

PAPER 4

LESSONS LEARNT THROUGH THE MISA LIC CAPACITATION PROGRAMME

Devan Govender¹, Fazel Sherrif² and Lennin Naidoo³

¹Naidu Consulting

²MISA

³Naidu Consulting

ABSTRACT

Labour Intensive Construction (LIC) is a method of construction which proactively seeks to replace plant-based tasks and activities with people thereby enhancing job creation through public spending. LIC is implemented under the ambits of the Expanded Public Works Programme (EPWP): a programme which is now in its Fourth 5-year phase. Despite being in place for more than 15 years, the roll out of LIC may not have been as effective in creating jobs with little or no projects being undertaken labour intensively. Whilst the number of jobs which are created and reported on the National EPWP reporting system has increased, this increase may be attributed to improved reporting rather than the creation of more jobs. Several papers have been written about the success and failures of the Programme.

The COVID-19 pandemic exacerbated the unemployment crisis with unemployment increasing to more than 30% in 2021. In response, President Cyril Ramaphosa announced a series of governmental initiatives to stimulate economic recovery. Whilst this was affected, the presidency embarked on a capacity building programme to mainstream LIC in order to optimise job creation through projects. COGTA was commissioned to undertake the pilot programme, who in turn utilised MISA to lead the programme. In a first Cohort, 15 municipalities were selected from around the country as pilot municipalities to implement such a programme with strong focus on job creation using MIG funding through Roads and stormwater projects. One specific consultant was appointed as the service provider to support 8 of the 15 municipalities through formal and informal training, data support and LIC mainstreaming support.

Whilst the projects realised some success, several key lessons were learnt in the process which may aid future roll out and importantly begin to understand why LIC was not being effectively implemented in the municipalities. This paper will outline the approach to programme, the scope of works, and the challenges experienced which have been identified as impeding LIC implementation. The paper will not look to unpack LIC but rather focus on unpacking some of the reasons why LIC has not gained the traction that it ought to have.

TABLE 1: List of municipalities supported by the consultant in the first Cohort

Province	Municipalities
Eastern cape	(1) Dr Beyers Naude Local Municipality (2) Umzimvubu Local Municipality
Gauteng	(3) Lesedi Local Municipality (4) Rand West Local Municipality
Kwazulu-Natal	(5) Greater Kokstad Local Municipality (6) Umvoti Local Municipality
Northern Cape	(7) Dawid Kruiper Local Municipality
North West Province	(8) Ramotshere Moiloa Local Municipality

1 INTRODUCTION

In the State of the Nation Address in February 2018, His Excellency President Ramaphosa said "Infrastructure investment is key to our efforts to grow the economy, create jobs, empower small businesses and provide services to our people." (State of the Nation Address, February 2018) In his 2019 State of the Nations address, the President instructed the former Minister of Transport to maximise job creation in the road sector using labour intensive methods among other things. During October 2020, the Minister of Finance tabled the budget adjustment, directing funding from the Presidential Employment Stimulus Package to infrastructure Programmes to stimulate the local economies and to create jobs.

Government continues to direct funding to the infrastructure sector in order to create jobs. Whilst jobs are created through the extensive activities that are performed in infrastructure projects, the act of substituting processes involving large equipment with people and smaller equipment in such projects is called Labour Intensive Construction (LIC). The implementation of LIC results in income transfer to a larger pool of people doing decent work.

The COVID-19 pandemic exacerbated the unemployment crisis with unemployment increasing to more than 30% in 2021. In response, President Cyril Ramaphosa announced a series of governmental initiatives to stimulate economic recovery. Whilst this was affected, the presidency embarked on a capacity building programme to mainstream LIC in order to optimize job creation through projects. COGTA was commissioned to undertake the pilot programme, who in turn mobilized MISA to lead the programme. In a first Cohort, 15 municipalities were selected from around the country as pilot municipalities to implement such a programme with a strong focus on job creation using MIG funding through Roads and stormwater projects. One specific consultant was appointed as the service provider to support 8 of the 15 municipalities through formal and informal training, data support and LIC mainstreaming support.

Whilst this programme achieved some success, valuable lessons were learnt which could impact job creation through public bodies in the foreseeable future. The paper highlights the lessons learnt through the process.

2 THE SCOPE OF WORKS AND PROJECT IMPLEMENTATION

MISA Developed the scope of works through consultation with the National Department of Public Works, the custodians of the Expanded Public Works Programme under which Labour-Intensive Construction Projects are implemented. Whilst the programme was initially envisaged to be implemented over a period of 3 years, the contract was put out for a period of 1 year. The scope of works included the following key elements.

- LIC Training and Capacitation: The element entailed the provisions of classroom training followed by on the job training through the implementation of LIC projects. The training requirement included accredited LIC training as well as capacitation workshops to ensure that stakeholders who would influence LIC understood the key concepts to make and implement decisions regarding LIC.

- Enhancement of the EPWP LIC Reporting System: This process element involved improvement of the reporting processes in the EPWP to simplify the process to reduce data loss and improve the reported numbers on the EPWP system. This included a review of the reporting process as well as improvements to the EPWP Reporting System to allow Biometric Capturing and data capturing using mobile devices.
- LIC Implementation: This component comprised the application of LIC knowledge through the provisions of strategic and operational support to Public Bodies to mainstream LIC. To this end, strategic support included:
 - o The review of municipal EPWP policies to include LIC
 - o The development of Proforma tender documents
 - o The establishment of EPWP institutional structures
 Operational support has included:
 - o The selection of projects which are conducive to LIC
 - o The design of projects to include LIC
 - o The appropriate specification of LIC projects
 - o Monitoring implementation of LIC projects
- Programme Reporting: communicating the progress of the project to key stakeholders throughout the project period. This aided capacitation efforts and promoted information sharing.
- Typical Project Processes: which included inception, planning and close out.

2.1 Breakdown of municipalities

One specific consultant was appointed to provide support to eight municipalities across 5 provinces in the country. A full list of municipalities is listed in Table 1.

2.2 Status Quo Analysis

A status quo analysis was undertaken in the municipality during the first stage of the project (inception). Page 1 of the Guidelines for Labour-Intensive Construction, (International Labour Organisation, 2015) lists 4 key areas which are targeted to mainstream job creation being:

- The identification of suitable projects
- Appropriate designs
- Specification for labour intensive works
- Compilation of contract documentation for labour intensive projects.

The status quo analysis was aimed at evaluating the municipalities performance against these key areas which is reported in the sections below.

2.3 The identification of suitable projects

Whilst all projects could include an element of LIC, some presented more

opportunities than others. As an example, a bulk water project may employ LIC principles however, the nature of the work which requires deep trenches and pipes which may not be lifted by hand, does not allow for significant numbers of people to be employed in the project. Municipalities must therefore select projects which are amenable to LIC in their project lists. Analysis of the respective municipal MIG project lists is shown in Table 2.

Analysis of the projects across all municipalities showed that most municipalities are using at least 20% of their MIG budgets for LIC Conducive/ LIC Amenable projects. In this regard, policies were not updated to show the ringfencing of budgets for LIC, whilst the relevant stakeholders involved in the selection of projects for the business plans, were not aware of the principles of LIC. Specifically, such stakeholders did not understand what a LIC Amenable project was.

2.3.1 Key Lessons Learned from the identification of suitable projects

- All decision-making stakeholders must be capacitated to support LIC. This may be formal (accredited) or informal (workshops). Stakeholders who need to be capacitated include:
 - o Technical staff such as Project management unit staff, engineers, technologists, technicians, heads of department.
 - o Non-technical staff such as supply chain management, finance, and politicians
 - o Decision makers from COGTA and the provincial Public Works personal.
 - o Private sector stakeholders such as a consultant who support the develop of the IDPs.
- EPWP Policies must be revised to allow for the ringfencing of funding for the inclusion of LIC amenable projects.
- The development process for MIG project lists must be revisited. There was inconsistency in the manner in which MIG Project lists were generated, if at all.
- The approval of project lists must be revisited and COGTA must be more rigorous in ensuring that municipalities include LIC projects in their project lists.
- COGTA must enforce consequence management to ensure that LIC projects are at a suitable stage prior to the start of the financial year to effectively be implemented in the set years.

2.4 Appropriate designs

When rolling out Labour-Intensive Design projects, the designer will be required to carefully consider processes, materials and methods which may be incorporated into the project to enhance job creation. This may include adjusting cut to fill to reduce haul distances, choosing the type of material for a retaining wall (Gabion versus reinforced concrete) and directing the method of construction for example directing the use of labour for excavation versus excavating the works by machine. Whilst civil

TABLE 2: Analysis of MIG project lists in the municipalities

Municipality	2021/22 MIG Allocation	Number of projects on the MIG List	Projects from list amenable to LIC	Value of LIC projects from the list	% LIC conducive projects
Dr Beyers Naude LM	R28 564 000.00	4	0	0	0
Umzimvubu LM	R97 114 000.00	9	6	R7 937 011	8%
Lesedi Local Municipality	R27 716 000.00	7	5	R22 766 000	82%
Rand West LM	R96 442 000.00	8	5	R39 500 000	41%
Greater Kokstad LM	R18 073 000.00	5	2	R11 071 765	61%
Umvoti LM	R41 323 000.00	13	1	R6 104 560	15%
Dawid Kruiper LM	R26 323 000.00	11	5	R7 037 607	27%
Ramotshere Moiloa LM	R39 127 000.00	9	6	R23 785 325	61%

TABLE 3: Capacity of the stakeholders to effectively design LIC works

Municipality	Municipal Staff		Municipal Consultants		
	Number of Technical Staff	Staff Who had NQF 5 or 7	Consultant Tender required LIC	Staff had the qualification	Staff adequately rolled out LIC
Dr Beyers Naude LM	4	0	No	No	No
Umzimvubu LM	6	0	No	No	No
Lesedi LM	13	0	No	Yes	No
Rand West LM	10	1	Yes	No	No
Greater Kokstad LM	12	4	Yes	No	No
Umvoti LM	10	2	No	No	No
Dawid Kruiper LM	11	10	No	No	No
Ramotshere Moilola LM	3	1	No	No	No

engineers are capacitated to design works through conventional methods, the use of Labour-Intensive Construction practices are not random but planned, and carefully executed and formal training and capacitation is required in order to plan and execute LIC works.

The ability of stakeholders to design LIC works was evaluated including the municipal and private stakeholder sector staff. The analysis revealed that stakeholders did not have the necessary skill or experience to undertake LIC works. Municipal staff may therefore shy away from the unknown – and did not put out tenders requiring LIC qualified engineering support. Further to this, where LIC practitioners had the ability to incorporate LIC into the projects, they were not compelled to do so, or the work was simply accepted even if it was under-designed in terms of LIC. It must be noted that several municipalities embraced LIC and attempted to implement accordingly. Saying this, the lack of understanding of LIC, lead to lacklustre results with respect to LIC and great projects may be deemed to have underperformed.

2.4.1 Key Lessons Learned from using Appropriate designs

- All engineering staff working on infrastructure projects must have gone through accredited LIC training. (NQF 7 or 5)
- Consultant tenders must include a requirement for designers who will be working on municipal projects to have the LIC NQF 7 qualification.
- Municipalities must acquire the ability to direct and monitor LIC elements in their projects through internal or external capacity.
- Designs process flows must be re-evaluated to ensure that LIC is incorporated into the process.
- A list of mandatory LIC items may will lead to defining the minimum LIC requirements in municipal projects.

2.5 SPECIFICATION OF LABOUR-INTENSIVE WORKS

After making changes to a design, it is important to identify all items in the Bill of Quantities (BOQ) which are intended to be constructed as LIC items.

TABLE 4: Municipal Tender BOQ/Specification Analysis

Municipality	Tender shows LI Items Clearly	Specification describes LI Method
Dr Beyers Naude LM	No	No
Umzimvubu LM	No	No
Lesedi LM	No	No
Rand West LM	Yes	No
Greater Kokstad LM	Yes	No
Umvoti LM	No	No
Dawid Kruiper LM	No	No
Ramotshere Moilola LM	No	No

This is generally annotated with the letters LI or LIC in the BOQ. Further to this, the specifier was required to include specifications which direct the use of labour in any specific bill item, specifying that excavation of trenches less than 1.5m must be undertaken by hand using small tools and plant. A summary of the sample of project specifications from the various municipalities is shown in Table 4.

The analysis showed that all municipalities did not have adequate specifications and the BOQ to ensure that LIC is implemented on the ground. This reflects a lack of understanding of LIC and an inability to adequately specify LIC for any project. Whilst an appropriate project may be selected, and the design adequately undertaken there still remain risk that the municipality will not generate the optimum jobs through the project.

2.5.1 Key Lessons Learned from Specification of Labour Intensive Works

- All engineering staff working infrastructure projects must have gone through accredited LIC training (NQF 7 or 5).
- Consultant tenders must include a requirement for designers who will be working on municipal projects to have the LIC NQF 7 qualification.
- Proforma tender documents and standard LIC clauses are to be considered for LIC projects and LIC activities.

2.6 Compilation of contract documentation for labour intensive projects

Whilst infrastructure projects are guided by contractual law such as the GCC, LIC which is implemented under the ambits of the Expanded Public Works Programme is guided by Ministerial Determination for EPWP(Department of Labour, 2012). To this end, several standard clauses must be incorporated into a tender document which will allow for the effective implementation of LIC. Clauses that need to be added into traditional engineering contracts include clauses for wage rates, the job creation targets, the training requirements and the supervisory competence (NQF 5 in LIC). A proforma tender document is useful in this regard and presents a baseline on which tender documents should be produced.

Due to a lack of capacity, many municipalities do not use a proforma tender document in their municipalities and rely on consultants to produce a tender document for each project. Further to this, where a proforma exists, the custodian of the Proforma has been the technical team rather than supply chain management. This presents a significant risk to municipalities. Finally, contractual clauses are not adequately included into proforma tender documents and as a result may leave room for interpretation by the contractor who may not undertake the works labour intensively.

TABLE 5: Status of Proforma tender documents

Municipality	Proforma Tender Utilised	Proforma Tender (adequately) includes LIC
Dr Beyers Naude LM	No	No
Umzimvubu LM	No	No
Lesedi LM	No	No
Rand West LM	No	No
Greater Kokstad LM	No	No
Umvoti LM	No	No
Dawid Kruiper LM	No	No
Ramotshere Moiloa LM	No	No

2.6.1 Key Lessons Learned from the Compilation of contract documentation for labour intensive projects

- A proforma tender ought to be developed for each municipality. The document ought to be managed by supply chain management. It is recommended that COGTA support this process.
- All projects being put out to tender must be based on the current approved tender proforma held by SCM.
- All engineering staff working on infrastructure projects must have gone through accredited LIC training. (NQF 7 or 5)
- Consultant tenders must include a requirement for designers who will be working on municipal projects to have the LIC NQF 7 qualification.

3 IMPACT OF INTERVENTION

As discussed in section 1, the project was aimed at capacitating stakeholders to enhance job creation through projects being implemented by the respective municipalities. To this end, support was offered to all municipalities with a summary of the achievements listed in Table 6.

3.1 Jobs created (Work opportunities and FTEs)

Implementing LIC starts at the planning stages and continues through the life cycle of any project. Whilst reporting of jobs created was one of the deliverables in these projects, the figures reflect the support offered to capture information onto the national reporting system rather than the creation of any further jobs. A key challenge in implementing EPWP and LIC has been the reporting of jobs whereupon challenges in these processes led to the general under-reporting of the jobs created. This success here may be attributed to support offered in collecting, cleaning, and capturing data. This has no bearing on further job creation.

3.2 Proforma Tender Documents

Support offered through the programme allowed for the creation of the proforma tender documents which included LIC. Whilst these documents may not have been adopted for use in every municipality, the use of the proforma has changed the landscape for LIC in these municipalities. There has been heightened interest in LIC NQF 5 as tenders now require the qualification and the number of jobs created through projects which are aligned to LIC, and are expected to increase as the document gets used more often. This increase will not merely attribute to improved reporting but an increase in the real number of jobs created on the ground. If adopted and appropriately utilised, this change will have a long term impact on the municipality and job creation.

3.3 Policy Documents

All policies were aligned to include clause related to Labour Intensive Construction. By the end of the contract, not all municipalities had adopted their policies or were implementing them. These documents, if appropriately implemented, will create an enabling environment for the implementation of LIC in the future.

3.4 Number of project tenders reviewed

Where relevant, tenders were reviewed for adequate LIC inclusion. This was done to influence current work however, importantly, such reviews were undertaken to aid on-the-job practical training of stakeholders for future works. The review of tenders allowed for the development of a benchmark for each of the municipalities for LIC activities which in turn would enhance job creation through projects.

3.5 Number of people trained on LIC

It was appreciated that LIC training and capacitation could not be limited to technical resources as non-technical stakeholders influenced decision making and could easily derail LIC works. Such stakeholders included politicians, SCM and finance. Accredited training was provided to all technical staff whilst non-accredited training workshops was provided to the non-technical stakeholders. The overarching design of the training programme allowed for all affected stakeholders to better contribute to LIC decision making. This training has achieved varying degrees of success with some municipalities immediately asking for flagship/pilot projects, whilst others immediately temporarily stalled tender processes to include LIC requirements into their tenders. Whilst immediate results will largely not be seen, the impact of this training will be noticed in the years ahead.

4 OTHER LESSONS LEARNED

Whilst the project has successfully supported capacitation in each of these municipalities, there were several other key lessons which may be useful when looking to implement LIC in municipalities.

- The programme must be driven by the Municipal Manager (MM). It was found that accountability for job creation had to be driven by the MM. Where this was not driven by the MM, support was generally resisted with wasted expenditure in some instances.
- EPWP & LIC should be led by the PMU or Infrastructure units. The programmes are incorrectly perceived as a social programme that largely relates to reporting. LIC is an engineered process and must be driven by engineers. Many municipalities appoint an administrator who has little

TABLE 6: Achievements in the first Cohort of MISA projects

Indicator	Municipality								Total
	1	2	3	4	5	6	7	8	
Work Opportunities reported through the support (improvement)	16	173	101	184	571	513	200	71	1829
FTEs Created through the support (improvement)	7	20	37	63	230	280	27	19	683
Proforma Tender Documents revised to include clauses on LIC	1	1	1	1	1	2	1	1	9
EPWP Policy revised to include clauses on LIC	1	1	1	1	1	1	1	1	8
Number of project tenders reviewed to include LIC clauses	1	3	10	6	5	6	3	0	34
Number of people trained on LIC	22	30	94	58	83	96	84	55	522
EPWP reporting system Updates made to enhance reporting	7								7

authority as the EPWP Champion in a municipality. This is unrealistic and will not work.

- Reporting must be operationalised to be undertaken by the contractors and overseen by project managers. There has been an over-emphasis on reporting and the lack of capacity to report.
- Consequence management does not appear to be implemented for non-performing staff or professional service providers. To effectively roll out LIC, consequence management will be crucial in the change management process.

5 CONCLUSION

The project has shown that Labour Intensive Construction has not been adequately planned, designed, specified, and implemented. Whilst the concept of LIC is not new, several key drivers are required to mobilise public bodies to create jobs through their service delivery. The project has proven that support can cause municipalities to develop this ability however this support must continue whether from the Private or Public Sector. Whilst poverty remains rife, EPWP or LIC cannot be rejected for not achieving results until it has been effectively implemented through projects.

6 BIBLIOGRAPHY

Department of Labour, 2011. Code of Good Practise for employment and conditions of work for Expanded Public Works Programme, Pretoria: Government Printing Works.

Department of Labour, 2012. Ministerial Determination 4: Expanded Public Works Programme, Pretoria: Department of Labour.

International Labour Organisation, 2015. Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme. Third ed. Pretoria: Department of Public Works.

BIENNIAL PROJECT EXCELLENCE AWARDS

CALL FOR ENTRIES

To recognise outstanding achievements in **municipal infrastructure**, we are calling for entries that showcase projects that demonstrate the best of civil engineering as a science and how engineering enhances the lives of the local communities, through excellence in:

- Planning and design
- Construction methods
- Innovation and originality
- Meeting social and technical challenges
- Contributing to the well-being of communities

CATEGORIES

1

ENGINEERING EXCELLENCE IN STRUCTURES & CIVILS
E.g. Projects demonstrating engineering science, use of alternate materials, innovative construction processes, etc.

2

COMMUNITY UPLIFTMENT & JOB CREATION
E.g. Projects demonstrating labour-intensive construction, skills development, community awareness/participation, etc.

3

ENVIRONMENT & CLIMATE CHANGE
E.g. Environmental rehabilitation, renewable energy, drought solutions, coastal initiatives for rising sea levels, pollution control, educational/technical initiatives, etc.

CLOSING DATE FOR SUBMISSIONS

03 July 2023

Only projects that have reached practical or substantive completion by 30 June 2023 will be accepted for the Excellence Awards.

Adjudicators reserve the right to reallocate entries in the 3 categories.

ENTRY FORMS AND AWARD CRITERIA

Available for download on the website:
www.imesa.org.za

QUESTIONS

Contact Debbie Anderson on +27 (0)31 266 3263
or email conference@imesa.org.za



THE INSTITUTE OF MUNICIPAL ENGINEERING OF
SOUTHERN AFRICA (IMESA)



Consulting Engineers South Africa