



Development of Local Content Thresholds for Fertiliser, Packaging and Pharmaceutical Sectors

Draft Report

Submitted to

**Ministry of Industry and Commerce
Government of Zimbabwe**

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List of Acronyms

BAZ	Bankers Association of Zimbabwe
BMOs	Business Membership Organizations
CCZ	Consumer Council of Zimbabwe
CSOs	Civil Society Organizations
CZI	Confederation of Zimbabwe Industries
GDP	Gross Domestic Product
EDLIZ	Essential Drug List in Zimbabwe
EMCOZ	Employers Confederation of Zimbabwe
FISRM	Fertiliser Import Substitution Road Map
FGDs	Focus Group Discussions
LCP	Local content policy
LCS	Local Content Strategy
LCSSC	Local Content Strategy Steering Committee
MCAZ	Medicines Control Authority of Zimbabwe
MHESTD	Ministry of Higher and Tertiary Education, Innovation, Science and Technology Development
MIC	Ministry of Industry and Commerce
MOFAIT	Ministry of Foreign Affairs and International Trade
MOFED	Ministry of Finance and Economic Development
NDS 1	National Development Strategy (NDS) 1 (2021-2025)
NIDP	National Industrial Development Policy (2019-2023)
OPC	Office of the President and Cabinet
PSZ	Pharmaceutical Society of Zimbabwe
R&D	Research and development
RBZ	Reserve Bank of Zimbabwe
UNECA	United Nations Economic Commission for Africa
ZAP	Zimbabwe Association of Packaging
ZCTU	Zimbabwe Congress of Trade Union
ZIMRA	Zimbabwe Revenue Authority
ZNCC	Zimbabwe National Chamber of Commerce
ZMFA	Zimbabwe Fertiliser Manufacturers Association

Executive summary

The main substantive objectives of the report were to (i) undertake desk review on the Local Content Strategy and its associated policies, laws and regulations; (ii) prepare market studies on the state of the fertilizer, packaging and pharmaceutical sub-sectors and linked supply chains, with reference to government objectives outlined in existing strategic plans, laws and policies, and with a specific focus on local content procurement challenges and opportunities, and (iii) draft local content thresholds. Local content, a term which is overall understood as a set of policy measures implemented by government that typically require a certain percentage of inputs into the value chains such as labour, supplies of intermediate goods, services, knowledge and technology used in various stages of the production process be sourced from the domestic economy. When one considers all the local content definitions available, three key aspects emerge: (i) the procurement of goods and services, (ii) employment that covers issues around skills development, and (iii) corporate social responsibility. The motivation and key elements of local content can be summarised in terms of geographic location, participation, value addition from the development of local industries, and technology transfer from labour market development through knowledge and technical skills transfer.

Zimbabwe started implementing Local Content Strategy in 2019 and the LCS has three main objectives which are:

1. To increase average local content levels in prioritized sectors from current levels of approximately 25% to 80% by 2023;
2. To increase capacity utilization in prioritized sectors from current levels of approximately 45 % to 75% by 2023; and
3. To increase manufactured exports in prioritized sectors by at least 5% annually between 2019 and 2023.

The four guiding principles of the LCS are: (i) local resource utilization and service provision, (ii) beneficiation and value addition of local resources, (iii) import substitution and (iv) sustainable consumption of local products.

In carrying out the assignment, the consultant employed a mixed method approach to collect quantitative and qualitative data for the purpose of coming up with contextualized local content thresholds for the three sectors under study. Specifically, the consultant used an integrated approach that allows for collection and analysis of both qualitative and quantitative data and information. That is, in conducting the research study, primary data and information was collected from diverse stakeholders. Primary data/information was collected through the use of a standardized questionnaire¹. The questionnaire was administered to individual stakeholders for them to complete, and this was done electronically through email. To ensure collection of more data and information, during the validation workshop, stakeholders will be divided into three groups by each sector (fertilizer, packaging and pharmaceutical), and focus group discussions (FGDs) will be conducted in each of the three groups with the help of the interview guide. The physical validation workshop will be done in Harare, with some selected stakeholders outside

¹ The questionnaire was shared with Ministry of Industry and Commerce (MIC) and UNECA for inputs and improvement before they were rolled out to stakeholders.

Harare going to be funded to attend the workshop, while majority of stakeholders outside Harare will be consulted virtually (by attending the Harare workshop virtually) and through emails and other virtual platforms.

Local Content Strategy, associated policies, laws and regulations

The table below depicts various policies, laws and regulations that support and government local context implementation in the country.

Laws, policies and regulations governing local content strategy in Zimbabwe

	Policies	Laws and Bills	Regulations
1	Zimbabwe National Industrial Development Policy (2019-2023)	Mines and minerals amendment bill	SI 2010-116, Indigenisation and Economic Empowerment (Amendment) Regulations, 2010 (No.2)
2	Zimbabwe Local Content Strategy (LCS) (2019)	Small and Medium Enterprises Act Chapter 24:1	The Indigenisation and Economic Empowerment Act [Chapter 14:33]
3	National Development Strategy (NDS) 1 (2021-2025)	Constitution of Zimbabwe	Statutory Instrument (SI) 64
4	Pharmaceutical Manufacturing Strategy for Zimbabwe (2021-2025)		Statutory Instrument (SI) 122 of 2017
5	The Fertiliser Import Substitution Road Map		

Source: author compilation

Major findings

1 Capacity utilization across the three sectors

The average manufacturing and/or production capacity utilization for the year 2022 in the fertilizer sector was 52%, while the figure ranged between 80% on the upper bound and 38% on the lower bound. In the case of packing sector, the average capacity utilization is 59%, with an upper bound of 72% and a lower bound of 40%. The average capacity utilization was found to be 48% with an upper bound of 70% and a lower bound of 30% in the pharmaceutical sector.

2 Challenges associated with local content procurement

A number of challenges were enumerated as the major hurdles to effective implementation of local content across the three sectors. The challenges include (i) unavailability of raw materials locally, (ii) poor or inconsistent quality of locally produced inputs, (iii) higher local prices for inputs when compared to imports, (iv) unreliable local suppliers, (v) unavailability of

technology, (vi) credit constraint, (vii) limited knowledge/skills, limited technology and capacity constraints, among others.

3 Opportunities associated with local content procurement

Implementation of local content was found to have a number of opportunities across the three sectors as well as the whole economy at large. Some of the opportunities includes (i) formal employment generation, (ii) increased government tax revenue, (iii) foreign currency generation and/or savings, (iv) improved value chain linkages, (v) increased manufacturing/production capacity utilization, (vi) industrial development, (vii) increased research and development (R&D) and (viii) enhanced competitiveness.

Major recommendations

i. Recommended local content thresholds for each sector

One of the major objectives of this study was to come up with recommended local content thresholds for each of the three sectors. The recommended local content thresholds for each of the three sectors is presented below.

Recommended optimal local content thresholds

Recommended optimal local content thresholds					
Type of input		Baseline	Percentage of input to be sourced locally (%)		
		Current % sourced locally	Short term (Immediately)	Medium term (After 2 years)	Long term (After 5 years)
Fertilizer sector					
1	Labour	85	91	94	98
2	Supplies of intermediate goods	35	39	45	59
3	Services	60	68	79	93
4	Knowledge and technology	40	58	67	77
Packaging sector					
1	Labour	100	100	100	100
2	Supplies of intermediate goods	15	60	81	95
3	Services	75	90	94	96
4	Knowledge and technology	40	51	65	82
Pharmaceutical sector					
1	Labour	80	88	94	100
2	Supplies of intermediate goods	15	44	58	75
3	Services	50	74	81	93
4	Knowledge and technology	30	58	70	85

Source: Field survey October – December 2022

ii. Capacity needs for effective implementation of local content thresholds

Effective implementation of local content thresholds requires capacitation of various sub-sectors within the three main sectors. Stakeholders were asked during the consultations to indicate capacity needs required for effective implementation of local content thresholds across the three sectors. The following are the capacity needs: (i) plant and equipment re-tooling, (ii) research and development (R&D), (iii) technical know-how development, (iv) infrastructure development, (v) capacitation of local tertiary institutions, (vi) production (manufacturing) of quality and affordable inputs and (vii) affordable prices

iii. Incentives for encouraging local procurement

Effective implementation of local procurement requires incentives which aims at encouraging local manufacturers from the three sectors to prefer local inputs compared to imports. The following are some of the major incentives that were enumerated: (i) tax relief or tax incentives or tax rebates or long tax holidays or tax free zones, (ii) financial incentives and/or affordable credit lines, (iii) lower importation costs for inputs, (iv) local preferences during tenders and (v) export incentives, among others.

iv. Local content policy (LCP) sensitization

There is need for LCP sensitization where the various stakeholders including industry and customers are made aware of the importance of buying locally produced (manufactured) products, instead of importing. Sensitization can be implemented through quarterly stakeholder forums where each sector report on the progress it had made in the preceding quarter with regards to procuring local products. Challenges hindering effective implementation of LCP can be discussed in such fora and solutions suggested. Relevant business membership organizations (BMOs) and industry associations should be on the forefront of championing these quarterly stakeholder forums.

1 Introduction

Local content policies that do not result in the expected level of procurement from local manufacturers contribute to limited industrialisation and job creation. Without active interventions to address the constraints on low levels of local content, domestic producers will be disadvantaged and will not have the opportunity to improve their capabilities and capacity. The benefits of a local content framework are clear; for instance, while local producers may not initially be in a position to compete against foreign suppliers on both price and quality due to capacity issues, experiences from various countries have shown that, with clear procurement timelines and standards and an assurance of domestic demand, local producers would be in a position to increase, improve and modify their capacities and capabilities to suit specifications and compete more effectively.

Whilst there is no agreed definition of what the term “local” or “content” means, this concept, according to Silva (2014) and Ramdoo (2016), is overall understood as a set of policy measures implemented by government that typically require a certain percentage of inputs into the value chains such as labour, supplies of intermediate goods, services, knowledge and technology used in various stages of the production process be sourced from the domestic economy. Another definition considers local content policies as aimed at ensuring that, within strategic sectors, domestic goods and services are used such that imported inputs are substituted by domestic value addition (Silva, 2014). The International Petroleum Industry Environmental Conservation Association (IPIECA) (2011) considers local content as referring to the added value brought to a host nation (or region or locality) through workforce development (i.e., employment of local workforce; and training of local workforce) and investments in supplier development (i.e., developing supplies and services locally; and procuring supplies and services locally). Thus in this definition, local content is construed to capture local content and national content in one term. The Local Content Strategy (LCS) of 2019 that was developed Government of Zimbabwe’s Ministry of Industry and Commerce (MIC) considers local context as the extent of utilization of local resources in the production and provision of goods and services in the Zimbabwean economy. When one considers all the local content definitions available, three key aspects emerge: (i) the procurement of goods and services, (ii) employment that covers issues around skills development, and (iii) corporate social responsibility. The motivation and key elements of local content can be summarised in terms of geographic location, participation, value addition from the development of local industries, and technology transfer from labour market development through knowledge and technical skills transfer.

In the context of Zimbabwe, the current national policy blueprint, the National Development Strategy One (NDS1) (2021-2025) thematic area of Moving up the Value Chain and Structural Transformation emphasize the need for the country to move away from the export of raw or unprocessed minerals and agricultural products towards the export of beneficiated minerals and manufactured products. A study by UNECA (2021) revealed that Zimbabwe as a resource-based economy, its manufactured value-added share to the Gross Domestic Product (GDP) has remained low, with the manufacturing sector having remained relatively undiversified. As a result, the Government of Zimbabwe, in June 2019, approved the Local Content Strategy (LCS) whose aim is the promotion of utilization of domestic resources as inputs along value chains. The strategy is derived from the Zimbabwe National Industrial Development Policy (2019 – 2023).

The implementation of the Local Content Strategy was envisioned as a way of stimulating demand for local inputs (e.g., labour, goods, capital, services, etc) along strategic value chains which have the greatest potential to add value, mineral beneficiate and foster value chains development. According to NDS1 paragraph 157, the value chains that will be prioritised are mainly those existing in agro-processing. These include the soya bean, cotton, leather and fertiliser value chains. Outside agro-processing, priority will be to resuscitate the pharmaceutical and bus and trucks assembly value chains. The objectives of the Zimbabwe Local Content Strategy are:

1. To increase average local content levels in prioritized sectors from current levels of approximately 25% to 80% by 2023;
2. To increase capacity utilization in prioritized sectors from current levels of approximately 45 % to 75% by 2023; and
3. To increase manufactured exports in prioritized sectors by at least 5% annually between 2019 and 2023.

The four guiding principles of the LCS are: (i) local resource utilization and service provision, (ii) beneficiation and value addition of local resources, (iii) import substitution and (iv) sustainable consumption of local products. To achieve the above objectives, paragraph 6.1 (Preferential Local Procurement) of the LCS states that “As part of the implementation of the LCS, market studies will be conducted to establish minimum local context thresholds of designated sectors”. This assignment, *The Development of Local Content Thresholds for Pharmaceutical, Fertiliser and Packaging*, undertaken with the support of the United Nations Economic Commission for Africa, Sub-regional Office of Southern Africa, is in fulfilment of this objective within the overall national aspiration to ensure that local resources are an integral part of the industrialization process. Whilst the LCS contains thirteen (13) prioritized sectors, this assignment focuses on the fertilizer, packaging and pharmaceutical sectors. These have been specifically selected by the client of the study, the Ministry of Industry and Commerce.

2 Objective and Scope of work

In line with the terms of reference (ToR), the objective of the assignment is to develop Local Content Thresholds (LCT) for the following three sub-sectors: Fertilizer, Pharmaceutical, and Packaging. The scope of work included the following major strategic areas, but not limited to:

1. Undertake desk review on the Local Content Strategy and its associated policies, laws and regulations;
2. Prepare market studies on the state of the fertilizer, packaging and pharmaceutical, sub-sectors and linked supply chains, with reference to government objectives outlined in existing strategic plans, laws and policies, and with a specific focus on local content procurement challenges and opportunities.
3. Map key stakeholders and conduct interviews of a representative sample and produce report of the mapping exercise with initial hypotheses on their needs, views, capacities and constraints to implementing the local content thresholds;
4. Draft and final local content thresholds;

3 Methodology and approach

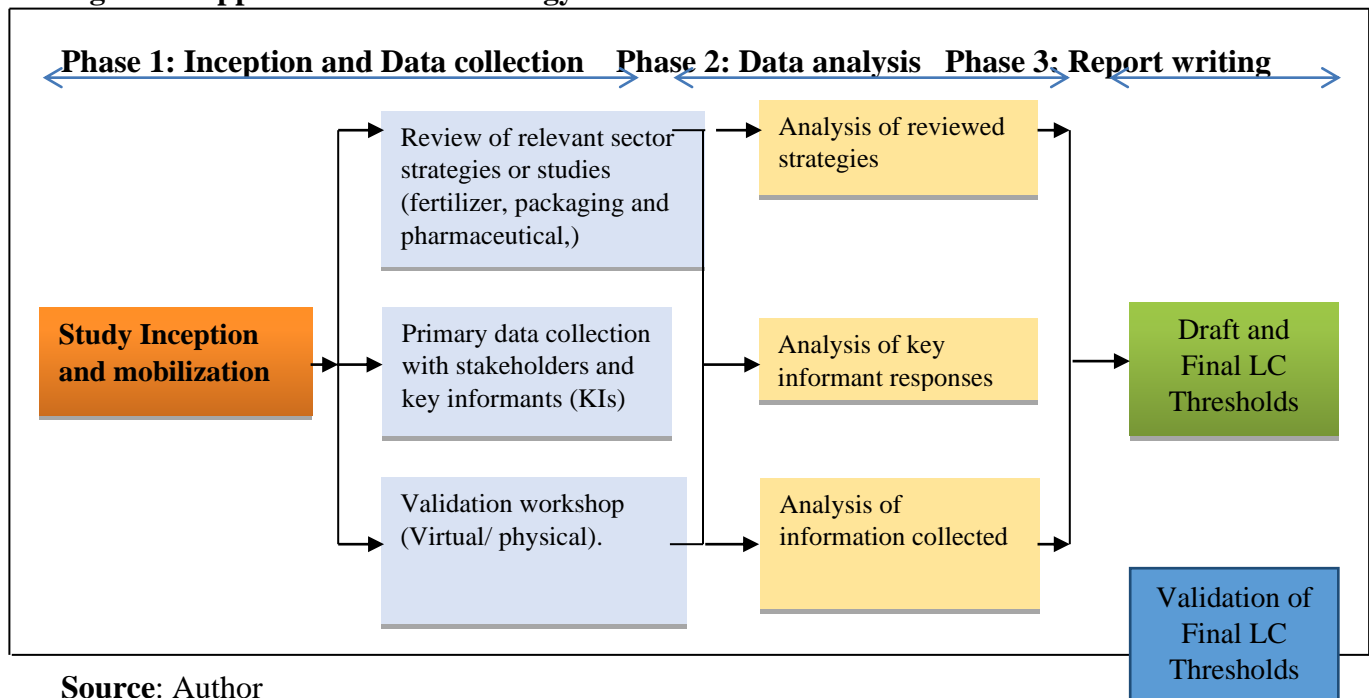
The development of the local content thresholds (LCT) was conducted in a manner which ensured broader stakeholder participation especially the involvement of stakeholders in the three sectors, namely fertilizer, packaging and pharmaceutical. Logically, the assignment was implemented in six phases as:

- i. **Phase 1:** Inception and assimilation phase. This included inception meeting with the principal client, the Ministry of Industry and Commerce, and UNECA. The meeting was held virtually on 9th September 2022. The inception meeting was important as it ensured that the three parties namely the client (MIC), technical partner (UNECA) and the consultant all had the same understanding of the task to be done, thus forming the basis for evaluating the work as it progresses.
- ii. **Phase 2:** Collection and recording of data (both primary data and secondary data).
- iii. **Phase 3:** Analysis and Interpretation of Data
- iv. **Phase 4:** Draft and final local content thresholds reports for fertilizer, packaging and pharmaceutical, sectors.
- v. **Phase 5:** Validation of the local content thresholds study
- vi. **Phase 6:** Finalization of the study and submission of the final report

In carrying out the assignment, the consultant employed a mixed method approach to collect quantitative and qualitative data for the purpose of coming up with contextualized local content thresholds for the three sectors under study. Specifically, the consultant used an integrated approach that allowed for collection and analysis of both qualitative and quantitative data and information. That is, in conducting the research study, primary data and information was collected from diverse stakeholders. Primary data/information was collected through the use of a standardized questionnaire². The questionnaire was administered to individual stakeholders for them to complete, and this was done electronically through email. Table A1 in the Annex provides a list of stakeholders who were consulted during primary data collection. To ensure collection of more data and information, during the validation workshop, stakeholders will be divided into three groups by each sector (pharmaceutical, fertilizer and packaging), and focus group discussions (FGDs) will be conducted in each of the three groups with the help of the interview guide. The physical validation workshop will be done in Harare, with some selected stakeholders outside Harare going to be funded to attend the workshop, while majority of stakeholders outside Harare will be consulted virtually (by attending the Harare workshop virtually) and through emails and other virtual platforms. In summary, the approach to the whole research study is pictured in Figure 1.

² The questionnaires were shared with Ministry of Industry and Commerce (MIC) and UNECA for inputs and improvement before they were rolled out to stakeholders.

Figure 1: Approach and methodology



4 Deliverables

The terms of references provide the expected deliverables that the whole assignment should deliver. The following are the major deliverables:

1. Inception report
2. Report on the desk review on the Local Content Strategy and its associated policies, laws and regulations
3. Market studies on the state of the pharmaceutical, fertilizer and packaging sub-sectors and linked supply chains, integrating the comments from the Ministry of Industry and Commerce
4. Draft and final local content thresholds reports
5. Draft implementation plan

5 Local content strategy, associated policies and laws

Implementation of local content in Zimbabwe is supported by a number of policies, laws and regulations. Table 1 depicts various policies, laws and regulations that support local content implementation in the country. The country's National Industrial Development Policy, one which aims at industrializing the country by developing manufacturing value chains across the country emphasis the use of local resources as much as is feasible. The policy is premised on the belief that the country is endowed with diverse resources including labour, services, supplies of various intermediate goods and some level of technology required to promote economic activities across various sectors in the economy.

Table 1: Laws, policies and regulations governing local content strategy in Zimbabwe

	Policies	Laws and Bills	Regulations
1	Zimbabwe National Industrial Development Policy (2019-2023)	Mines and minerals amendment bill	SI 2010-116, Indigenisation and Economic Empowerment (Amendment) Regulations, 2010 (No.2)
2	Zimbabwe Local Content Strategy (LCS) (2019)	Small and Medium Enterprises Act Chapter 24:1	The Indigenisation and Economic Empowerment Act [Chapter 14:33]
3	National Development Strategy (NDS) 1 (2021-2025)	Constitution of Zimbabwe	Statutory Instrument (SI) 64
4	Pharmaceutical Manufacturing Strategy for Zimbabwe (2021-2025)		Statutory Instrument (SI) 122 of 2017
5	The Fertiliser Import Substitution Road Map		

Source: author compilation

Paragraph 440 of the National Development Strategy (NDS) 1 (2021-2025) allude to the fact that, as a country, in order to promote value chains, Government will implement a number of programmes during the NDS1 period, chief among them being the local content strategy (LCS).

The Zimbabwe National Industrial Development Policy (NIDP) (2019-2023) consider Local Content Strategy (LCS) as a tool aimed at encouraging local value addition through utilisation of domestic resources and localisation of supply chains. The LCS will create economic linkages and business opportunities for local entrepreneurs. The LCS will be implemented through specific evidence based local content thresholds in prioritized sectors, among others being fertilizer, packaging and pharmaceutical sectors. NIDP (2019-2023) (page 9) emphasis the use of local content strategy (LCS) to increase value addition of agricultural produce. The LCS is aimed at promoting the utilization of locally produced inputs such seed, fertilizer and agro-chemicals in agriculture

Increase in capacity utilization and production in the pharmaceutical sector, according to the Pharmaceutical Manufacturing Strategy for Zimbabwe (2021-2025) (page 5) is premised on the implementation of the local content strategy (LCS). According to the Pharmaceutical Manufacturing Strategy for Zimbabwe (2021-2025), implementation of LCS will be fast-tracked and Government will ensure that the directives to procure locally are adhered to.

The fertiliser industry in Zimbabwe plays a key role in terms of its contribution to gross domestic product (GDP) and its growth and food security among others. Apart from saving the country the elusive foreign currency, The Fertiliser Import Substitution Road Map (FISRM) is aimed also at improving national food security, while creating employment. Through this Road Map, Government of Zimbabwe see the urgent need to promote local production and import substitution to ensure food security and job creation. In an effort to ensure fruitful results from implementation of the Road Map, Government is supporting local fertilizer production to complement the agriculture recovery plan, save foreign currency and generate employment. According to the Minister of Industry and Commerce, “The Government entered into a five year

fertiliser import substitution roadmap with local fertiliser manufacturers to boost productivity and production, save foreign currency, ensure food security and create employment”³.

Statutory Instrument (SI) 122 of 2017, named Control of Goods (Open General Import Licence) (Amendment) Notice, 2017 (No.5) removes a number of products from open general import licence, that is, from a situation where such products were free imported and placed them on list of products to be imported only with an import licence. The aim of the SI was to encourage customers and uses of such goods to buy locally produced (manufactured) products, thus boosting local content production and consumption. For these products listed in the SI, one can only import them after getting an import licence, and the licence will only be issued if the Government (through the Ministry of Industry and Commerce) has satisfied itself that such goods are not locally produced or manufactured.

Statutory Instrument (SI) 2010-116 named the Indigenisation and Economic Empowerment (Amendment) Regulations, 2010 (No.2), aims at giving priority to local resources including ownership and control of economic resources and activities. The SI encourages local procurement across all economic sectors. Statutory Instrument (SI) 64, when it was implemented was aimed at discouraging importation of goods which were also produced in Zimbabwe. Thus, the SI was an indirect way of encouraging import substitution industrialization. Although this policy was not applied across the board in terms of importation, there was a list of 42 products, mostly consumer goods, whose importation was only allowed in exception cases and through import permit. The policy helped in boosting local production and consumption of a number of products, especially those that were on the list.

Fourth Schedule (Section 16) of the Indigenisation and Economic Empowerment Act [Chapter 14:33] considers use of local raw materials and value addition as some of the pillars of the Act. Specifically, Section 2 (Objectives of the Charter) under this Schedule says” (d) promote the use of local raw materials and value addition in economic activities and (e) promote local research and development. Sub-section on “Production Responsibility” under the same Schedule says: (c) businesses shall, to the extent possible, utilise locally available resources and promote value addition; and (d) businesses shall utilise indigenous knowledge systems, and promote local research and development as well as promote technology transfer. In short, the Indigenisation and Economic Empowerment Act [Chapter 14:33] promotes local content as far as local production is concerned.

Article 2A (Government to promote development of MSMEs) of the Small and Medium Enterprises Act Chapter 24:12 (Legislation as at 31 December 2016) has provision which encourages government and its arms to prioritize purchasing locally produced goods when doing its procurement. With special reference to micro, small and medium enterprises (MSMEs), the Act says that the Government shall endeavour to create an economic and regulatory environment that promotes MSMEs in order to develop and enhance their contribution to national development. Specifically, paragraph 2 says: (e) ensuring that, when tendering out contracts for the supply to the State of goods and services, not less than twenty-five per centum of the value of goods or services to be procured are procured (whether by way of the contract or any subcontract

³ The Herald (19 April, 2021). Government to reduce fertiliser imports. Available at: <https://www.herald.co.zw/govt-to-reduce-fertiliser-imports/>

thereunder) by MSMEs: Provided that an MSME benefiting from such contracts and subcontracts shall benefit on terms not less favourable than any other contractor or subcontractor. The bulky of products that MSMEs will be supplying to government and its arms will have been produced or manufactured locally.

6 State of fertilizer, packing and pharmaceutical sectors

This section presents the findings from both secondary data collection (including literature review) and primary data collection that was conducted across the three sectors under study.

6.1 State of fertilizer sector in Zimbabwe

Minde et al (2010) argues that the trends in the supply of fertilizers in Zimbabwe have been driven by key factors such as government policy, market information, and infrastructure while on the demand side farmer's capacity to acquire (or use⁴) fertilizers, availability of water (rainfall) and farmer's knowledge on fertilizer use have been key drivers. The fertilizer sector in Zimbabwe has both old and young firms, with the oldest having opened its production doors in 1971, thus having amassed experience which comes by being in the sector for more than five decades. The young firm started its operations in 2019, thus boosting from the use of latest new technology.

According to Food and Agriculture Organization of the United Nations (FAO, 2006), the common fertilizers types used in Zimbabwe are (a) straight fertilizers (e.g. ammonium nitrate, urea, sodium nitrate, ammonium sulphate, calcium nitrate, single and double triple phosphates, potassium chloride and potassium sulphate), (b) compound fertilizers (e.g. compound A and D) and (c) blends (e.g. tobacco blend, maize blends). The fertilizers are supplied in granular form and in bags. In developing countries, including Zimbabwe liquid fertilizers are only confined to specialized drip irrigation for high value crops. The major fertilizer types used in Zimbabwe differentiated by crop are shown in Table 2.

Table 2: Major fertilizer types differentiated by crops where used

	Main crop	Main fertilizer type(s) used
1	Tobacco	Compound A, B, C, S, V, Tobacco blend
2	Maize	Compound D, AN, Urea, Maize blend
3	Coffee, Fruit trees	Compound J, Coffee blend
4	Groundnuts	Phosphates, Gypsum
5	Wheat	Compound D,
6	Horticultural crops	Compound C, D, Vegetable blend, AN

Source: FAO (2006:23)

⁴ Fertilizer consumption measures the quantity of plant nutrients used per unit of arable land.

6.1.1 Production capacity in fertilizer sector

The country has never been self-sufficient in terms of fertilizer requirements. On average, the annual national fertilizer demand stands at 780,000 metric tons (mt), composed of 380,000 mt of top-dressing fertilizers and 400,000 mt of basal fertilizers (compounds and blends). The consumption of 380,000 mt of top-dressing is further divided into top dressing direct application (that is ammonium nitrate (AN)) and input into compounds (urea), while the consumption of 400,000 mt of compounds is further divided into phosphate, potassium and AN. Unpacking the national annual demand by major three demand components shows that command agriculture demand 240,000 mt, while the presidential input scheme demand 180,000 mt and lastly private agent demand 180,000 mt.

On the production side, the country remains a perennial importer of fertilizer year in and year out. Available statistics shows that between 2014 and 2019, the country imported fertilizer worthy US\$662 million cumulatively. During the same period, the Ministry of Industry and Commerce (MIC) argues that had the local fertilizer industry been supported by government it would have produced the same quantity of imported fertilizer at a cost of approximately US\$400 million, thus saving around US\$262 million worthy of scarce foreign currency. Table 3 shows fertilizer production levels as of 2020.

Tabulated information in the case of ammonium nitrate (AN) shows that whilst all the firms producing this type of fertilizer in the country have installed capacity of 90,000 mt, they produce, an annual average of 30,000 mt which account for just 12% of the annual national demand. This lower production results in idle capacity of 60,000 mt, which is 24% of annual national demand. A similar situation is replicated in the case of compounds (phosphate) fertilizers where the installed capacity is 80,000 which represent 23% of the annual national demand. However, all firms in the business of producing this type of fertilizer are only producing 60,000 mt which account for 17% of annual national demand, resulting in idle capacity of 20,000 mt (or 6% of annual national demand).

Table 3: Fertilizer production levels in Zimbabwe

	Ammonium nitrate (AN)		Compounds (Phosphate)		All types	
	mt	% of National demand	Mt	% of National demand	mt	% of National demand
Installed current capacity	90,000	36	80,000	23	170,000	28
Actual production	30,000	12	60,000	17	90,000	15
Idle capacity	60,000	24	20,000	6	80,000	13
National demand	250,000	100	350,000	100	600,000	100

Source: Ministry of Industry and Commerce (2020)

When the two major types of fertilizers are put together, the country's installed capacity of 170,000 mt can only meet 28% of the annual national demand. Actual annual production is however at 90,000 mt which only satisfy 15% of annual national demand, while 80,000 mt of capacity is idle. Evidence shows that idle capacity is mainly due to non-allocation of foreign currency to import ammonia gas which is one of the major ingredients in production of fertilizer.

The average fertilizer manufacturing and/or production capacity utilization for the year 2022 in the fertilizer sector was 52%, while the figure ranged between 80% on the upper bound and 38% on the lower bound. The local fertilizer firms provide a sizeable level of formal employment to the citizens. On average, a fertilizer firm employs 88 permanent staff and 110 contract workers annually. The largest company by employment numbers employs 110 permanent workers, with 300 contract workers. Another company employs 220 permanent workers and 67 contract workers. The smallest firm by headcount employs five permanent and 25 contract workers. Employment levels by gender shows that a firm, on average employs 57 male workers and 26 female workers. The largest company by labour force employs 103 males and 19 female workers, while the smallest firm employs 23 male and seven females.

Table 4 presents the list of fertilizer inputs (products) by source of origin and products produced (past 12 months) by local fertilizer firms. As can be seen from the table, some inputs/products are wholly 100% sourced locally, while some are wholly imported. There are also some inputs and/or products with some share sourced locally and the remaining share imported. What the table also shows is that the sector is an open sector whereby both local and imported inputs and products compete. Combining the locally sourced inputs and those imported, on average, the sector sources around 33% inputs or products used in the manufacturing of fertilizer from the local market, while 67% is imported.

Table 4: List of fertilizer inputs (products)

List of inputs or products				List of products produced
		% sourced locally	% imported	
1	Urea	20	80	Top dressing fertilizer
2	Ammonium Nitrate	20	80	Top fertilizer
3	MOP	100	0	Basal fertilizer
4	SOP	100	0	Basal fertilizer
5	Limestone	100	0	All fertilizers
6	Rock Phosphate	100	0	All fertilizers
7	Calcium Ammonium Nitrate (CAN)	10	90	
8	Imports MAP, MOP, GSOA	20	80	NPK 8-23-23 and other high analysis
9	Phosphorous	40	60	NPK
10	Potassium	0	100	NPK
11	Sulphur	0	100	NPK
12	Zinc	0	100	NPK
13	Boron	0	100	NPK
14	Nitrogen	5	95	NPK fertilizers
15	Phosphates	25	75	NPK fertilizers
16	Potash		100	NPK fertilizers
17	Imports MAP, MOP, GSOA	50	50	NPK 7-14-7 AND 6-15-12
18	Local Single super phosphates -lime,			

	and, granulation, bags, transport, labour, marketing			
19	Local Single super phosphates -lime, sand, granulation, bags, transport, labour, marketing			
	Average	33	67	

Source: Field survey October – December 2022

Key: MAP = Mono-ammonium Phosphate; MOP = Muriate of Potash; SOP = Salphate of Potash; NPK = Nitrogen, Phosphorous and Potassium

The major input country sources for fertilizer production includes South Africa, China (GSOA and urea), Saudi Arabia (MAP), Arab Gulf (MOP), Black Sea countries (AN), Egypt, Russia, Belarus, Ukraine and Mozambique, among others. The fact that the country import some of inputs used in the manufacturing of fertilizer implies that Zimbabwe need to work hard in order to start producing or manufacturing inputs used in the sector locally.

In terms of sales, fertilizer manufacturers and producers indicated that, on average, they sell 99% of their final products on the domestic market. The remaining 1% of final products are exported to other countries. Disintegrating the 99% of sales on the domestic market, the Government of Zimbabwe and development partners are the main buyers of locally produced fertilizers, with Government accounting for 57% while development partners buys 28% of the locally manufactured fertilizer. In the case of the Government of Zimbabwe, command agriculture demand 240,000 mt, while the presidential input scheme demands 180,000 mt, and these two government funded schemes absorbs 57% of the locally manufactured fertilizers. The private sector, including individual farmers, accounts for 14% of the locally manufactured fertilizer. For the 1% that is exported, the main destinations are Botswana and Zambia

6.1.2 Local content issues in the fertilizer sector

Fertilizer firms were asked whether they were familiar with local content strategy (LCS) in Zimbabwe or not. 80% of respondents said they were not familiar with LCS, and only 10% indicated some level of knowledge, though not very much familiar. In short, the majority of fertilizer firms are not familiar with various policies, laws and regulations associated with LCS. Furthermore, stakeholders were not abreast with any progress with regards to implementation of the local content policy (LCP) in Zimbabwe for fertilizer sector. Inferring from the fact that most inputs or products used in the manufacturing of fertilizer materials by local firms were imported (that is 67%), stakeholders indicated that there was minimal or no progress with regards to implementation of the local content policy (LCP) in the country for this sector. Lack of familiarity with regards to LCS implies that the Government of Zimbabwe, through the Ministry of Industry and Commerce (MIC) among other government arms, should intensify dissemination and conscientization of the LCS to the various economic agents especially the business community across the various sectors.

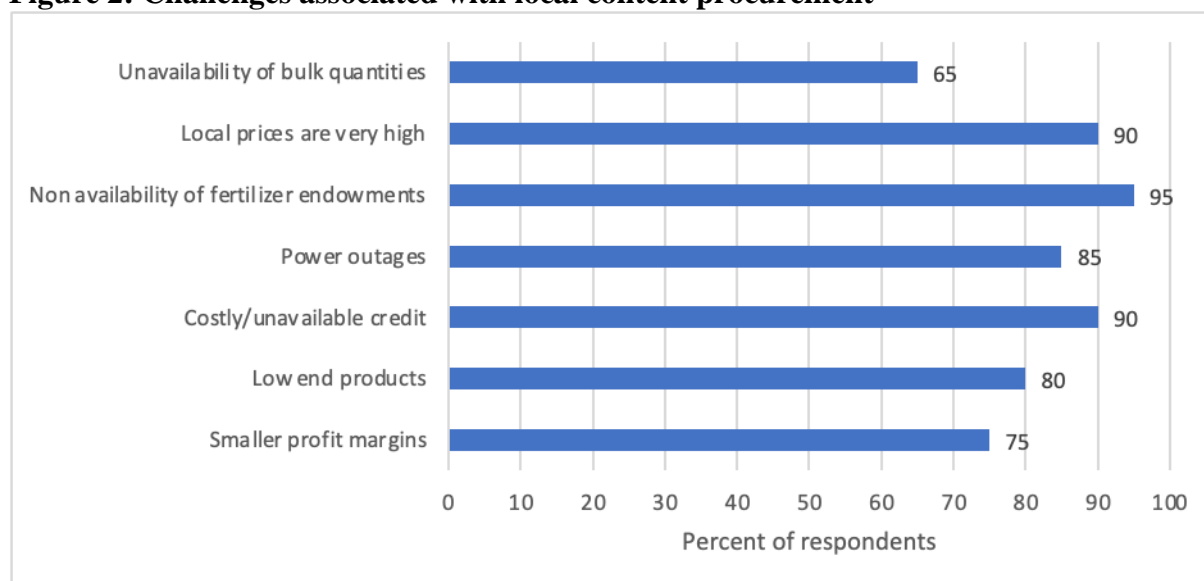
6.1.2.1 Challenges associated with local content procurement in the fertilizer sector

Despite limited knowledge on LCS/LCP, fertilizer manufacturers and stakeholders were asked to narrate the various challenges associated with local content procurement, especially with regards to the use of inputs into the value chains such as labour, supplies of intermediate goods, services, knowledge and technology, etc. Figure 2 shows a number of reasons discouraging local manufactures of fertilizer from procuring their inputs locally.

Non availability of key raw materials: Non availability of key raw materials in bulky quantities on the local market was cited by 65% of respondents as the main reason why they end up importing inputs and not use locally produced inputs. The non-availability of key raw materials in large enough quantities was further compounded by non-availability of fertilizer raw materials in the country. Non availability of fertilizer endowments in Zimbabwe, as was indicated by 95% of respondents is a big challenge given that major ingredients into fertilizer manufacturing comes from the endowments. The country is however endowed with only phosphates as one of the fertilizer raw material, and going forward the country and especially fertilizer stakeholders need to take advantage of this endowment. Research and development (R&D), and exploration should be conducted to discover usable fertilizer endowments

Low product quality: In instances where some inputs were manufactured and potentially found locally, the second challenge which made manufacturers of fertilizers shun such inputs was the failure of locally manufactured inputs to meet minimum required international quality standards. Stakeholders indicated that local inputs in most cases are low end products. According to 80% of respondents, failure to meet the required quality standards or inconsistent quality is a serious problem given the quality of the final fertilizer output may not be guaranteed in such instances.

Figure 2: Challenges associated with local content procurement



Source: Field survey October – December 2022

High prices of local inputs: Another major challenge associated with locally manufactured inputs is the issue of exorbitant prices as was alluded to by 90% of stakeholders. Most inputs manufactured locally are highly priced when compared to imported equivalent, thus forcing fertilizer firms to prefer imported inputs. The high cost of locally manufactured inputs is in turn a

result of a number of factors including high cost of production caused by high labour costs, unreliable and expensive utilities (such as electricity and water etc), among other factors. Thus, compared to imported inputs, locally manufactured equivalents are more expensive and as such, it becomes profitable for local manufacturers to prefer imported inputs. According to 75% of respondents, the high prices results in smaller profit margins, thus making them to prefer imported inputs.

Limited working capital: Working capital and funds for investment remains a major challenge for most firms in the fertiliser sector. High interest rates discourage firms in the sector from borrowing finance for retooling activities. There is need for affordable credit lines and financial incentives that encourages investors and players in the sector to boost their economic activities. With interest rates at 200% for local currency; and between 10% and 15% in the case of US dollar dominated loans, stakeholders indicated that such rates are not profitable. There is need for better financial incentive including payment terms, and comparable (with other countries) interest rates.

Electricity/power challenges: Manufacturing is a high energy intensive activity hence unreliable electricity as evidenced by constant power outages or blackouts have been singled out by 85% of respondents as one of the challenges affecting successful implementation of local content in the fertilizer industry.

Costly imported raw materials: ZFMA (2022) indicates that increased cost of imported fertilizer raw materials because of the global shortages and increased logistical costs is a major challenge facing local producers of fertilizers.

Limited foreign currency: Zimbabwe has been bedevilled with limited foreign currency for a relatively long time, and this has resulted in most companies in the sector failing to pay their suppliers on time for raw materials. This challenge has negatively affected production activities of local firms, and sometimes resulting in shortage of fertilizer on the local market.

Low capacity utilization: Local capacity utilization averaging around 52% as indicate earlier is hindering local firms from exploiting their full manufacturing potential. This results in limited economies of scale which exhibits itself in relatively high market prices for locally manufactured inputs and final products.

Shipping delays: Since the start of Ukraine-Russian war on 24th February 2022, international shipping lines that are used by local firms when importing inputs and raw materials have been affected mainly by long delays and shortage of cargo space. This has resulted in local fertilizer production severely affected by delays.

Import barriers: Barriers to import caused by bureaucratic quality requirements have also been a major cause for concern in the sector. Among others, qualitative requirements of Bureau veritas

(BV) and those required for a Certificate of Compliance (Certificate of Conformity) (COC)⁵ were cited as some of the import barriers that fertilizer input/raw material importers were facing.

Outstanding debt: Some fertilizer companies are still struggling to repay financial debt from last seasons, and those debts have made it difficult to unlock new financial loans. This means that such firms will have limited working capital and investments, and they will eventually operate below their capacity.

6.1.3 Actions for increasing use of local inputs in the fertilizer sector

Given that the country has LCS on one hand, and very low use of local inputs by manufacturers of fertilizer products on the other hand, stakeholders were asked to provide possible actions that may help improve use of local inputs by manufacturers. Table 5 provides some of the suggested actions and respective institutions to action the suggestions. Investment in R&D to find potential sources of raw materials especially from various endowments found in the country, among others, was enumerated as one of the major actions that the country and sector must do so as to enhance production of quality and reliable fertilizers by local entities. Both Government and private sector have roles to play, especially by investing in fertilizer production activities so that much of the fertilizer can be manufactured locally.

Another important action is for local fertilizer firms to produce both MAP and top-dressing fertilizers or inputs. Fertilizer firms such as Zimphos and Sables Chemicals, among others should lead this process. This means that the constraints that are currently facing fertilizer producing companies which includes costly lines of credit, power outages and high input local prices should be addressed. The monetary authorities need to reduce interest rates, while power company, Zimbabwe Electricity Supply Authority (ZESA) or its subsidiaries should ensure constant supply of electricity, especially to fertilizer manufacturing firms, among others.

Table 5: Actions to increase use of local inputs

	Action	Institution to do
1	Produce MAP	Zimphos
2	Produce top dressing	Sable
3	Attracting more investment by reduction of taxes in fertilizer industry to increase availability	MOFED
4	Price regulation on local inputs	MIC
5	Stricter quality control on local inputs	SAZ
6	R&D on potential sources for raw material	MIC & Private Companies
7	Expedite the exploitation of gas resources	MIC
8	Provide tax incentives for new fertiliser raw material production projects e.g use of coal in urea production.	MIC

Source: Field survey October – December 2022

⁵ In trade a Certificate of Compliance (Certificate of Conformity) (COC) is given to exporters or importers to show that the goods or services purchased meet the required standards of a given country. This document is usually required to be presented during customs clearance.

Key: MOFED = Ministry of Finance and Economic Development; SAZ = Standard Association of Zimbabwe

Research and development (R&D) as well as innovation hubs were considered as one of the areas that require investment, and as such, areas that stakeholders in the sector should continue to support. The call for the sector is to fund R&D and innovation hubs for research which are mainly directed at discovering new fertilizer endowments. Fertilizer industrial players and government should lead and work hand-in-hand in this process.

Other interventions will include:

- Targeted funds with low interest rates to increase capacity utilization of fertilizer manufacture.
- The need to reduce inspection costs, Bureau veritas (BV) and COC inspections to be done on a whole order and not on shipments.
- More foreign currency should be allocated through the auction system.
- The need to expeditiously service old debt from previous government schemes so as to get new supplies of raw materials released.

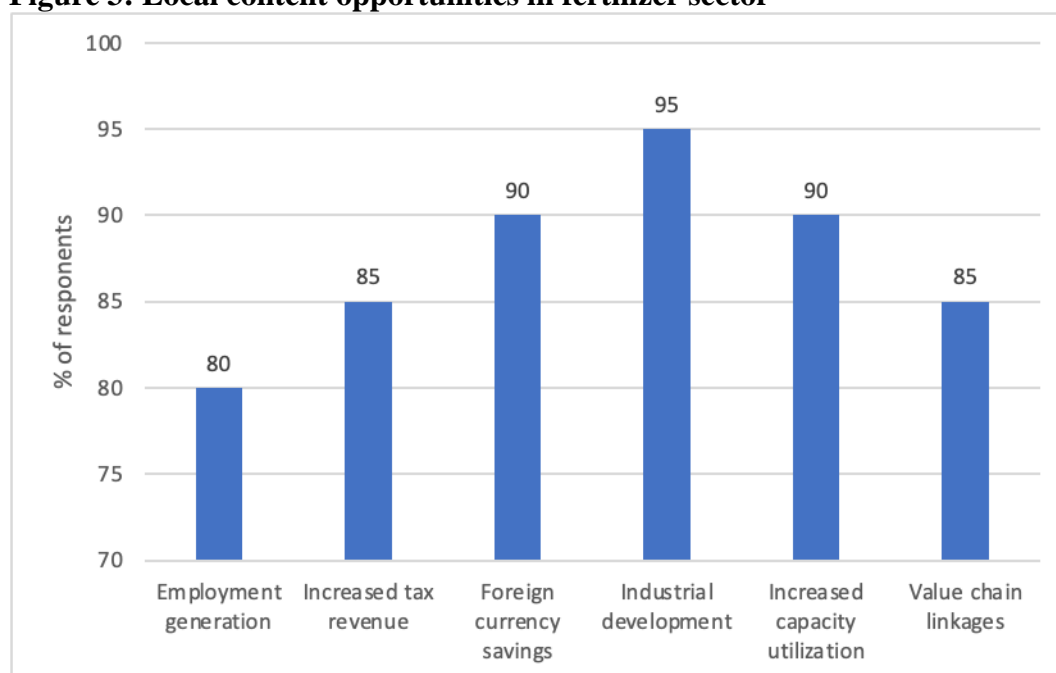
6.1.4 Opportunities associated with local content procurement in fertilizer sector

Stakeholders were asked to enumerate some of the opportunities associated with local content procurement, that is the use of inputs into the value chains such as labour, supplies of intermediate goods, services, knowledge and technology, etc. Figure 3 provides the main opportunities that stakeholders enumerated.

Increased capacity utilization: Increased capacity utilization was indicated as one of the major opportunities that the fertilizer sector will reap once local content is implemented. According to 90% of sector stakeholders, the average capacity utilization is poised to rise from the current 52% to even more than 65% in a short period of time if the sector embraces local content procurement backed by investments in intermediate value chains.

Employment opportunities: The country is currently grappling with high levels of formal unemployment. Implementation of local context thresholds with its associated investments is expected to generate formal employment in the fertilizer sector, that is, along the fertilizer value chain (manufacturing and distribution), thus helping the country deal with the issue of unemployment. To have productive formal workforce in the sector, both skilled and unskilled workers (new and current) would need to be supported by continuous and relevant capacity building initiatives and/or trainings. The opportunity for formal employment creation in the sector will also provide potential to absorb a sizeable number of youths coming out of the country's tertiary institutions. 80% of study respondents consider formal employment generation as one of the major benefits of local content implementation.

Figure 3: Local content opportunities in fertilizer sector



Source: Field survey October – December 2022

Foreign currency savings: One possible benefit is the fact that the country will likely save a lot of foreign currency it has been losing every year in importing fertilizers. Zimbabwe, since independence in 1980 has had perennial challenges of inadequate foreign currency year-in-year out. Thus, implementation of local content according to 90% of respondents will likely reduce the pressure on the country's meagre foreign currency reserves.

Increased tax revenue: Another opportunity to be brought by implementation of local content strategy (policy) will increased government tax revenue. According to 85% of respondents, increased economic activities will have direct, indirect and induced tax revenue benefits from the point of view of ZIMRA. For instance, increased economic activities means that fertilizer companies will have increased profits, thus contributing to direct tax (that is company tax); more people will be formally employed, thus contributing to tax base through pay-as-you-earn (PAYE). Furthermore, both the companies and the new formally employed people will demand various goods in the market, that contributing towards tax through value-added tax (VAT), among others.

6.1.5 Possible constraints associated with implementing the local content thresholds

The major constraints associated with implementing the local content thresholds in the near future within the fertilizer manufacturing sector are presented in Figure 4.

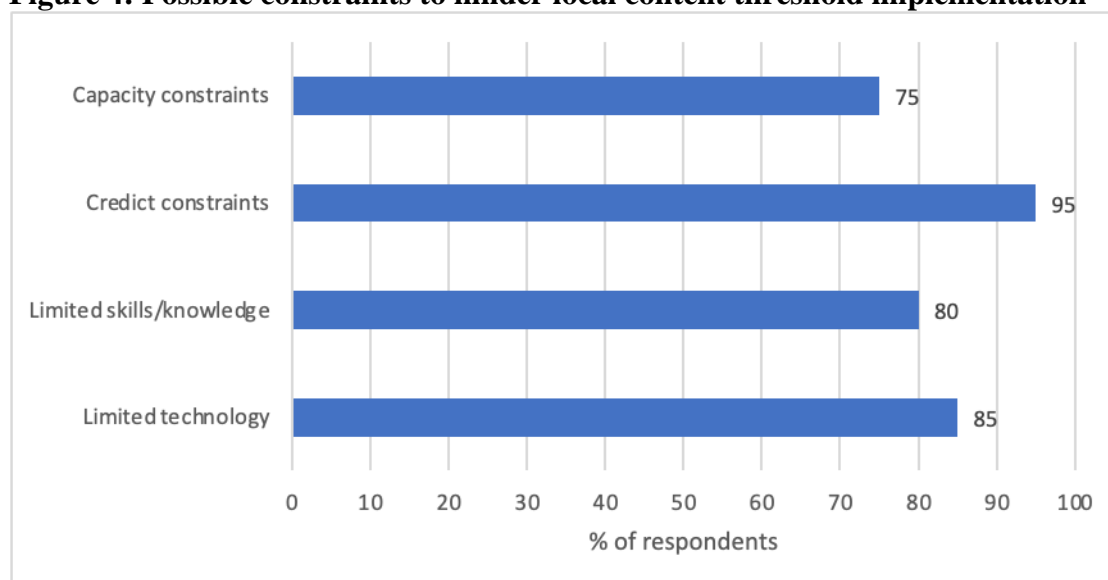
Credit constraints: Credit constraints for both working capital and funds for investment remains a major challenge for most firms in the fertiliser sector. According to 95% of fertilizer stakeholders, there is need for affordable credit lines and financial incentives that encourages

investors and players in the sector to boost their economic activities. With interest rates at 200% for local currency; and between 10% and 15% in the case of US dollar dominated loans, stakeholders indicated that such rates are not profitable. There is need for better financial incentive including payment terms, and comparable (with other countries) interest rates.

Lack of knowledge or inadequate knowledge/skills: Lack of knowledge or skills that may be required in the fertilizer sector maybe a possible challenge to the implementation of local content in the sector. According to 80% of stakeholders, fertilizer sector is a sector that is always evolving and is technology driven, thus requiring upgrading of human skills frequently. Also lack of knowledge about existence of LCS or LCP is likely to impede endeavours associated with local content implementation. As has already been indicated, all fertilizer manufacturers indicated ignorance of local content strategy in Zimbabwe. Thus, going forward, stakeholders indicated that such lack of knowledge of existence, benefits and procedures associated with local content procurement will demean all endeavours of implementing such a policy.

Limited technology: International best practices and experiences shows that technology is an important aspect in the manufacturing of fertilizer. Use of latest technology implies better quality, economies of scale and lower production unit costs when compared to a case where fertilizer is done using lower levels of technology in fertilizer production. Whilst the fertilizer sector in Zimbabwe uses some technology, 85% of respondents indicated that the country is very much lagging behind given that the technology being used is generally old when compared to what other producers from other countries use. Use of old technology has contributed, among others, towards making fertilizer produced in Zimbabwe relatively expensive when compared to similar products from other countries that employ latest technology in their respective manufacturing activities.

Figure 4: Possible constraints to hinder local content threshold implementation



Source: Field survey October – December 2022

Capacity constraints: whereby local manufacturers of raw materials have serious limitations have been singled out by 75% of fertilizer stakeholders. Local fertilizer raw material producers face capacity constraints in terms of human specialized skills and financial constraints to conduct economies of scale production and quality challenges. These capacity constraints need to be dealt with if local content implementation is going to be successful.

6.1.6 Recommended local content thresholds for fertilizer sector

Fertilizer manufacturers and stakeholders were asked to recommend optimal local content thresholds in terms of shares or percentage of inputs into the value chains such as labour, supplies of intermediate goods, services, knowledge and technology used in various stages of the production process that should be sourced from Zimbabwe. Table 6 presents average recommended local content thresholds that stakeholders in the fertilizer sector considered as optimal given the industry's circumstance and the general economy.

Stakeholders considered labour input as one factor whose local procurement can be speeded up. Currently the fertilizer sector employs 85% of the labour requirements locally, but going forward stakeholders recommended that 91% of labour force in the sector can be sourced locally in the very short term. Stakeholders argued that the country has a good human capital base both in general and also with regards to human skills required in the sector. Gradually and after two years, stakeholders recommend that 94% of labour force in the sector should be procured locally and after five years, 98% of fertilizer labour force be procured locally. The justification for these labour procurement thresholds emanates from the fact that the country has good skills base that just need to be upgraded continuously to move with sector trends.

Table 6: Recommended optimal local content thresholds for fertilizer sector

	Type of input	Baseline	Percentage of input to be sourced locally (%)		
			Short term (Immediately)	Medium term (After 2 years)	Long term (After 5 years)
1	Labour	85	91	94	98
2	Supplies of intermediate goods	35	39	45	59
3	Services	60	68	79	93
4	Knowledge and technology	40	58	67	77

Source: Field survey October – December 2022

In the case of supplies of intermediate inputs goods (i.e., equipment, inputs, ingredients, etc), stakeholders alluded to the fact that the value chain is still weak, and as such there is need for some time to enhance and improve the intermediate value chain. As of now, the sector procures, an average of 35% of supplies locally, but in the immediate short run, the sector is recommended to procure at least 39% of supplies of intermediate goods locally, with the share of local procurement increasing to 45% in the medium term. Given the fact that it takes some time to have a fully grown value chain, the sector is recommended to procure at least 59% of intermediate supplies in the long run, that is after five years. It is in the very long run that 100%

local procurement can be expected, but that very long run will depend with the evolution of the sector over time.

Services are one of the major backbones of the fertilizer sector. Currently, 60% of services required in the sector are procured locally. Going into the future, stakeholders recommends that at least 68% of services be procured locally in the short term, with the share of local services used in the sector recommended to at least 79% in the medium term. After five years, the fertiliser sector should procure 93% of all required services within the country. The high levels of proposed local content procurement when compared to the other two sector emanates from the fact that majority of the services are not very much complicated, and they are not regulated too much.

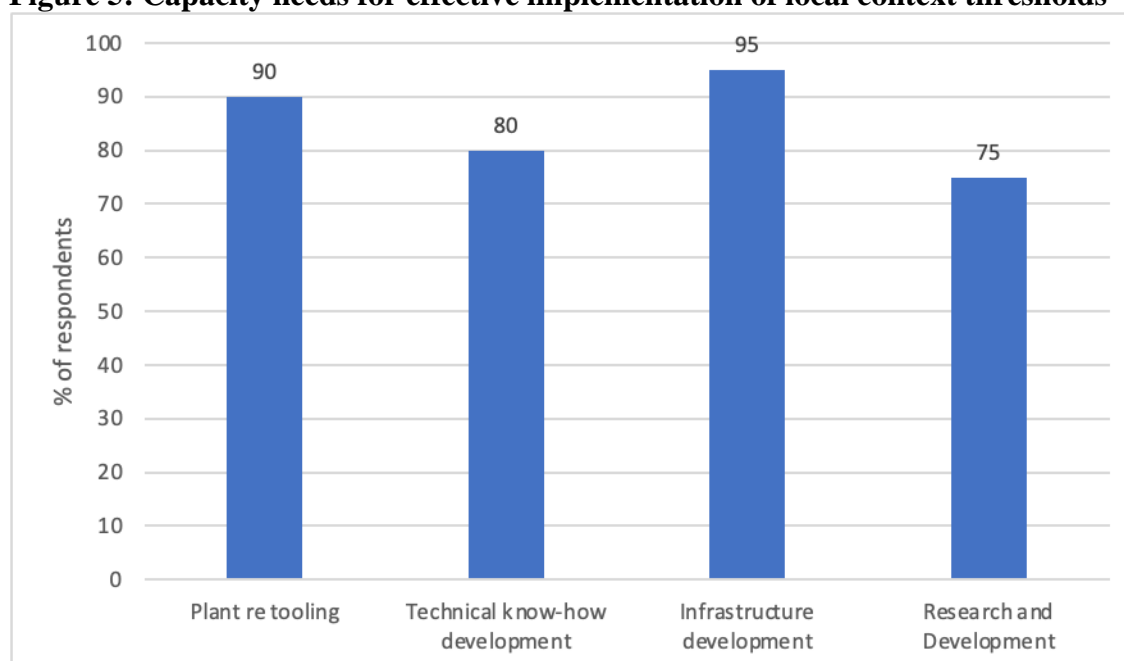
In the case of knowledge and technology, sector stakeholders indicated that the country is not yet in the forefront of knowledge frontier, and as such with capacitation of tertiary institutions which leads to new inventions and innovations, the share of knowledge and technology to be procured locally should gradually increase with time. Currently, 40% of knowledge and technology used in the sector is procured locally but going forward, sector stakeholders recommends that 58% of knowledge and technology required in fertilizer industry be procured locally in the very short term, and the share must increase to 67% in the medium term, that is after two years. The share of knowledge and technology to be sourced locally should be at least 77% in the long run, that is after five years. As to when can the sector be expected to procure 100% of knowledge and technology locally, that will depend on the evolution in the sector.

6.1.7 Capacity needs for effective implementation of local context thresholds

Effective implementation of local content thresholds requires capacitation of various sub-sectors within the fertilize sector. Stakeholders were asked during the consultations to indicate capacity needs required for effective implementation of local content thresholds in fertilizer sector in Zimbabwe. Figure 5 shows some of the major capacity needs that were suggested by stakeholders. Plant retooling was enumerated by 90% of respondents as one of the major actions that the country and sector needs. Stakeholders argued that most machineries, and factories in the fertilizer sector are either very old or they are behind latest technology used by similar sector in other countries. As such, there is need for sprucing up and upgrading these machineries and equipment.

Local institutions (i.e., universities, technical colleagues, among others), according to 75% of respondents do play a major role in the local content equation and as such they need to be capacitated. These institutions are the origins of new knowledge and innovations. Meaningful and ground-breaking inventions and innovations are mostly done by or in conjunction with tertiary institutions. In Zimbabwe, most tertiary institutions lack capacity in terms of R&D, incentives for new inventions, state of art equipment, among others, and this calls for government, private sector and other stakeholders to help in capacitating tertiary institutions.

Figure 5: Capacity needs for effective implementation of local context thresholds



Source: Field survey October – December 2022

Fertilizer sector has been evolving over time, thus the use of relevant and upto date technology is part and parcel of survival in the sector. Thus, technical knowhow development and use, according to 80% of respondents is an area which need capacity enhancement if local content is to be fruitful in the sector. Technology development and use is normally correlated with research and development (R&D). It is through R&D that new inventions, innovations and development are conducted. There is need for increased R&D in the fertilizer sector according to 75% of respondents for the sector to successfully benefit from any local content implementation.

6.1.8 Incentives for encouraging local procurement in fertilizer sector

Effective implementation of local procurement requires incentives which aims at encouraging fertilizer manufacturers to prefer local inputs compared to imports. Table 7 presents the various incentives that stakeholders suggested so as to encourage use of locally available inputs, labour, products and services, among others. According to World Bank ease of doing business, among other economic barometers, Zimbabwe is known as a highly taxed country, and this has been one of the major economic challenge for a number of decades. Stakeholders recommends the Government of Zimbabwe through the Ministry of Finance and Economic Development; and the Zimbabwe Revenue Authority (ZIMRA) to consider and institute a number of tax incentives aimed at encouraging fertilizer manufacturers and stakeholders to increase their economic activities. Some of the tax incentives includes operation of tax-free zones (i.e., special economic zones – SEZs), tax relief and tax rebates. Long tax holidays or preferential tax regime for investors will encourage investors to venture into the production of inputs for the sector. Each of these tax incentives has its own pros and cons, and as such their implementation will have to be contextualised to the fertilizer sector.

Table 7: Incentives for encouraging local procurement in fertilizer sector

	Type of incentive	Institution responsible
1	Make SSP available at a competitive price	The producer
2	Duty free exemption on importation of spares and capital goods and raw materials	MOFED
3	Tax relief and tax rebates	Government and MOFED
4	Concessional loans	Government and banks

Source: Source: Field survey October – December 2022

Key: MOFED = Ministry of Finance and Economic Development, SSP = Super Single Phosphate

Working capital and funds for investment remains a major challenge for most firms in the fertilizer sector. There is need for concessional loans or affordable credit lines and financial incentives that encourages investors and players in the sector to boost their economic activities. With interest rates at 150% for local currency; and between 10% and 15% in the case of US dollar dominated loans, stakeholders indicated that such rates are not profitable. There is need for better financial incentive including payment terms, and comparable (with other countries) interest rates.

6.1.9 Funding requirements in fertilizer sector

A number of areas were enumerated as requiring funding if local content implementation is to be successful in the fertilizer sector. Table 8 list some of the major areas that need funding. Industry capitalization is one of the major funding requirements according sector stakeholders. Stakeholders indicated the need for investment in manufacturing equipment in the form of state-of-the-art machineries. The estimated investment cost is \$30 million and private sector and government should be the main funders. Given that fertilizer is a strategic product in the country, Government should incentivize the private sector to invest in fertilizer manufacturing capacity. Another area which need funding is in the area of making phosphate deposits available to new investors if current deposit holders are not developing them to full potential. Development and use of phosphate deposits is key in the manufacturing of fertilizers.

Table 8: Recommended funding for local content implementation in fertilizer sector

	Recommendation	Estimated Funding requirement (US\$m)	Proposed funder (funding source)
1	Develop phosphate deposits	Not known	
2	Construction/building of new SSP plant	5	Government, private sector, banks
3	Construction/building of new TSP plant	80	Government, private sector, banks
4	Investment in manufacturing equipment	30	MOFED, Government, Private sector, banks

Source:

Key: MOFED = Ministry of Finance and Economic Development, SSP = Super Single Phosphate; TSP = Triple Single Phosphate

The major area which also need funding involves the construction or building of both super single phosphate (SSP) and triple single phosphate (TSP) plants. The estimated plant costs for SSP is \$5 million while that of TSP plant is \$80 million. Given these huge financial outlays, there is need for combined effort from government, private sector and banks to fund these noble investments.

6.2 State of Packaging sector

Packaging is involved in all facets of the Zimbabwean market and is important in every value chain. Demand and development of printing and packaging is “derived demand” in the sense that, on its own packaging cannot by nature drive demand but responds to demand. When operating at full capacity, local producers have capacity and capability to meet demand in areas where they are equipped. Production activities are hinged on imported inputs given that all raw materials for packaging are currently imported but potential to invest in local paper production exists given the right policy environment. From 2015 the packaging sector grew substantially on import substitution but has experienced a sharp decline when import licence requirements were suspended.

The sector’s value chain cuts across all sectors of the economy and it boasts from the fact that it employs more people per ton of product than most industries. Despite challenges bedevilling the country, producers in the sector have up to date technology to support an import substitution strategy as well as exports under the right policy environment. Furthermore, local skill expertise is available, where it’s not available, expatriate skills are relatively easy to obtain. The sector offers opportunity for local value addition for comparatively low investment capital levels as the sector prides itself in being competitive in terms of quality, lead time and price against alternative imports.

The sector has a number of manufacturing firms, with one of the oldest firms having been established in 1951, thus boasting of decades long experience in the sector. The relatively new firm in the industry started operating in 2016, thus boasting the use of latest state of the art technology in the sector.

6.2.1 Production and capacity utilization in packaging sector

The exact annual national demand for packaging products in Zimbabwe is estimated from \$30 million to \$70 million, with an average figure of \$46.5 million. From this amount, local producers provide packaging worth \$23.6 million, with each producer manufacturing an average of \$6 million per annum.

The average manufacturing and/or production capacity utilization for the year 2022 in the packaging industry was 59%, while the figure ranged between 72% on the upper bound and 40% on the lower bound. On average, a manufacturing packaging firm employs 79 permanent staff and 52 contract workers annually. The largest company by employment numbers employees 185 permanent workers, with 150 contract labourers. On the other hand, the smallest firm by

headcount employs 20 permanent and five contract workers. Employment levels by gender shows that a firm in the packaging sector, on average employs 57 male workers and 26 female workers. The largest company by labour force employs 217 males and 118 female labourers, while the smallest firm employs 16 male and 9 females.

Table 9 presents the list of packaging inputs (products) by source of origin and products produced (in the past 12 months) by local firms. As can be seen from the table, some inputs/products are wholly 100% sourced locally, while some are wholly imported. There are also some inputs and/or products with some share sourced locally and the remaining share imported. What the table also shows is the sector is an open sector whereby both local and imported inputs and products compete. Combining the locally sourced inputs and those imported, on average, the sector sources around 20% inputs or products used in the manufacturing of packaging material from the local market, while 80% is imported. The domination of imports in the input basket is simple due to the fact that such inputs are either not produced locally, or whenever they are available, they are of low quality or highly priced.

Table 9: List of packaging inputs (products)

List of inputs or products				List of products produced
		% sourced locally	% imported	
1	Paper	0	100	Boxes, cartons
2	Board	0	100	Labels and Book
3	Wet strength label paper	1	99	Beer labels
4	Newsprint	1	99	Exercise books, other books
5	Carton board	60	40	Cartons
6	Gloss art paper	60	40	Flyers, magazines, calendars
7	Standard label paper	20	80	Beverage labels
8	Kraft paper	50	50	Exercise books
9	LDPE raisins (Polyethelene)	0	100	Bags and pouches
10	BOPP Film	0	100	Wraps and bags
11	Adhesives	40	60	Laminated bags
12	Polyethylene terephthalate (PET Film)	0	100	Grains packaging
13	Inks	100		
14	Solvents and chemicals	100		
15	300 and 400 gsm duplex	0	100	Cartons for Delta, Nestle
16	Inks	0	100	
17	Varnish food grad	0	100	
18	Varnish general	20	80	
19	Glue	100	0	
20	Corrugated boxes	100	0	
21	Polyproplene Granules		100	Grain Bags
22	Sewing Thread		100	Fertiliser Bags
23	Webbing	30	70	Seed Bags
24	Printing Inks	100		Sugar Bags

25	Twill Tape	100		Mealie Meal Bags
26	Masterbatch	100		Chicken Bags
27	B.O.P.	30	70	1 ton Bags-For Mines
28	Calcium	100		Rice Bags
	Average	20	80	

Source: Field survey October – December 2022

The major input sources countries are South Africa (>70%), China (around 20%) and Europe (around 10%). The fact that the country imports some inputs used in the manufacturing of packaging implies that such inputs are not produced locally, thus going forward, the country should encourage and incentivize private sector to invest in manufacturing activities which produce such inputs. Importation of inputs may also be a result of the fact that local inputs are either of low quality or they are highly priced.

In terms of sales, packaging manufacturers and producers indicated that, on average, they sale 89% of their final products on the domestic market. The remaining 11% of final products are exported to other countries. Disintegrating the 89% of sales on the domestic market, private sector (that is business entities) and development partners are the main buyers of locally produced packaging materials, with close to 50% apiece. The public sector (that is the government), is not an important customer of packing materials produced in the country. The major customer within the private sector are mostly beverage entities (around 80%), fast food sector (around 15%) with others taking the remaining share of 5%. For packaging products that were exported, that is the 11% share, the main destination countries were Malawi (60%), Zambia (25%) and Mozambique (15%), among others.

6.2.2 Local content issues affecting packaging sector

Packaging manufacturing firms were asked whether they were familiar with local content strategy (LCS) as a policy in Zimbabwe or not. 80% of respondents said they were not familiar with LCS, and only 10% indicated some level of knowledge, though not very much familiar. In short, the majority of packing firms are not familiar with various policies, laws and regulations associated with LCS. Furthermore, stakeholders were not abreast with any progress with regards to implementation of LCS in Zimbabwe for packaging sector. Inferring from the fact that most inputs or products used in the manufacturing of packing materials by local firms were imported (that is 80%), stakeholders indicated that there was minimal or no progress with regards to implementation of the Local Content Policy (LCP) in Zimbabwe for this sector. Lack of familiarity with local content strategy (LCS) implies that the Government of Zimbabwe, through the Ministry of Industry and Commerce (MIC) among other government arms, should intensify dissemination and conscientization of the LCS to the various economic agents especially the business community across the various sectors.

6.2.2.1 Challenges associated with local content procurement

Despite limited knowledge on local content policy (LCP) packing manufacturers and stakeholders were asked to narrate the various challenges associated with local content

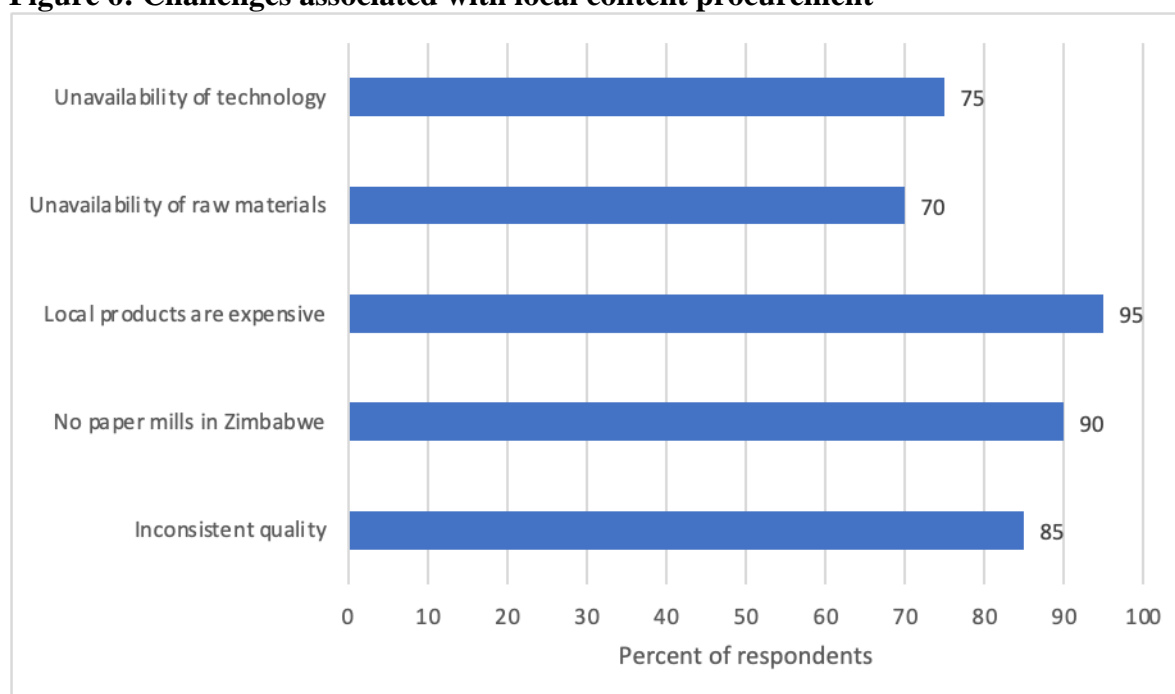
procurement, especially with regards to the use of inputs into the value chains such as labour, supplies of intermediate goods, services, knowledge and technology, etc. Figure 6 shows a number of reasons discouraging local manufactures of packing materials from procuring their inputs locally.

Non availability of key raw materials: Non availability of key raw materials such as LDPE raisins (Polyethelene), BOPP Film, 300 and 400 gsm duplex, Inks and Varnish food grad, among others on the local market was cited by 70% of respondents as the main reason why they end up importing inputs and not using locally produced inputs. The non-availability of key raw materials was further compounded by a combination of non-availability of enough paper mills in Zimbabwe and limited capacity at existing paper mills.

Non availability of (enough) paper mills: Non availability of (enough) paper mills in the country, as was indicated by 90% of respondents is a major challenge given that bulky of packing manufacturing inputs or activities revolves around packing. Production of packaging products is hinged to a larger extent on paper mills, hence unavailability of them or limited supply of paper mills will seriously limit packaging production.

Inconsistent quality: In instances where some inputs were manufactured and potentially found locally, the second challenge which made manufacturers of packaging products shun such inputs was the failure of locally manufactured inputs to meet minimum required quality standards. According to 85% of respondents, failure to meet the international/ required quality standards or inconsistent quality is a serious problem given that the quality of the final packing output may not be guaranteed in such instances.

Figure 6: Challenges associated with local content procurement



Source: Field survey October – December 2022

Exorbitant local prices: Another major challenge associated with locally manufactured inputs is the issue of exorbitant prices as was alluded to by 95% of stakeholders. Most inputs manufactured locally are highly priced when compared to imported equivalent, thus forcing packaging manufacturers to prefer imported inputs. The high cost of locally manufactured inputs is in turn a result of a number of factors including high cost of production caused by high labour costs, unreliable and expensive utilities such as electricity and water etc), among other factors. Thus, compared to imported inputs, locally manufactured equivalents are more expensive and as such, it becomes profitable for local manufacturers to prefer imported inputs.

For some packing companies, the fact that some local producers of intermediate inputs use obsolete technology, which in turn results in lower quality inputs, thus forcing packing manufactures to shun these locally produced inputs, and prefer imports instead.

6.2.3 Actions for increasing use of local inputs in the packaging sector

Given that the country has local content strategy (LCS) on one hand, and very low use of local inputs by manufacturers of packing products on the other hand, stakeholders were asked to provide possible actions that may help improve use of local inputs by manufacturers. Table 10 provides some of the suggested actions and respective institutions to action the suggestions.

Investment in paper mills: Investment in paper mills to produce paper locally was indicated as one of the major actions that the country and sector must do so as to enhance production of quality and reliable paper by local entities. This investment is called for on the backdrop of the fact that either they are not enough paper mills in the country or in instances where they are available, they are very obsolete and as such they are always in constant breakdown which results in lower productivity. The Government's major role is to incentivize the private sector to invest in paper mills in the country. Some of the incentives includes concessional credit loans and duty rebates on imported equipment and machineries

Resuscitation of paper and ink manufacturing activities: Another important action that the sector has to do is for firms in the sector to resuscitate manufacturing of both paper and ink given that such manufacturing activities, though they used to be done locally, have since closed some time ago due to various challengers which were bedevilling the sector. Some of the challenges have already been presented before include unavailability or inadequate paper mills in the country, inconsistent quality of locally produced inputs and high prices of locally manufactured inputs, among others. Private sector firms especially Kadoma paper mills and Mutare Board, are some of the major entities to champion resuscitation of these manufacturing activities.

Table 10: Actions to increase use of local inputs in packaging sector

	Actions	Institution to do
1	Investment in paper mills to produce paper locally	Private companies supported by government due to size of investment required
2	Continue encouraging R&D and innovation hubs	Packaging industry players, Tertiary institutions, banks

3	Resuscitate paper manufacturing	Kadoma paper mills and Mutare Board
4	Resuscitate ink manufacturing	Art Corporation, Government

Source: Field survey October – December 2022

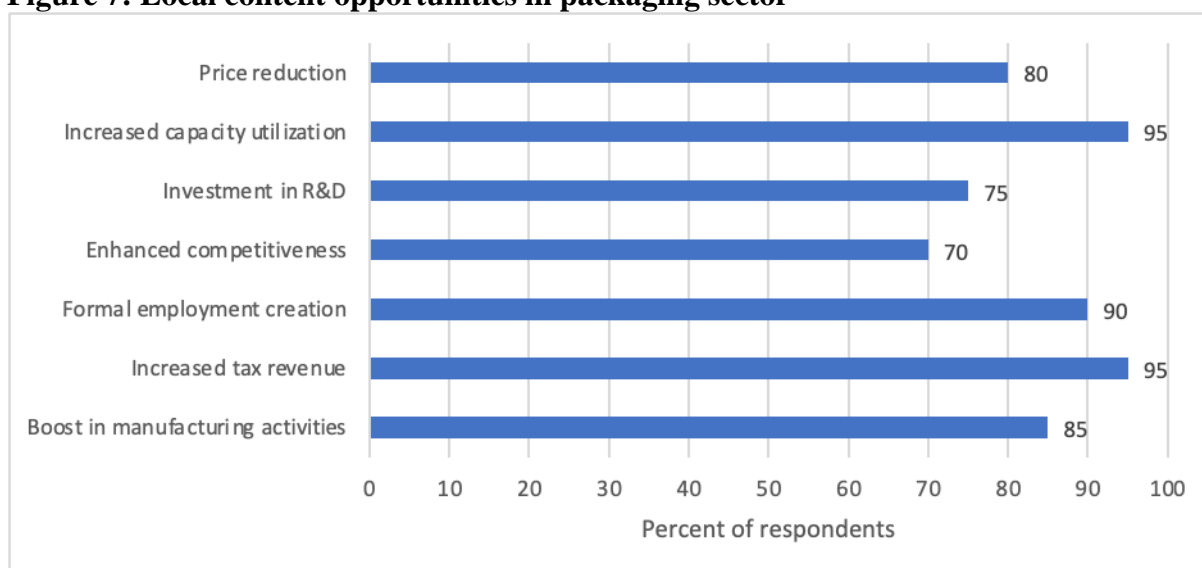
Research and development (R&D): R& D as well as innovation hubs were considered as one of the major areas that require investment, and as such, stakeholders in the sector should continue to support. The call for the sector is to fund R&D and innovation hubs for research which are mainly directed at discovering and coming up with innovative and enhanced ways of producing packaging inputs and materials. Packaging industrial players should lead the R&D process with banks providing the funding.

6.2.4 Opportunities associated with local content procurement in packaging sector

Stakeholders were asked to identify some of the opportunities associated with local content procurement, that is the use of local inputs into the value chains such as labour, supplies of intermediate goods, services, knowledge and technology, etc. Increased capacity utilization was indicated as one of the major opportunities that the packaging sector will reap once local content is implemented. According to 95% of sector stakeholders, the average capacity utilization is poised to rise from the current 59% to even more than 70% in a short period of time if the sector embraces local content procurement in the areas of labour, supplies of intermediate goods, services, knowledge and technology, etc backed by investments in intermediate value chains.

The country is currently grappling with high levels of formal unemployment. Implementation of local content thresholds with its associated investments is expected to generate formal employment in the packaging sector, thus helping the country to deal with issue of unemployment. 90% of study respondents consider formal employment generation as one of the major benefits of local content implementation.

Figure 7: Local content opportunities in packaging sector



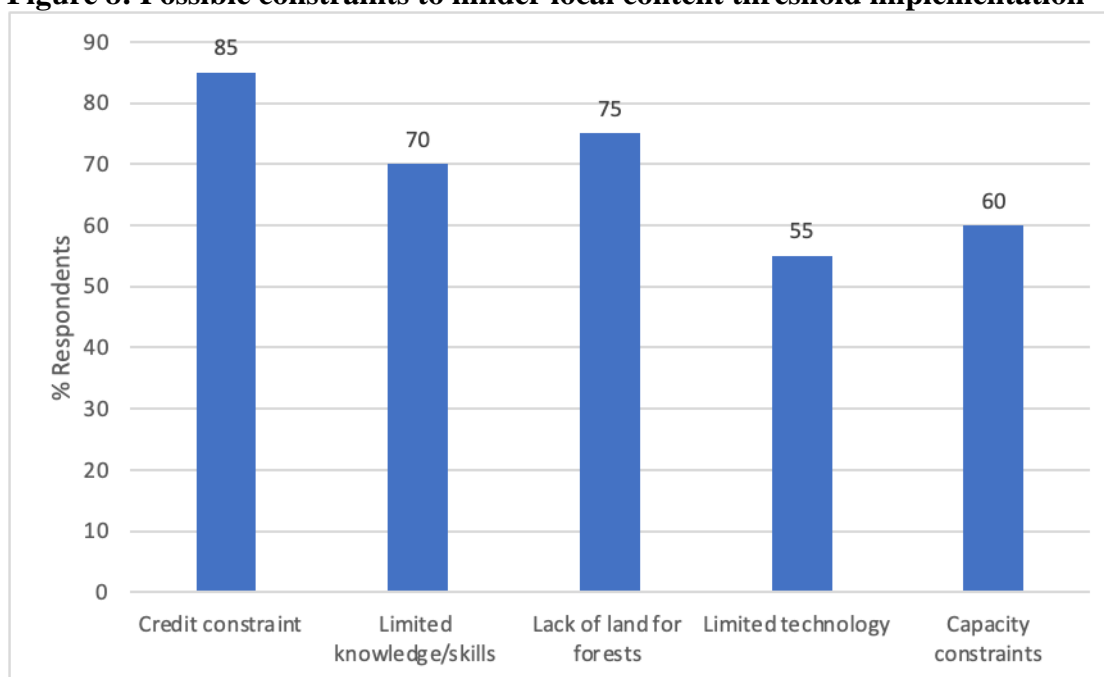
Source: Field survey October – December 2022

Implementation of local content will be associated with increased investments, and economies of scale. Majority of respondents (80%) are of the view that economies of scale will result in price reduction for locally manufactured packaging inputs and paper. Another opportunity to be brought by implementation of local content will be increased government tax revenue. According to 95% of respondents, increased economic activities will have direct, indirect and induced tax revenue benefits from the point of view of ZIMRA. For instance, increased economic activities means that packaging companies will have increased profits, thus contributing to direct tax (that is company tax); more people will be formally employed, thus contributing to tax base through pay-as-you-earn (PAYE). Furthermore, both the companies and the new formally people employed will demand various goods in the market, thus contributing towards tax through value-added tax (VAT), among others.

6.2.5 Possible constraints associated with implementing the local content thresholds

The major constraints associated with implementing the local content thresholds in the near future within the packing manufacturing sector are presented in Figure 8. Working capital and funds for investment remains a major challenge for most firms in the packaging sector. According to 85% of packaging sector stakeholders, there is need for affordable credit lines and financial incentives that encourages investors and players in the sector to boost their economic activities. With interest rates at 150% for local currency; and between 10% and 15% in the case of US dollar dominated loans, stakeholders indicated that such rates are not appropriate for business. There is need for better financial incentive including payment terms, and comparable (with other countries) interest rates.

Figure 8: Possible constraints to hinder local content threshold implementation



Source: Field survey October – December 2022

Lack of knowledge or inadequate knowledge/skills that may be required in the packaging sector maybe a possible challenge to the implementation of local content in the sector. According to 70% of stakeholders, packaging sector is a sector that is always evolving and is technology driven, thus requiring upgrading of human skills frequently. Also lack of knowledge about existence of LCS or LCP is likely to impede endeavours associated with local content implementation. As has already been indicated, all packaging manufacturers indicated ignorance of local content strategy in Zimbabwe. Thus, going forward, stakeholders indicated that such lack of knowledge of existence, benefits and procedures associated with local content procurement will demean all endeavours of implementing such a policy. This calls for sensitization of LCS to all stakeholders and this can be done through presentations at their respective business membership organizations' (BMOs) such as Zimbabwe Association of Packaging's (ZAP) meetings or conferences.

6.2.6 Recommended local content thresholds for packaging sector

Packaging manufacturers and stakeholders were asked to recommend optimal local content thresholds in terms of shares or percentage of inputs into the value chains such as labour, supplies of intermediate goods, services, knowledge and technology used in various stages of the production process that should be sourced from Zimbabwe. Table 12 presents average recommended local content thresholds that stakeholders in the packing sector considered as optimal given the industry's circumstance and the general economy.

Currently, the sector sources 100% of labour locally, and going forward, stakeholders considered this input as one factor whose procurement should remain whole locally perpetually. The justification for these labour procurement thresholds emanates from the fact that the country has good skills base that just need to be upgraded continuously to move with sector trends.

Table 11: Recommended optimal local content thresholds for packaging sector

	Type of input	Baseline	Percentage of input to be sourced locally (%)		
			Short term (Immediately)	Medium term (After 2 years)	Long term (After 5 years)
1	Labour	100	100	100	100
2	Supplies of intermediate goods	15	60	81	95
3	Services	75	90	94	96
4	Knowledge and technology	40	51	65	82

Source: Field survey October – December 2022

In the case of supplies of intermediate goods (i.e., equipment, inputs, ingredients, etc), stakeholders alluded to the fact that the value chain is still weak, and as such there is need for some time to enhance and improve the intermediate value chain. Currently, the sector is procuring 15% of supplies of intermediate goods locally. Going forward and in the immediate short run, the sector is recommended to procure at least 60% of supplies of intermediate goods locally, with the share of local procurement increasing to 81% in the medium term. Given the

fact that it takes some time to have a fully developed value chain, the sector is recommended to procure at least 95% of intermediate supplies in the long run, that is after five years. It is in the very long run that 100% local procurement can be expected, but that very long run will depend with the evolution of the sector over time.

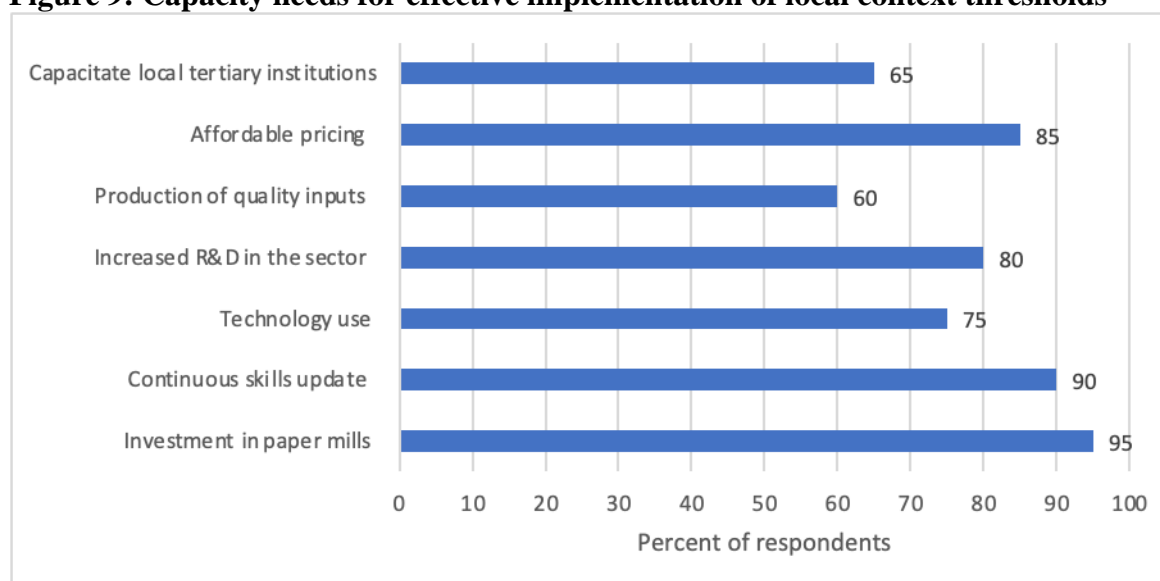
Services are one of the major backbones of the packing sector. Although 75% is currently sourced on the local market, stakeholders recommend that at least 90% of services be procured locally in the short term, with the share of local services used in the sector recommended to at least 94% in the medium term. After five years, the pharmaceutical sector should procure 96% of all required services within the country. The high levels of proposed local content procurement when compared to the other two sector emanates from the fact that majority of the services are not very much complicated, and they are not regulated too much.

In the case of knowledge and technology, sector stakeholders indicated that the country is not yet in the forefront of knowledge frontier, and as such with capacitation of tertiary institutions which leads to new inventions and innovations, the share of knowledge and technology to be procured locally should gradually increase with time. Currently, only 40% of knowledge and technology is procured locally, going into the future, sector stakeholders recommends that 51% of sector knowledge and technology required in the packaging industry be procured locally in the very short term, and the share must increase to 65% in the medium term, that is after two years. The share of knowledge and technology to be sourced locally should be at least 82% in the long run, that is after five years. As to when can the sector be expected to procure 100% of knowledge and technology locally, that will depend on the evolution in the sector.

6.2.7 Capacity needs for effective implementation of local content thresholds

Effective implementation of local content thresholds requires capacitation of various sub-sectors within the packaging sector. Stakeholders were asked during the consultations to indicate capacity needs required for effective implementation of local content thresholds in packaging sector in Zimbabwe. Figure 9 shows some of the major capacity needs that were suggested by stakeholders. Local institutions (i.e., universities, technical colleagues, among others), according to 65% of respondents do play a major role in the local content equation and as such they need to be capacitated. These institutions are the origins of new inventions, knowledge and innovations. Meaningful and ground-breaking inventions and innovations are mostly done by or in conjunction with tertiary institutions. The use of state-of-the-art technology in the sector is hinged upon innovations which come from tertiary institutions. In Zimbabwe, most tertiary institutions lack capacity in terms of R&D, incentives for new inventions, state of art equipment, among others, and this calls for government, private sector and other stakeholders to help in capacitating tertiary institutions.

Figure 9: Capacity needs for effective implementation of local context thresholds



Source: Field survey October – December 2022

The packaging industry itself need to be capacitated in terms of machinery and equipment. Most firms in the sector have old and obsolete equipment which are prone to constant breakdowns. Furthermore, output from such equipment tend to be of relatively lower quality when compared to output from latest equipment and machinery used by the same sector in other countries. Industry standards boards or institutions such as the Standard Association of Zimbabwe (SAZ) has a role to play in ensuring that internationally agreed standards or quality for equipment and machineries used in packaging sector are adhered to. Thus, there is urgent need for capacitation of local packaging industry to ensure smooth implementation of local content threshold strategy, according to 95% of stakeholders.

Packing sector has been evolving over time, thus use of relevant and upto date technology is part and parcel of both growth and survival in the sector. Thus, technology development and use, according to 75% of respondents is an area which need capacity enhancement if local content is to be fruitful in the sector. Technology development and use is normally correlated with research and development (R&D) and innovation. It is through R&D that new inventions, innovations and development are conducted. There is need for increased R&D in the packaging sector according to 80% of respondents for the sector to successfully benefit from any local content implementation. R&D in the sector can be done by private sector in conjunction with tertiary institutions where new knowledge is usually created. Financial institutions come in to provide funding with government providing tax concessions and tax holidays as a way of stimulating R&D in the sector.

6.2.8 Incentives for encouraging local procurement

Effective implementation of local procurement requires incentives which aims at encouraging packaging manufacturers to prefer local inputs compared to imports. Table 13 presents the various incentives that stakeholders suggested so as to encourage the use of locally available

inputs, labour, products and services, among others. According to World Bank ease of doing business, among other economic barometers, Zimbabwe is known as a highly taxed country, and this has been one of the major economic challenge for a number of decades. Stakeholders recommends that Government of Zimbabwe through the Ministry of Finance and Economic Development (MOFED); and the Zimbabwe Revenue Authority (ZIMRA) to consider and institute a number of tax incentives aimed at encouraging packaging manufacturers and stakeholders increasing their economic activities. Some of the tax incentives includes operation of tax-free zones or special economic zones, tax relief and tax rebates. Long tax holidays or preferential tax regime for investors will encourage investors to venture into the production of inputs for the industry e.g. paper mills, forest plantation growers as these are long term and large investments, hence long tax holidays make investment less costly. Each of these tax incentives have their own respective pros and cons, and as such their implementation will have to be contextualised to the packaging sector.

Table 12: Incentives for encouraging local procurement

	Type of incentive	Institution responsible
1	Remove bureaucracy when importing inputs	Government
2	Funding guarantee when taking working capital/investment loans	Government
3	Financial incentives and/or affordable credit lines	Government, RBZ, Local Banks
4	Tax incentives/tax free zones/tax relief/tax rebates/long tax holidays	Government, MOFED, ZIMRA

Source: Field survey October – December 2022

Key: MOFED = Ministry of Finance and Economic Development; RBZ = Reserve Bank of Zimbabwe; ZIMRA= Zimbabwe Revue Authority

The costs of importation that importers of inputs pay are relatively high. Stakeholders lamented the various costly paper work and bureaucracy that they undergo before they get clearance to import some of the inputs. It is the paper work and bureaucracy that are costly and this results in costly imported inputs, which in turn results in relatively high price for locally manufactured packaging outputs when compared to imported equivalents. Government and its various arms should lower the costs associated with paperwork and other bureaucratic procedures.

Working capital and funds for investment remains a major challenge for most firms in the packaging sector. For instance, the issue of paper mills and factories require significant financing. There is need for affordable credit lines and financial incentives that encourages investors and players in the sector to boost their economic activities. With interest rates at 150% for local currency; and between 10% and 15% in the case of US dollar dominated loans, stakeholders indicated that such rates are not profitable. There is need for better financial incentive including payment terms, and comparable (with other countries) interest rates.

6.2.9 Funding requirements for packaging sector

A number of areas were enumerated as requiring funding if local content implementation is to be successful. Table 14 list some of the major areas that need funding. Industry recapitalization is one of the major funding requirements according sector stakeholders. An estimated US\$1 million is required to re-capitalize the sector for it to be competitive in terms of quality products, among others. There is priority for investment into productive capacity for content manufacturers e.g. mills and forestry companies, among others. The private sector, especially the packaging firms themselves, and banks have a role to play in providing finance for this noble cause.

Table 13: Recommended funding for local content implementation

	Recommendation	Estimated Funding requirement (US\$)	Proposed funder (funding source)
1	Investment into productive capacity for content manufacturers e.g. mills, forestry companies	not known	Concessionary loans, government guarantees or government to government investment facilities and partnerships, private sector - banks
2	Investment in partnerships with foreign expert providers of know-how and specialised services	not known	Players in the industry
3	Recapitalisation and working capital	\$1 million	Banks, Financing instruments
4	Resuscitation of key input industries	not known	Government and private equity

Source: Field survey October – December 2022

There is need for the local packaging sector players to invest in partnerships with foreign entities or experts who will provide updated know-how and specialised services. There are players in the same sector but from other countries where, because of technology development, have more knowledge of sector dynamics, thus the need for the local players to join alliances with such players by investing in partnerships.

6.3 State of Pharmaceutical sector

6.3.1 History of pharmaceutical production

There are 10 pharmaceutical manufacturers in Zimbabwe licensed with Medicines Control Authority of Zimbabwe (MCAZ). The industry is only second to South Africa in the Southern African Development Community (SADC) region. Some of the products that are manufactured locally includes medicines and personal care products in various dosage forms i.e., oral solids, oral liquids, topical preparations. These health products cover pain ailments, infectious, cardiovascular, endocrine, renal and respiratory diseases as prescription or over the counter medicines. Animal health care is also covered in infectious, parasitic and

nutrition diseases. Capacity for manufacturing sterile products is currently lying idle this includes: small volume parenteral (svp); large volume parenteral (LVP).

According to the Pharmaceutical Manufacturers' Association (PMA), the country's pharmaceutical industry consists of 10 pharmaceutical companies. The companies which manufacture human medicines are: CAPS Pharmaceuticals, Varichem Pharmaceuticals, Pharmanova, Datlabs, Plus Five Pharmaceuticals, ZimPharm Graniteside, Gulf Drug, Cospharm Pharmaceuticals, and SIPPS whilst Ecomed manufactures veterinary products. The country also boasts of vast pharmacies which are into selling of pharmaceutical products across the country.

Information and data from the study survey reveals that the average annual national demand for pharmaceutical products in Zimbabwe is estimated at around \$272 million. The local manufacturers produce, on annual basis, \$31.5 million worth of products while the remainder are imports. The largest domestic firm manufactures pharmaceutical products worthy \$15 million, while the smallest firm manufactures products worth \$250,000. Exports of pharmaceutical products constituted about \$3 million in 2019.

The major challenge facing the local pharmaceutical industry is low levels of production which account for only 12% of the medicines which are consumed locally, whilst 88% are imported by the private sector and through development partners. The low levels of production have been attributed to the fact that the industry produces some pharmaceuticals products which are not on high demand and also products that face limited procurement by Government institutions amongst other things. The use of obsolete and antiquated equipment, cumbersome registration procedures and limited innovation has also affected the competitiveness of the sector.

The oldest pharmaceutical company still operating in the country opened its doors to operations and/or production in 1957 while the youngest company which participated in the survey opened its doors in 2014. Old companies have endured the test of times, thus mastering the art of the industry, while the relatively new firms consider latest technology as their survival and competitive advantage.

About 80% of local pharmaceutical companies are mainly involved in production of pharmaceutical products, while 20% are involved in importation business. The fact that majority of entities are into production as opposed to importation is a positive development in a country like Zimbabwe which currently aims to enhance its value addition activities across various sectors including the pharmaceutical sector.

The local companies use imported Active Pharmaceutical Ingredients (APIs) to produce generic medicines which fall into two categories namely oral solid and liquid dosages. The country is no longer producing parenterals (drips). However, two local facilities for parenteral production namely, Small Volume Parenterals (SVPs) and Large Volume Parenterals (LVPs), are in the process of refurbishment. One company re-opened the production of penicillin in September 2019. Varichem achieved World Health Organisation (WHO) Prequalification (PQ) for an ARV at one time, but that PQ status has since lapsed.

The major components of consumption of medicines in the Zimbabwean market are imported, through Development Partners and locally-produced medicines. Medicines through Development Partners are imported and procured through funding from international agencies such as the Global Fund, the US Government's President's Emergency Plan for AIDS Relief (PEPFAR) program, the European Union and Department for International Development (DFID). The medicines are principally for the treatment of HIV/AIDS as well as malaria, TB, and Opportunistic Infections (OI). Local manufacturers' export of medicines and reexports are not significant.

Most local pharmaceutical companies are not compliant to standards set by the World Health Organization (Good Manufacturing Practices) (MIC, 2020a). There are only 2 local companies which are nearing compliance whilst the other 6 have facilities which are considered unsuitable for pharmaceutical production. The issue of compliance is a major concern if the sector is going to be competitive. The sector is also experiencing low exports due to the prevalence of non-tariff barriers, such as the requirement to airlift pharmaceutical products and restricted transit of medicines through land borders (MIC, 2020a). The Air-freight transit cost 5 times more than the road. Lack of information on the exports markets has restricted local companies to penetrate other countries.

The local pharmaceutical manufacturing industry supports and creates employment for local business in the pharmaceutical value chain. This includes the following:

- ✓ Employment: for every person employed in the pharmaceutical industry means that 7 to 10 other jobs are created in the supporting businesses. Graduate trainees doing pharmaceutical qualifications have also managed to get opportunity of practising what they have been taught from class.
- ✓ Packaging materials that include: plastic, paper and printing industry.
- ✓ Sugar and other locally available excipients
- ✓ Water treatment and purification chemicals
- ✓ Laboratory chemicals and reagents for quality control testing.
- ✓ Servicing, calibration, repairs and maintenance of plant, equipment and analytical instruments.
- ✓ Engineering, transport, distribution, shipping and clearance, construction and IT industries among others

Major highlights of the Pharmaceutical Manufacturing Strategy (2021-2025)

The pharmaceutical value chain has the following key deliverables, according to Pharmaceutical Manufacturing Strategy (2021-2025):

- US\$45 million of pharmaceutical development revolving fund: Unfortunately, by November 2022 the fund has not been implemented. Crucial re-tooling, cGMP upgrades, retooling, product development has been self-financed and therefore slow.

- Public sector procurement of locally produced medicines by government through Natpharm and other public entities among others, has declined over the past 2 to 3 years.
- 60% of Essential Medicines to be locally manufactured: Movement on this aspect has been slow due to stringent registration of medicines by government through MCAZ.
- Targeted import substitution of US\$150 million: Local production currently accounts for less than US\$30 million of the US\$245 million imported into the country representing less than 15% of market share.
- Targeted 25% exports of the local production: Exports currently account for less than 5% of local production. Attributed to lack of competitiveness brought about by the 40% export retention and limited product portfolio.
- Attainment of International GMP Standards: A number of pharmaceutical firms have slowly carried out facility upgrades to meet basic WHO expectations. The slow pace is attributed to lack of implementation of the US\$45 million fund.
- Registration of locally manufactured medicines: Lengthy registration pipeline of up to 18 months as opposed to the 6 months promised by the regulator has discouraged potential players to come into the sector. Furthermore, stringent registration requirements have been hindering the growth of the sector.

6.3.2 Production and capacity utilization in the pharmaceutical sector

Generally, the pharmaceutical companies in Zimbabwe are classified as Small to Medium Enterprises (SMEs) whereby each company has less than US\$15 million annual sales. The industry has a wide product portfolio which range from 3 to 129 products of different dosage forms. Table 14 presents the summary list of products produced in Zimbabwe as well the various inputs used in producing such products (Table A2 in the Annex provides an extending list of these products). As can be clearly seen, majority of inputs used in manufacturing pharmaceutical products are imported from other countries. In value (US\$) terms, in 2022 only 8% of inputs used in production of pharmaceutical products in Zimbabwe were sourced locally while the remaining 92% were imported from other countries. This shows that the sector's value chain is mainly driven outside the country, hence the various benefits associated with backward, forward and lateral linkages are very minimum to the country.

Table 14: Summary list of pharmaceutical inputs (products)

		List of inputs or products		List of products produced
		% sourced locally	% imported	
1	Active pharmaceutical ingredients	0	100	Various pharmaceuticals
2	Excipients (inert ingredients)	0	100	Various
3	Filters	0	100	Components for manufacture
4	Equipment	0	100	
5	Sugar	100	0	Cough Syrups
6	Honey	100	0	Cough Syrups
7	Ethanol	100	0	Various pharmaceuticals

8	paracetamol		100	Panado,
9	aspirin		100	Cafemol
10	Codeine phosphate		100	Pynstop, Stopayne, Propain
11	chlorpheniramine		100	Allergex
12	Magnesium hydroxide		100	Paracetamol Suspension 120mg/5ml
13	Menthol crystals		100	Menthies Lozenges
14	Paracetamol Powder BP		100	Sweet'N'Low (artificial sweetener)
15	Other – See Annex table			
	Average	8	92	

Source: Field survey October – December 2022

The average manufacturing and/or production capacity utilization for the year 2022 in the pharmaceutical industry was 48%, while the figure range between 70% on the upper bound and 30% on the lower bound. The local pharmaceutical firms provide a sizeable level of formal employment to the citizens. On average, a manufacturing pharmaceutical firm employs 86 permanent staff and 58 contract workers annually. The largest company by employment numbers employees 143 permanent workers, with 155 contract labourers. On the other hand, the smallest firm by headcount employs 19 permanent and five contract workers. Employment levels by gender shows that a firm, on average employs 99 male workers and 46 female workers. The largest company by labour force employs 186 males and 112 female labourers, while the smallest firm employs 14 male and 10 females.

The major input sources are South Africa (>50%), China (around 28%), India (around 26%), with Denmark and Germany being the other source countries. The fact that the country imports majority of inputs used in the manufacturing of pharmaceutical implies that there is a potential market for locally produced inputs, and thus the country (that is both government and private sector stakeholders) need to work hard in order to start producing or manufacturing inputs used in the sector locally.

In terms of sales, pharmaceutical manufacturers and producers indicated that, on average, they sell 96% of their final products on the domestic market. Only four percent of final products are exported. Disintegrating the 96% of sales on the domestic market, government or public institutions account for 3% of total domestic sales, while development partners take 1% share. The major customer within the domestic market are the private health institutions or facilities and they account for 96% of total local sales. The 4% exports are distributed mainly across three countries namely Namibia, Botswana and South Africa, in that order.

6.3.3 Local content issues in pharmaceutical sector

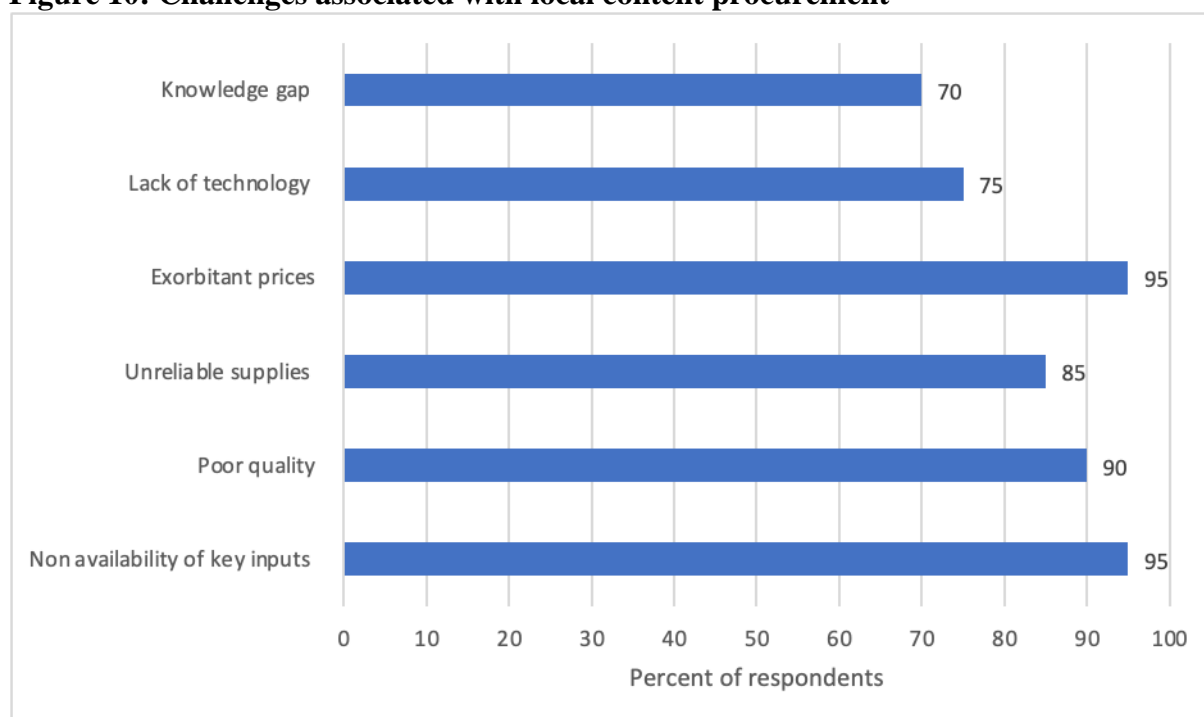
Pharmaceutical manufacturing firms were asked whether they were familiar with LCS in Zimbabwe or not. Unfortunately, 100% of respondents said they were not familiar with LCS, and as a result, they were not familiar with various policies, laws and regulations associated with LCS. Furthermore, stakeholders were not abreast with any progress with regards to the implementation of the LCP in Zimbabwe for pharmaceutical sector. Lack of familiarity with

local content strategy (LCS) implies that the Government of Zimbabwe, through the Ministry of Industry and Commerce among other government arms, should intensify dissemination and conscientization of the LCS to the various economic agents especially the business community across the various sectors.

6.3.3.1 Challenges associated with local content procurement in the pharmaceutical sector

Despite limited knowledge on the national local content policy, pharmaceutical manufacturers and stakeholders were asked to narrate the various challenges associated with local content procurement, especially with regards to the use of inputs into the value chains such as labour, supplies of intermediate goods, services, knowledge and technology, etc. Figure 10 shows a number of reasons discouraging local manufactures of pharmaceutical from procuring their inputs locally. Non availability of key inputs on the local market was cited by 95% of respondents as the main reason why they end up importing inputs and not use locally produced inputs. There were no local suppliers for some of the inputs used in manufacturing pharmaceutical products, and as such, local manufacturers were forced to source such products from other countries.

Figure 10: Challenges associated with local content procurement



Source: Field survey October – December 2022

Non-availability of key inputs: The pharmaceutical sector is characterized by the fact that most raw materials and glass bottles are not produced locally. In instances where some inputs were manufactured and potentially found locally, the second challenge which made manufacturers of pharmaceuticals shun such inputs was the failure of locally manufactured inputs to meet minimum required quality standards. According to 90% of respondents, failure to meet the

required pharmaceutical quality standards is a serious problem given the fact that the sector is heavily regulated to ensure human safety of the medicines that will be sold to the general public.

Exorbitant prices: Another major challenge associated locally manufactured inputs is the issue of exorbitant prices as was alluded to by 95% of stakeholders. Most inputs manufactured locally are highly priced when compared to imported equivalent, thus forcing pharmaceutical manufacturers to prefer imported inputs. The high cost of locally manufactured inputs is in turn a result of a number of factors including high cost of production caused by high labour costs, unreliable and expensive utilities such as electricity and water, among other factors. Thus, compared to imported inputs, locally manufactured equivalents are more expensive and as such, it becomes profitable for local manufacturers to prefer imported inputs.

Unrealizable suppliers: Consistency in supplying inputs by local manufacturers is a major challenge. Around 85% of stakeholders indicated that local input suppliers are unreliable, thus making it difficult for local pharmaceutical producers to depend on such suppliers. The pharmaceutical manufacturers end up sourcing inputs from other countries given the unreliability of local input suppliers.

Mabhiza (2022) further enumerate the following as other challenges that hinder production and growth in the pharmaceutical sector.

Operating costs: Operating costs in the pharmaceutical sector are prohibitively high as manifested by cumbersome regulatory, cost barriers and unfavorable tax regimes. According to Mabhiza (2022), this is one of the reasons why since independence in 1980, only 4 new pharmaceutical manufacturers have commenced business.

Unfavourable sector: The health delivery sector favours importation and distribution at the expense of local production of medicines. That's why they are 10 times more wholesalers than manufacturing companies.

Lack of organised finance: The US\$45 million pharmaceutical development fund in the pharmaceutical manufacturing strategy is still to be availed. The financial sector has very little understanding of pharmaceutical manufacturing, and hence have little appetite to finance it.

Subdued local market: There is no local preference policies for local produced pharmaceutical products by the public sector unlike other countries in other Southern African Development Community (SADC) countries.

Subdued public procurement: Natpharm buys very little from local manufacturers. Natpharm prefers to buy from local manufacturers in local currency, that is, ZWL at the auction rate and yet pays in foreign currency for imported products.

Violation of the import restrictions: There are 23 products under import restrictions through a Statutory Instrument (SI). These products are being imported even when locally available. There is intense lobbying for the scrapping of the import restriction by importers. It is blamed for

medicines shortages and high prices when it only accounts for less than 10% of market value ignoring the acute shortages and high prices of imported medicines.

None tariff barriers for medicines exports to South Africa: These includes border restrictions to air-freight which is very expensive and requirements that every exported batches should be analyzed and passed by the South African medicines regulatory authority.

No enough support: The industry faces challenges of exaggerated expectations, with little or no policy support. The problem is not that the pharmaceutical industry is failing but the government and other stakeholders are not doing enough to support it.

Foreign currency retention: The compulsory liquidation (retention) of 40% export proceeds at official rate. This is a death nail to growth of exports. It is making it unviable to export products.

6.3.4 Actions for increasing use of local inputs in the pharmaceutical sector

Given that the country has local content strategy on one hand, and very low use of local inputs by manufacturers of pharmaceutical products on the other hand, stakeholders were asked to provide possible actions that may help improve use of local inputs by manufacturers. Table 15 provides some of the suggested actions and respective institutions to action the suggestions. Capacity building was enumerated as one of the major actions that the country and sector must carry on to enhance production of quality and reliable pharmaceutical inputs by local entities. The capacity should include among others, setting up manufacturing plants for the requisite pharmaceutical raw materials and or inputs. Both Government and private sector have roles to play in terms of ensuring the building of manufacturing capacity so that local firms can manufacture or produce inputs locally in the country. Another important action that the sector has to do is for firms in the sector to start manufacturing of pharmaceutical equipment and inputs that are required in production of pharmaceutical products, thus reducing the need for importation of such equipment or inputs.

Table 15: Actions to increase use of local inputs

	Actions	Responsibility
1	Enhancing Capacity of Pharmaceutical sector	MIC and private sector
2	Manufacturing of pharmaceutical equipment and inputs	MIC, and private sector
3	Research, Development and Innovation	Tertiary institutions, local companies and MIC
4	Target regional blocks as the market as Zimbabwe as too small to make the project viable	Manufacturing firms
5	Get companies to contribute 75% of products in Essential Drug List in Zimbabwe (EDLIZ) first	PSZ, MCAZ
6	Increase capacity utilisation to reduce costs	Manufacturers
7	Diversify product portfolio	Manufacturers
8	Technology transfer	Manufacturers & Tertiary Institutions

Source: Field survey October – December 2022

The sector by nature, is evolving hence the need for continuous innovation in terms of equipment, processes, inputs and procedures used in manufacturing of pharmaceutical outputs. This calls for continuous research and development (R&D) which leads to new inventions and innovations. Thus, tertiary institutions (e.g. universities), local companies and government must combine human resource and financial efforts in supporting R&D of new inventions which leads to innovations in the pharmaceutical sector. Whilst new innovations may take time to come, there is need for technology transfer in the sector, where local companies should be in the habit of constantly acquiring latest technology from advanced countries. The advantage of using latest technology is in the cost savings that is brought by such technology as well as in high quality end products which came from any manufacturing process that uses latest technology. It is the duty of the manufacturing firms themselves to champion the process of constantly acquiring latest technology.

Mabhiza (2022) provides the following as some of the other possible ways of increasing the use of locally produced inputs and products. Overall, the solutions lie in the creation of an enabling policy environment that supports the local pharmaceutical manufacturing of medicines at the expense of importation:

- ✓ Full implementation of the pharmaceutical manufacturing strategy.
- ✓ Availing of the US\$45 million pharmaceutical development revolving fund in the pharmaceutical development strategy. This should be of long-term nature, at low interest rates and in foreign currency for GMP plant upgrades and product planning.
- ✓ Removal of permits and taxes on imported pharmaceutical raw materials and imported machinery
- ✓ Local preference wherein: local manufacturers are given 25% price preference and 75% of all orders by value are awarded to local manufacturers.
- ✓ Preferential and less stringent registration of locally produced medicines by the MCAZ at the expense of imported medicines.
- ✓ Review and expansion of import restriction list to cover all medicines produced by at least 2 local manufacturers and common preparations such as cough, flue and cold, antacids and skin preparations that are locally produced.
- ✓ Pricing system for these products can be agreed to avoid situations of overpricing (MRP). This is common in countries in North Africa which produce more than 60% of their medicines. In these countries the moment a drug is locally produced importation is banned.

6.3.5 Opportunities associated with local content procurement in pharmaceutical sector

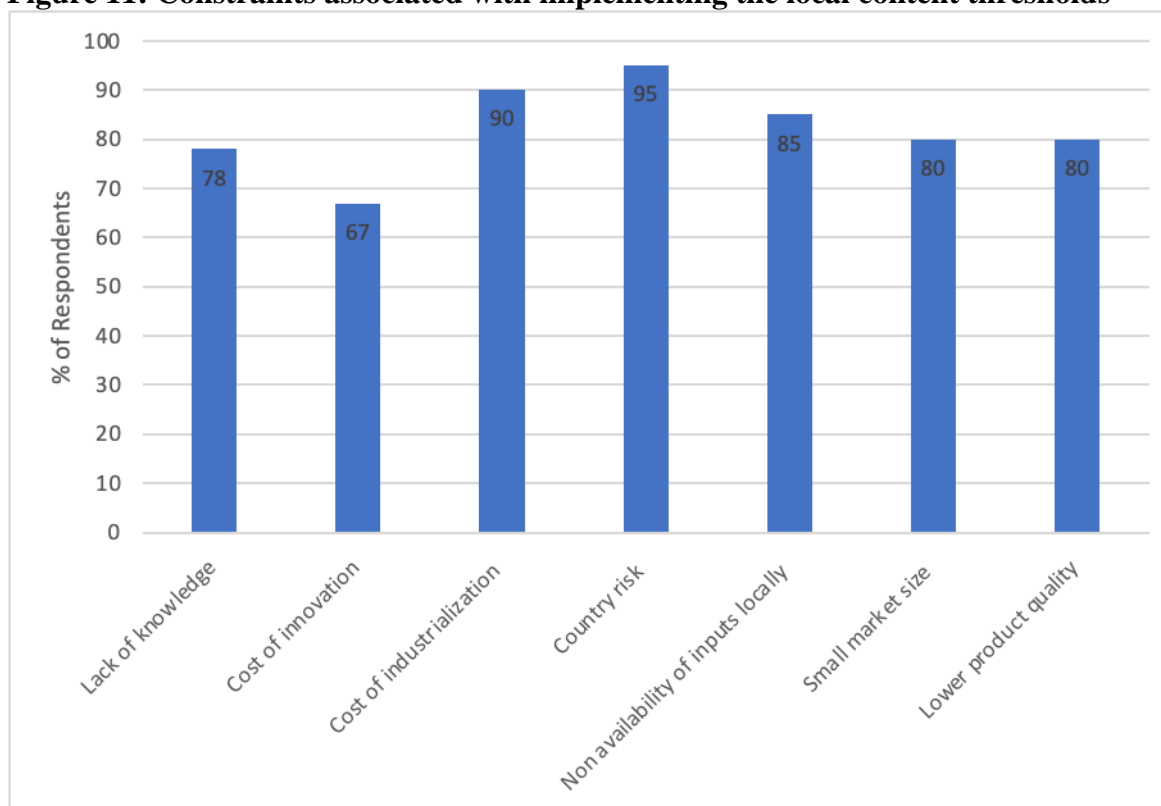
Stakeholders were asked to enumerate the opportunities associated with local content procurement, that is the use of inputs into the value chains such as labour, supplies of intermediate goods, services, knowledge and technology, etc. One of the major opportunities involves the stimulation of local pharmaceutical production and manufacturing activities that comes with increased volumes in terms of demand of pharmaceutical inputs emanating from derived local demand. Increased manufacturing of pharmaceutical inputs locally will in turn results in other benefits to the country which includes increased formal employment, savings in

foreign currency as inputs will now be locally available and increased government tax as the tax base will be enlarged. The second opportunity will be the development of intermediate industries, thus ensuring a proper value chain within the industry in the country. Currently, pharmaceutical input production value chain is none or near to none existent in the country. Thus, emphasis on local procurement on inputs will result in the development of intermediate industries in the sector that will concentrate on production of equipment and inputs used in pharmaceutical outputs.

6.5.6 Possible constraints associated with implementing the local content thresholds

The major constraints associated with implementing local content thresholds in the near future within the pharmaceutical manufacturing sector are presented in Figure 11. Lack of knowledge about existence of local content strategy or local content policy or regulations is likely to impede endeavours associated with local content implementation. As has already been indicated, all pharmaceutical manufacturers indicated ignorance of local content strategy in Zimbabwe. Thus, going forward, majority of stakeholders, (78%) indicated that such lack of knowledge of existence, benefits and procedures associated with local content procurement will demean all endeavours of implementing such a policy.

Figure 11: Constraints associated with implementing the local content thresholds



Source: Field survey October – December 2022

Effective implementation of local content procurement in the pharmaceutical industry requires huge investments given that there is currently no meaningful intermediate industries manufacturing equipment and inputs used in production of final products. Such investments outlays are likely to not materialize in the near future given the high-country risk rating associated with Zimbabwe. According to 95% of respondents, country risk, a broad description which has other components with it like inflation, corruption, costly production processes, shortage of foreign currency, poor utility services (water, electricity) and government bureaucracy, impede investments aimed at boosting local content manufacturing activities.

The fact that critical equipment and inputs required in manufacturing of pharmaceutical products are not made locally, according to 85% of respondents, will hinder the implementation of local content procurement in the pharmaceutical sector, unless serious investments have been done in the near future to start production of equipment and inputs locally. Production of local inputs which meet required standards is paramount to the successful implementation of local content procurement in the sector.

One major factor which encourages any investment aimed at boosting local production of various pharmaceutical equipment and inputs is availability of local effective and sufficient demand to warrant economies of scale. Unfortunately, and according to 80% of stakeholders, the Zimbabwean market is very small to warrant economies of scale production. However, the country belongs to various regional trade blocs including the Common Market for Eastern and Southern Africa (COMESA), the Southern Africa Development Community (SADC), the African Continental Free Trade Area (AfCFTA) and a number of bilateral trade relations including with South Africa, Botswana, Malawi and Zambia. These trade arrangements will offer an enlarged market for Zimbabwean manufactured pharmaceutical equipment and inputs as long as they meet international quality standards required in the sector. Furthermore, these trade blocs will offer Zimbabwean pharmaceutical sector to participate in regional pharmaceutical value chain initiatives for the benefit of the country.

6.5.7 Recommended local content thresholds for pharmaceutical sector

Pharmaceutical manufacturers and stakeholders were asked to recommend optimal local context thresholds in terms of shares or percentage of inputs into the value chains such as labour, supplies of intermediate goods, services, knowledge and technology used in various stages of the production process that should be sourced from Zimbabwe. Table 16 presents average recommended local context thresholds that stakeholders in the pharmaceutical considered as optimal given the industry's circumstance and the general economy.

Stakeholders considered labour input as one factor whose local procurement can be speeded up, with 88% of labour force in the pharmaceutical sector being sourced locally in the very short term, up from the current share of 80%. Stakeholders argued that the country has good human capital base both in general and also with regards to human skills required in the sector. Gradually and after two years, stakeholders recommend that 94% of labour force in the sector should be procured locally and after five years, 100% of pharmaceutical labour force be procured locally. The justification for these labour procurement thresholds emanates from the fact that the

country has good skills base that just need to be upgraded continuously to move with sector trends.

Table 16: Recommended optimal local content thresholds for pharmaceutical sector

	Type of input	Baseline	Percentage of input to be sourced locally (%)		
			Short term (Immediately)	Medium term (After 2 years)	Long term (After 5 years)
1	Labour	80	88	94	100
2	Supplies of intermediate goods	15	44	58	75
3	Services	50	74	81	93
4	Knowledge and technology	30	58	70	85

Source: Field survey October – December 2022

In the case of supplies of intermediate goods (i.e., equipment, inputs, ingredients, etc), stakeholders alluded to the fact that the value chain is still weak, and as such there is need for some time to enhance and improve the intermediate value chain. Currently, the sector procures 15% of supplies locally, but in the immediate short run, the sector is recommended to procure at least 44% of supplies of intermediate goods locally, with the share of local procurement increasing to 58% in the medium term. Given the fact that it takes time to have a full-grown value chain, the sector is recommended to procure at least 75% of intermediate supplies in the long run, that is after five years. It is in the very long run that 100% local procurement can be expected, but that very long run will depend with the evolution of the sector over time.

Services are the backbone of the pharmaceutical sector. Stakeholders recommends that at least 74% of services be procured locally in the short term, up from the current share of 50% that is sourced locally. The share of local services used in the sector is further recommended to at least 81% in the medium term. After five years, the pharmaceutical sector should procure at least 93% of all required services within the country.

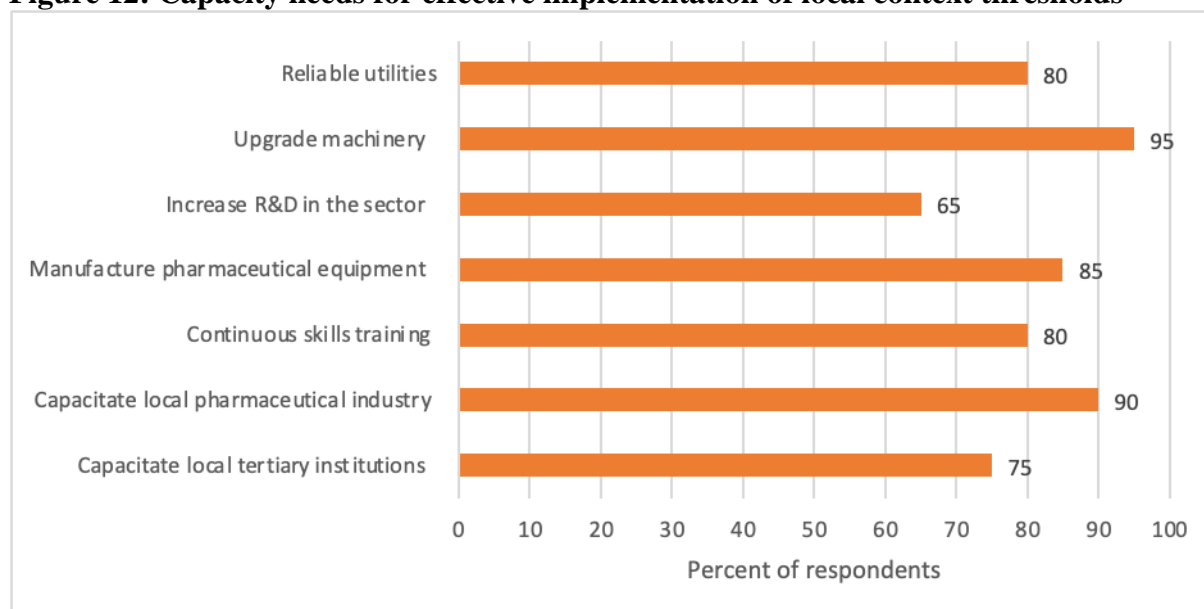
In the case of knowledge and technology, sector stakeholders indicated that the country is not yet in the forefront of knowledge frontier, and as such with capacitation of tertiary institutions which leads to new inventions and innovations, the share of knowledge and technology to be procured locally should gradually increase with time. Currently, 30% of knowledge and technology required in the sector is procured locally, buy going forwards, sector stakeholders recommend that 58% be procured locally in the very short term, and the share must increase to 70% in the medium term, that is after two years. The share of knowledge and technology to be sourced locally should be at least 85% in the long run, that is after five years. As to when can the sector be expected to procure 100% of knowledge and technology locally, that will depend on the evolution in the sector.

6.5.8 Capacity needs for effective implementation of local context thresholds

Effective implementation of local content thresholds requires capacitation of various sub-sectors within the pharmaceutical sector. Stakeholders were asked during the consultations to indicate capacity needs required for effective implementation of local content thresholds in pharmaceutical sector in Zimbabwe. Figure 12 shows some of the major capacity needs suggested by stakeholders. Local institutions (i.e., universities, and technical colleagues, among others), according to 75% of respondents do play a major role in the local content equation and as such they need to be capacitated. These institutions are the origins of new knowledge and innovations. Meaningful and ground-breaking inventions and innovations are mostly done by or in conjunction with tertiary institutions. In Zimbabwe, most tertiary institutions lack capacity in terms of R&D, incentives for new inventions, state of art equipment, among others, and this calls for government, private sector and other stakeholders to help in capacitating tertiary institutions.

The pharmaceutical industry itself need to be capacitated in terms of machinery and equipment. Most firms in the sector have old and obsolete equipment which are prone to constant breakdowns. Furthermore, output from such equipment tend to be of relatively lower quality when compared to output from latest equipment and machinery used by the same sector in other countries. Thus, there is urgent need for capacitation of local pharmaceutical industry to ensure smooth implementation of local content threshold strategy, according to 90% of stakeholders.

Figure 12: Capacity needs for effective implementation of local context thresholds



Source: Field survey October – December 2022

Availability of reliable and affordable utilities including water and electricity, among others is another major factor needed for effective implementation of local content thresholds in the pharmaceutical sector in Zimbabwe. The country has over the years been grappling with challenges of reliable and affordable electricity to power manufacturing and other economic and social activities, with constant electricity blackouts being the norm. This has forced some entities

to procure generators as standby power suppliers. Generators by nature are costly to run and in case of heavy-duty machinery and equipment, they cannot effectively power such.

6.5.9 Incentives for encouraging local procurement in pharmaceutical sector

Effective implementation of local procurement requires incentives which aims at encouraging pharmaceutical manufacturers to prefer local inputs compared to imports. Table 17 presents the various incentives that stakeholders suggested so as to encourage use of locally available inputs, labour, products and services, among others. According to World Bank ease of doing business, among other economic barometers, Zimbabwe is known as a highly taxed country, and this has been one of the major economic challenge for a number of decades. Stakeholders recommends that Government of Zimbabwe through the Ministry of Finance and Economic Development (MOFED); and the Zimbabwe Revenue Authority (ZIMRA) to consider and institute a number of tax incentives aimed at encouraging pharmaceutical manufacturers and stakeholders increasing their economic activities. Some of the tax incentives includes operation of tax-free zones, tax relief and tax rebates. Each of these tax incentives has its own pros and cons, and as such their implementation will have to be contextualised to the pharmaceutical sector.

Table 17: Incentives for encouraging local procurement

	Type of incentive	Institution responsible
1	Tax incentives/tax free zones/tax relief/tax rebates	Government, MOFED, ZIMRA
2	Local preferences during tenders	Government, private sector, development partners
3	Financial incentives and/or affordable credit lines	Government, RBZ, Local Banks
4	Export incentives	MOFED

Source: Field survey October – December 2022

Key: MOFED = Ministry of Finance and Economic Development; RBZ = Reserve Bank of Zimbabwe; ZIMRA= Zimbabwe Revue Authority

Stakeholders also implored pharmaceutical buyers especially the Government of Zimbabwe, private sector and development partners to give priority to local suppliers during tenders or purchases in all cases where local suppliers meet the required quality and medical standards. Investments by local pharmaceutical firms with the intention of reaping economies of scale is a subject of effective, guaranteed and reliable demand, and if the demand is coming from local buyers, the better.

Working capital and funds for investment remains a major challenge for most firms in the pharmaceutical sector. There is need for affordable credit lines and financial incentives that encourages investors and players in the sector to boost their economic activities. With interest rates at 150% for local currency; and between 10% and 15% in the case of US dollar dominated loans, stakeholders indicated that such rates are not profitable. There is need for better financial incentive including payment terms, and comparable (with other countries) interest rates.

6.5.10 Funding requirements for pharmaceutical sector

A number of areas were enumerated as requiring funding if local content implementation is to be successful. Table 18 list some of the major areas that need funding. Industry capitalization is one of the major funding requirements according sector stakeholders. An estimated US\$10 million is required to re-capitalize the sector for it to be competitive in terms of quality products, among others. The private sector, especially the pharmaceutical firms themselves, and banks have a role to play in providing finance for this noble cause.

Table 18: Recommended funding for local content implementation

	Recommendation	Estimated Funding requirement (US\$m)	Proposed funder (funding source)
1	Capitalization/Retrofitting of the local industry	10	Private sector, banks
2	Soft loans	30	Banks
3	Export incentives	na	Government
4	Tax breaks	na	Government
5	Set up facilities that manufacture the ingredients	42	Government through SDR, private sector
6	Factory and machinery upgrades to international standards	na	Domestic and international Finance Houses e.g. AFREXIM Bank, banks
7	Skills retention as most services are being provided by outsiders	na	Government, Private sector
8	Consultancy laboratories	na	na
9	Technology transfer		Tertiary institutions, private sector, Government

Source: Field survey October – December 2022

na = no figures were given

There is need for the country to set up state of the art facilities that manufacture pharmaceutical ingredients in the country. Such facilities will go a long way in encouraging potential manufacturers of pharmaceutical ingredients to venture in manufacturing activities locally as they will have access to state of the art facilities.

Pharmaceutical factories and machineries require upgrades to international standards. This is one area that need immediate attention given that some of the machineries are old and do not only face constant breakdowns, but also the output their produce is of lower quality compared to output from start of the art machineries.

7 Implementation, monitoring and evaluation

7.1 Implementation and coordination

The survey presented in the previous section has proposed thresholds in the three sector in the short, medium and longterm. Implementation of these thresholds will dependd on the local maturity of the value chains and deepen linkages with the local economy leading to the innumerable local and national wide benefits elaborated in the previous sections. The successful implementation and coordination of local content thresholds will be the responsibility of a Local Content Strategy Steering Committee (LCSSC). The LCSSC will be chaired by Ministry of Industry and Commerce (MIC). The following will be the member institutions of LCSSC:

- Ministry of Industry and Commerce (MIC)
- Ministry of Finance and Economic Development (MOFED)
- Reserve Bank of Zimbabwe (RBZ)
- Buy Zimbabwe
- Office of the President and Cabinet (OPC)
- Zimbabwe Fertiliser Manufacturers Association (ZMFA)
- Pharmaceutical Society of Zimbabwe (PSZ)
- Zimbabwe Association of Packaging (ZAP)
- Medicines Control Authority of Zimbabwe (MCAZ)
- Zimbabwe Revenue Authority (ZIMRA)
- Ministry of Higher and Tertiary Education, Innovation, Science and Technology Development (MHESTD)
- Tertiary institutions (Universities, polytechnics etc)
- Bankers Association of Zimbabwe (BAZ)
- Confederation of Zimbabwe Industries (CZI)
- Zimbabwe National Chamber of Commerce (ZNCC)
- Consumer Council of Zimbabwe (CCZ)
- Zimbabwe Congress of Trade Unions (ZCTU)
- Employers Confederation of Zimbabwe (EMCOZ)
- Civil Society Organizations (CSOs)
- Parliament Portfolio Committee on Industry and Commerce
- Ministry of Foreign Affairs and International Trade (MOFAIT)

This LCSSC will be overseeing the implementation of the local content thresholds under the auspices of MIC, which will chair and ensure periodic meetings and regular reports to be made available to the public. Specifically, the objectives of LCSSC are to:

- Be the core body, responsible for overseeing the implementation of the local content thresholds
- Establish standing sub-committees and ad hoc committees (where needed) to monitor and oversee the implementation of specific local content thresholds actions
- Make recommendations and express opinions on policy-making and administrative guidelines

- Coordinate with public sector agencies, the private sector and civil society on local content threshold implementation issues
- Expand activities in accordance with the local content thresholds issues
- Develop a comprehensive monitoring and evaluation system with relevant indicators and to periodically monitor and evaluate progress in the implementation of the local content thresholds according to such system; and
- Compile an annual report to OPC and Parliament (relevant portfolio committee) on progress with regard to the implementation of the local content thresholds.

The first task in this regard will be that the local content threshold report will be publicly launched, at which occasion the members of the LCSSC will also be introduced to the public. Thereafter, the LCSSC should meet at least once every quarter in a year, where the main agenda of the meetings will be to review progress in the previous periods on the implementation of the local content thresholds. The meetings will deliberate monitoring and evaluation (M&E) reports on each of the three (3) sectors for which local content thresholds will be implemented.

7.2 Monitoring and Evaluation (M&E) Groups

Although it is the prerogative of the LCSSC to establish various sub-committees, other stakeholders can still propose additional sub-committees if the need arise. The strategy monitoring groups shall consist of heads of the institutions that implement the pillars they monitor. The strategy monitoring activity shall be conducted by three (3) groups as follows, and MIC should be the chair of each group:

Fertilizer sector monitoring group – Responsible for implementation of local content thresholds for the fertilizer sector. Members of this will be drawn from members of LCSSC, with the vice chair being Zimbabwe Fertiliser Manufacturers Association (ZMFA).

Packaging sector monitoring group – Responsible for implementation of local content thresholds for the packaging sector. Members of this will be drawn from members of LCSSC, with the vice chair being Zimbabwe Association of Packaging (ZAP).

Pharmaceutical sector monitoring group – Responsible for implementation of local content thresholds for the pharmaceutical sector. Members of this will be drawn from members of LCSSC, with the vice chair being Pharmaceutical Society of Zimbabwe (PSZ).

The monitoring groups' meetings shall be held four times a year: each of the 3 monitoring groups shall publicly hear the progress and difficulties in implementing the due actions planned according to the local content thresholds. The monitoring groups' meetings shall be hosted by one of the pillar institutions falling under the responsibility of that group. Meetings shall be chaired ex officio by the host institution management. During the monitoring group's meetings, the head of the institution that hosted the last meeting shall be the Chairperson of that Group, until the next meeting hosted by another institution from the pillars monitored by the group.

The LCSSC or MIC shall coordinate the hosting of each meeting in advance with the institutions from the pillars, distribute the agenda, the monitoring and assessment reports, and other materials

to all members of the group 14 days before the meeting. Institutional vice chair for each group hosting the monitoring group's meeting shall post an announcement about the conduct of the meeting on its website one week before the date that the meeting is to take place on. During the meetings, the local content thresholds implementation monitoring and assessment reports shall be heard, which will be presented briefly by the Secretariat of the group. The representatives of pillar institutions, the activity of which was concerned, may make amendments and/or objections to the report of the Secretariat.

After the presentation of the group's reports of implementing institutions' objections and amendments, the head of the monitoring group shall allocate time for discussion, comments and debates among the group members, allowing other persons invited as observers and other present persons to the meeting to speak up too.

The meetings of the Monitoring Groups are concluded with the adoption of decisions on the part of the Group members, at the initiative of the Chairperson or proposed by any member of the Group, for the improvement of the performance in the Strategy implementation. The decisions of the Monitoring Group are adopted by consensus of majority Monitoring Group members, while the Monitoring Group members who hold a different opinion are given the chance to express it. The Monitoring Group meetings are deliberative under the condition of the participation of a member majority.

The monitoring groups' Secretariat (the Secretariat) shall be led by MIC, which will designate a specialized structure to that effect. The Secretariat's duties are:

- a) to keep record of the Monitoring Groups' members;
- b) to organize the Monitoring Groups' meetings;
- c) to draw up the minutes of the Monitoring Group's meetings and decisions;
- d) to collect, store and synthesize the information provided by the implementing institutions;
- e) to prepare the monitoring groups' quarterly and annual reports on the implementation of the actions planned for each strategy pillar;
- f) to develop draft annual reports on the local content thresholds implementation;
- g) other complementary tasks to those listed.

Institutional group members shall submit to the Secretariat, in writing and via e-mail, the information necessary for monitoring and assessing the progress of implementation of the planned actions for which they are responsible, within the deadlines set in the action plans. During the first year of strategy implementation, the Secretariat shall develop an electronic platform for progress reporting, to which all the responsible institutions will be connected.

The local content thresholds implementation monitoring and assessment reports shall be prepared by the Secretariat at least 2 weeks before the monitoring groups' meetings. The reports shall contain:

- the executive summary of the main findings of the report;
- the description of progress of the institutions responsible for performing the due actions and for achieving the progress indicators – according to the pillars covered by the report;
- the assessment of the quantitative progress, in order to achieve the expected results and the outcome indicators of priorities – according to the pillars covered by the report;

- the description of the risks in the activities of the responsible institutions, that can lead to delays in implementing the actions that have not matured;
- conclusions and recommendations.

7.3 Local content thresholds implementation Assumptions

The following assumptions underpin the successful implementation of local content thresholds across the three sectors.

7.3.1 Economic stability and political will

The activity of local content thresholds implementation is highly influenced by the events occurring in the economic space. Consistent and adequate availability of economic infrastructure including utilities such as electricity, water among others, are important enablers for effective implementation of local context thresholds in Zimbabwe. Stable exchange rates, affordable interest rates, lower inflation rates and lower levels of corruption, are some of the economic factors that enter into production and manufacturing planning activities of any private company. These factors have, over the years, been cited as some of the reasons which makes Zimbabwe a costly operating environment, thus discouraging investment and economic activities across various sectors. There is need for political will from policy makers to ensure that exchange rates, inflation, interest rates and corruption are dealt with and kept at minimum levels so that the country's economic environment can encourage production investment.

7.3.2 Financial assurance

The implementation of local content thresholds across all the three sectors requires financial support especially from banks through concessionally loans. As has been indicated across the sectors, availability of adequate and cheaper credit in the country remains a challenge, and this reduces the appetite for conducting necessary investment required to improve sectoral value chains which are necessary for ensuring production and manufacturing of various inputs and financial products across the three sectors. Hence, it is important to provide sufficient financial means which helps companies to invest. Both private banks and RBZ should strive to have such loans not only available but also affordable.

7.3.3 Assuming responsibilities of the sector institutions.

Together with the adoption of the local content thresholds, MIC and Parliament Portfolio Committee on Finance and Economic Development, among other relevant portfolio committees should assume the role of an active promoter of the local content thresholds implementation as well as the overall aims and objectives of local content strategy in Zimbabwe. It is important that institutions in each of the three sectors, according to their competencies, come up with the necessary pressure on the local content threshold implementing entities, be they manufactures, government arms etc, responsible for carrying out the measures set in the threshold strategy, in order for ensuring that all the planned actions are implemented fully and within the set deadlines.

7.3.4 Public control, independent and impartial monitoring

The effectiveness of local content thresholds implementation will depend on the contribution of the civil society and the media. Thus, besides the submission of official reports by the responsible sectoral institutions to the Secretariat of the monitoring groups, it is important for the civil society and media to directly contribute to the monitoring of the implementation of the action plans for each of the three sectors and present alternative reports to the official ones developed by the sector secretariat. Important premises in this respect are freedom, independence, transparency, integrity and credibility of NGOs and media institutions.

7.4 Action plan for the implementation of local content thresholds

Table 19 outlines the salient aspects of local content thresholds, including its expected outcomes. These outcomes and their associated targets will be developed further through the LCSSC and will form the basis for ongoing monitoring and later evaluation of local content thresholds implementation progress and impact.

Table 19: Action plan for the implementation of local content thresholds

Action Ref	Activity Description	Outcome	Data Sources of verification	Responsible Department	Time frame
Fertilizer sector					
1	Expedite the exploitation of gas resources	Local production of gas in Zimbabwe at competitive prices	Ministry of Mines, Ministry of Energy reports	MIC, ZFMA	By last quarter of 2023, and continuously thereafter
2	R&D on potential sources for raw material	Discovery of local sources of fertilizer raw materials	MIC, ZFMA reports	MIC, Private Companies, Tertiary institutions	3 rd quarter of 2023
3	Production of Mono-ammonium Phosphate (MAP)	MAP locally produced	ZFMA, MIC reports	Zimphos, Other fertilizer companies	Continuously
4	Stricter quality control on local inputs	Locally manufactured inputs that meet international quality standards	SAZ, ZFMA reports	SAZ, ZFMA	Continuously
5	Produce top dressing	Top dressing locally produced	ZFMA, Sable Chemicals reports	Sable Chemicals, Other fertilizer companies	3 rd quarter of 2023, and continuously thereafter
6	Provide tax incentives for new fertiliser raw material production projects e.g use of coal in urea production.	Tax incentives offered	ZFMA reports	MOFED, ZIMRA	
7	Import substitution of inputs	Use of locally manufactured inputs	ZFMA, MIC	MIC, ZFMA	3 rd quarter of 2023, and continuously thereafter
8	Attracting more investment by reduction of taxes in fertilizer industry to increase availability	Increased investment in fertilizer industry	MOFED, ZIMRA reports	MOFED, ZIMRA	Continuously
9	Price regulation on local inputs	Competitive input prices	MIC, ZFMA reports	MIC, ZFMA	2 nd quarter of 2023
10	Financial incentives and/or	Availability of affordable	MIC, ZFMA	RBZ, Local Banks	2 nd quarter of 2023

	affordable credit lines	credit lines	reports		
Packaging sector					
1	Investment in paper mills to produce paper locally	Paper mills produced locally	ZAP, MIC reports	Packaging companies, MIC	3 rd quarter of 2023, and continuously thereafter
2	Continue encouraging R&D and innovation hubs	New and better processes in packaging manufacturing sector	ZAP, MIC reports	Packaging industry, Tertiary institutions, banks	Last quarter of 2023
3	Resuscitate paper manufacturing	Paper manufactured in locally at competitive prices, and meeting international quality standards	ZAP, MIC reports	Kadoma paper mills and Mutare Board	Last quarter of 2023
4	Resuscitate ink manufacturing	Ink manufactured in locally at competitive prices, and meeting international quality standards	ZAP, MIC reports	Art Corporation, MIC	Last quarter of 2023
5	Financial incentives and/or affordable credit lines	Availability of affordable credit lines	MIC, ZFMA reports	RBZ, Local Banks	2 nd quarter of 2023
Pharmaceutical sector					
1	Enhancing Capacity of Pharmaceutical sector	Enhanced pharmaceutical in various aspects	PSZ, MIC reports	MIC, PSZ and private sector	2 nd quarter of 2023 and continuously thereafter
2	Manufacturing of pharmaceutical equipment and inputs	Locally manufactured pharmaceutical equipment and inputs with competitive prices and meeting international quality standards	PSZ, MIC reports	MIC, PSZ and private sector	2 nd quarter of 2023 and continuously thereafter
3	Research, Development and Innovation	New and better processes in pharmaceutical manufacturing sector	MIC, PSZ reports	MIC, Private Companies, Tertiary institutions	Last quarter of 2023
4	Target regional blocks as the bigger product market	More pharmaceutical products being exported to various regional trading blocs	ZimTrade, PSZ reports	MOFAIT, ZimTrade, MIC, Manufacturing firms	Continuously
	Get companies to contribute 75% of products in Essential	75% of products in Essential Drug List in Zimbabwe	PSZ, MCAZ reports	PSZ, MIC, manufacturers	2 nd quarter of 2023 and continuously thereafter

5	Drug List in Zimbabwe (EDLIZ)	(EDLIZ) produced locally			
6	Increase capacity utilisation to reduce costs	Increased production capacity utilization in pharmaceutical	PSZ, MIC, MCAZ reports	PSZ, MIC, manufacturers	2 nd quarter of 2023 and continuously thereafter
7	Diversify product portfolio	Increased number of pharmaceutical products manufactured locally	PSZ, MCAZ reports	PSZ, MIC, manufacturers, tertiary institutions	2 nd quarter of 2023 and continuously thereafter
8	Technology transfer	Increased number of technologies transferred to local producers	PSZ, Tertiary institutions reports	PSZ, MIC, manufacturers, tertiary institutions	2 nd quarter of 2023 and continuously thereafter

Source: Author construction

8 Conclusions and recommendations

The main substantive objectives of the report were to (i) undertake desk review on the local content strategy and its associated policies, laws and regulations; (ii) prepare market studies on the state of the pharmaceutical, fertilizer and packaging sub-sectors and linked supply chains, with reference to government objectives outlined in existing strategic plans, laws and policies, and with a specific focus on local content procurement challenges and opportunities, and (iii) draft local content thresholds. Local content, a term which is overall understood as a set of policy measures implemented by government that typically require a certain percentage of inputs into the value chains such as labour, supplies of intermediate goods, services, knowledge and technology used in various stages of the production process be sourced from the domestic economy. When one considers all the local content definitions available, three key aspects emerge: (i) the procurement of goods and services, (ii) employment that covers issues around skills development, and (iii) corporate social responsibility. The motivation and key elements of local content can be summarised in terms of geographic location, participation, value addition from the development of local industries, and technology transfer from labour market development through knowledge and technical skills transfer.

Zimbabwe started implementing local content strategy in 2019 and the LCS has three main objectives which are:

4. To increase average local content levels in prioritized sectors from current levels of approximately 25% to 80% by 2023;
5. To increase capacity utilization in prioritized sectors from current levels of approximately 45 % to 75% by 2023; and
6. To increase manufactured exports in prioritized sectors by at least 5% annually between 2019 and 2023.

The four guiding principles of the LCS are: (i) local resource utilization and service provision, (ii) beneficiation and value addition of local resources, (iii) import substitution and (iv) sustainable consumption of local products.

In carrying out the assignment, the consultant employed a mixed method approach to collect quantitative and qualitative data for the purpose of coming up with contextualized local content thresholds for the three sectors under study. Specifically, the consultant used an integrated approach that allows for collection and analysis of both qualitative and quantitative data and information. That is, in conducting the research study, primary data and information was collected from diverse stakeholders. Primary data/information was collected through the use of a standardized questionnaire⁶. The questionnaire was administered to individual stakeholders for them to complete, and this was done electronically through email. To ensure collection of more data and information, during the validation workshop, stakeholders will be divided into three groups by each sector (pharmaceutical, fertilizer and packaging), and focus group discussions (FGDs) will be conducted in each of the three groups with the help of the interview guide. The

⁶ The questionnaires was shared with Ministry of Industry and Commerce (MIC) and UNECA for inputs and improvement before they were rolled out to stakeholders.

physical validation workshop will be done in Harare, with some selected stakeholders outside Harare going to be funded to attend the workshop, while majority of stakeholders outside Harare will be consulted virtually (by attending the Harare workshop virtually) and through emails and other virtual platforms.

8.1 Major conclusions

This subsection contains the major findings and conclusions from the study report.

i. Capacity utilization across the three sectors

The average manufacturing and/or production capacity utilization for the year 2022 in the fertilizer sector was 52%, while the figure ranged between 80% on the upper bound and 38% on the lower bound. In the case of packing sector, the average capacity utilization is 59%, with an upper bound of 72% and a lower bound of 40% for the pharmaceutical sector. The average capacity utilization was found to be 48% with an upper bound of 70% and a lower bound of 30%.

ii. Challenges associated with local content procurement

A number of challenges were enumerated as the major hurdles to effective implementation of local content across the three sectors. The challenges include (i) unavailability of raw materials locally, (ii) poor or inconsistent quality of locally produced inputs, (iii) higher local prices for inputs when compared to imports, (iv) unreliable local suppliers, (v) unavailability of technology, (vi) credit constraint, (vii) limited knowledge/skills, limited technology and capacity constraints, (among others

iii. Opportunities associated with local content procurement

Implementation of local content was found to have a number of opportunities across the three sectors as well as the whole economy at large. Some of the opportunities includes (i) formal employment generation, (ii) increased government tax revenue, (iii) foreign currency generation and/or savings, (iv) improved value chain linkages, (v) increased manufacturing/production capacity utilization, (vi) industrial development, (vii) increased research and development (R&D) and (viii) enhanced competitiveness.

8.2 Major recommendations

i. Recommended local content thresholds for each sector

One of the major objectives of this study was to come up with recommended local content thresholds for each of the three sectors. The recommended local content thresholds for each of the three sectors is presented below.

Table 20: Recommended optimal local content thresholds for the three sectors

Table 2.6: Recommended optimal local content thresholds for the three sectors					
Type of input		Baseline	Percentage of input to be sourced locally (%)		
		Current % sourced locally	Short term (Immediately)	Medium term (After 2 years)	Long term (After 5 years)
Fertilizer sector					
1	Labour	85	91	94	98
2	Supplies of intermediate goods	35	39	45	59
3	Services	60	68	79	93
4	Knowledge and technology	40	58	67	77
Packaging sector					
1	Labour	100	100	100	100
2	Supplies of intermediate goods	15	60	81	95
3	Services	75	90	94	96
4	Knowledge and technology	40	51	65	82
Pharmaceutical sector					
1	Labour	80	88	94	100
2	Supplies of intermediate goods	15	44	58	75
3	Services	50	74	81	93
4	Knowledge and technology	30	58	70	85

Source: Field survey October – December 2022

ii. Capacity needs for effective implementation of local context thresholds

Effective implementation of local context thresholds requires capacitation of various sub-sectors within the three main sectors. Stakeholders were asked during the consultations to indicate capacity needs required for effective implementation of local content thresholds across the three sectors. The following are the capacity needs: (i) plant and equipment re-tooling, (ii) research and development (R&D), (iii) technical know-how development, (iv) infrastructure development, (v) capacitation of local tertiary institutions, (vi) production (manufacturing) of quality and affordable inputs, (vii) affordable prices

iii. Incentives for encouraging local procurement in fertilizer sector

Effective implementation of local procurement requires incentives which aims at encouraging local manufacturers from the three sectors to prefer local inputs compared to imports. The following are some of the major incentives that were enumerated: (i) tax relief or tax incentives or tax rebates or long tax holidays or tax free zones, (ii) financial incentives and/or affordable credit lines, (iii) lower importation costs for inputs, (iv) local preferences during tenders and (v) export incentives, among others.

iv. Local content strategy (LCS) sensitization

There is need for LCS sensitization where the various stakeholders including industry and customers are made aware of the importance of buying locally produced (manufactured) products, instead of importing. Sensitization can be implemented through quarterly stakeholder forums where each sector report on the progress it had made in the preceding quarter with regards to procuring local products. Challenges hindering effective implementation of LCS can be discussed in such fora and solutions suggested. Relevant business membership organizations (BMOs) and industry associations should be on the forefront of championing these quarterly stakeholder forums.

References

FAO (2006) Fertilizer use by crop in Zimbabwe. Food and Agriculture Organization of the United Nations. Land and Plant Nutrition Management Service Land and Water Development Division. Rome.

Government of Zimbabwe, (2020). National Development Strategy 1 (NDS1): Towards a Prosperous & Empowered Upper Middle-Income Society by 2030 (January 2021 – December 2025). Harare, Zimbabwe.

International Petroleum Industry Environmental Conservation Association (IPIECA) (2011). Local content strategy: A guidance document for the oil and gas industry. London, United Kingdom.

Mabhiza. D. (2022). Pharmaceutical Manufacturing Value Chain. Presentation made at Pharmaceutical Manufacturers' Association (PMA) workshop on 3rd November 2022 in Bulawayo, Zimbabwe

Minde, Isaac J.; Mazvimavi, Kizito; Murendo, Conrad; and Ndlovu, Patrick V. (2010). Supply and demand trends for fertilizer in Zimbabwe: 1930 to date: Key drivers and lessons learnt. Paper presented at the Joint 3rd African Association of Agricultural Economists (AAAE) and 48th Agricultural Economists Association of South Africa (AEASA) Conference, Cape Town, South Africa.

Ministry of Industry and Commerce (MIC) (2020a). Pharmaceutical Manufacturing Strategy for Zimbabwe 2021-2025. Harare, Zimbabwe

Ministry of Industry and Commerce (MIC), Government of Zimbabwe (2020b). Five Year Fertilizer Import Substitution Roadmap. Presentation by Minister (3 July 2020), Harare, Zimbabwe

Ministry of Industry and Commerce (MIC), Government of Zimbabwe (2019). Zimbabwe Local Content Strategy (LCS): Towards Investment, Innovation & Export - Led Industrialisation. Harare, Zimbabwe (2019 – 2023).

Ramdoo, I. (2016). *Local content policies in mineral-rich countries*. European Centre for Development Policy Management Discussion Paper, No 196.

Silva, S. (2014). *Local content requirements and the green economy*. United Nations Conference on Trade and Development (UNCTAD), Geneva, Switzerland.

Takadiyi, T (2022). Fertilizer value chain Q3 Report. Presentation made at Zimbabwe Fertilizer Manufacturers Association (ZFMA) Workshop

United Nations Economic Commission for Africa (UNECA) Sub-Regional Office for Southern Africa (SRO-SA) (2021). Alignment And Harmonisation Of Regional And National Frameworks On Industrialisation and National Domestication of Regional Strategies and Policies to Support Industrial Development in Southern Africa focusing on Malawi, Zambia, and Zimbabwe. FINAL STUDY REPORT. (Study compiled by Dr Richard Kamidza)

Annex 1: List of stakeholder participants

Table A1: Stakeholders who were consulted

Name	Organisation	Address	Contact	Email
FERTILIZER SECTOR STAKEHOLDERS				
Mr Chigwende	CHEMPLEX	Harare	0777810877 /0779656955	chigwende@chemplex.co.zw
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PACKAGING SECTOR STAKEHOLDERS				
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Annex 2: Extended list of pharmaceutical input products

Table A2: List of pharmaceutical inputs (products)

		List of inputs or products		List of products produced
		% sourced locally	% imported	
1	Active pharmaceutical ingredients	0	100	Various pharmaceuticals
2	Excipients (inert ingredients)	0	100	Various
3	Filters	0	100	Components for manufacture
4	Equipment	0	100	
5	Sugar	100	0	Cough Syrups
6	Honey	100	0	Cough Syrups
7	Ethanol	100	0	Various pharmaceuticals
8	paracetamol		100	Panado,
9	aspirin		100	Cafemol
10	Codeine phosphate		100	Pynstop, Stopayne, Propain
11	chlorpheniramine		100	Allergex
12	Povidone iodine		100	Betacide range
13	chlorpromazine		100	Chlorpromazine tablets
14	Potassium chloride		100	Susta K
15	APIs	0	100	See attached list
16	Excipients	3%	97%	See attached list
17	Aluminium hydroxide gel		100	Glucopect Suspension
18	Icthammol		100	Menthies Cough Syrup
19	Light Kaolin USP		100	Gulf Gripe Mixture
20	Magnesium hydroxide		100	Paracetamol Suspension 120mg/5ml
21	Menthol crystals		100	Menthies Lozenges
22	Paracetamol Powder BP		100	Sweet'N'Low (artificial sweetener)
23	Peppermint oil		100	
24	Povidone Iodine 30/06 USP		100	
25	Simethicone 30% Emulsion Bp/USP		100	
26	Sodium bicarbonate BP/USP		100	
27	Aerosol 200		100	
28	Aniseed oil USP		100	
29	Benzyl Alcohol USP		100	
30	Bottles with closures Amber 100ml		100	
31	Bottles with Closures Amber 200ml		100	
32	Bottles with closures Clear		100	

	100ml			
33	Butterscotch Flavour No1		100	
34	Calcium Carbonate BP		100	
35	Camphor USP		100	
36	Caramel		100	
37	Carboxy Methyl Cellulose		100	
38	Castor Oil		100	
39	Choc Mint Flavor (H&R LR 4890)		100	
40	Cinnamon Oil		100	
41	Citric acid		100	
42	Citric Acid Monohydrate BP		100	
43	Dextrose USP		100	
44	Dill oil		100	
45	Disodium Hydrogen Phosphate Anhydrous BP		100	
46	Eucalyptus		100	
47	Glycerin USP		100	
48	Glycerine		100	
49	Glycerine BP		100	
50	Guar gum		100	
51	Gum acacia USP		100	
52	Icing Sugar	100		
53	Industrial Methylated Spirit (IMS)		100	
54	Lactic Acid USP (Theoretical 90.0% - 1.4)		100	
55	Liquid Paraffin		100	
56	Liquorice liquid extract		100	
57	Magnesium stearate		100	
58	Menthies Original Carton		100	
59	Menthies Peppermint Carton		100	
60	Menthies Reel 89mm		100	
61	Menthol BP/USP		100	
62	Methyl Hydroxybenzoate USP		100	
63	Methyl paraben		100	
64	Methyl Salicylate USP		100	
65	Millamide 150		100	
66	Nipasset Sodium		100	
67	Opalake Blend CLF 3874 lime		100	
68	Pectin USP		100	
69	Peppermint oil USP		100	
70	Pine oil		100	

71	Plain Reels Opaque 89mm	100		
72	Plain spirit	100		
73	Polybags 145*200	100		
74	Polybags 340*440	100		
75	Polybags 900*910	100		
76	Polybags 910*950	100		
77	Potassium Chloride USP		100	
78	Propyl paraben		100	
79	Propylene glycol		100	
80	Sodium benzoate		100	
81	Sodium Chloride USP		100	
82	Sodium citrate		100	
83	Sodium Hydroxide BP/USP		100	
84	Sodium saccharin		100	
85	Sorbitol 70% solution		100	
86	Sucrose	100		
87	Thymol crystals USP		100	
88	Turpentine oil		100	
89	Veegum		100	
90	White Soft Paraffin		100	
91	Xanthan gum		100	
92	HDPE Bottles 100ml	100		
93	HDPE bottles 200ml	100		
94	HDPE Dropper Bottles 30ml		100	
95	HDPE Dropper Bottles 50ml		100	
96	Glass Bottle clear 100ml with lids		100	
97	Cartons	100		
98	Labels	100		
	Average	8	92	

Source: Field survey October – December 2022