity utilization (Moshi, 2014) of raw materials by co-operative industries. Further, technological improvement will put industrial co-operatives in a safe position to produce high-quality products and cope with competitions from IOFs.

4. Conclusion

The trend and process of industrialization in Tanzania have passed through a series of phases up to date. From the colonial to state control to the market liberalization era, still, industrialization

was regarded as among the most valuable strategies to promote national development. Even in the current government, industrialization is still seen as a means to ensure Tanzania becomes a middle-income economy. In this case, the involvement of various stakeholders in industrialization is inevitable. Co-operative societies have for a decade been potential partners in promoting development including in the industrialization process. In our focus on co-operative organizations, their participation in national industrial development can be directly through self initiatives by individual co-operatives, registering co-operatives as pure industrial entities, cooperation among co-operatives and with private sector and government as well as using secondary societies such as Co-operative Unions can help co-operative involvement in industrializations.

Also, co-operatives can indirectly enter the industrialization process, such as the supply of inputs, market coordination for industrial goods, financing industrial activities and offering insurance services. In the process to promote co-operatives' involvement in industrialization, financing is very important. Access to finance can be done by involvement of financial co-operatives and banks, government institutions, donor funding and community contributions. Further, given that the industrial environments have been highly dynamic, issues such as limited capital, lack of well supporting national policies and plans, manpower shortage and limited managerial competence, technological access challenges, competition and limited diversification may impinge on effective involvement of co-operative in industrialization. These give them a new perspective as they engage in the industrialization process.

References

- Aeroe, A. (1992). New Pathways to Industrialisation in Tanzania: Theoretical and Strategic Considerations. *IDS Bulletin*, 23(3), 15–20. <https://doi.org/10.1111/j.1759-5436.1992.mp23003004.x>
- Anania, P., and Bee, F. K. (2018). Emerging Global Trends and the Opportunities for African Co-operatives in Improving Members' Wellbeing. *Journal of Co-operative and Business Studies (JCBS)*, 1(1), 1–22.
- Anania, P. ., and Towo, P. . (2016). The Contribution of Agricultural Marketing Co-operatives in Service Provision to Members in Tanzania A Case of Moshi District. *Tengeru Community Development Journal*, 3(2), 87–117.
- Andreoni, A. (2017). *Mapping industrial production in Tanzania: A disaggregated analysis based on the 2013 mainland census* (2017 No. WP 12). *Inclusive and Sustainable Industrial*

Development. Vienna, Austria.

EAC. (2012). *East African Community Industrialization Strategy 2012-2032*.

Egbert, H. (2007). Capacity Utilization of Enterprises in Tanzania. *Tanzania Journal of Development Studies*, 7(1), 16–26.

Grashuis, J. (2018). Joint ownership by farmers and investors in the agri-food industry: an exploratory study of the limited cooperative association. *Agricultural and Food Economics*, 6(1). <https://doi.org/10.1186/s40100-018-0118-0>

ILO. (1978). *Towards Self Reliance: Development Employment and Equity Issues in Tanzania*. International Labour Office (ILO), Addis Ababa

Katundu, M. (2018). The Role of Cooperative Organizations in Tanzania's Industrialization. In S. Efobi, U.R and Asongu (Ed.), *Financing Sustainable Development in Africa* (pp. 397–420). https://doi.org/10.1007/978-3-319-78843-2_15

Kay, S., and Nagesha, V. (2016). *The Demographic Profile of African Countries* (Vol. 43). Addis Ababa, Ethiopia.

Lapperre, P. (2001). Industrialization of Tanzania: Can Tanzania Learn from European History. In A. et al Szirmai (Ed.), *The Industrial Experience of Tanzania* (pp. 283–284). Palgrave MacMillan.

Mbelle, A., and Kabanda, H. (2018). *Recent progress towards industrialisation in Tanzania*.

Mkwizu, W.M. (1984): *Development of Industrial Co-operatives on Tanzania: Prospects and Constraints: Dissertation for the Award of MA Degree at University of York: Ontario, Canada, 90pp.*

Moshi, H. P. (2014). Sustainable and Inclusive Growth in Africa: Industrialization a Must. In *International Conference on Manufacturing-led Growth for Employment Creation and Equality. 20-21 May 2014, Johannesburg.*

Mwaigomole, E.A. (2009). Industrial Manufacturing and Trade Development in Tanzania. *Journal of International Cooperation Studies*, 16(3), 23-49.

Mwang'onda, E. ., Mwaseba, S. ., Juma, M. ., and Simon Mwang'onda, E. (2018). Industrialisation in Tanzania: The Fate of Manufacturing Sector Lies upon Policies Implementations. *International Journal of Business and Economics Research*, 7(3), 71–78. <https://doi.org/10.11648/j.ijber.20180703.14>

Nwankwo, F., Ewuim, N., and Asoya, N. (2012). Role of Cooperatives in Small and Medium Scale Enterprises (SMEs) Development in Nigeria: Challenges and the Way Forward. *African Research Review*, 6(4), 140–156. <https://doi.org/10.4314/afrrrev.v6i4.10>

- Nyoni, T. S. (2006). The Role and Scope of Industrialization in Enhancing The Impact of Trade Policy On Poverty Reduction in Tanzania. Paper presented in The Second National Dialogue on Trade, Development and Poverty (TDP) in Tanzania; Giraffe Oceanic View Hotel, Dar es Salaam on 24th November 2006. Economic and Social Research Foundation (ESRF): Dar es Salaam, Tanzania.
- Oustapassidis, K., Vlachvei, A., and Karantininis, K. (1998). Growth of Investor Owned and Cooperative Firms in the Greek Dairy Industry. *Annals of Public and Cooperative Economics*, 69(3), 399–417. <https://doi.org/10.1111/1467-8292.00087>
- Ruete, M. (2014). Inclusive Investment in Agriculture: Cooperatives and the role of foreign investment. International Institute for Sustainable Development (IISD). Policy Brief # 2: June. Retrieved from <http://www.iisd.org>
- Schwettmann, J. (2012). Capacity Building for Africa’s Cooperatives and Social Economy Organizations. In *A Contribution to the Expert Group Meeting Cooperatives in Social Development : Beyond 2012. 3 – 6 May 2011, Ulaanbaatar, Mongolia* (p. 9).
- Shirom, A. (2008). The industrial relations systems of industrial cooperatives in the united states, 1880-1935. *Labor History*, 13(4), 533–551. <https://doi.org/10.1080/00236567208584225>
- Skarstein, R., and Wangwe, S. . (1986). *Industrial Development in Tanzania : Some Critical Issues*. Uppsala.
- Stiglitz, J., Lin, Justin, Y., and Monga, C. *et al.* (2017). *Industrialize Africa: Strategies, Policies, Institutions and Financing*. Abidjan, Cote d'Ivoire.
- Sumari, S. V. (2007). *The Role of Women in Poverty Alleviation; A Case Study of Tarakea Women Sawmill in Rombo District, Tanzania*. Dissertation for the Award of MSc Degree at the Open University of Tanzania and Southern New Hampshire University, 95pp.
- Tapiero, C. S. (1989). The utility of manufacturing cooperatives. *Journal of Economic Dynamics and Control*, 13(3), 471–483. [https://doi.org/10.1016/0165-1889\(89\)90033-X](https://doi.org/10.1016/0165-1889(89)90033-X)
- URT. (2016a). *Agricultural Sector Development Programme Phase Two (ASDP II)*. Retrieved from http://www.tzdpg.or.tz/fileadmin/documents/external/national_development_frameworks/ASDP2_Final_Document_20_May._2016__after_edit__1_.pdf
- URT. (2016b). *Annual Agricultural Sample Survey 2014/2015*. Dar es Salaam, Tanzania. Retrieved from http://www.nbs.go.tz/nbs/takwimu/Agriculture/Annual_Agricultural_Sample_Survey_Report2014_15.pdf
- URT. (2018a). *Annual Survey of Industrial Production (ASIP) 2015: Statistical Report*. Dar es

Salaam, Tanzania.

URT. (2018b). *The Economic Survey 2017*. Dodoma, Tanzania. Retrieved from <http://www.mof.go.tz/docs/ECONOMIC SURVEY BOOK 2017 FINAL.pdf>

USDA. (2005). *Cooperatives in the Dairy Industry*. Cooperative Information Report 1 No. Section 16). Washington, DC. USA.

Wangwe, S. ., Mmari, D., Aikaeli, J., Rutatina, N., Mboghoina, T., and Kinyondo, A. (2014). *The Performance of the Manufacturing Sector in Tanzania: Challenges and the Way Forward* (Learning to Compete No. Working Paper No. 22).