Action plan for optimal growth of African Traditional Medicine: industry and transformation
Commissioned studies and processes by the dti family

- Small Enterprise Development Agency (Seda)
- South African Bureau of Standards (SABS)
- Trade and Investment KwaZulu-Natal (TIKZN)
Objectives

- Analyse the current status of the sector in SA (government and agencies, private sector, research institutions, CBOs and THPs)
- Identify key components of the value chain and key stakeholders within each segment
- Engage with key participants and stakeholders to understand their perceptions of current challenges and opportunities
- Make recommendations
Market definition

A broad definition, including:
- African Traditional Medicines
- Phyto-medicines
- Herbal products and teas
- Health foods
- Cosmeceuticals
- Nutraceuticals
- Essential oils

.........derived from indigenous plants and knowledge
International context

- WHO African Regional Strategy on traditional medicine was adopted in 2000 (WHO, 2000)

- AU Decade of African Traditional Medicine 2001-2010, extended to 2011-2020

- WHO Traditional Medicines Strategy 2002-2005 provides a framework for action to promote the use of TM
Chapter 2 of the Constitution of South Africa (The Bill of Rights) states that every citizen has a right to participate in the cultural life of their choice.

“The Traditional Health Practitioners Act No. 22 of 2007 provides for a national policy on traditional medicine, but actual integration of traditional medicine into the national health care system and structured relationships with the pharmaceutical industry has been limited” (National Development Plan, 2030)
Initiatives of National Government on Traditional Medicine Innovation
A paradigm shift
(Ubuntu pharmacology)

Conventional Drug Discovery and Development
Expensive, time consuming, numerous hurdles

Reverse Pharmacology
Affordable, efficient, less hurdles with potential registration of phytotherapy and patenting of phytomedicine

Platform Sequence:
- Healer Claims
- Prospecting Leads
- Medicine Trials
- Technology Applications
The TM Market

International

- The global market for traditional medicine estimated to be about US $83 billion annually, with a steady growth rate of about 10-20% per annum *

National

- In South Africa, up to 80% of the population uses traditional medicine for primary health care

*(Robinson & Zhang 2011)
### Size of the SA market

+ 400 000 people working in the sector

<table>
<thead>
<tr>
<th>Category</th>
<th>No. Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>THPs</td>
<td>200 000</td>
</tr>
<tr>
<td>Informal Harvesters</td>
<td>144 000</td>
</tr>
<tr>
<td>Cultivators</td>
<td>30 000</td>
</tr>
<tr>
<td>Informal Manufacturers / Distributors</td>
<td>5 000</td>
</tr>
<tr>
<td>Formal Traders/ exporters/ manufacturers/distributors &amp; marketers</td>
<td>10 000</td>
</tr>
<tr>
<td>Ancillary services</td>
<td>15 000</td>
</tr>
</tbody>
</table>

- A large percentage employed being rural women
- +/- R3 billion generated by the informal sector? possibly an underestimate
Current market size

- Comprises formal and informal market, exports

- Scale of formal herbal sector? DEA research in process
The TM Value Chain

1. Researchers (academic/contract)
2. Product Developers
3. Cultivators & Harvesters
4. Exporters & Traders
5. THPs
6. Manufacturers
7. Distributors & Marketers
8. Consumers
The Value Chain – Issues

- Formal and informal chains
- Limited vertical integration
- Poor communication across chain
- Bottlenecks e.g. raw materials
- Market access
- Regulatory uncertainty
- Lack of enforcement
- Environmental sustainability
The Value Chain – Questions

- How much value added, and where?
- Fair distribution of power & rewards?
- Quality and safety standards and enforcement?
- Lack of alignment of scientific and indigenous knowledge
# Essential Oil Production Volume by Province

<table>
<thead>
<tr>
<th>Province</th>
<th>Total ha</th>
<th>Small and commercial growers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>200</td>
<td>15</td>
</tr>
<tr>
<td>Free State</td>
<td>70</td>
<td>5</td>
</tr>
<tr>
<td>Gauteng</td>
<td>82</td>
<td>9</td>
</tr>
<tr>
<td>KZN</td>
<td>422</td>
<td>30</td>
</tr>
<tr>
<td>Limpopo</td>
<td>91</td>
<td>9</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>943</td>
<td>14</td>
</tr>
<tr>
<td>North West</td>
<td>40</td>
<td>7</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>45</td>
<td>6</td>
</tr>
<tr>
<td>Western Cape</td>
<td>77</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1970</strong></td>
<td><strong>115</strong></td>
</tr>
<tr>
<td>Strengths</td>
<td>Weaknesses</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>• Active and growing R &amp; D base</td>
<td>• Negative perceptions of TM by some consumers</td>
<td></td>
</tr>
<tr>
<td>• Strong sustained growth in global herbal market</td>
<td>• Absence of national strategy for TM sector development</td>
<td></td>
</tr>
<tr>
<td>• Strong domestic demand</td>
<td>• Limited strategic/coordinated investment in sector</td>
<td></td>
</tr>
<tr>
<td>• South African biodiversity and traditional knowledge</td>
<td>• Barriers to knowledge sharing and collaboration</td>
<td></td>
</tr>
<tr>
<td>• Aligned with government policy on priority sectors and rural development</td>
<td>• Lack of market intelligence and access</td>
<td></td>
</tr>
<tr>
<td>• Included in Vision 2030 by the National Planning Commission</td>
<td>• Lack of comprehensive pharmacopoeia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Bottlenecks in establishing commercial cultivation</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Strong and sustained growth in global herbal market</td>
<td>• International competitors (Chinese, Ayurvedic, other herbal products)</td>
</tr>
<tr>
<td>• International interest in new products, commercialisation of African herbs</td>
<td>• Cheaper imports, synthetic substitutes</td>
</tr>
<tr>
<td>• Consensus that time is right to coordinate initiatives and investment to grow sector</td>
<td>• Regulatory uncertainty</td>
</tr>
<tr>
<td>• Potential to create new SMEs and jobs</td>
<td>• Protectionist regulation in key international markets</td>
</tr>
<tr>
<td>• Potential to develop rural enterprises</td>
<td>• Lack of MCC regulations</td>
</tr>
<tr>
<td></td>
<td>• Unintended consequences of regulation e.g. bioprospecting in limiting sector growth</td>
</tr>
<tr>
<td></td>
<td>• Environmental issues</td>
</tr>
</tbody>
</table>
Emerging themes

- Absence of national and provincial TM commercial strategies
- Value chain; parallel chains, lack of vertical integration, lack of access, and bottlenecks
- Fragmentation and limited engagement between different players
- Lack of access to/information on research, market intelligence, sources of funding
- Need to integrate the informal sector & indigenous knowledge in initiatives
Opportunities

- Strong and sustained growth in global herbal market
- International interest in new products, commercialisation of African herbs
- Strong domestic market demand
- National Development Plan provides for potential growth of this sector
- Consensus on need to coordinate initiatives and investment to grow sector
- Recognised potential to create new SMEs and jobs
Recommendations

- National 5 year Commercial Strategy and Implementation plan
- Key strategic partnerships
- Sector hub; virtual and physical
- Cultivation programme
- Investment in beneficiation (manufacturing facility)
- Identifying and Packaging of available Funding Support
- Creation of Key Strategic Partnerships
- Specialist market research (export market)
- Ongoing identification of specific investment opportunities
Sector hub

Virtual

• Develop open-access research database
• Market maker (matching buyers and sellers)
• Facilitate access to funding
• Sector networking forum
• Commission market research ?
• Identify new commercial opportunities
Sector hub

Physical

- Source/supply propagated material to cultivators
- Technical support and training on cultivation and processing
- Laboratory service for cultivation and processing
- Marketing support for product commercialisation
- Raw material consolidation (cultivated, harvested)
Possible partners: Funding/Technical

- Department of Trade and Industry
- Department of Agriculture and Forestry
- Department of Environmental Affairs
- Department of Health
- Department of Science and Technology
- Department of Cooperative Governance and Traditional Affairs
- Science Councils
Possible partners: Implementation

- Commercial/community entities active in SA (all segments of the value chain)
- Municipalities
- Science Councils
- THPs
- University tech transfer units (to link with industry)
- University research labs
ATMIDA

• An SABS conference in Durban led to the establishment of the ATM Industrial Development Association (ATMIDA)

• ATMIDA’s vision is to enable “a stable, cohesive and internationally competitive African Traditional Medicine industry that will ensure future sustainability to the benefit of all stakeholders”.
Acknowledgements

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