

HORTICULTURAL DEVELOPMENT PLAN FOR THE THULAMELA LOCAL MUNICIPALITY

Appendix A: Methodology

OABS Development (Pty) Ltd



Compiled by:

Dr Daan Louw (Managing Director: OABS Development) as Project Leader, in
conjunction with Mr Clifford Flandorp (Project Coordinator)

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258 Main Street, PO Box 3426, Paarl, 7622
Tel: +27 (0) 87 095 2108 Fax: +27 (0) 86 616 4970
Contact persons:

Dr Daan Louw (Project Leader) Cell: 082 857 3458
Email: Daan@oabs.co.za
Mr Clifford Flandorp (Project Coordinator) Cell: 072 518 1658
Email: Clifford@oabs.co.za

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1. METHODOLOGY

1.1 PROJECT CONCEPTUALISATION

The diagram in Figure 1.1 below illustrates the general approach to be adopted to unlock horticultural opportunities. It should be clear that agricultural production should follow market demand or requirements, and not the other way round. This is the approach that will be followed for the project. Although some small-scale farmers in TLM already produce agricultural products, this produce are not necessarily what the market wants. It is therefore necessary to do a market and value chain analysis to identify the horticultural opportunities for small-scale farmers (commercially orientated).

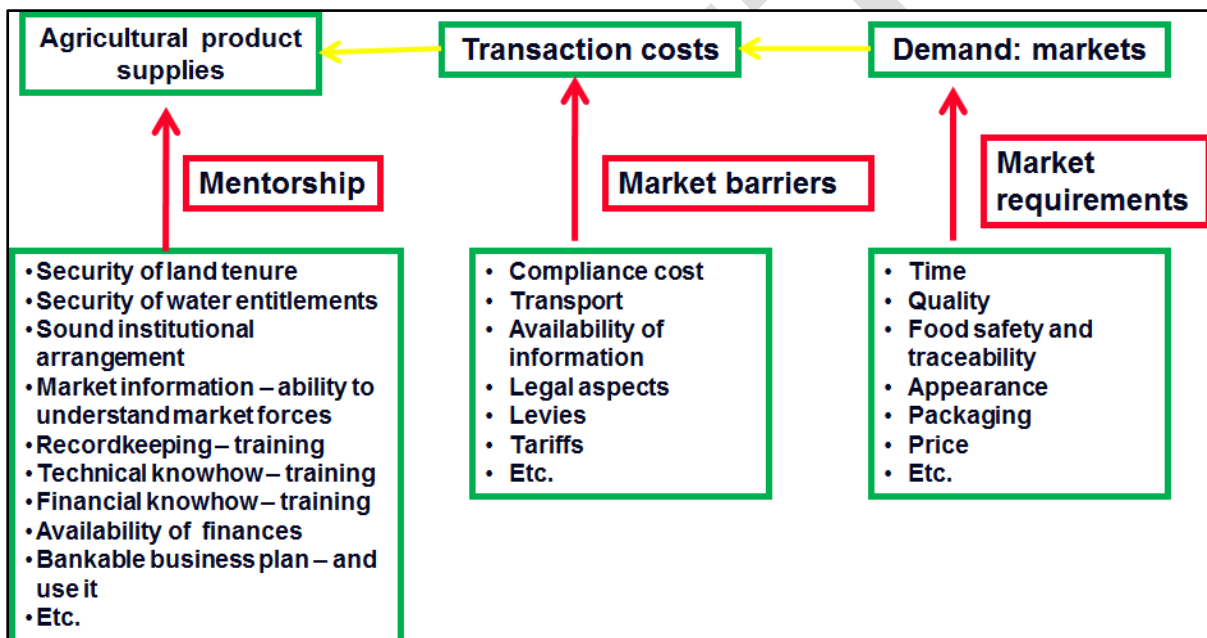


Figure 1.1: Approach to unlock horticultural opportunities in the TLM region

It is important to note that there are three basic components to any agricultural market (in fact for most commodity markets). These include:

- The supply side.
- Transaction costs.
- The demand side.

It would therefore be appropriate with the design of a development plan for Thulamela to consider all these elements so as to ensure efficient market access for small-scale commercial farmers. The previous diagram provides a condensed summary of the concept of market access. The entire supply chain is driven by what the market wants. The link between the demand side (market) and the supply side (farms) are transaction costs. If transactions costs are too high, they erode away the advantages of trade and therefore become a barrier for market mechanisms to work efficiently.

A major barrier to markets (the demand side) is also when there is restrictions on the supply side that lead to failure on the part of producers to be ready to access the opportunities provided by the market. These barriers are listed in the diagram under *Agricultural product supplies*. It should be evident that if these issues are not addressed, it will be impossible to produce products sustainably and, subsequently, to access the market.

It should be clear from the diagram that it is convenient from a practical point of view to address agricultural development plan on three levels, i.e.:

- Market readiness (basically agricultural products supply and transaction costs).
- Activities or actions to reduce transaction costs.
- Market access (demand by markets).

This does not mean that these elements should be placed in “boxes” and be addressed completely independently from each other. It is axiomatic that everything on the production side should be directed at satisfying consumers on the agricultural products demand side.

In this regard it will be necessary to formulate a comprehensive strategy to facilitate stakeholder identification (private sector actors in the value chain as well as public sector entities), extensive engagement and interaction, determination of present and future potential for collaborative frameworks to be established (between primary producers and secondary processors), amongst others. The emphasis in developing the plan should be focused on pragmatism and plausible implementation rather than presenting an academic dissertation. Furthermore, innovative solutions should be explored to improve the efficacy of the plan.

1.2 PROJECT APPROACH, DESIGN AND METHODOLOGY

The following key methodologies were used to enable the research team to produce the deliverables as indicated in the TOR.

- Participative action research
- Comparative versus competitive advantage analysis
- Productivity versus opportunity GAP analysis
- Total Value Chain Analysis
- Value chain development strategy formulation methodology

Each of these are briefly discussed in the sections below.

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1.2.1 Participative action research (PAR)

Participative action research (PAR) is an approach to research in communities that emphasizes participation and action. It seeks to understand the world by trying to change it, collaboratively and following reflection. PAR emphasizes collective inquiry and experimentation grounded in experience and social history. Within a PAR process, "communities of inquiry and action evolve and address questions and issues that are significant for those who participate as co-researchers" (Reason and Bradbury, 2008). PAR

contrasts with many research methods, which emphasize disinterested researchers and reproducibility of findings.

PAR practitioners make a concerted effort to integrate three basic aspects of their work: **participation** (life in society and democracy), **action** (engagement with experience and history), and **research** (soundness in thought and the growth of knowledge) (Chevalier and Buckles, 2013). The way each component is actually understood and the relative emphasis it receives varies nonetheless from one PAR theory and practice to another. This means that PAR is not a monolithic body of ideas and methods but rather a pluralistic orientation to knowledge making and social change.

“Participatory research attempts to break down the distinction between the researchers and the researched, the subjects and objects of knowledge production by the participation of the people-for-themselves in the process of gaining and creating knowledge. In the process, research is seen not only as a process of creating knowledge, but simultaneously, as education and development of consciousness, and of mobilization for action (Gaventa, 1988).

1.2.2 Comparative advantage versus competitive advantage

Within the context of the proposed study it is **of utmost importance to have a clear definition of the concept of comparative and competitive advantage** since these two concepts will form the basis of the proposed general methodology to study identified sector’s value chains. In economics, the law of **comparative advantage** refers to the ability of a party/country to produce a particular good or service at **a lower marginal and opportunity cost over another**. Even if one country is more efficient in the production of all goods (absolute advantage in all goods) than the other, both countries will still gain by trading with each other, as long as they have different relative efficiencies.

Competitive advantage seeks to address some of the criticisms of comparative advantage. Michael Porter proposed the theory in 1985. Competitive advantage theory suggests that states and businesses should pursue policies that **create high-quality goods to sell at high prices in the market**. Porter emphasizes productivity growth as the focus of national strategies. Competitive advantage rests on the notion that **cheap labour is ubiquitous and natural resources are not necessary for a good economy**. The other theory, comparative advantage, can lead countries to specialize in exporting primary goods and raw materials that trap countries in low-wage economies due to terms of trade. Competitive advantage attempts to correct this issue by **stressing maximizing scale economies in goods and services that garner premium prices** (Stutz and Warf, 2011).

Competitive advantage occurs when an organization acquires or develops an attribute or combination of attributes that allows it to outperform its competitors. These attributes can include access to natural resources, such as high grade ores or inexpensive power, or access to highly trained and skilled personnel human resources. New technologies such as robotics and information technology either to be included as a part of the product, or to assist making it. Information technology has become such a prominent part of the modern business world that it can also contribute to competitive advantage by outperforming competitors with regard to internet presence.

Porter’s five forces analysis is a framework to analyse level of competition within an industry and business strategy development. It draws upon industrial organization (IO)

economics to derive five forces that determine the competitive intensity and therefore attractiveness of a market. Attractiveness in this context refers to the overall industry profitability. An "unattractive" industry is one in which the combination of these five forces acts to drive down overall profitability. **A very unattractive industry would be one approaching "pure competition", in which available profits for all firms are driven to normal profit** (Porter & Heppelmann, 2014).

Porter referred to these forces as the micro environment, to contrast it with the more general term macro environment. **They consist of those forces close to a company that affect its ability to serve its customers and make a profit.** A change in any of the forces normally requires a business unit to re-assess the marketplace given the overall change in industry information. The overall industry attractiveness does not imply that every firm in the industry will return the same profitability. Firms are able to apply their core competencies, business model or network to achieve a profit above the industry average. A clear example of this is the airline industry. As an industry, profitability is low and yet individual companies, by applying unique business models, have been able to make a return in excess of the industry average. Porter's five forces include:

- three forces from '**horizontal**' competition: the threat of substitute products or services, the threat of established rivals, and the threat of new entrants;
- and two forces from '**vertical**' competition: the bargaining power of suppliers and the bargaining power of customers.

1.2.3 Productivity GAP versus the Opportunity GAP

In addition we also propose that the concepts of the **productivity gap** versus the **opportunity gap** as described by Obeng (1997) be applied in this study. Typically, strategies can focus on productivity (improving the current situation), opportunity (investing in future developments), or both. The potential choices are well described by Obeng (1997). It is important to strike a balance between only focusing on productivity versus only focusing on opportunity. **Figure 1.2** presents the region of strategic positioning necessary for an industry to increase its competitiveness and profitability in a sustainable manner. Moreover, basically two strategic positions exist, namely **a focus on the productivity gap** or **a focus on the opportunity gap**¹.

The former focuses on **present routines, processes, products, and markets** where decisions involve **improving productivity** of known systems and routines. This strategy is important for success when markets are static, mature, or fully competitive. In other words, firms are able to invest in assets corresponding to long production runs and lowering marginal costs. However, what happens when markets are dynamic, firms enter a period of structural change, or when markets become less competitive. Then product or production-based strategies are lost because the markets are lost. It is therefore no coincidence that globalization and structural change have seriously challenged the traditional business model of being the world's low cost producer of commodities.

¹ Goldsmith, P. and Gow, H. (2001). Strategic agricultural positioning under agricultural structural change: A critique of long jump co-operative ventures. Department of Agricultural and Consumer Economics. University of Illinois.

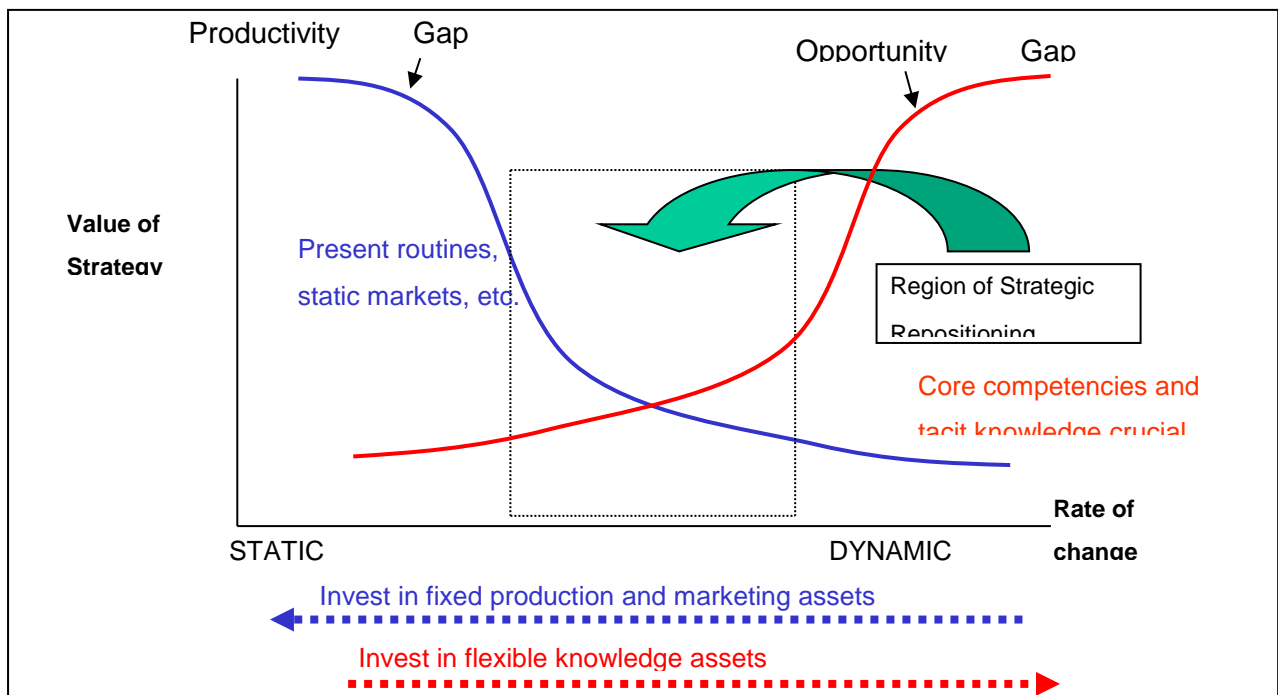


Figure 1.2: Region of strategic repositioning

Technology is packaged in ever more useable formats adaptable by almost any producer in the world and decreasing commodity prices outpace producers' abilities to increase productivity. **Hence, of vital importance is a shift away from only focusing on the productivity gap to focusing on the other half of the value creation equation, defined as the opportunity gap.** When looking at the opportunity gap two important concepts come to the fore, namely core competency and tacit knowledge.

Successful adapters understand their capabilities as bundles of competencies, not products or functions. Competencies are the human capital, the shared knowledge, the corporate history, communication networks and traditions, organisational structure, and collective learning. In other words, it is all that remains if you were to remove the products. The key components of core competencies are **information and knowledge**.

Tacit knowledge is acquired largely through personal experience and is often embedded in the routines of organisations or individuals. Much of the knowledge needed for successful decision-making is made up of unique experiences generated over time and through interactions that cannot be replicated by formal rules.

Hence, to strike an optimal balance between focusing on the productivity gap in relation to the opportunity gap, i.e. to accomplish strategic repositioning, **a self-assessment of inherent core competencies and tacit knowledge is vital. Role players in the value chain need to refocus on investment in knowledge assets that provide them with a competitive advantage in markets where direct competition (rivalry) is the norm.** Producers looking to create more value from their competencies shift their managerial focus from the production side of the business to the marketing side. The marketing knowledge gained then feeds back into changes and adaptations to the production plan and asset mix.

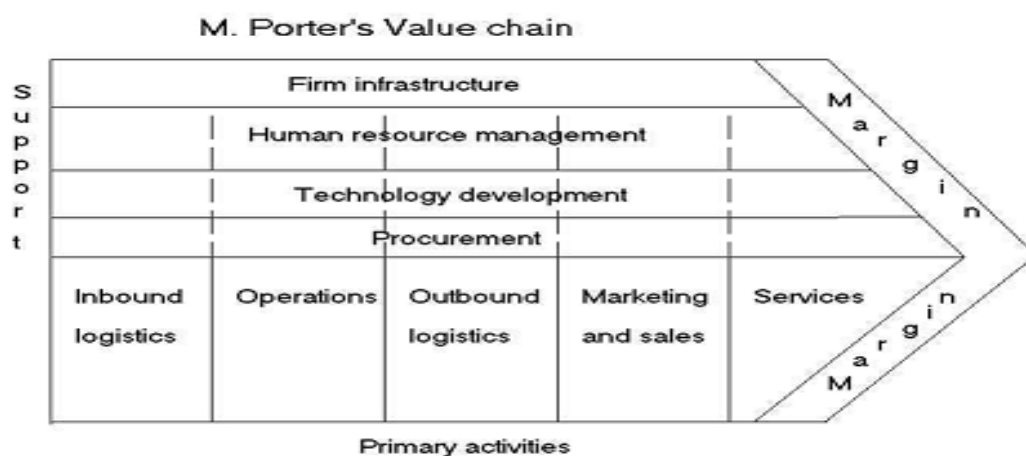
“To make any money now we would have to concentrate on doing even better what we already do well today. This would mean that we would have to concentrate all our best people and key resources on improving the service offering we currently provide. At the same time, in order to make money both now and in the future, we would have to find ways of doing things significantly differently. In order to achieve this, we would have to focus the efforts of all our best people and resources on creating solutions for the future”.

1.2.4 The Value Chain Approach

The value chain approach examines key activities in the value chain to analyze relationships between value chain actors and their performances. The analysis identifies ways to achieve improved competitiveness through a combination of (adapted from Juliard *et al.*, 2006):

- supportive regulatory framework and business environment
- efficiency improvement of products and services
- diversification of products and services through quality standards and other innovations
- exploitation of new market demand.

Value chain analysis - This ultimately forms the basis for the research, whereby the current status (value chain analysis) of the identified sector’s will be investigated. Porter’s **generic** value chain analysis framework will form the basis for the analysis to be conducted in respect of the entire identified value chains, including all aspects pertaining to primary production, processing, skills and trade, new product development and standards.



Source: GRUNDY (2006)

1.2.5 Proposed agricultural development plan formulation

Please note that Figure 1.3 below is just a conceptual overview of the envisaged Agricultural Development Plan for Thulamela. Please note that this figure is just for illustrative purpose for the reader to get some idea of what the envisaged outcome of our approach will be (conceptually).

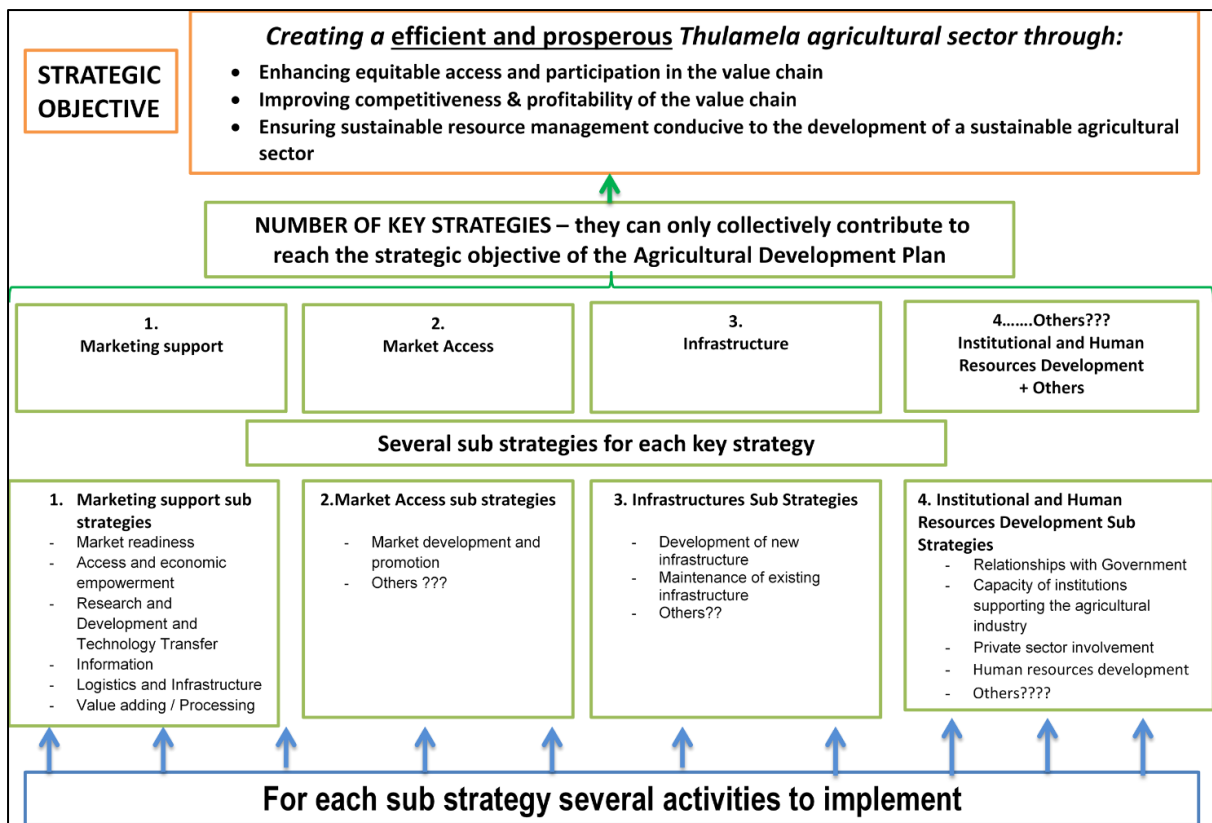


Figure 1.3: Conceptual Thulamela Development Plan

The detail of the strategy will be packaged in a matrix with the following fields:

- Strategic objective
- Sub-Strategy / strategies
- Objectives per sub-strategy
- Actions
- Outcome
- Output indicators
- Responsible stakeholders
- Time frame
- 5-year Target
- Estimated budget

1.2.6 Multi-criteria decision analysis

Multi-criteria decision analysis will be used to develop a short list of horticultural products to be selected with the highest potential for more in depth market and value chain analysis.

Multiple-criteria decision analysis (MCDA) is a sub-discipline of operations research that explicitly considers multiple criteria in decision-making environments. Structuring complex

problems well and considering multiple criteria explicitly lead to more informed and better decisions. A variety of approaches and methods have been developed.

1.2.7 Research design and methodology

The Project has been subdivided into 10 Phases stretching over a period of 26 weeks (6.5 months). The key objective with the development of any agricultural development plan is to ensure that it should be in support of the economic, financial, technical, institutional and environmental feasibility of such a development.

- Phase 1: Organising the effort and resource allocation
- Phase 2: Status Report on Current Agricultural Developments and Services
- Phase 3: Environmental Analysis
- Phase 4: Market Analysis
- Phase 5: Value Chain Analysis
- Phase 6: Overview of the Demography and Socio-economic Status of the Project Area
- Phase 7: Overview of Stakeholders Involved in the Agriculture of TLM
- Phase 8: Development of the Thulamela Agricultural Development Plan
- Phase 9: Integrated reporting
- Phase 10: Dissemination of the report

REFERENCES

See main report for complete list of all references used in this report