SECTOR DEVELOPMENT PLAN

Indigenous essential oils

AUGUST 2021

Kruger Swart Associates (KSA) were commissioned by the project ABioSA
to develop this sector development plan in collaboration with sector partners and participants.

ABioSA has also commissioned a series of knowledge products for key biotrade species.
These and other biotrade resources can be found at www.abs-biotrade.info/projects/abiosa/resources

A glossary of biotrade terms can be found at www.abs-biotrade.info/resources

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INDIGENOUS ESSENTIAL OIL CLUSTER

Sector Development Plan

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For:

Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH
The ABS Capacity Development Initiative (ABS Compliant Biotrade in Southern Africa)

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1. EXECUTIVE SUMMARY

The aim of this Sector Development Plan (SDP) is to guide development in the South African Essential Oil sector. The SDP was developed through the implementation of a consultative process with sector stakeholders in collaboration with the Southern African Essential Oil Producer Association (SAEOPA). The process included desktop research, workshops and direct stakeholder and expert consultation.

The SA market for essential oils is not stable causing stakeholders to switch between oils based on market demand and resulting in the sector not having developed a strong, consistent and well-known offering in any one indigenous species, a factor which is needed for sustained market access. For meaningful sector development, market interest in specific indigenous species needs to be determined and investment needs to be made into the development of high quality and consistent volumes of these species supported by export compliant product documentation and registrations, inclusive of safety and efficacy testing.

To reach this goal, sector stakeholders identified 6 Work Packages included in this SDP. Work Package 1: Institutional Strengthening focussed on accessing the current capacities of SAEOPA and increasing this through a combination of sector organization expansion, sector involvement and export support. Work Package 2: Prioritisation of Indigenous Species, details the need to focus on a limited number of species for development and market access and to make sure that development actions are focussed on these species to get them market ready in terms of volume, quality and market requirements. Work Package 3: Standards and Quality processes and support underlines the importance of Standards and quality for export market access and plots out how Standards can be developed, and the sector informed to optimally use this as a market access tool. Works Package 4: Sustainable Supply Development directly addresses inconsistency in volumes and quality as a barrier to market access and proposes a model that can ensure increased volumes and improved quality while at the same time unlocking the potential of rural development through sector partnerships. Work Package 5: Industry Data focusses on how the lack of accurate and comprehensive data creates barriers for sector development and market access and outlines a process for the development and upkeep of a data management system to enable sector communication and promotion to in turn support growth and market access. Work Package 6: Technical File Development plots actions for the collaborative development of product documentation and technical files crucial for market access. The SDP includes detailed action planning for all Work Packages inclusive of timeframes, implementation responsibility, resources and collaborative relationships to support implementation and outcomes.

A cost estimation for implementation of the plan was developed, but will I need to be reviewed and detail increased for any formal funding application. The total cost estimation for the implementation of the plan is R2 229 500 over a period of three years: Year 1: R81 500, Year 2: R1 485 500 and Year 3: R662 500.

Lastly the SDP includes a monitoring schedule to enable the monitoring of the actions under the work packages and adjustment if needed. Added to this, there is also an Evaluation framework which guides how sectors can innovate and develop to mitigate shocks and build resilience.

2. INTRODUCTION

2.1. AIM OF THE SECTOR DEVELOPMENT PLAN

The aim of the SDP is to provide a detailed plan or roadmap to guide the development of the sector. The plan also includes details on how to engage with associated value chains, products, and markets as part of sector development.

The plan details how the sector will engage with the following aspects to ensure sector development: identifying new indigenous crops for distillation, biodiversity and conservation, access and benefit sharing of indigenous plants, the sector's current global economic position, exploiting existing value chains, identifying new markets, the development of current and future technologies, sector data management and stakeholder engagement.

The SDP aims to be a succinct document and at minimum includes the strategic objectives of the sector, the actions related to the implementation of the objectives along with responsible persons or organisations, set timelines, cost and a monitoring strategy.

Within the context of the ABioSA project the SDP provides the detailed plan to create an enabling environment for SMEs to operate and grow and for the sector to develop in a sustainable way.

2.2. OVERVIEW OF PROCESS FOR DEVELOPMENT OF SDP

This Sector Development Plan was prepared as part of the ABioSA project. The first step in the ABioSA work for the Essential Oils sector was to determine stakeholders to be involved and consulted in the process. An original list with 24 possible companies was received from GIZ and verified with SAEOPA as the sector organisation after which 7 companies were excluded from the list, mostly since they were no longer involved in essential oil production. Through the course of the implementation of the project 6 additional companies were identified in collaboration with SAEOPA. Please see the final stakeholder list attached as Addendum A.

The list was used as a basis for consultation with key informants in the sector, supplemented by desktop research, the development and implementation of a sector wide survey, and field visits to three core sector role players. Consultation focused on species-specific information, key considerations for market access, success factors for sector development and initial thoughts on the structure and functioning of a sector organisation. The findings of the research and consultation were collated and shared in a stakeholder engagement workshop with sector stakeholders on 11 February 2021 to verify information and identify any gaps. Following the stakeholder engagement workshop additional consultations were held with key informants and findings from the status quo analysis reworked.

The status quo analysis and stakeholder consultation identified the following areas as priorities for inclusion in a sector strategy:

1) further clarifying and supporting the organisational structure of the sector and identifying key roles and responsibilities within it

2) identifying and formalising production processes of various essential oil plants to share with producers to ensure sustained supply
3) identifying required standards, registration, and quality for exports and making it available to the sector in accessible formats
4) supporting producers to gain market access (including documentation needed)
5) facilitating access and benefit sharing permit applications

The priority areas were used as the basis for the development of the work packages included in this SDP with the addition of the management of industry data as another priority identified by the sector. These work packages were then reviewed by sector development experts and inputs integrated prior to being shared with sector stakeholders at a consultative workshop on 4 May 2021. The inputs gained from this workshop were integrated in the work packages and a final workshop was held on 22 June 2021 for verification and approval of the final work packages and the SDP.

2.3. STRUCTURE OF THE SDP

The SDP is structured in four sections. Firstly, the situational analysis will provide insight into the current composition of the sector, current status, challenges, and opportunities and how the sector is organised in order to take the sector development plan forward. Secondly, the strategic direction will provide the vision and mission, as well as strategic objectives of the sector, before unpacking the specific work packages in more detail. Thirdly, the financing and funding strategy for the SDP is considered, and finally the monitoring and evaluation of the SDP within the sector will be explained.

3. SITUATIONAL ANALYSIS

3.1. COMPOSITION OF THE SECTOR

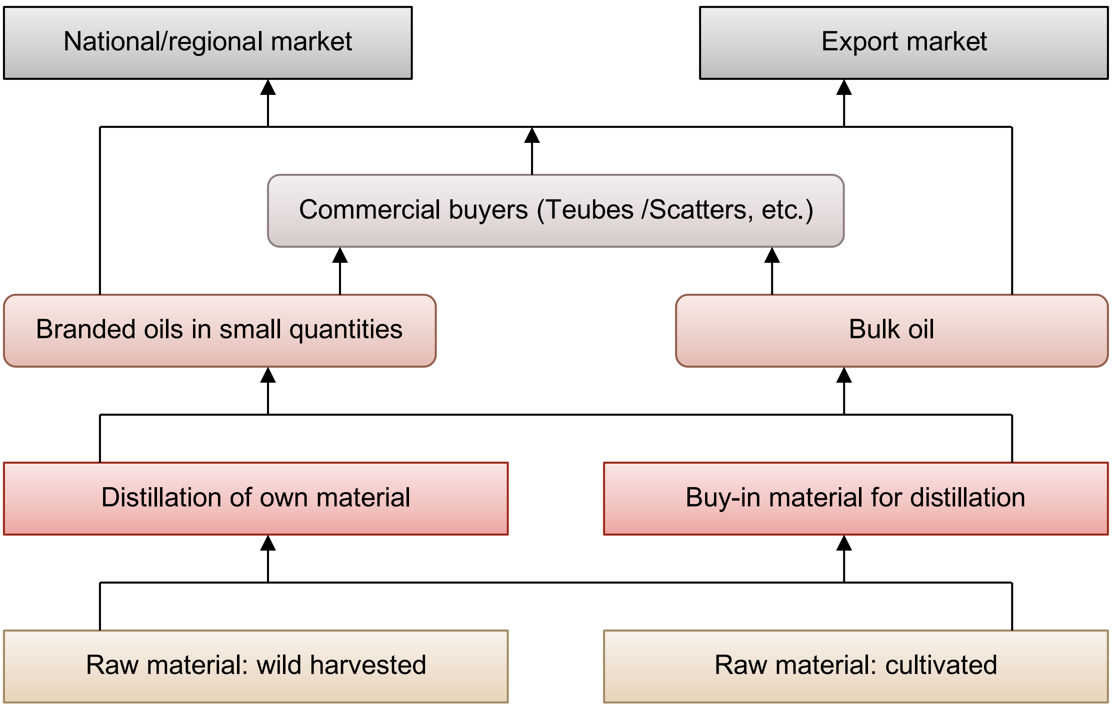
The SA essential oil sector is complex in comparison to other homogenous indigenous biological resources sectors such as the rooibos industry, since stakeholders work with a number of resources and need to couple these resources with the cultivation of and trade in classic oils to enable financial viability of their enterprises. Please see below the indigenous and classic species that stakeholders reported working with.

Indigenous	*Classic*
• *Eriocephalus punctulatus* and *E. africanus* (wild rosemary) • *Lippia javanica* (lemon bush) • *Helichrysum odoratissimum, H. splendidum* and *H. crispum (everlastings)* • *Felisia filifolia* (wild aster) • *Coleonema album* (cape may) • *Salvia stenophylla (blue mountain sage)* • *Pelargonium graveolens, P. citronellum, and P. tomentosum (geraniums)* • *Artemisia afra (*African wormwood) • *Ocimum americanum* (wild basil)	• *Rosmarinus officinalis* (rosemary) • *Simmondsia chinensis* (jojoba) • *Matricaria chamomilla* (German chamomile) • *Rosa canina* (rosehip oil) • *Lavandula angustifolia* (lavender) • *Cymbopogon citratus* (lemongrass) • *Melaleuca alternifolia* (tea tree)

The market for essential oils from SA is not stable, causing producers and processors to switch between oils based on market demand and price offered. This has led to the development of a sector that, apart from possibly *Pelargonium*, has not developed a strong, consistent and well-known offering in any one indigenous species, a factor which is needed for sustained market access.

Another aspect to note is that while there is data available, mostly through SAEOPA, these data sets are outdated due to time lapsed and the fast-changing nature of the industry. A formal system should be designed and implemented to establish baselines, expand on the data and keep it updated and thus relevant. Stakeholders reported that data circulating in the sector was unverified and as a result contributed to general disagreement and confusion. This situation compromises the sector's ability to effectively engage with issues such as cultivars, volumes, required tests and registrations, quality, and global price, which in turn hinder establishing South Africa as a global player in natural oils. This is a key area to address to enable the sector to successfully communicate and strategically place itself globally.

In general, the structure of the industry can be depicted as below, but data on volumes, employment and other key indicators for targeted and well-conceived sector development is lacking.



3.2. STATUS OF THE SECTOR

Please refer to Addendum B for the *Essential Oil Sector Context Analysis* as completed at the onset of the process leading up to the development of the SDP and see the most important issues from the Context Analysis summarized below.

Even though there has been some global market penetration by individual companies with branded products, the SA indigenous essential oil sector is relatively unknown in export markets resulting in a very low market pull and slow development of the sector as a whole. For meaningful sector development, market interest in specific indigenous species needs to be determined and investment needs to be made into the development of high quality and consistent volumes of these species supported by export compliant product documentation and registrations, inclusive of safety and efficacy testing.

From a production perspective, there is consensus that for most available indigenous resources, cultivation will be needed to ensure consistent supply of oil at a volume interesting to markets. A key consideration is the development of propagation, production, and processing protocols to ensure stable and standardised oil for supply to market. To ensure the development of the sector in an inclusive manner with small grower inclusion, rural development and job creation as priorities, models based on partnership between successful commercial businesses partners and high potential rural individuals, or communities need to be developed and implemented.

Employment creation in the sector will not be very high but has the potential to grow in a steady and sustainable manner with the sector. The greater opportunity in this sector is in the creation of a supportive and collaborative environment for the development of SMMEs.

Bioprospecting, Access and Benefit-sharing regulations, 2008, informed by the global Nagoya protocol and the National Environmental Management Biodiversity Act No. 10 of 2004, are seen as a definite barrier to export market access and development, due to uncertainty of intended beneficiaries and the slow processing of applications by the South African government. Since this is a collective issue across the biotrade sector, collaboration with other sectors and government is needed to ensure that permitting processes are streamlined and made accessible to all levels of sector stakeholders.

Lastly, sector stakeholders recognise the potential of the sector, but feel that this needs to be supported by a strong and capacitated sector body. Over the past years the capacity of SAEOPA as the sector organisation has been increased through the support of UNIDO, but if the scope of development as set out in this SDP is to be achieved, the organisation will need further institutional strengthening coupled with a collaborative sector approach.

Based on the above, sector priorities were identified for inclusion in the SDP in two categories: 1) focussed sector specific work packages and 2) priority development areas to be addressed in a collaborative manner in the biotrade sector over the medium to long term.

Sector specific Work Packages (WP)	*Priority development areas*
WP1: Institutional Strengthening	Market Access
WP2: Prioritisation of Indigenous Species	Outgrower Programme
WP3: Standards and Quality processes and support	Bioprospecting & Access and Benefit Sharing Permits
WP4: Sustainable Supply Development	Research
WP5: Industry Data	
WP6: Technical File Development	

Please see below an overview of priorities identified, inclusive of the challenges inherent in these areas.

3.2.1. SECTOR SPECIFIC WORK PACKAGES

This section gives the background and context to the Work Packages included in this SDP under *Section 4.4. Implementation Actions*

Work Package 1: Institutional Strengthening

This will be discussed in more detail in 3.3 Responsibility for Implementation below.

Work Package 2: Prioritisation of Indigenous Species

A strong concern from sector stakeholders at the onset of the SDP development process was the focus on three rare indigenous species. Specific concerns included the financial feasibility of working only with indigenous species, as the market for indigenous SA essential oil is pre-emerging.

However, during the EO workshop of 11 February, sector stakeholders discussed the issue and agreed that development actions and impact can be diluted through a focus on too many species simultaneously and decided that species prioritisation is needed, but that this should be based on known market demand and sector expertise and agreement. As part of the SDP processes, sector stakeholders actively participated and contributed expertise in order to conclude the prioritisation as part of the SDP process, but the time was too short to truly engage markets and determine interest with the potential to translate to off-take – a crucial part of the process. Key sector stakeholders concluded that it would be irresponsible to identify focus species for the sector and invest in these species without this input.

It is suggested that the BioInnovation project partnership between SAEOPA, Parceval and F Mane Files is used as a first step in this prioritisation process. This project focuses on the exploration of essential oils and extracts to ascertain commercial potential and presents an opportunity to the sector to gain valuable market input into high potential species prior to decision making on costly actions such as supply development and technical file development. This project focuses on facilitating a collaborative industry approach to liaising with a known fragrance house to explore the potential of SA indigenous ingredients. It is recommended that the industry re-engage on the issue of priority species once this process is concluded and use the results of this process as a basis for species focus in sector development efforts.

Work Package 3: Standards and Quality processes and support

With the reduction of geographical barriers and the pressures of competing in the global marketplace, operational and service excellence have become necessities for enterprises to remain globally competitive. Customers expect consistent quality and to be seen as a reputable supplier. As such, the SA EO sector must put measures in place to ensure adherence to expected standards and quality. Different standards and quality requirements apply all along the EO value chain and in these chains, quality is demonstrated using conformity assessment tools such as testing, certification, inspection etc. each of which is based on an internationally accepted standard and delivers supply chain confidence.

In order to gain export market access:

- Enterprises need to be able to use accredited testing laboratories to determine compliance of the oil with a regional specification of the particular oil.
- These laboratories should have access to metrology and calibration services to ensure that their test equipment is giving reliable results.
- The oils (product) and quality management systems may be certified by accredited third parties to give confidence to the buyers and regulatory bodies (such as the EU) that the relevant requirements are being met consistently.
- The certification bodies and laboratories have to be accredited to demonstrate their technical competences.
- Product standards such as the South African National Standards (SANS) developed by SABS can fulfil a risk management function and can be used as a basis for SMEs (particularly new entrants) to gain a competitive advantage in accessing markets.

Works Package 4: Sustainable Supply Development

Inconsistent quality and low volumes were identified as main factors negatively influencing buyers' opinion of SA indigenous oils and compromising market access and uptake. Buyers are reluctant to explore new oils if quality and volume cannot be guaranteed. Development of sustained supply is key for the sector to access and maintain market position and may contribute to more stable and favourable price points for the oils.

Identified strategies to increase quality and volume include, but is not limited to:

- Identification of different cultivars growing in South Africa and propagation of material with favourable specifications
- Increased focus on cultivation through the implementation of smart agriculture
- Development of Standard Operating Procedures (SOPs) for standardisation of plant material, propagation, cultivation and production
- The development and implementation of hub/aggregator models as outlined in Addendum C, inclusive of implementation of developed SOPs for consistency and aggregation of volumes
- Exploring models for wild harvesting where the resource is abundant, aligned with the protection of biodiversity and conservation
- Aligned with expectations of international buyers for sustainability (traceability, socially responsible, environmental sustainability)

The hub/aggregator model has the potential to encapsulate the possible strategies to increase quality and volume as listed above, while at the same addressing rural development and job creation in the sector. A pilot of the model is needed to refine the model and develop a step-by-step guidance for use of and implementation by the sector to scale volumes and the correct quality.

Work Package 5: Industry Data

For the development and implementation of strategies that support well-conceived and targeted sector growth, it is crucial to know the nature and scope of the sector. Existing datasets are outdated due to a missing data capturing structure and continuous data-gathering. These systems need to be carefully designed and implemented to keep industry data updated, relevant, and credible.

Up to date and accurate data sets will enable the sector to effectively engage with issues such as cultivars, volumes, required tests and registrations, quality, and global price, which in turn will support establishing South Africa as a global player in natural oils.

Relevant industry data would for example include, but not be limited to:
- Types of crops and cultivars
- Farm details including size, location, climatic conditions, and soils
- Processing infrastructure - onsite distillation (permanent vs rented) vs offsite distillation (outsourced vs raw material sold)
- Types of compliance standards in place
- Number of employees per farm and/or processing units, indicating scarce skills: managerial, administrative, supervisors, general workers (indicating women and youth)
- Annual yield reports and projections per crop, updated with every harvest
- Average price per kg of oil per crop: winter vs summer prices
- Country specification ranges per crop placed against various global specifications

A clear distinction should also be made between shared industry data to establish the sector as a global player, and confidential company information and measures should be put in place to protect the latter. By making this distinction and protecting confidentiality, trust will be built in the sector, which in turn would motivate more frequent and accurate sharing of industry data. Initial identification of data categories and analysis, and the development of the system should be done in collaboration with sector stakeholders.

Data should be presented and shared in a simple and accessible format to ensure that all members of the sector draw value from the resource. Aggregated data saves costs and can be used for access to funding, gap analysis, understanding the sector and knowing where opportunities are and where support is needed, technical file development and registration and generic marketing, to name a few.

Digitised data on supply, volume available and origin will also be valuable in anticipating increasing demand for transparency in supply chains and enabling direct access to data for buyers.

Work Package 6: Technical File Development

Stakeholders identified the improvement of product documentation and development of technical files to address some of the concerns from international buyers as a priority. Due to cost and capacity considerations, stakeholders are currently implementing the minimum range of tests for market access. Comprehensive and correct testing and assessment on all required areas will increase the sophistication of the sector in its engagement with export markets and may in turn stimulate market demand.

Stakeholders also identified the costs of needed tests, assessments and file development as expensive and not within the financial capability of many businesses involved in the EO sector. Based on this, a strong need for collective technical file development guided by experts was expressed. This will not only create cost efficiency but will also provide buyers with the assurance they need to confidently build relationships with the SA sector as a supplier of high quality EO. However, it is important that this process is only embarked on once there is clarity on product focus which will be gained through the results of the BioInnovation Africa project as detailed above in the section on Prioritisation of Indigenous Species.

In the selection of the prioritised tests, it is crucial that sector stakeholders are consulted, and that test are identified and categorised in: 1) tests already conducted and available in the sector and 2) test not available in the sector that must still be completed.

If prioritised tests are already available, it can be included in the technical file and, if not, measures need to be put in place to complete tests. Since the technical file will be collective, samples from different areas will be analysed and a range of values included. Lisam, as part of their work on the ABioSA project is developing a Knowledge Product (KP) indicating what should be included in a technical file and where tests can be conducted. It must be ensured that this is a simple guide to increase accessibility to sector stakeholders. Sector stakeholders can also reference the CBI guidance on preparing technical files as developed by ProFound for both cosmetics[1] and flavourings[2].

3.2.2. PRIORITY DEVELOPMENT AREAS

Market Access

The creation of a unique and unified identity for SA natural oils to stimulate market demand were identified as a high priority by sector stakeholders. In the SDP processes, it became clear that while SA natural oils have high potential, it is unknown in export markets, creating barriers for potential client communication. Export market trends show an increasing appetite for products that are organic, natural, sustainable and have a unique story and the SA EO sector needs to focus on this in their positioning and creation of identity. The development of a mark or a brand for Southern African Essential Oils similar to the approach employed by SA Olive could be considered[3].

Sector stakeholders discussed the priorities for the creation of market demand and market access and concluded that these are very well aligned with the work of the BioPANZA Market Access Cluster (MAC) which is now being activated through a process supported by GIZ. For this reason, the sector decided to include this as a development area, but not a work package in the SDP. The sector will liaise with the BioPANZA MAC on optimal ways to engage and

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1 https://www.cbi.eu/market-information/natural-ingredients-cosmetics/how-prepare-technical-dossier-cosmetic-ingredient

2 https://www.cbi.eu/market-information/natural-food-additives/how-prepare-technical-data-sheets

3 https://www.saolive.co.za/correct-labelling/

ensure that sector priorities are integrated in the activities of the MAC. The sector also wants to nominate a supply chain actor as representative on the MAC.

Outgrower Programme

Successful and sustained rural development inclusive of smallholder farmers remains an unrealised priority for both government and farming sectors. The EO sector could play a critical role in supporting smallholder farmers as outgrowers if the programme is created to address the shortfalls of previous programmes to set up outgrowers in a sustainable way.

Such a programme could be implemented or piloted with EO producers in rural areas interested in: 1) escalating their approach in working with smallholders or 2) revising their cultivation and sourcing model to more proactively include and grow a smallholder base as part of their business. The hub/aggregator model is one approach to outgrower development that could be supported by the sector.

Please see a more comprehensive overview of programme considerations and approach in Addendum D.

Bioprospecting & Access and Benefit Sharing Permits

The slow roll out of Bioprospecting, Access and Benefit Sharing (BABS) in the SA environment poses an increased risk to the ability to identify resources, as well as trade and access relevant markets.

Permitting and ABS is a very high priority for the sector but based on the number of collective initiatives already ongoing in the wider natural ingredient sector, stakeholders decided not to include permitting and ABS as a work package, but to rather focus on supporting and joining collective initiatives to resolve the issue which is a problem across sectors and species. Two identified opportunities include:

1) Participation of sector stakeholders and SAEOPA in the BioInnovation Africa ABS handholding project aimed at directly support SMEs and create guidance in the industry to optimally engage government and streamline the permitting process.
2) The use of the ABioSA ABS KP by SAEOPA to support permit applications in the sector. Additional to this, a permit support function and the creation of a body or authority to specifically address ABS issues to avoid investors turning away from the industry was also suggested.

Research

Sector stakeholders decided that data collection and management must be supplemented with targeted research to create a knowledge base for the sector. Added to this, research can also play an important role market promotion through substantiating product benefit claims, for example the communication of product efficacy testing.

Instead of dedicating resources to Research in a work package, stakeholders decided that a research and fundraising strategy could be developed as an initial step and that this area could then be developed as a work package over the longer term.

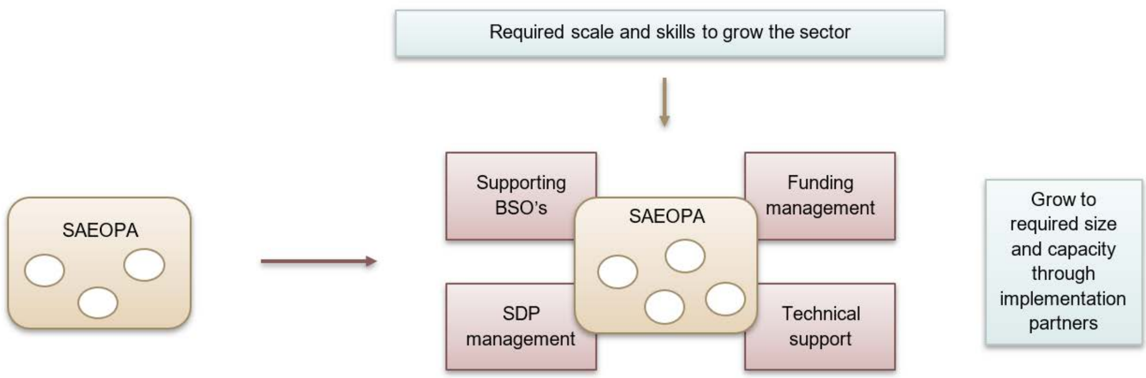
The research strategy should include a focus on both exploratory research on relatively unknown species and more focused research on the known species and specific focus areas should be decided on by the sector in a collaborative manner, facilitated by SAEOPA. The stakeholders also felt that academic institutions could be approached to prioritise these topics in their programmes and SAEOPA noted that they already have a number of good connections and a history of collaboration with universities.

In its simplest form, the research strategy can focus on: 1) list current research to see what can be of value to the sector, 2) engaging the sector to identify and agree on research priorities, 3) map current government and other research initiatives to see where strategic collaboration is possible and 4) enter into agreements with research institutions on sector level to implement identified research.

3.3. RESPONSIBILITY FOR IMPLEMENTATION

SAEOPA[4], a non-profit organisation, established in 2000 is the industry organisation for the Essential Oil industry in SA and will have responsibility for the implementation of the SDP. The organisation has a long history of involvement in the EO sector, is very well networked and has a comprehensive knowledge base and experience in all parts of the EO value chain. Currently SAEOPA has 31 members in Southern Africa.

During the SDP processes, sector stakeholders noted that a strong institution or institutional arrangement will not only be key to the implementation of the SDP, but also for the sustained and meaningful growth of the sector. Due to the scope of the SDP as set out in this document, the current institutional capacity of SAEOPA as the sector organisation needs to be considered and strengthened. Please see the proposed strategy for institutional strengthening in the visual below.

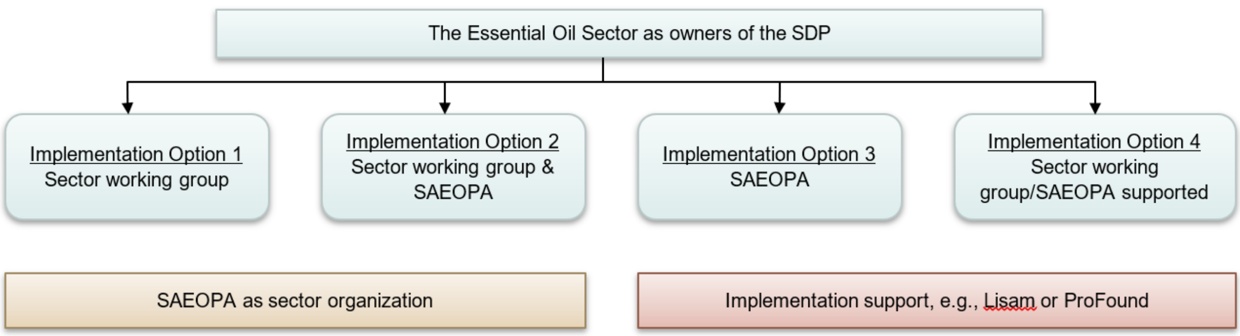


[4] https://www.saeopa.co.za/

The strategy focuses on a modest expansion of the organisation through additional full time or part time employees, coupled with dedicated support from experts in, for example technical expertise, as well as data collation and management. With this strategy capacity can be utilised on a contract basis when needed for SDP implementation. Following this approach to increased capacity creates a more flexible structure that can continuously bring in required expertise to collaborate in successful sector plan implementation.

In the sector workshop of 4 May 2021, sector stakeholders reiterated that there needs to be a strong central function for administration to liaise with the sector and oversee the implementation of the plan. To this point, it was suggested that the job descriptions for the current Executive Director and Secretariat be amended to accommodate the SDP's requirements and that new positions or portfolios with clear job descriptions are created in SAEOPA for the following functions: 1) project manager, 2) financial manager and 3) data manager.

Implementation responsibility for the work packages will be a collaborative effort between SAEOPA, contracted experts and key industry stakeholders. This will be approached through the creation of working groups responsible for the implementation of the respective work packages, either in collaboration with SAEOPA and/or contracted experts or independently. Working groups can be structured in a number of ways: 1) SAEOPA only, 2) sector stakeholders only 3) SAEOPA and sector stakeholders or 4) SAEOPA and sector stakeholder supported by experts. It is likely that working groups will be linked directly to the implementation of the plan and will exit on the completion of work packages or will hand over work packages once they are stable with clear protocols for continuation. Considering the resources available in the sector at present, it is suggested that support organisations are optimally utilised to support the implementation of actions. Please see below a visual depiction of how work package implementation could be approached:



One of the key challenges for SAEOPA as the sector organisation is financial sustainability. The income generated through the current membership fee structure is insufficient and the sector needs to agree on and commit to a levy structure or similar to fund the operations of the organisation in the implementation of this sector development plan and other related functions. Additional to this, it is important that people appointed in the new positions of either project or financial manager have proven fundraising skills to identify and realise access to external funding for the organization. Due to the development actions required, Institutional Strengthening was included as a Work Package in this SDP.

4. STRATEGIC DIRECTION

4.1. VISION

SAEOPA is a representative, vibrant organisation that actively promotes and protects the Southern African essential, vegetable- and seed oils industry and the interests of SAEOPA members.

4.2. MISSION

- To establish a regional essential oil industry, comprising both indigenous and exotic plants, with high production volumes, excellent quality, sustainability and maximum value-adding, whose end products meet international market requirements.
- To be an association that supports its members with agricultural, technical and marketing information in order to exploit business opportunities.
- To build an active and strong Southern African Essential Oil Producers Association that will grow the industry and make a positive contribution to developing the economy of Southern Africa.
- To increase the region's volume of essential oil production and exports to the extent of it being a net exporter of essential oil-related products.
- To be recognised internationally as the regional voice for the essential oil industry in southern Africa.

4.3. KEY STRATEGIC OBJECTIVES AND TARGETS

The key objectives for the EO sector correspond to work-packages (section 3.2.1) and development areas (section 3.2.2) that have been identified in the SDP process. These objectives and work-packages are included in the table below.

Objective	*Work Packages (WP)*	*Development areas*
Sustainable use of biodiversity & sustainable supply	• WP 2: Prioritisation of Indigenous Species • WP4: Sustainable Supply Development	• Bioprospecting, Access & Benefit Sharing Permits • Research
Fair and equitable sharing of benefits		Bioprospecting & Access and Benefit Sharing Permits
Rural development and job creation	WP4: Sustainable Supply Development	Outgrower Programme
Compliance with national and international regulations	WP3: Standards and Quality processes and support	Bioprospecting & Access and Benefit Sharing Permits
Create and sustain market access	WP6: Technical File Development	Market Access
Sector cohesion	WP1: Institutional Strengthening	
Knowledge creation and management	WP5: Industry Data	Research

The implementation of the actions detailed for the Work Packages and the sector collaboration envisaged for the Development Areas, will result in the sector reaching concrete and tangible targets for the Strategic Objectives identified. Please see the targets related the Strategic Objectives detailed below.

Objectives	*Targets*
Sustainable use of biodiversity & sustainable supply	• Standard Operating Procedures for Quality and Volume increase developed for the top three prioritized species and implemented by 50% of current EO stakeholders resulting in a 30% volume increase in indigenous resource essential oils supplied to the export market by end 2023 • Assessment of current wild harvesting and cultivation practises concluded for three rural hubs and guidelines developed to enable the 11 (48%) EO sector stakeholders active in rural areas to share knowledge with a total of 330 employees[5] leading to improved biodiversity management by end 2023
Fair and equitable sharing of benefits	A 70% increase in companies holding ABS permits (16 out of 23) as a combination of the BIA ABS handholding project (foreseen to contribute 40%) and support from SAEOPA based on the systems put in place by the BIA ABS handholding project (foreseen to contribute 30%) by end 2022
Rural development and job creation	• The establishment of three rural hub and aggregator models providing direct employment to 210 employees[6] and generating income for 210 rural households by end 2025 • The development of 24 independent outgrowers[7] providing employment and income for them and their families by end 2025
Compliance with national and international regulations	• Development of national standards for the priority essential oils and accreditation of three local physical and chemical testing laboratories enabling a 60% increase (14 out of 23) in companies with valid Certificates of Analysis for market access by end 2022 • Training of 100% of EO stakeholder (23 companies) through the roll out of the GQSP-SA standards and quality training syllabus by end 2022
Create and sustain market access	• Development of three baseline technical files on prioritized species, relevant to 70% (16 out of 23) companies working with those species resulting in a 40% volume increase in indigenous resource essential oils supplied to the export market by end 2024 • 20% (5 out of 23) increase in companies with access to export markets as a result of training and market access initiatives through BioPANZA platform and SIPPO support programme by end 2024
Sector cohesion	• Three permanent positions created and maintained in SAEOPA resulting in a 150% capacity increase by June 2022 • Successfully raising R180 000 per annum for a period of three years to support running cost of SAEOPA by end 2024
Knowledge creation and management	• 80% (19 out of 23) of the sector actively sharing data for input into the system by end 2022 • Operational data collection and aggregation system enabling the creation of 4 collated data reports per annum enabling SAEOPA and sector stakeholders to communicate to export markets and increase exports by 20% by end 2023

[5] Based on 30 employees per company, but this is more in some cases
[6] Based on 70 employees employed by Qobo Qobo as the case study for this model
[7] Based on 8 outgrowers included in the Qobo Qobo case study for this model

4.4. IMPLEMENTATION ACTIONS

Work Package 1		*Institutional Strengthening*				
Action	*Priority*	*Timeframe*	*Responsible*	*Resources required*	*Collaboration & alignment*	*Outcomes*
Development of a strategy to create additional funding streams to fund the operations of the organisation	Critical	July – Sept 2021	SAEOPA Board	Sector working group	SAEOPA members	• Funding strategy • Adoption of funding strategy by sector
Review of SAEOPA organogram and job descriptions against the requirement of the SDP to identify gaps, and make decisions on additional positions or portfolios	Critical	July – Sept 2021	SAEOPA Board	Sector working group	SAEOPA members	Excel matrix comparing SDP requirements & current capacity
Review and adjust job descriptions for the ED and Secretariat and develop job descriptions for new positions	Critical	Oct 2021	SAEOPA Board	Sector working group	SIPPO & UNIDO?	Job description for ED, Secretariat & new positions
Appointment of project manager, financial manager and data manager (or other new positions identified by the SAEOPA Board) to support SDP development	Critical	Oct – Nov 2021	SAEOPA Board	Sector working group		Appointment letters for new positions
Annual part time salaries to support project, finance and data management	Short term	Jan – Feb 2022	SAEOPA Board	External funding	SDP funder	Excel showing calculation of salaries based on job descriptions
Review requirements of the SDP and identify additional support needed, as well as potential organisations that could provide it	Short term	Jan – Feb 2022	SAEOPA Board	Sector working group	SIPPO & UNIDO?	• Excel matrix comparing SDP requirements & current capacity • List of potential BSOs & other support organisations

Develop and enter into MoUs with identified support organisations	Short term	March – April 2022	Secretariat	Identified BSOs	Identified BSOs	MoUs with support organisations
Development of management plan inclusive of implementation and finance management	Short term	March – April 2022	Secretariat for approval of Board	SAEOPA Board		• Management plan • Financial plan

Work Package 2		*Prioritisation of Indigenous Species*				
Action	*Priority*	*Timeframe*	*Responsible*	*Resources required*	*Collaboration & alignment*	*Outcomes*
Share results from F Mane Files project with sector	Short Term	June 2022	SAEOPA & Parceval	Sector expertise	BioInnovation Africa	Documented market feedback on potential for indigenous species
Sector engagement on high potential species	Short Term	June 2022	SAEOPA & sector	Sector input	BioInnovation Africa	• Selection criteria to determine sector focus • List of high potential species
Identify focus species and prioritise	Short Term	June 2022	SAEOPA & sector	Sector input	BioInnovation Africa	Top 3 prioritized species for sector development

Work Package 3		*Standards and Quality processes and support*				
Action	*Priority*	*Timeframe*	*Responsible*	*Resources required*	*Collaboration & alignment*	*Outcomes*
Development of national standards for the priority essential oils (dependent on priority species identified in WP2)	Critical	Ongoing (started in 2019)	SABS	SAEOPA and industry players	UNIDO GQSP-SA	National Standards published & available
Support local physical and chemical testing laboratories for accreditation readiness or attain accreditation status	Short term	March 2022	GQSP-SA project	SECO funded GQSP-SA project	SANAS NLA-SA	Accredited testing laboratories
Raise awareness on the role of standards, conformity assessment, accreditation and metrology in supporting market access	Critical	Ongoing (started in 2019)	GQSP-SA	SECO-funded GQSP-SA project	SAEOPA MSQF chaired by the dtic	• Awareness raising materials • Record of sector engagement
Introduce training syllabus for SMMEs on standards and quality	Critical	Ongoing (started in 2020)	GQSP-SA	SECO-funded GQSP-SA project	SAEOPA	• Standards and quality training syllabus • Training records
Develop an incentive scheme for SMMEs to implement quality management systems (QMS) preferably certified (basic QMS as well as additional buyer requirements e.g., FairWild, organic)	Short term	2022	BioPANZA Market Access and Finance clusters	IDC fund	the dtic BioPANZA (Finance & MAC) DFFE	• Documented incentive scheme • Records of communication to sector
Develop a subsidy scheme for SMMEs to have the oils tested and obtain a full Certificate of Analysis (CoA)	Medium term	2022	BioPANZA Regulatory & Supply clusters	External funding	SEDA	• Documented subsidy scheme • 5 SMMEs assisted with full CoA

Work Package 4		*Sustainable Supply Development*				
Action	*Priority*	*Timeframe*	*Responsible*	*Resources required*	*Collaboration & alignment*	*Outcomes*
Identify an existing hub with outgrowers with the potential for scaling the number of outgrowers and developing the hub into more sophisticated processing	Short	Aug – Nov 2021	Sector stakeholders & experts	Sector expertise	SAEOPA & ABioSA	• Criteria for selection of hub • Hub selected
Matching the hub with an aggregator with proven processing and market access expertise	Short term	Aug – Nov 2021	Sector stakeholders & experts	Sector expertise	SAEOPA & ABioSA	• Criteria for selection of aggregator • Aggregator selected
Develop a partnership agreement between the hub and aggregator, including responsibility and trade	Short term	Aug – Nov 2021	Hub & Aggregator partners	Partner investment		Documented and signed partnership agreement
Development of a detailed budget for implementation of the below:	Short term	Aug – Nov 2021	Hub & Aggregator partners	Partner investment		Documented and agreed budget
Assessment of current wild harvesting and cultivation practises	Medium term	Jan – April 2022	Aggregator with BSO & sector expert support	External funding	Relevant BSOs	• Documented assessment methodology • Documented assessment results
Development of SOPs for: ● Increased volume ● Improvement in quality	Medium term	Jan – April 2022	Aggregator with BSO & sector expert support	External funding	Relevant BSOs	• Volume SOPs • Quality SOPs
Guided and monitored implementation of SOPs	Medium term	May – Dec 2022	Hub & Aggregator	External funding		• Production records • Bi-monthly progress reports capturing learnings
Development of best practise processing methods and procedures	Medium term	Jan – Dec 2022	Aggregator with BSO & sector expert support	External funding	Relevant BSOs	Guide for best practise processing methods and procedures

Mentorship and guidance to the outgrowers and the hub to improve quality through processing	Medium term	May – Dec 2022	Hub & Aggregator	External funding		• Copies of guides • Minutes of meetings • Training records
Development of collaborative strategies for market access	Medium term	May – Dec 2022	Hub & Aggregator	Partner investment		Market access strategy
Supplying the product to market	Medium term	As relevant	Aggregator	Partner investment		Proof of transactions (as relevant)
Development of a detailed guide on the above process to enable duplication of the model	Medium term	Jan – Feb 2023	Aggregator with BSO & sector expert support	External funding		Detailed hub/aggregator guide with supporting documentation and templates
Training of BSOs, sector organisation and development partners on the guide to create ability for duplicating the model in the sector	Medium term	March 2023	BSOs	External funding	SAEOPA, dtic, DSBD, etc.	• Slide decks • Training material • Training records and attendance registers

Work Package 5		*Industry Data*				
Action	*Priority*	*Timeframe*	*Responsible*	*Resources required*	*Collaboration& alignment*	*Outcomes*
Finalise confidentiality policy and get endorsement from sector for its use	Critical	Aug – Nov 2021	SAEOPA & sector		UNIDO	Confidentiality policy endorsed by sector
Data categories and analysis: ● Identification of needed data categories ● Determine confidentiality level of data categories identified	Critical	Aug – Nov 2021	SAEOPA & sector	Sector expertise		Excel sheet with detailed data categories, including indication of confidentiality levels
Identify responsible party to manage data collection, aggregation, and sharing with sector (this could be the data manager appointed in WP1 within SAEOPA)	Critical	Aug – Nov 2021	Sector			• Job description of data manager • Signed contract with data manager
Develop system for data collection, aggregation and maintenance as per data analysis categories above	Short term	Jan – April 2022	Systems expert	Sector expertise External funding	BioPanza Capacity Fund	• Excel sheet with “backdoor” data to enable App development • User and maintenance guide for keeping data updated
Develop online application where data can be entered by stakeholders and verified	Short term	May – July 2022	Technical service provider	External funding	BioPanza Capacity Fund	EO Sector data application
Implement data system	Short to long term	July 2022 onwards	Party to be identified		BioPanza Capacity Fund	App functional and in use by sector for 4 months
Start sharing information	Short to long term	July 2022 onwards	Party to be identified		BioPanza Capacity Fund	• Collated data reports, visuals, infographics • System for data sharing agreed by sector evidence of regular data sharing for a 6-month period

Work Package 6		*Technical File Development*				
Action	*Priority*	*Timeframe*	*Responsible*	*Resources required*	*Collaboration & alignment*	*Outcomes*
Generate list of tests required by buyers	Short term	Sept 2022	SAEOPA & sector	Sector investment	Lisam	Knowledge Product detailing list of all tests
Compare current tests to comprehensive technical file requirements & identify gaps	Short term	Sept 2022	SAEOPA & sector	Sector investment		• Excel matrix detailing required and available tests • Gaps in testing identified and documents
Prioritisation and categorisation of tests for various export markets	Short term	Sept 2022	SAEOPA & sector	Sector investment		List of prioritized tests to be implemented
Implementation of tests	Medium term	Oct 2022 onwards	Laboratories & sector	External funding	The dtic, IDC, universities & development organizations	Test results available to the sector
Development of collective baseline technical files for identified resources	Medium term	Oct 2022 onwards	SAEOPA or Lisam	External funding		Baseline technical files for 3 species
Development of KPs for technical file development and testing	Medium term	Oct 2022 onwards	SAEOPA or Lisam	External funding		Knowledge Product on technical file development
Sector training on tests, technical file development & use and market access	Medium term	Oct 2022 onwards	SAEOPA or Lisam	External funding	Development organizations	• Slide decks • Training material • Training records and attendance registers

5. FINANCE STRATEGY

5.1. COST ESTIMATIONS

Please see the detailed cost estimation attached in Addendum E, inclusive of the timeframe and responsibility for implementation. The cost estimation was developed in an itemised manner to allow the sector flexibility in implementation.

For example, the implementation timeframe for actions can be adjusted, individual actions deemed to be of high priority can be implemented or high-cost items such as implementation of test can be delayed based on availability of funding. Please see the budget per annum and total over the three-year period below.

Year	*Budget*
2021	R81 500
2022	R1 485 500
2023	R662 500
Total	*R2 229 500*

It needs to be noted that the cost estimation was completed in collaboration with informed sector stakeholders, but the estimate will need to be reviewed and detail increased for any formal funding application.

5.2. FUNDRAISING / FUNDING

The sector will use this SDP as a baseline document to determine interest from external funders to fund the work packages or actions included here. Due to the structure of both the SDP and the cost estimation, funders can engage with those work packages or actions which are aligned to their funding strategies and objectives.

As detailed in Section 3.3, one of the key challenges for SAEOPA as the sector organisation is financial sustainability. The income generated through the current membership fee structure is insufficient and the sector needs to agree on and commit to a levy structure or similar to fund the operations of the organisation in the implementation of this sector development plan and other related functions.

The development of a strategy or system to create additional funding streams to fund the operations of the organisation was included as an implementation action in Work Package 1: Institutional Strengthening. The strategy could consider a combination of the below.

Voluntary levies	Voluntary levies are determined by members of an organisation and usually based on volume produced.
Membership fees	Some organisations charge a set membership fee, usually paid annually. In some cases, the fee is based on categories of membership, depending on the size of the organisation or their level of participation and benefits. Most sector organisations have a membership fee model combined with levies based on volume.

External funding	This can be through national government initiatives or international funding organisations who support sector development.
Member contributions	Not all sector organisations are able to generate levies, membership fees or external funding during their early stages, and may be dependent on direct voluntary contributions from members. (Monetary or in kind)

6. MONITORING AND EVALUATION

6.1. RESPONSBILITY FOR IMPLEMENTATION

The monitoring and evaluation function will be implemented by SAEOPA as the sector organization. SAEOPA will be introduced to the principles and method for the implementation of this function as part of the close-out actions of the ABioSA project.

6.2. MONITORING SCHEDULE

It is important that SAEOPA and the sector role-players involved in work package implementation monitor the identified actions of this SDP against the Outcome indicated in Section 4.4. above.

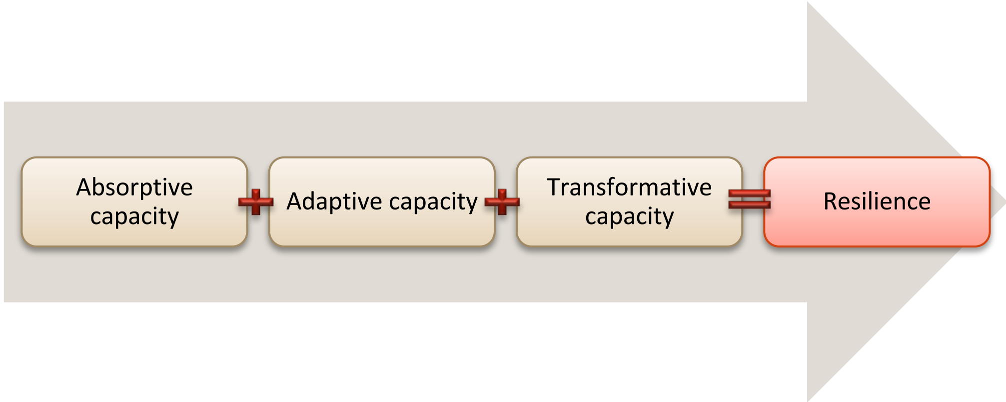
This will allow the sector to stay in track with their development actions and to adjust their implementation schedule if needed. Please see a monitoring template schedule attached in Addendum F. This template captures:

- The outcome that will indicate the successful implementation of actions
- Who will be responsible for making sure that the outcome is reached?
- By when must this outcome be reached or completed
- Progress made
- Adjustment dates and reason for adjustment (where necessary)

6.3. INTRODUCTION TO EVALUATION

One of the key aims of the ABioSA programme is to build resilient sectors able to identify challenges or blockages and develop and implement actions to address these challenges to ensure sector growth and internal resilience against outside shocks created by the fast-changing environment in which the sector operates.

For this reason, the monitoring and evaluation framework used for the sector development plans, focus on how sectors can innovate and develop to mitigate shocks and build resilience. For sectors to become resilient over time, they need to develop three types of capacities as summarized in the visual below.



The main focus of each type of capacity is summarized below.

Absorptive capacity	Refers to the ability to recognise the need for new and external information and apply it to improve the bioeconomy. This can be built through establishing knowledge products intentionally to cope with stress factors such as changed market requirements, extreme weather events, economic downturn, lack of access to market intelligence and changes in consumer buying behaviour.
Adaptative capacity	Refers to making intentional adjustments in anticipation of or in response to change in order to create more flexibility in the future. Intentional changes can include adjusting to new legislation and regulations, as well as to find innovative ways to prevent threatened species used in the bioeconomy from becoming extinct.
Transformative capacity	Refers to making intentional changes to stop or reduce the causes of risk, so that risk is not carried by vulnerable communities and businesses involved in the biotrade supply chain. Transformation can include assessing and adjusting supply chains to correct power imbalance.

6.4. EVALUATION FRAMEWORK

The monitoring and evaluation framework includes the following elements as indicated in the tables below:

Sector challenge	This is the stress factor, threat or area that needs transformation
Work Package	This is an indication of the work package where the required change is included
Indicator of success	This is the action that needs to be implemented to address the stress factor, threat or need for transformation
Sources of verification	This is the proof that the action has been implemented, similar to the outcomes listed in the Implementation actions above
Key assumptions or risk	This details assumptions or risks that may be experienced in the implementation of the action to bring about change
Frequency of collection	This is ow often progress on the action is checked, i.e., annually, quarterly, monthly, etc.

The sector-specific monitoring & evaluation framework for the essential oils sector is included below.

6.5. ABSORPTIVE CAPACITIES

Sector challenge	*WP / Priority area*	*Indicators of success*	*Sources of verification of data*	*Key assumptions / risks*	*Frequency of collection*
Outdated and unverified market intelligence and data to support the sector in sustained market access	WP 5: Industry data	Prioritization and aggregation of identified data categories by SAEOPA			
		Develop online application where verified data can be entered by stakeholders			
Limited sector knowledge on technical file development	WP 6: Technical File Development	Develop collective baseline technical files for identified resources			
		Generate list of tests required by buyers in collaborative process among sector stakeholders			
		Sector training on tests and creation of knowledge products for technical file development & use for market access			
Lack of market access in Europe & Low demand on other international and regional market levels	PA1: Market Access	Analyse the export market databases and platforms and create Knowledge Products (KP) to support the sector			

6.6. ADAPTIVE CAPACITIES

Sector challenge	*WP / Priority area*	*Indicators of success*	*Sources of verification of data*	*Key assumptions / risks*	*Frequency of collection*
Sector stakeholders experience challenges with market access due to inability to communicate quality through standards compliance	WP3: Standards and Quality processes and support	Liaise with UNIDO in terms of the development of standards to ensure quality requirements included			
Inconsistent oil quality and volume supply	WP4: Sustainable Supply Development	Develop measures/protocols for smart cultivation and Standard Operating Procedures for production			
		Identify and develop two hub/aggregator models to pilot with reference to quality and smart cultivation SOPs, standardization SOPs and hub/aggregator market access			
		Develop guidance documents on critical steps needed to sustainably supply quality oils			
Sector stakeholders have limited or inconsistent access to information to support market access	• WP3: Standards and Quality processes and support • WP4: Sustainable Supply Development • WP6: Technical File Development	Consolidate Knowledge Products to be used in sector training			

Only a few value chain actors are compliant with ABS regulations	PA3: Bioprospecting & Access and Benefit Sharing Permits	Value chain actors support collective initiatives to resolve the problem across sectors and species			
		Sector association to make use of the ABS Knowledge Product as a guide to support permit application and administration			

6.7. TRANSFORMATIVE CAPACITIES

Sector challenge	*WP / Priority area*	*Indicators of success*	*Sources of verification of data*	*Key assumptions / risks*	*Frequency of collection*
Sector organisation needs increased capacity to support the sector and implement the SDP	WP1: Institutional Strengthening	Institute a strong central function for administration to liaise with the sector and oversee the implementation of the Sector Development Plan (SDP)			
		Investigate different funding streams including a membership fee or levy structure to support and capacitate SAEOPA			
Not sufficient integration of rural production and knowledge transfer to support rural development in sector	WP4: Sustainable Supply Development	Identify and develop two hub/aggregator models to support rural development and create knowledge transfer through mentorship			
	PA2: Outgrower programme	Develop and implement an outgrower programme to facilitate access for smallholder into EO supply chains			