

# Aloe ferox

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A glossary of biotrade terms can be found at [www.abs-biotrade.info/resources](http://www.abs-biotrade.info/resources)

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**Adrie El Mohamadi**

Component Manager

The ABS Capacity Development Initiative (ABS Compliant  
Biotrade in Southern Africa)  
Center for Cooperation with the Private Sector (CCPS)

**Deutsche Gesellschaft für Internationale Zusammenarbeit  
(GIZ) GmbH**

+27 12 423 7955 | +27 82 902 4083

[adrie.elmohamadi@giz.de](mailto:adrie.elmohamadi@giz.de)

[www.giz.de](http://www.giz.de) & [www.abs-biotrade.info](http://www.abs-biotrade.info)



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# ALOE FERROX

## *Sector Development Plan*

**Author(s):** Suzanne Herbst  
**Contact details:** [suzanne@skaa.co.za](mailto:suzanne@skaa.co.za)  
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## 1. EXECUTIVE SUMMARY

*Aloe ferox* is predominantly wild harvested on farmland or reserves in the Western Cape and mostly on communal or land under traditional authority in the Eastern Cape, and cultivation predominantly occurs in the Western Cape. SANBI conducted a Resource Assessment in 2019 which provides supports the non-detriment finding from the Scientific Authority of South Africa in 2019 stating that the harvest and international trade of the specie poses a low to moderate risk to the population in the wild. The sector is currently represented by the Aloe Council of South Africa (ACSA) and the Cape Aloe Movement (CAM).

The *Aloe ferox* sector experiences huge challenges as the European Food Safety Authority (EFSA) prohibited the use of plants containing *hydroxyanthracene* derivatives (HADs) in March 2021, which has a severe knock-on effect on the exporting of Bitters to Europe for use as a food supplement or herbal medicine.

A draft BMP was published in June 2021 and the Geographic Indication registration process is in progress. Although some processors obtained ABS permits, a sector-wide support process is underway to ensure compliancy throughout the sector.

The Western Cape variety has a higher concentration of the aloin content of 18-20% in comparison to the Eastern Cape *Aloe ferox*, and the Western Cape variety is preferred for medicinal purposes and alcoholic beverages. The use of *Aloe ferox* in Europe is most driven by the continuous health trend and growing digestive health market. The main direct competitors include products made from *Aloe barbadensis* *Aloe arborescens*. Although *Aloe ferox* leaf gel differs substantially, both natural ingredients are used for similar applications, and consumers seem to perceive products containing Aloe as similar.

The Sector Development Plan (SDP) addresses the various blockages in the *Aloe ferox* value chain as identified through a process of extensive consultation. The SDP includes specific strategic objectives, namely 1) Strengthen the sector organisation; 2) Establish international relations on *hydroxyanthracene* (HAD) prohibition; 3) Sector legislation compliancy & GI registration; 4) Increase domestic market demand; 5) Ensure consistent quality supply; and 6) Identify alternative global markets.

## 2. INTRODUCTION

### 2.1. AIM OF SDP

The aim of the *Aloe ferox* 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: biodiversity/conservation status, traditional use, current economic position, existing value chains, market potential, current and future technologies, stakeholders etc.

The *Aloe ferox* 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 organizations, set timelines, cost and a monitoring strategy.

Within the context of the ABioSA project the *Aloe ferox* 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 *Aloe ferox* sector was to determine stakeholders to be involved and consulted in the process. An original list with 10 possible companies was received from GIZ and verified with key sector stakeholders, after which 3 companies were excluded from the list, mostly since they were not longer involved in *Aloe ferox* production. Through the course of the implementation of the project, additional companies were identified in collaboration with key sector stakeholders. 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 and this was 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 *Aloe ferox* production and harvesting in the Western and Eastern Cape, key considerations for market access, success factors for sector development and initial thoughts on the structure and functioning of a sector organization. The findings of the research and consultation were collated and shared in a stakeholder engagement workshop with sector stakeholders on 10 March 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) strengthen the sector organisation, 2) establish international relations on *hydroxyanthracene* (HAD) prohibition, 3) sector legislation compliancy & GI registration, 4) increase domestic market demand, 5) ensure consistent quality supply, and 6) identify alternative global markets.

The priority areas were used as the basis for the development of the work packages included in this SDP with the addition of Industry data as another priority identified by the sector. These work packages were then reviewed by sector development experts and inputs integrated. The inputs gained from further individual consultations were integrated in the work packages and a final workshop will be held on 22 July 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. First, the situational analysis will provide insight into the current composition of the sector, current status, challenges, and opportunities and how the sector is organized in order to take the sector development plan forward. Second, the strategic direction will provide the vision and mission and strategic objectives of the sector, before unpacking the specific work packages in detail. Third the financing and funding strategy for the SDP is considered, and finally the monitoring and the evaluation of the SDP within the sector will be explained.

### 3. SITUATIONAL ANALYSIS

#### 3.1. COMPOSITION OF THE SECTOR

The *Aloe ferox* sector is dominated by well-established vertically integrated supply chains where quality and quantity aspects are well regulated. *Aloe ferox* is predominantly wild harvested on farmland or reserves in the Western Cape and mostly on communal or land under traditional authority in the Eastern Cape, and cultivation predominantly occurs in the Western Cape. Please see below the composition of the *Aloe ferox* supply chain.

# COMPOSITION OF THE ALOE FEROX SUPPLY CHAIN

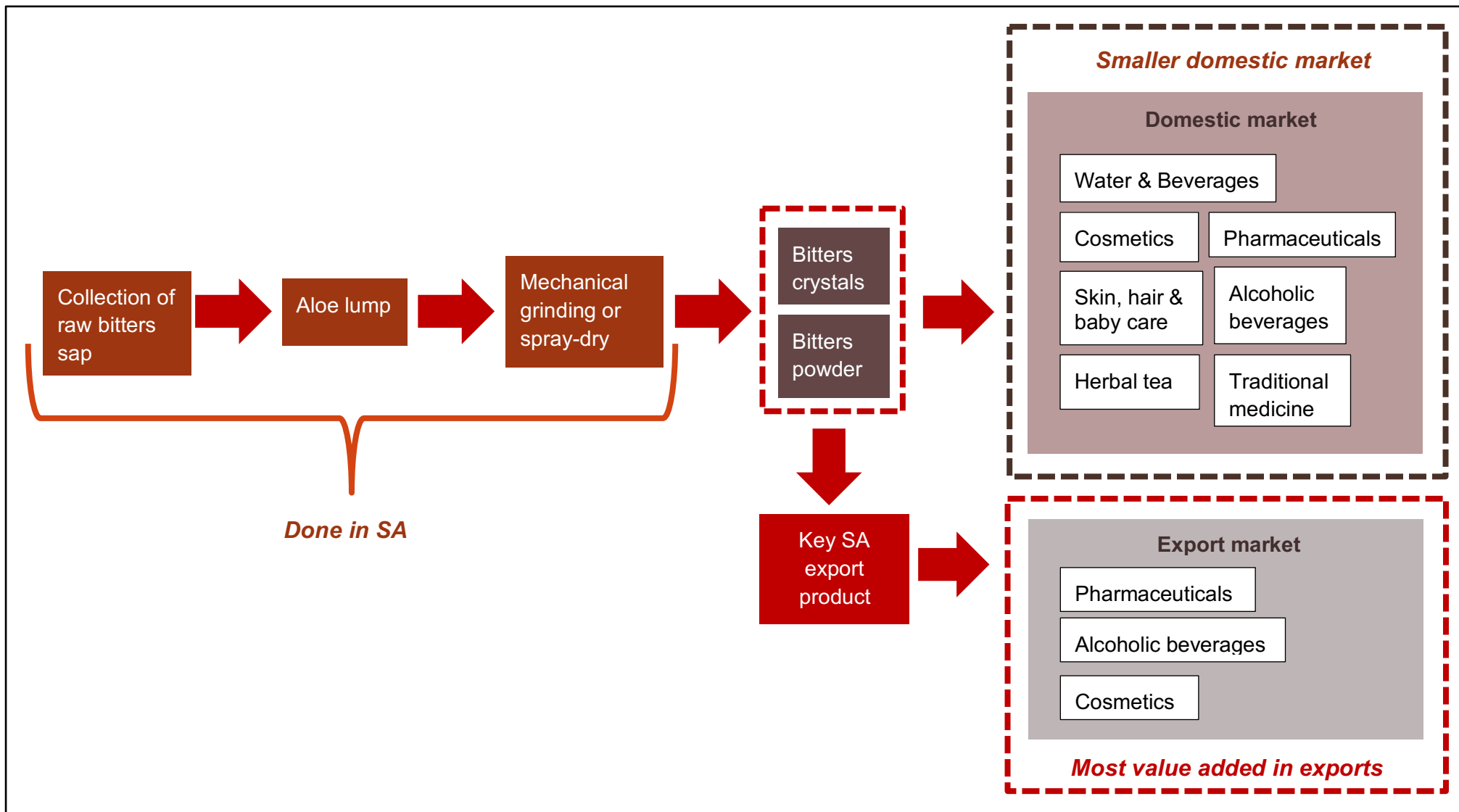


Figure 1: Composition of the Aloe ferox supply chain



## 3.2. STATUS OF THE SECTOR

### 3.2.1. NATIONAL ANALYSIS

*Aloe ferox* is predominantly wild harvested on farmland or reserves in the Western Cape and mostly on communal or land under traditional authority in the Eastern Cape, and cultivation predominantly occurs in the Western Cape. Unsustainable harvesting practices occur predominantly in the Eastern Cape and have been perceived as a threat to the survival of some species in areas in close proximity to some communities. *Aloe ferox* is included in Appendix II of the Convention on International Trade Endangered Species of Wild Fauna and Flora (CITES) of 2020 and obtained a non-detriment finding from the Scientific Authority of South Africa in 2019. This finding indicates that the harvest and international trade in *Aloe ferox* is non-detrimental and poses a low to moderate risk to the population in the wild. SANBI conducted a Resource Assessment in 2019 which provides an informed overview on the current impact of harvesting on biodiversity.

A draft BMP was published for comment on 25 June 2021 in the Government Gazette number 44764<sup>1</sup> and was jointly developed by the Eastern Cape Department of Economic Development, Environmental Affairs and Tourism and Department of Environment Forestry and Fisheries. The South African National Standards (SANS) 368:2015<sup>2</sup> was developed to provide recommendations towards harvesting parameters when sourcing *Aloe ferox* leaves for raw material, yet these standards are not always met by wild harvesters. The processors in the Western Cape have long-standing working relationships with the wild harvesters (Tappers) and provide continuous training to improve harvest practices and the quality of the plant material. The majority of the Tappers in the Western Cape developed their own harvesting practices to safeguard the *Aloe ferox* growing on the private land allocated to them for harvesting purposes. The ABS permits and identification of TK holders processes are incomplete.

The gel and juice of the leaf of *Aloe ferox* are widely used in fortified foods and in food supplements for their laxative effect, especially the Bitters (latex). The prevalence of Aloe emodin is directly related to the percentage of aloin in *Aloe ferox*, with Western Cape *Aloe ferox* containing far greater levels of aloin than the Eastern Cape or KZN *Aloe ferox*. The European Food Safety Authority (EFSA) has prohibited the use of plants containing *hydroxyanthracene* derivatives (HADs) in March 2021 which has a rather destructive impact on the *Aloe ferox* industry and related employment opportunities, as Bitters can no longer be exported to Europe for use in food (supplements)<sup>3, 4</sup>.

The main direct competitor to *Aloe ferox* products is *Aloe vera* (*Aloe barbadensis*) and the Japan Aloe (*Aloe arborescens*). Although *Aloe ferox* leaf gel differs substantially from that of *Aloe vera*, both natural ingredients are used for similar applications, such as to support skin healing after sunburn or radiation, relieving itching and insect stings and for its moisturising

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<sup>1</sup> [https://www.greengazette.co.za/documents/national-gazette-44764-of-25-june-2021-vol-672\\_20210625-GGN-44764](https://www.greengazette.co.za/documents/national-gazette-44764-of-25-june-2021-vol-672_20210625-GGN-44764)

<sup>2</sup> <https://store.sabs.co.za/pdfpreview.php?hash=cdda3ffd70fef5769b6815ad825aa5a5a66d5ab4&preview=yes>

<sup>3</sup> <https://eur-lex.europa.eu/eli/reg/2021/468/oj>

<sup>4</sup> [https://www.cosmeticsdesign-europe.com/Article/2021/03/29/EC-s-aloe-extracts-ban-raises-further-questions-as-industry-assesses-implications?utm\\_source=copyright&utm\\_medium=OnSite&utm\\_campaign=copyright](https://www.cosmeticsdesign-europe.com/Article/2021/03/29/EC-s-aloe-extracts-ban-raises-further-questions-as-industry-assesses-implications?utm_source=copyright&utm_medium=OnSite&utm_campaign=copyright)

and soothing effects. For this reason, consumers seem to perceive products making use of both plants as similar.

### 3.2.2. GLOBAL ANALYSIS

On the global market, *Aloe ferox* is limited to niche markets and authorised in herbal medicine. It is registered in the European pharmacopoeia as *Aloe capensis* and as aloe dry extract; it is also included in the Community Herbal Monograph on *Aloe barbadensis* and *Aloe ferox*. For use in cosmetics, *Aloe ferox* is included in the European Commission cosmetics ingredients database (CosIng) with skin conditioning properties in various versions of International Nomenclature for Cosmetic Ingredients (INCI). In general, the Western Cape variety with an aloin content of 18-20% is preferred for medicinal purposes and alcoholic beverages. The use of *Aloe ferox* in Europe is most driven by the continuous health trend and growing digestive health market. For *Aloe ferox* the health market segment likely offers more opportunities, as there is a stronger interest in the high aloin content in this market. The herbal medicine market is currently in jeopardy as a result of the ban on the use of *hydroxyanthracene* derivatives. It is unclear how the ban will influence the cosmetics market, which currently offers some opportunities for *Aloe ferox*, but here especially there will be strong competition from *Aloe vera*, which is a lot more established in this segment.

### 3.2.3. SWOT ANALYSIS

Strengths	<ul style="list-style-type: none"> <li>• Applications in wide range of cosmetics, skincare, pharmaceuticals &amp; traditional medicine</li> <li>• Sustainable harvesting promoted - continuous training to improve harvest practices &amp; quality</li> <li>• Long-standing working relationships between Tappers and processors</li> <li>• Exporting manufacturers - GMP compliant &amp; have product dossiers close to EU buyer expectations</li> </ul>
Weaknesses	<ul style="list-style-type: none"> <li>• Sector organisation not represented of industry</li> <li>• Limitations market data – strong global focus on <i>Aloe vera</i></li> <li>• Limited quality and no sustainable supply of sufficient quantities</li> <li>• Newcomers - difficult to compete against established &amp; vertically integrated supply chains, even though the resource is plentiful</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>• Increase market demand - continuous health trend &amp; growing digestive health market</li> <li>• Resource available in abundance</li> <li>• Consumer awareness health benefits aloes growing</li> </ul>
Threats	<ul style="list-style-type: none"> <li>• New EU legislation bans aloe extracts with <i>hydroxyanthracene</i> in food and food supplements</li> <li>• Most companies trade illegally due to ABS permit non-compliance</li> <li>• Some populations in EC areas under communal tenure are under most pressure from stressors linked to land-use management practices</li> </ul>

### 3.3. RESPONSIBILITY FOR IMPLEMENTATION

The implementation of the *Aloe ferox* SDP should ideally be the Aloe Council of South Africa (ACSA), but the council seems to be inactive currently. The Cape Aloe Movement (CAM) is a collective initiative formed by the traditional tappers, public sector and industry to develop the biodiversity economy of the aloe industry. The Department of Forestry, Fisheries and Environment (DFFE) has commenced with the process to establish an *Aloe ferox* Community of Practice (ACoP). DFFE needs to confirm the progress of the ACoP and the level of representation. It is recommended that leadership is represented in all three bodies, with both the ACSA and CAM being members also of the ACoP. Herewith a diagram of the proposed changes to the structure of an inclusive industry association:

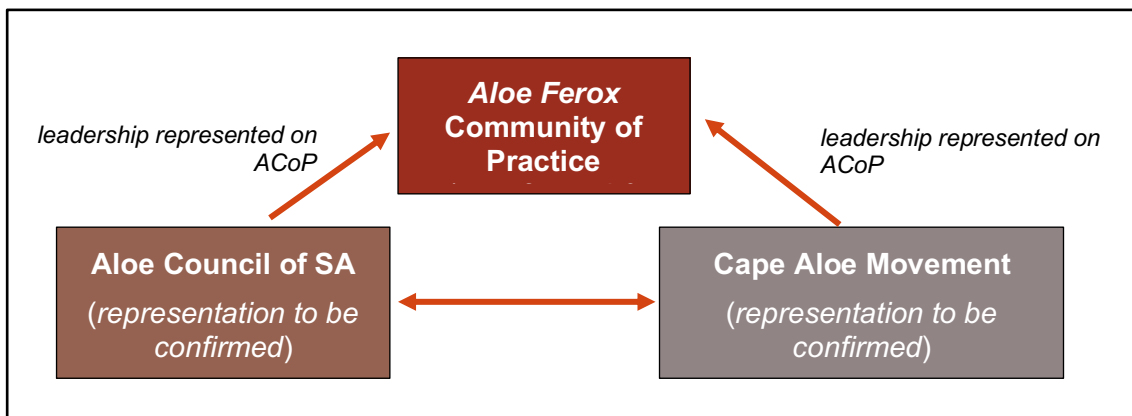


Figure 2: Proposed structure of an inclusive industry association

## 4. STRATEGIC DIRECTION

### 4.1. VISION & MISSION

#### Mission

The Aloe Council of South Africa (ACSA), the Cape Aloe Movement (CAM) and the in-process *Aloe ferox* Community of Practice (ACoP) aim to collectively work together to promote, protect and support the growth of a sustainable *Aloe ferox* industry, inclusive of all its stakeholders.

#### Vision

The creation of a resilient and vibrant *Aloe ferox* industry able to take advantage of global market opportunities and create value for all involved.

#### Core values

- To promote transformation, equitable and inclusive access and participation of the *Aloe ferox* industry in ACSA, CAM and ACoP
- A transformed and representative *Aloe ferox* sector organisation to represent the *Aloe ferox* Industry on regulatory level in a strategic manner and to engage proactively with relevant parties on national and international level to protect and promote the interest of the industry

- To address the impact of the ban on bitters in the EU and find alternative markets
- To support and strive for the creation of a stable and sustainable environment where the *Aloe ferox* industry can thrive and grow
- To develop and implement strategies to protect and enhance the natural environment and biodiversity crucial for the continued success of the industry and the protection of the *Aloe ferox* as part of the indigenous resources of South Africa

## 4.2. TARGETS

The table below provides an alignment between the different capacities of resilience and the pro-poor targets identified for the broader biotrade environment. The purpose of this alignment is to follow the impacts that the building of the different capacities aims to have on improving the resilience of the biotrade industry against shocks, with specific reference to the *Aloe ferox* sector. The alignment between the different capacities of resilience and the pro-poor targets also identifies the learning that needs to take place, as well as the accountability of sector associations and other role players to actively support the building of the different capacities of resilience. The evaluation indicators and targets are detailed in the tables on the following page (VALUATION INDICATORS & TARGETS).

## EVALUATION INDICATORS & TARGETS

ALOE FEROX SECTOR: ABSORPTIVE CAPACITIES					
CURRENT MAJOR STRESS FACTORS	<b>ACTIONS NEEDED:</b> INTENTIONAL PROTECTIVE ACTIONS TO COPE WITH STRESS FACTORS	PRO-POOR TARGETS ALIGNMENT		RELATION TO SDP OUTCOMES	TARGETS
		DIMENSIONS OF POVERTY	FOCUS AREA		
Low domestic market demand	Develop marketing strategy to increase local value-added product demand; Communicate the story of Aloe Ferox Tappers' unique approach	Socio-economic status	1. Employment & income generation 2. Business assets	1. Job creation 2. Improved quality of life and ability to create employment 3. Improve access to markets 4. Sector growth	Biotrade businesses create 10% more employment opportunities by 2025
Limited global market outside EU countries	Develop marketing strategy to introduce Aloe Ferox to consumers and retail (domestic and global); investigate types of trade promotion initiatives available				
Lack of funding for research on product development not containing HADs	Investigate different funding options to support product development		1. Scientific research supporting marketing strategy	1. Improve access to markets backed by scientific claims 2. Innovation	
ALOE FEROX SECTOR: ADAPTIVE CAPACITIES					
THREATS	<b>ACTIONS NEEDED:</b> INTENTIONAL ADJUSTMENTS IN ANTICIPATION OF CHANGE	PRO-POOR TARGETS ALIGNMENT		RELATION TO SDP OUTCOMES	TARGETS
		DIMENSIONS OF POVERTY	FOCUS AREA		
Only a few value chain actors are compliant with ABS regulations	Develop a collective industry-wide ABS agreement and draft a step-by-step guide on completing the permit process	Natural resources as a livelihood asset	1. Compliance with ABS	1. Supply chain actors have valid ABS permits	80% increase of supply chain actors compliant annually

Incomplete GI registration	Plot next steps required to complete GI application in terms of process to move from MMA to APS	Natural resources as a livelihood asset	1. Geographic Indicator status	1. To protect the geographic origin of the natural resource	Aloe Ferox obtained protected PDO and/or PGI status by 2025
Hydroxyanthracene (HAD) prohibition in the EU	Aloe Ferox Community of Practice (ACoP) and International Aloe Science Council (IASC) to form a Scientific Committee on HADs and investigate safe use levels	Representation, inequality & gender	1. Sector actors organised & represented	1. To ensure sector representation are able to act against shocks 2. Technology transfer	Sector organisation to challenges EU finding with support on international associations by 2026
Export of bitters reduced after HAD ban in EU	Investigate market access outside of the EU where HAD has not been banned	Socio-economic status	1. Market intelligence	1. Access to current information on new international markets	5 additional eastern countries explored as new markets
Challenges with the quality of supply from the Eastern Cape	ACoP to develop and implement harvesting guidelines inclusive of cultivated and wild-harvested resource	Education & skills development	1. Skills development	1. Acquire skills to improve good practices and understand market requirements	Guidelines relating to good practices and improved processing methods developed and rolled out annually in such a way to overcome illiteracy barriers. Change report back in BMP.
		Natural resources as a livelihood asset	1. Consistent quality supply		
Lack of harvesting guidelines and training	Supplier development of current and new harvesters/tappers harvesting guidelines inclusive of different provincial areas	Education & skills development	1. Skills development		

Table 1: Evaluation indicators and targets

#### 4.3. KEY STRATEGIC OBJECTIVES

- Objective 1: Strengthen the sector organisation
- Objective 2: Establish international relations on *hydroxyanthracene* (HAD) prohibition
- Objective 3: Sector legislation compliancy & GI registration

- Objective 4: Increase domestic market demand
- Objective 5: Ensure consistent quality supply
- Objective 6: Identify alternative global markets

The Key Strategic Objectives and corresponding work packages are detailed below in 4.4. IMPLEMENTATION ACTIONS.

#### 4.4. IMPLEMENTATION ACTIONS

OBJECTIVE 1: STRENGTHEN THE SECTOR ORGANISATION						
Work Package 1.1.		PROMOTE INCLUSIVITY AND UNITY IN SECTOR ASSOCIATIONS				
Action	Priority	Timeframe	Responsible	Resources required	Collaborations and alignments	Outcomes
Formation of <i>Aloe ferox</i> Community of Practice (ACoP)	Critical (solved asap)	April – Dec 2021	<ul style="list-style-type: none"> <li>• Sector association to request progress from DFFE<sup>5</sup></li> <li>• ACoP<sup>6</sup> to outline its terms of reference and outcomes</li> </ul>	Sector representing organisations	DFFE Dep Agri WC EC Dep: Rural Development and Agrarian Reform	ACoP supported by terms of reference; outcomes with actions and responsibilities listed
Align ACoP with ACSA and CAM <sup>7</sup>	Critical (solved asap)	April – Dec 2021	Sector association to appoint a dedicated person/committee to act as the secretariat	Sector representing organisations	DFFE; CAM; ACSA <sup>8</sup> ; ACoP	Detailed outcomes and action plan available
Work Package 1.2.		OBTAIN FUNDING FOR SECRETARIAT FUNCTIONS				
Action	Priority	Timeframe	Responsible	Resources required	Collaborations and alignments	Outcomes

<sup>5</sup> Department of Forestry, Fisheries and Environment

<sup>6</sup> Aloe ferox Community of Practice

<sup>7</sup> Cape Aloe Movement

<sup>8</sup> Aloe ferox Council of South Africa

Provide Secretariat function to Aloe ferox industry	Critical (solved asap)	On-going (to start Dec 2021)	Sector association to appoint a secretariat and obtain funding for the function	External funding – either competent BSO/consultant	DFFE; CAM; ACSA; ACoP	Functional Secretariat in place to support the industry
Ensure leadership represented on all three structures	Critical (solved asap)	On-going (to start Dec 2021)	Relevant sector representing organisations & stakeholders to collaborate	Sector representing organisations	DFFE; CAM; ACSA; ACoP	Representation of different portfolios clearly defined and aligned with ACoP outcomes

## OBJECTIVE 2: ESTABLISH INTERNATIONAL RELATIONS ON HYDROXYANTHRACENE (HAD) PROHIBITION

<i>Work Package 2.1.</i>		COLLABORATION WITH INTERNATIONAL ALOE SCIENCE COUNCIL (IASC)				
<i>Action</i>	<i>Priority</i>	<i>Timeframe</i>	<i>Responsible</i>	<i>Resources required</i>	<i>Collaborations and alignments</i>	<i>Outcomes</i>
ACoP management structure to setup collaboration with IASC to form a Scientific Committee on HADs	Short term (6 months – 1 year)	May 2021 – May 2022	Sector association secretariat	CAM ACSA ACoP Sector association secretariat	DFFE International Aloe Science Council (IASC) <sup>9</sup>	IASC collaborates with ACoP in setting up HAD Scientific Committee
Scientific Committee to investigate the safe use levels	Medium term (1 – 2 years)	Jan 2022 – Dec 2023	Sector association secretariat; Scientific Committee	CAM ACSA ACoP Scientific Committee	IASC	Scientific Committee publishes findings on safe use levels

<sup>9</sup> <https://www.iasc.org/Certification/CertifiedProducts.aspx>



Scientific Committee to address the concerns of EFSA	Medium term (1 – 2 years)	Jan 2023 – Dec 2024	DFFE, Sector association secretariat, Scientific Committee to present to EFSA	Scientific Committee	IASC	Scientific Committee uses findings to negotiate with EFSA on lifting the prohibition
ACoP to contact other stakeholders in EU that are working on HAD issue			DFFE, Sector association secretariat, Scientific Committee to collaborate with international stakeholders	CAM ACSA ACoP	IASC	ACoP and scientific committee aligned with organisations or stakeholders in EU on HADs

### OBJECTIVE 3: SECTOR LEGISLATION COMPLIANCE & GI REGISTRATION

<i>Work Package 3.1.</i>						
ENSURE SECTOR ABS COMPLIANCY						
<i>Action</i>	<i>Priority</i>	<i>Timeframe</i>	<i>Responsible</i>	<i>Resources required</i>	<i>Collaborations and alignments</i>	<i>Outcomes</i>
Identify the actions and resources needed to ensure ABS sector compliance through a collective approach	Medium term (1 - 2 years)	Jan 2022 – Dec 2022	Sector association to appoint a dedicated person/committee responsible for ABS coordination	DFFE CAM ACSA ACoP Sector association secretariat	DFFE UEBT <sup>10</sup>	Collective industry-wide ABS agreement and permits; compliant industry
<i>Work Package 3.2.</i>						
STREAMLINE PERMIT PROCESS ACROSS PROVINCES						

<sup>10</sup> <https://www.ethicalbiotrade.org/>

<i>Action</i>	<i>Priority</i>	<i>Timeframe</i>	<i>Responsible</i>	<i>Resources required</i>	<i>Collaborations and alignments</i>	<i>Outcomes</i>
Provide suggestions on how the sector organisation can streamline the process	Medium term (1 - 2 years)	Jan 2022 – Dec 2022	Sector association secretariat	CAM ACSA ACoP Sector association secretariat	DFFE Dep Agri WC EC Dep: Rural Development and Agrarian Reform	Step-by-step guide on permit process available to suppliers and processors in both provinces
Investigate differences between the Western Cape & Eastern Cape permit system	Medium term (1 - 2 years)	Jan 2022 – Dec 2022	Sector association secretariat	CAM ACSA ACoP Sector association secretariat	DFFE Dep Agri WC EC Dep: Rural Development and Agrarian Reform	Better understanding of permit system and blockages in both provinces
<i>Work Package 3.3.</i>		<b>OBTAIN GEOGRAPHIC INDICATOR REGISTRATION</b>				
<i>Action</i>	<i>Priority</i>	<i>Timeframe</i>	<i>Responsible</i>	<i>Resources required</i>	<i>Collaborations and alignments</i>	<i>Outcomes</i>
Plot next steps required to complete GI	Medium term (1 - 2 years)	Jan 2022 – Dec 2022	Sector association to appoint a dedicated person/committee	Dirk Troskie CAM ACSA ACoP Sector association secretariat	CIRAD <sup>11</sup>	GI registration received; administrative tasks completed; industry informed; Agricultural Product Standards Act (APS)

<sup>11</sup> French Agricultural Research Centre for International Development

OBJECTIVE 4: INCREASE DOMESTIC MARKET DEMAND						
Work Package 4.1.		DEVELOP A GENERIC MARKETING CAMPAIGN				
Action	Priority	Timeframe	Responsible	Resources required	Collaborations and alignments	Outcomes
Develop marketing strategy to increase local value-added end-product demand	Short term (6 months - 1 year)	May 2021 – May 2022	Sector association secretariat to appoint an external expert	CAM ACSA ACoP Sector association secretariat	WESGRO <sup>12</sup> ; DTIC <sup>13</sup>	Monthly media release; update website; coordinate all media enquiries; Actively promote consumer knowledge; Consumer developed a taste for the different species; <i>Aloe ferox</i> gained own market identity
Implement marketing strategy to introduce Aloe ferox to consumers and retail (domestic and global)	Medium term (1 - 2 years)	Jan 2022 – Dec 2024	Sector association secretariat to appoint an external expert	CAM ACSA ACoP Sector association secretariat	WESGRO; DTIC	

<sup>12</sup> The official tourism, trade and investment promotion agency for Cape Town and the Western Cape

<sup>13</sup> Department of Trade, Industry & Competition

Communicate the story of <i>Aloe ferox</i> Tappers' unique approach	Medium term (1 - 2 years)	Jan 2022 – Dec 2024	Sector association secretariat to appoint an external expert	CAM ACSA ACoP Sector association secretariat	WESGRO; DTIC; Natural Justice (Community Biocultural Protocol) <sup>14</sup>	Traceability of local value-added products and domestic demand improved
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### OBJECTIVE 5: ENSURE CONSISTENT QUALITY SUPPLY

Work Package 5.1. DEVELOP HARVESTING GUIDELINES						
Action	Priority	Timeframe	Responsible	Resources required	Collaborations and alignments	Outcomes
Develop harvesting guidelines inclusive of different provincial areas	Long term (3 – 5 years)	Jan 2022 – Jan 2027	DFFE; SANBI	DFFE & SANBI <sup>15</sup> funding; supported by DEDEAT <sup>16</sup> & CapeNature	WC DoA; SANBI; DEDEAT, Harvesters; TRAFFIC; District & local Municipalities & Tribal Authorities; Provincial conservation agencies	Supplier development of current and new harvesters/tappers; consistent supply & quality; No-go areas are mapped to preserve sensitive areas
Disseminating guidelines and train harvesters & landowners	Long term (3 – 5 years)	Jan 2022 – Jan 2027	Provincial conservation authorities (DEDEAT & CapeNature)			
Ensure that wild collection is carried out in a	Short-term (14 months)	Jan 2022 – March 2023	SANBI; DFFE			

<sup>14</sup> <https://naturaljustice.org/>

<sup>15</sup> South African National Biodiversity Institute

<sup>16</sup> Department of Economic Development, Environmental Affairs and Tourism

sustainable manner						
<i>Work Package 5.2.</i>		ROLL-OUT OF BIODIVERSITY MANAGEMENT PLAN				
<i>Action</i>	<i>Priority</i>	<i>Timeframe</i>	<i>Responsible</i>	<i>Resources required</i>	<i>Collaborations and alignments</i>	<i>Outcomes</i>
Roll-out of BMP inclusive of different communities in provincial areas	Long term (3 – 5 years)	Jan 2022 – Jan 2027	Sector association to appoint a dedicated person/committee in collaboration with SANBI & DFFE	External funding needed	NGO on grass roots level involved with Aloe ferox; Sector association	Landowners & harvesters fully aware of how to harvest sustainably
Establish a mechanism to facilitate community liaison	Long term (3 – 5 years)	Jan 2022 – Jan 2027	Sector association to appoint a dedicated person/committee in collaboration with SANBI, DFFE, Natural Justice	External funding needed	NGO on grass roots level involved with Aloe ferox; Sector association; UNDRIP; Community protocols	Local communities rights to do wild collection and manage communal collection areas are recognised and respected

## OBJECTIVE 6: IDENTIFY ALTERNATIVE GLOBAL MARKETS

<i>Work Package 6.1.</i>		SCOPING OF MARKETS OUTSIDE EU				
<i>Action</i>	<i>Priority</i>	<i>Timeframe</i>	<i>Responsible</i>	<i>Resources required</i>	<i>Collaborations and alignments</i>	<i>Outcomes</i>
Liaise with TFSA <sup>17</sup> to start the research &	Medium term (1 – 3 years)	Dec 2021 – Dec 2023	Sector association secretariat; TFSA	CAM ACSA ACoP	TFSA (Trade Forward Southern Africa);	New markets in the East identified

<sup>17</sup> <https://tfsouthernafrika.org/>

identification of markets process				Secretariat	Dtic	
<i>Work Package 6.2.</i>		<b>TARGET MARKET ANALYSIS</b>				
<i>Action</i>	<i>Priority</i>	<i>Timeframe</i>	<i>Responsible</i>	<i>Resources required</i>	<i>Collaborations and alignments</i>	<i>Outcomes</i>
Appoint <i>Aloe ferox</i> Global Marketing Committee (AGMC)	Short term (6 months - 1 year)	May 2021 – May 2022	Sector association secretariat; TFSA	CAM ACSA ACoP AGMC Sector association secretariat	TFSA Dtic	Aloe Ferox Global Marketing Committee ready to conduct market analysis on newly scoped markets
Conduct target market analysis on newly scoped markets	Medium to long term (1 – 2 years)	Dec 2021 – Dec 2022	Sector association secretariat; TFSA	AGMC Sector association secretariat; marketing strategy service provider	TFSA Dtic	Sector has a clear concept of the needs of the new markets and market segments
Develop marketing strategy aimed at the newly identified markets	Medium term (1 year)	Dec 2021 – June 2022	Sector association secretariat to appoint an external expert	AGMC Sector association secretariat; marketing strategy service provider	TFSA Dtic	Marketing strategy developed and customised for the different markets and market segments
Implement marketing strategy	Medium term to long term (1 – 3 years)	June 2022 – June 2025	Sector association secretariat; TFSA; external expert	AGMC TFSA CAM ACSA ACoP	Dtic DFFE SIPPO	Marketing and promotion programme rolled out in domestic and global markets

Work Package 6.3.		GLOBAL TRADE PROMOTION				
Action	Priority	Timeframe	Responsible	Resources required	Collaborations and alignments	Outcomes
Investigate type of trade promotion initiatives available	Medium to long term (1 – 3 years)	Dec 2021 – Dec 2023	Sector association secretariat; <i>Aloe ferox</i> Global Marketing Committee (AGMC)	AGMC TFSA CAM ACSA ACoP	Dtic DFFE SIPPO	Information on and access to trade fairs & exhibitions available
Investigate and promote quality assurance to boost global market demand	Medium term to long term (1 – 5 years)	Dec 2022 – Dec 2024	Sector association secretariat; AFGC	AGMC TFSA CAM ACSA ACoP	Dtic DFFE SIPPO	Marketing strategy and expected quality aligned with expectations and requirements of global market

## 5. FINANCE STRATEGY

### 5.1. COST ESTIMATIONS

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

Herewith below please see the budget per objective and then per year.

OBJECTIVES (incl WORK PACKAGES)	COST ESTIMATION
Objective 1: Strengthen the sector organisation	R400 000,00
Objective 2: Establish international relations on HAD prohibition	R64 000,00
Objective 3: Sector legislation compliancy & GI registration	R152 000,00
Objective 4: Increase domestic market demand	R336 000,00
Objective 5: Ensure consistent quality supply	R700 000,00
Objective 6: Identify alternative global markets	R376 000,00
Total	R2 028 000,00

	2021	2022	2023	On-going
Total per annum	R128 000,00	R436 000,00	R288 000,00	R1 176 000,00

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.

See attached Excel spreadsheet for detailed line items and costs per objective.

### 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 4.3. Implementation Actions*, one of the key challenges for the sector is to address the impact of the ban on HADs and to commence with generic marketing to ensure financial sustainability. As the current levy structure does not generate sufficient income, additional income streams will need to be found until the sector is in such a position to sustain itself through a membership fee structure. The funding strategy could consider a combination of the below:



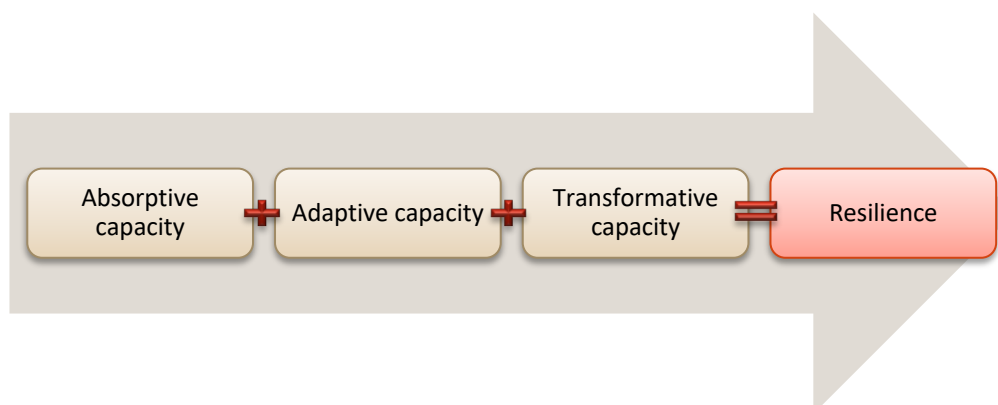
<i>Voluntary levies</i>	Voluntary levies are determined by members of an organisation and usually based on volume produced.
<i>Membership fees</i>	Some organisations charge a set membership fee, usually paid annually. In some cases, the fee is based on categories of membership, depending on the size of the organisation or their level of participation and benefits. Most sector organisations have a membership fee model combined with levies based on volume.
<i>External funding</i>	This can be through national government initiatives or international funding organisations who support sector development.
<i>Member contributions</i>	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. INTRODUCTION

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.

<i>Absorptive capacity</i>	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.
<i>Adaptative capacity</i>	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.
<i>Transformative capacity</i>	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.

## 6.2. RESPONSIBILITY FOR IMPLEMENTATION

The purpose is to institutionalise the monitoring & evaluation process with the sub-sector's stakeholders as a way to track their progress on sub-sector level; improve learning & innovation opportunities; and uncovering blockages. This process should ideally be driven by the transformed sector association (ACSA or CAM or ACoP) to evaluate the implementation of the *Aloe ferox* Sector Development Plan in terms of overall growth in production and exports; the number of small producers; gender equality and empowerment; and employment. This phase includes the evaluation of the drivers of innovation and the required policy and market environment to upscale the activities in the six value chains or sub-sectors through learning and innovation.

The sector-specific Monitoring & Evaluation Framework for the *Aloe ferox* sector is included below.

## 6.3. MONITORING AND EVALUATION FRAMEWORK

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

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

The sector-specific monitoring & evaluation framework for the *Aloe ferox* sector is included below.

ALOE FEROX SECTOR: ABSORPTIVE CAPACITIES					
SECTOR CHALLENGE	WP / PRIORITY AREA	INDICATORS OF SUCCESS	SOURCES OF VERIFICATION OF DATA	KEY ASSUMPTIONS / RISKS	FREQUENCY OF COLLECTION
Low domestic market demand	Work Package 4.1.	Develop marketing strategy to increase local value-added product demand; Communicate the story of <i>Aloe ferox</i> Tappers' unique approach			
Limited global market outside EU countries	Work Package 6.1., 6.2. & 6.3.	Introduce <i>Aloe ferox</i> to consumers and retail (domestic and global)			
		Investigate types of trade promotion initiatives available			
Lack of funding for research on product development not containing HADs	Work Package 2.1.	Investigate different funding options to support product development			

ALOE FEROX SECTOR: ADAPTIVE CAPACITIES					
SECTOR CHALLENGE	WP / PRIORITY AREA	INDICATORS OF SUCCESS	SOURCES OF VERIFICATION OF DATA	KEY ASSUMPTIONS / RISKS	FREQUENCY OF COLLECTION
Only a few value chain actors are compliant with ABS regulations	Work Package 3.1.	Develop a collective industry-wide ABS agreement and draft a step-by-step guide on completing the permit process			

Incomplete GI registration	Work Package 3.3.	Plot next steps required to complete GI application			
<i>Hydroxyanthracene</i> (HAD) prohibition in the EU	Work Package 1.1.	<i>Aloe ferox</i> Community of Practice (ACoP) and International Aloe Science Council (IASC) to form a Scientific Committee on HADs and investigate safe use levels			
Export of bitters reduced after HAD ban in EU	Work Package 6.1.	Investigate market access outside of the EU where HAD has not been banned			
Lack of harvesting guidelines and training	Work Package 5.1.	ACoP to develop and implement harvesting guidelines inclusive of cultivated and wild-harvested resource			
		Supplier development of current and new harvesters/tappers harvesting guidelines inclusive of different provincial areas			

ALOE FEROX SECTOR: TRANSFORMATIVE CAPACITIES					
SECTOR CHALLENGE	WP / PRIORITY AREA	INDICATORS OF SUCCESS	SOURCES OF VERIFICATION OF DATA	KEY ASSUMPTIONS / RISKS	FREQUENCY OF COLLECTION
Sector associations not representative of industry	Work Package 1.1.	<i>Aloe ferox</i> Community of Practice (ACoP) to be set up by DFFE			
		Current Aloe Council SA and Cape Aloe Movement to be realigned to actively represent the sector and address risks			
		Ensure leadership represented on all three structures			

## 7. LIST OF ADDENDUMS

Addendum A: Stakeholder list

Addendum B: Cost estimation

Addendum E: Sector-specific Context Analysis (Honeybush, *Aloe ferox*, Buchu)