



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



SAEOPA
Southern African Essential
Oil Producers Association

UNIDO WORKSHOP

KM Swanepoel

19 November 2018



LAUNCH OF UNIDO PROJECT





the dti

Department:
Trade and Industry
REPUBLIC OF SOUTH AFRICA



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

Objective: Strengthen the quality and standards compliance capacity to facilitate market access for SMEs in the essential and vegetable oils value chain destined for food, health and cosmetic markets.



▼ Partners

- **the dti** and agencies
- **DEA**
- **DAFF and agencies**
- **Training providers**
- **South African Quality Institute (SAQI)**
- **Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) - ABS Compliant Biotrade Project**
- **Swiss Import Promotion Programme (SIPPO)**

FULL SPECIE LIST FOR DEA, GIZ, BIOPANZA and UNIDO

- ***Adansonia digitata* / baobab**
- ***Agathosma betulina* / buchu**
- ***Agathosma crenulata* / buchu**
- *Aloe ferox* / African aloe
- *Aspalathus linearis* / rooibos
- *Bulbine frutescens* / bulbine / burn jelly
- ***Citrullus lanatus* / Kalahari melon**
- *Cyclopia genestoides* / honeybush
- *Cyclopia intermedia* / honeybush
- ***Eriocephalus punctulatus* / Cape camomile**
- *Erisema kraussianum* / bangalala
- *Harpagophytum procumbens* / devil's claw
- ***Helichrysum odoratissimum* / Imphepho / golden everlasting / kooigoed**
- *Hoodia gordonii* / hoodia
- *Hypoxis hemerocallidea* / African potato
- *Kigelia africana* / sausage tree
- ***Lippia javanica* / Lippia / fever bush / koorsbossie**
- *Lobostermon fruticosus* / pyjama bush
- *Moringa olifeira* / moringa exotic
- *Myrothamnus flabellifolia* / resurrection bush
- ***Pelargonium graveolens* / rose geranium**
- *Pelargonium reniforme* / kidney leaved pelargomium
- *Pelargonium sidoides* / kalwerbossie
- *Sceletium tortuosum* / kanna
- *Schinziophyton rautanenii* / mongongo / manketti
- ***Sclerocarya birrea* / marula**
- *Siphonochilus aethiopicus* / wild ginger
- *Sutherlandia frutescens* / cancer bush
- *Trichillia emetic* / mafura
- *Tylosema esculentum* / marama bean
- *Warburgia salutaris* / pepperbark tree
- ***Ximenia americana* / sour plum**
- ***Ximenia caffra* / sour plum**
- ***Artemisia afra* / lenyana/ wilde als/Wormwood**

Essential Oil

List Of Five Species UNIDO/ GIZ

- Rose Geranium
- Cape Camomile/ Rosemary, Kapokbos, Igaga
- Buchu / Boegoe and Artemisia for the rest of SA
- Helichrysum Imphepho (SS, X, Sw, Z),
 - kooigoed (A), Ingqunisa (Z)
- Lippia ; Zinziba, Beukesbossie, koors bossie, maagbossie, lemoenbossie, laventelbossie, fever tea, lemon bush. musukudu, bokhukhwane (Tswana), inzinziniba (Xhosa), umsuzwane (Zulu), mumara (Shona)



Vegetable/Seed Oil

Cluster of Five Species for UNIDO

- **Marula**
- **Baobab** for Limpopo but **Mafura** for KZN
- **Kalahari Melon** / t'sama
- **Manketti /Mongongo Manketti** / Mongongo in English -
manketti nut, mongongo nut, \ !Kung San - //xa, mongongo
Lozi - mungongo Shona - mungongoma Tswana - mongongo,
mugonga Herero - mangetti, mongongo Kwangali - ugongo
(ngongo) Afrikaans - wilde okkerneut
- **Ximenia spp**
 - americana: Kleinsuurpruim (Afrikaans), sour plum/tallow wood (English), cerise de mer (French), habbuli (Fulani), and mtundakala (Swahili),
 - X caffra: large sourplum (Eng.); grootsuurpruim (Afr.); umThunduluka-obmvu (Zulu); Morokologa (Northern Sotho)





the dti

Department:
Trade and Industry
REPUBLIC OF SOUTH AFRICA



the dti

Department:
Trade and Industry
REPUBLIC OF SOUTH AFRICA

A STUDY INTO AND PREPARATION OF A
STRATEGIC DEVELOPMENT PLAN
FOR THE
SOUTH AFRICAN ESSENTIAL OILS INDUSTRY

Cosmetics Sector Desk: Natural Ingredients

South Africa Natural Ingredients and Products Sector Export
Strategy



Dti Cosmetics Sector Desk



the dti

Department:
Trade and Industry
REPUBLIC OF SOUTH AFRICA

- The dti focuses on the Natural Ingredients Sector Aloe ferox, essential and indigenous oils to align with the DEA initiative, i.e. BioPANZA.
- A new incentive on Agro-processing has been established by the dti.
- The South African cosmetic and personal care industry is vibrant and dynamic, comprising an interesting mix of multinational giants, entrepreneurial companies, and small, medium and large local brands.
- The total exports amounted to R2.8 billion, equivalent to 0,53% of total exports
- Imports amounted to R4 billion, equivalent to 0,63% of total imports.



CBI
Ministry of Foreign Affairs

- 3 years support on Export Readiness
- Marketing opportunities
- Networking
- Product development MSDS/International regulations to EU
- Assistance to In Cosmetics show
- Assistance to BIOFACH show

EU



- Value Chain studies
- Testing of products
- Marketing
- Feasibility studies
- KZN
- Limpopo



Participatory Assessment of Nkandla Essential Oils Value Chain



October 2007



EuropeAid/122028/D/SV/ZA
This project is financed by the European Union



ABioSA

ABS Compliant Biotrade in South(ern) Africa

Funded by: Swiss State Secretariat for Economic Affairs (SECO)

Managed by: Access and Benefit-sharing Capacity Development Initiative (ABS Initiative), within the GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit)

Governance: Project steering & investment committees

Country Focus: South Africa (70%) and Southern African region (30%)



- Supporting Bulungula E Cape and SEOBI incubators since 2010
- Banks like ABSA incorporated e.g. Rustenburg
- Focus on Essential oil cultivation and distillation of Geranium
- SEOBI also do GC analysis and assist in marketing and MSDS
- The amount that can be applied for by cooperatives is between R40 000 – R1.5 million. Secondary coops could apply for higher amounts.

Cooperative Incentive Scheme (CIS)

- A Primary Co-operative will be funded between R400 000 – R1 500 000
 - 30% for working capital & 70% for capital equipment
 - for both start-ups and existing co-operatives
- Clusters in a form of a Secondary Co-operative (minimum of two primary co-operatives)
 - Minimum of R3 000 000 & maximum of R11 000 000
 - 30% for working capital & 70% for fixed capital eg. warehouses, silos machinery and equipment, technological improvement etc.
- Due to limited funding prioritisation will be given to those cooperatives that demonstrate a reasonable prospect of success and sustainability, create and maintain more jobs and contribute to community development.
- On- line applications will be launched in March 2019, an open window will be from the 1st of April 2019.



science
& technology

Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA

- Partners
 - CSIR
 - SEDA or SEOB
- The department, in partnership with the DEA have identified 20 species through the Phakisa Initiative.
- Hence, the recordings have been narrowed down around these species.
- Currently, the department is doing recordings on these species. The information will then be synchronised and will be hosted in the Indigenous Knowledge Systems Office.
- The IKS will be an arms length of the DST and operate under the Semi-autonomous on IKS issues.
- The DST also sees the links with the project on regulatory scope. It is foreseen that the Office will also have a leg of commercialisation.



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

- Funded projects
 - Honey bush
 - Sceletium tortuosum
- Facilitate workshops and networking
- The DEA indicated that the institution is custodian to the National Biodiversity Economy Strategy (NBES) and the initiative that emanated from the Operation Phakisa Biodiversity Economy, i.e. BioProducts Advancement Network South Africa.
- The DEA indicated that the BioPANZA is aimed at bringing all the partners in the table and tackling the challenges in the sector, on access to finance, access to markets, compliance, research and development.
- Environmental Protection and Infrastructure Programmes – fund infrastructure needs for the bioprospecting economy.
- The DEA will be implementing the projects that were successful in the recent call for the next five years.
- FNB indicated that the institution is working on addressing the gaps in small businesses. Hence, the FNB is working with DEA on providing training to SMME.
- FNB is also working on creating a network with partners to request funding support
- BIOPANZA initiative
- Online platform to be created



- **Sector focus:** Natural Ingredients (NI) and Processed Foods (PF)
- **BSO cooperation partners:** the dti, CECOSA, TIKZN, Wesgro & Food SA
- **Upcoming match-making activities:**
 - SIAL Paris 2018 trade fair – South African Pavillion, 21 – 25 October 2018
 - Selling Mission to Sweden, 12 – 16 November 2018
- **Collaboration with:** UNIDO GQSP, GIZ ABS Initiative and other stakeholders

SABS

No coordination of action between all Industry/Government and between Government/Government towards a South African Quality Framework for Natural Products

THE BIO-ECONOMY STRATEGY

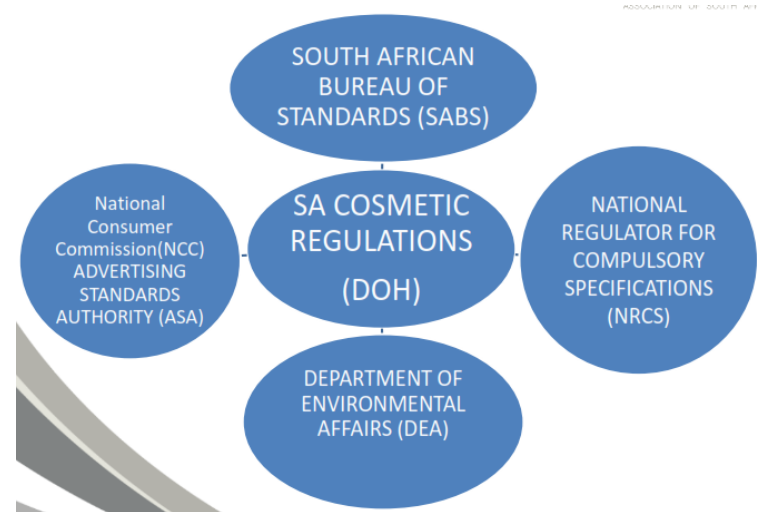
SAHPRA
SOUTH AFRICAN
HEALTH PRODUCTS
REGULATORY AUTHORITY

Biodiversity
ECONOMY INDABA

ACADEMIA



- Ingredient and labelling standards, ISO & SABS
- Not exclusively indigenous plants
- Safety, GMP, PIF, MSDS, INCI, DoH,



SURVEY AND DEVELOPMENT OF THE STATUS OF THE INDUSTRIAL CROPS SECTOR IN SOUTH AFRICA

VOLUME 4 Essential Oils Report

Zitholele Consulting
Reg. No. 2006/000392/07
PETERMARTIBURG
PO Box 1258 Petermaritzburg, 3000
KwaZulu-Natal, South Africa
163 Joubert Avenue, Street, Petermaritzburg
Tel + (27) 033 345 3165
Fax + (27) 033 345 3202
E-mail: mail@zitholele.co.za

ZITHOLELE
CONSULTING



REPORT ON

REVIEW OF THE ESSENTIAL OILS INDUSTRY
IN SOUTH AFRICA

Report No : 8737/86571/Z

Submitted to:

Department of Water Affairs and Forestry
157 Schoeman Street
Pretoria
0002

DISTRIBUTION:

3 Copies - Department of Water Affairs and Forestry
1 Copy - 8738

December 2006

8738



DEPARTMENT: AGRICULTURE ROSE GERANIUM PRODUCTION



Pelargonium cv. rosé
Photo: WG Alberts

PRODUCTION GUIDELINES FOR ROSE GERANIUM (*Pelargonium cv. rose*)

PART I: GENERAL ASPECTS

1. CLASSIFICATION

Scientific name: *Pelargonium cv. Rosé*

Common names: Rose geranium, Rose scented Geranium, *Pelargonium roseum*

Family: Geraniaceae

Genus: *Pelargonium*

We offer exporter support, including assistance for our start-up companies, on company registration, customs procedures, registration and process, and access to relative incentives.

Export Readiness Training. (Incoterms/VAT Act/SARS Compliance/Regulatory Compliance/Export Documentation/Logistics/Incoterms/other)

International trading protocols.

Lobbying with Governmental Bodies and Associations on behalf of our Members

Assistance in Exporting to foreign markets , the bureaucracy involved and how to structure finances.

- **CECOSA plays a critical role in supporting members in creating links to the right partners and providing information that will assist them in successfully implement their export marketing plans.**
- **MENTORING:** Enabling members to become self sufficient and assist with their growth and development. (Self and the Business).
- **Representing members at shows & exhibitions where members are financially unable to attend.**
- **Assisting our Growers in Accessing the Emerging Farmers Funding scheme.**
 - **Disseminating information to members on sector specific and trade matters for both local and international markets**
 - **Assist members identifying relevant markets accessing DTI local and international trade show funding.**
 - **Commercialising member products/services (CECOSA Retail)**



**The perfect
platform to help
launch your export
opportunities**

*Your partner in
development finance*



- In 2015 the IDC reinforced its operations and established the

New Industries Strategic Business Unit (SBU).

- Marula
- Possibly Kalahari Melon



NEDLAC



STUDY INTO THE ESTABLISHMENT OF AN AROMA AND
FRAGRANCE FINE CHEMICALS VALUE CHAIN IN SOUTH AFRICA
(TENDER NUMBER T79/07/03)

FINAL REPORT
(Submission Date: 15 September 2004)

Part Four-
Report: Aroma Chemicals Derived from Essential Oils

STUDY CONDUCTED BY:

Triumph Venture Capital (Pty) Limited
In conjunction with Dr Lorraine Thiel and Mr Fadl Hendricks
("the Consultant")



FRIDGE
Chemicals Sector Summit
Preparation:

Information System Strategy
(Step 4)

23 March 2005

ECONOMIC
DEVELOPMENT
PRACTICE

Leadership House 40 Shortmarket Street
Cape Town 8000, South Africa
tel +27 21 481 6000 fax +27 21 481 6001
www.kaiserrdp.com

CAPE TOWN • LONDON
NEW DELHI • SÃO PAULO
DUBAI • WASHINGTON



FROM START TO FINISH WE UPLIFT
INNOVATIVE COMPANIES IN THE ICT AND
ADVANCED MANUFACTURING, BIOSCIENCES
AND GREEN ECONOMY SECTOR-----

- Not funding for supporting any projects
- Provide information on identification, occurrence and status of plants to DEA and other institutions



**Evaluation of the *Leptospermum petersonii*
Essential Oil Operation at Emerald Acres**

Paulpietersburg

Report done for SASOL / ChemCity

by

KM Swanepoel & WG Alberts

October 2011

**SUPPORT TESTING AND
FORMULATIONS**

Lemon Scented Tea tree into
mouthwash

Castor oil into hair products

Awards for producers



- Eastern Cape in Villages
- Value adding but Lemon grass into candies and soap making with Rose geranium
- Amount of Financial support to be confirmed
- Transfer of technology by dedicated staff





our future through science

- R1m for initial assessments during 2018/19 FY.
- Marula, Geranium and Aloe ferox
- DST evaluating project proposals
- Appointed by Rural development in Limpopo as implementing agent; Rose geranium and Lippia javanica, appointed consultants to provide plant material from W Cape
- Funding received for Rose geranium project is R 600 000.00
- Artemisia and Manketti in formulations of finished products
- Kalahari Melon in NW Province
- Collaboration
 - University of Pretoria – analysis
 - North West University – dermal safety tests
 - Vantage Specialty Chemicals – shelf life
 - Bio-Earth Manufacturing – production of body lotion and bath oil
 - Other institutions in the Aloe ferox and Marula projects:
 - University of Fort Hare
 - ARC
 - Eastern Cape Development Corporation

BIDC

- focus is final product development and not always ingredient development
- product and process development resulting in final products that went onto the market.
- 8 enterprises supported in this area.
 - permission of my SMME's to provide with more specific details pertaining to their individual businesses if this is required.
- Imphepo: incense stick and cosmetics containing imphepo oil
- Moringa: Processing of leaves and seeds, final formulation into cosmetics and food products
- Marula oil: cosmetics
- Kalahari melon oil : cosmetics
- Rose geranium: cosmetics



BIDC products

- Essential oils
 - Rose geranium
 - Imphepo (helicrysun)
- Vegetable oils
 - Baobab
 - Marula
 - Manketti
 - Ximenia
 - Kalahari Melon



BIDC



- 26 enterprises supported (7 cosmetic)
- 88 interns trained, majority placed with industry or studying further
- 183 new permanent jobs created in enterprises
- 203 temporary jobs created
- 85 new products transferred to enterprises (40 cosmetic products)
- >220 applications from SMMEs



Stakeholders/Funders



science
& technology
Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA



BIDC SMME support programme

Cosmetic development:



Ingredient development:

DMT
(Rose geranium)

Biomoringa
(Moringa oil)

Teubes, Puris
(Natural Fragrances)



SMME Challenges

- Supply of quality ingredients locally
- Cost of imported oils/ingredients
- Affordability/ accessibility of product development/product testing for SMME's
- SMME product regulatory compliance
- Production facility/capability for small scale manufacture
 - Shared GMP compliant facility
 - Contract manufacturing
- Access to market (supplier development programmes, Dischem, Clicks, export opportunities)
- Follow-on funding

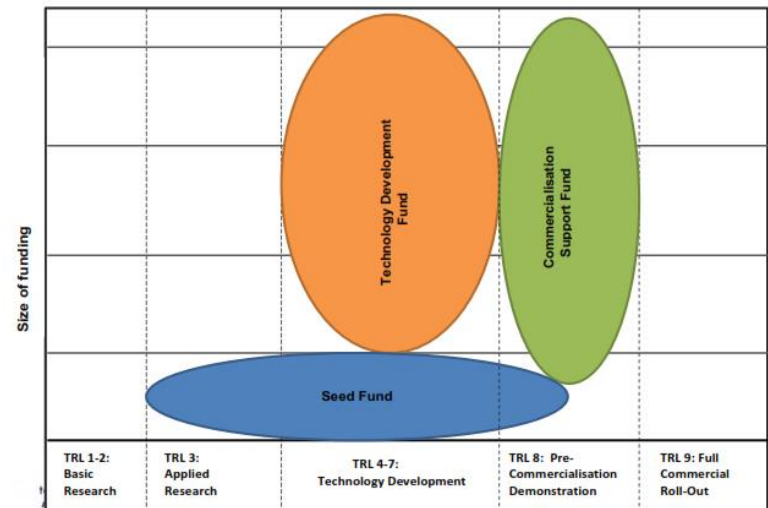
BIDC challenges and programme improvements

- SMME sustainability – need to support enterprises that are already in the market, has revenue, route to market and a committed entrepreneur
- Agile manufacture – minimum viable product (MVP)
 - Market testing – iterative approach
 - Market sample manufacture
- Maintaining focus on quality and good science while keeping TTM in mind
- Support SMME's understanding of development process
- Managing SMME expectations on BIDC service offering
- SMME funding, access to markets, business development
 - Partner - The Innovation Hub/Biopark/OneBio

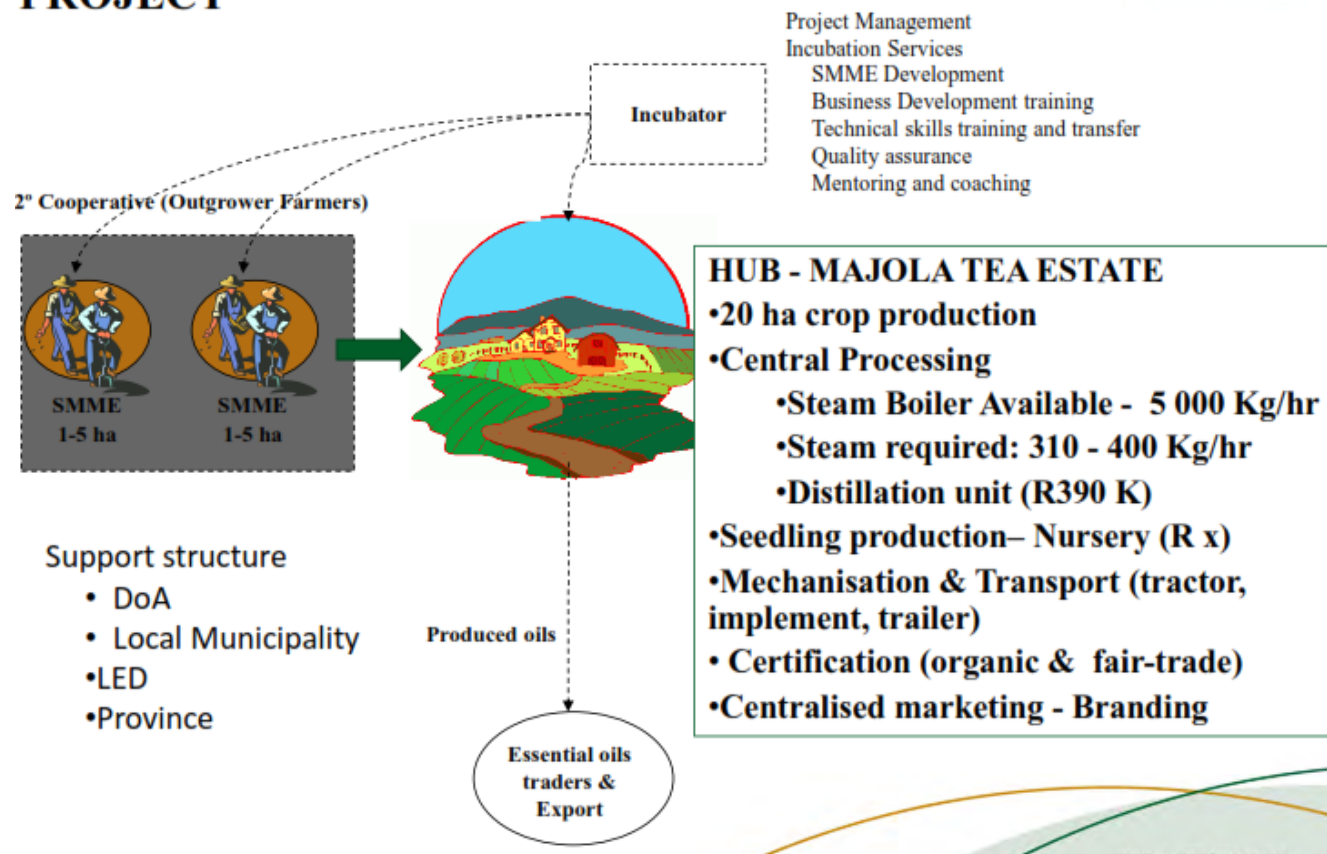


- TIA provides support in innovation skills development, creating awareness on the opportunities of the programme, in partnership with the DST.
- The programme provides focused and targeted training interventions to strengthen entrepreneurial capacity.
- TIA manages an agriculture portfolio on investment and developing/ verification of certain technologies for agriculture portfolio.
- TIA also provides tech-based expertise through its technology platforms to facilitate access to key infrastructure and expertise for technology innovation in targeted technology areas.
- The Technology stations programme provides access to world-class infrastructure and expertise in agro-processing for SMME and start-ups.
- Also support with Innovation funding - to fund project base or initiative base.

Funding Schemes



PROPOSED STRUCTURE FOR MAJOLA ESSENTIAL OILS PROJECT



- *Sasbo, the South African Society of Bank Officials as it was in 1916, started with members from the National Bank of South Africa Limited, the African Banking Corporation, the Netherlands Bank of South African Limited and the Standard Bank of South Africa Limited. Over time the union became a niche union operating almost exclusively in the Standard Bank of South Africa Limited and the then Barclays National Bank of South Africa Limited.*
- *Sasbo– The Finance Union, as it is now known, having diversified into the finance sector as a whole, has de facto recognition with approximately 20 financial institutions, ranging from banks to insurance companies to pension fund administrators and the like, and has members from nearly 200 financial institutions throughout the country. The union still has a banking flavour though in that the bulk of the membership is from ABSA, First National Bank and the Standard Bank, with Nedcor running a close fourth.*
- KZN and Limpopo
- Provided equipment for processing
- Cost R 250 000-00 plus transport and reassembling
- Facilitate technical training



Other Banks

- FNB indicated that they are trying to address that through capacity building and providing support the companies between R 0 to R 1 million.
- ABSA
- Nedbank
- Standard Bank

PROVINCIAL SUPPORT



- EASTERN CAPE:
 - LED R1 000 000
 - ARC
 - DRDAR Dohne Research station testing laboratory
 - Old Mutual and Land Bank R 600 000
 - DRDA
 - SEDA
 - ZDEDA R10M
- KZN
 - TKZN
 - INR
 - ADA
 - Municipalities
 - Ithala Bank
 - SASBO R25 000
 - Urban Econ
 - Institute for Natural Resources
- W CAPE: WESGRO
- LIMPOPO: RDLR
- NW Province: CSIR
- GAUTENG:
 - CSIR R1m
- MPUMALANGA: MEGA



R30m marula factory to boost KZN tourism

NEWS / 22 FEBRUARY 2016, 12:21PM / NOSIPHO MNGOMA





KZN- ADA- PARTNERS

- DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT
- KWAZULU-NATAL DEPARTMENT OF ECONOMIC DEVELOPMENT AND ENVIRONMENTAL AFFAIRS
- THE DEPARTMENT OF RURAL DEVELOPMENT AND LAND REFORM
- DEVELOPMENT BANK OF SOUTH AFRICA (DBSA) –
- THE JOB FUNDNATIONAL YOUTH DEVELOPMENT AGENCY
- LAND BANK
- ITHALA NATIONAL EMPOWERMENT FUND
- DEPARTMENT OF TRADE AND INDUSTRY

ADA



- Agricultural Development Agency active in KZN supporting seedlings, equipment and training.
- Seminars and information sessions
- Coordinating projects, municipalities and funders



- Since 2017 Based in Berlin
- Industry Association, many of whose members are involved in the processing of, and value addition, baobab seed oil.
- promoting growth and development of baobab industry, including baobab seed oil.
- Funded by members' contributions Estimated approx. 10,000 beneficiaries, of whom approx. 75% are women.
- Scientific research into the cosmetic benefits of using baobab oil, which will result in increased demand for the oil



Packaging as recommended by SASOL

- 23kg plastic containers food grade
- 190 kg metal/ plastic drums
- Foil Sleeves
- Sample bottles



Drums strapped to pallet

INDIGENOUS PLANT USE FORUM
ALL UNIVERSITIES PARTICIPATING
Essential oil and
vegetable oil researchers



Latest Publications Research

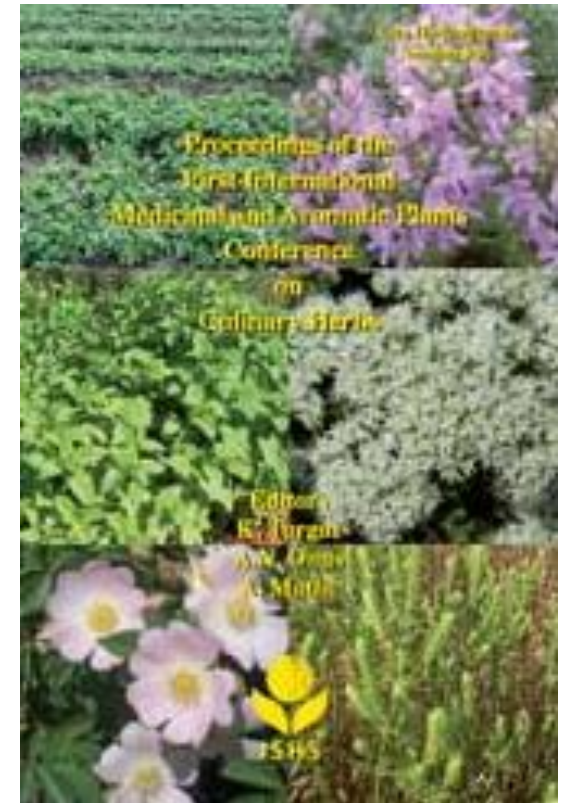


Indigenous Plant Use Forum
21st ANNUAL CONFERENCE 2018

*Survival Boutique Olive Estate,
Oudtshoorn, Western Cape Province,
South Africa*



Theme: Bridging the gap
between academic research
and commercial product
development



TECHNICAL AND FUNDING SUPPORT

- **CBI**

Market intelligence, training and access

4 years of In Cosmetics Global

Sign up of international distributors- Europe, Asia, US

- **IDC**

Social Enterprise fund grant for R&D

Enabled share allocation to community partner

- **TIA**

Bioplatform- R&D and trial manufacture



ZUPLEX
— BOTANICALS —



- 2018 - 2020
- 3 outgrower cooperatives
- 60 outgrowers
- 321 new jobs created
- Training:
 - Business
 - Agricultural & organic training
- Financial assistance
- 5 year off-take



EXPORT ASSISTANCE



AWARDS



INDIGENOUS PLANT
USE FORUM
SOUTH AFRICAN PRODUCT
OF THE YEAR 2014



Old Mutual Foundation

Empowering people and communities through skills development, education, socio-economic transformation and job creation.



Commercialization in SA – Challenges

- Synergy
- Regulation – Barriers to Access
- Internationally Accredited Testing Facilities
- Documentation Cost
- Manufacturing & Packaging
- Ingredients

EXPORT CHALLENGES

Market

- Consumer needs & market trends
- Unknown ingredients
- New product vs. substitute
- Regulations & registration

Technical

- Lack of technical expertise
- Standardisation & Traceability
- Certifications

Financial

- Scalability of production
- Minimum Order Quantities
- Lack of access to finance
- Price sensitive consumers

Freight

- Documentation
- Payment terms
- Export procedures & Incoterms

REGULATORY

CERTIFICATIONS



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA



R&D to Commercialisation: Regulatory process

- Key challenge for the sector
- 2.5 years to receive Biotrade/Bioprospecting permit
- Majority of potential suppliers do not yet have permits
- Result: lost export sales, lost jobs, stifled growth, SA reputational damage

Conclusion

Results of the GIZ Biotrade fund application will be added to the list of projects once the outcome is known

- Cooperation
 - Initially slow but excellent form producers and some stakeholders although some reservation
 - Not all provinces responded yet
- Information
 - Project information and progress not generally shared
 - Incomplete data on all stakeholders resulting : USAID, SATIH etc
- Funding
 - Available but not always accessible, transparent on amounts and not enough
- Technical assistance
 - Available but not always known or recognized
- Testing facilities
 - Available but not well funded and known
- Quality control
 - Awareness but need more specific training
- Training in general
 - Huge shortage in all stages of cultivation and value chain
- Value adding
 - Done and supported by various companies bur could increase
- Markets
 - Good and established in some species
 - Shortage is in supply and thus creating markets for new products



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

and implemented by



SAEOPA
Southern African Essential
Oil Producers Association