THE NATIONAL RECORDAL SYSTEM

Workshop on Documentation of Traditional Knowledge in the context of ABS
Breakwater Lodge, Cape Town
11-14 December 2013
VISION:

to be the leading Indigenous Knowledge Systems treasure hub through the recording, storing, management, maintenance, dissemination and protection of IK for communal socio-economic development in South Africa.
Oral in nature;
Linked to strong spiritual base;
Originates from ancestors and is passed on to new owners and practitioners by respective fore fathers and mothers;
Practised in a social structure- differ from one community to another;
Used in an environment of respect, recognising the influence of beliefs of the community and the natural environment;
Specific Culture and customs of the people drive the way IKS is managed;
Transferred in metaphor or rituals within strong tradition;
Source of pride to people who holds it.

Any process of recording IKS must acknowledge the Value System
The largest South African initiative that record, document, preserve and protect indigenous knowledge for the benefit of the communities of South Africa.

Records unrecorded IK in various multi media formats, link recorded IK and aim to promote community IK.

Collect grassroots community experiences in local languages.

Proposes both positive and defensive protection of IK.
Constitute an IKS network infrastructure that creates a legal framework linking research and developmental strategies at different layers of government.

Supported by National Indigenous Knowledge Management System (NIKMAS)
- comprises a semantic digital repository with custom-developed metadata schemata and a sophisticated security model to protect, preserve IK,
- an advanced semantic search engine, catalogue system and an overarching integration architecture that combines the subsystems into a coherent, fit for the purpose system.
• Follows a holistic approach to capture IKS
• Consider and support the complete IKS eco system
• Addresses both socio and economic challenges in communities and ensure community buy-in
• Supports legislation and the access benefit sharing framework
• Follows a living lab approach to the project
• Standards – Dublin Core (extended), International Classification of Diseases, International Patent Classification Codes
• Continuity
<table>
<thead>
<tr>
<th>Name</th>
<th>Format of original IK</th>
<th>Protection</th>
<th>Storage</th>
<th>Aim/Function</th>
<th>Capacity Building</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Recordal System</td>
<td>Unrecorded oral in the vernacular</td>
<td>Defensive and positive</td>
<td>Distributive</td>
<td>Promotion Protection (prior art) Preservation IK Patent Development</td>
<td>WIPO Toolkit CBD on Nagoya</td>
</tr>
<tr>
<td>Traditional Knowledge Digital Library</td>
<td>Documented in books in 4 languages (Ayurveda, Unani, Siddha and Yoga)</td>
<td>Defensive</td>
<td>Centralised</td>
<td>Protection (prior art)</td>
<td>WIPO Toolkit</td>
</tr>
<tr>
<td>Biozulua</td>
<td>Documented in local Venezuela languages</td>
<td>Defensive</td>
<td>Decentralised</td>
<td>Protection (prior art) IK Patent Development</td>
<td>Consultation with stakeholders</td>
</tr>
<tr>
<td>Honeybee</td>
<td>Published community newsletters</td>
<td>Defensive</td>
<td>Localised</td>
<td>Protection (prior art) Promotion</td>
<td>Consultation with stakeholders</td>
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Challenges and Opportunities for IP Protection

IK IP

Protection of content

External IK

Embedded IK

Protection of procedure

IK not novel

Duration of protection

Brain drain

Accreditation & Certification of Knowledge Holders

Documentation/Preservation/Protection

Cultural values vs globalisation

Current IP regimes inadequate

IK not novel

Duration of protection

Brain drain

Accreditation & Certification of Knowledge Holders

Documentation/Preservation/Protection

Holistic nature: part science, part social, part spiritual

Not disclose undisclosed information in public domain

Community is custodian of IK

Community has right to full control and enjoyment of IK

Access rights to be carefully managed

Prior informed consent

Materials/Information transfer agreement

Benefit sharing agreement

Community MoU

Economic Beneficiation

Community agreements

Protecting IK IP in open community

Fundamentals
WHO BENEFITS?

CBD/WIPO/FAO

DOH

DAFF

DRDLR

Civil Society

SABS

NSI

DEA

dti

PATENT OFFICES

Knowledge Institutions

Industry

DAC

DTA

NIKMAS

DST

SANBI

CIPC

DAFF

CBD/WIPO/FAO

IKSBC: LIMPOPO PROVINCE

Mutale

Sinthimule

Tsheda

Vuwani

WHO BENEFITS?

Knowledge Institutions

Civil Society

Industry

Knowledge Institutions

Civil Society

Industry

Knowledge Institutions

Civil Society

Industry

Knowledge Institutions

Civil Society

Industry

Knowledge Institutions

Civil Society

Industry
NIKMAS METADATA

• To annotate recorded IK stories for enhanced exploration and discovery
• Standard used: Qualified Dublin Core

• Thematic metadata for specific themes:
  – African Traditional Medicine
  – Food security

• Standardised controlled vocabularies
  – IPC codes (WIPO) for patent classification and utility models
  – ICD codes (WHO) for ailment classification
The National Indigenous Knowledge Management System (NIKMAS) supports the processes and structures developed through the National Recordal System (NRS) and is responsible for the recording, storing, management and dissemination of Indigenous Knowledge (IK) and related information. More ...
The aim of this website is to create an online source of information on the use, quality, efficacy and safety of traditional African medicines in South Africa. The website draws on published resources to provide information, cross referencing and research outputs for use by researchers, community members, traditional healers and a wide range of other global users. The digital pharmacopoeia serves as a national resource mechanism, not only for further research, but also for regulation of the use of traditional medicinal plants and medicine.

The treatment information on the site is linked to the International Classification of Diseases for Medical Purposes (ICD-10) and the WIPO International Patent Classification (IPC) referencing system. Up to date information on the national conservation status of each indigenous plant is provided from the Red List of South African Plants, maintained by the South African National Biodiversity Institute (SANBI). Plant chemical compositions include molecular formulae with relevant links to international databases such as PubChem, CAS, ChemSpider and others.

The website also serves as an archive of published materials relating to early use of traditional medicinal plants in South Africa. These are offered as historical documents for research purposes.
• Knowledge is considered as a valuable commodity in the Knowledge Economy (KE)

• IKS constitutes nations’ heritage and has massive potential for Research Development and Innovation (RDI) and social cohesion for a country.

• Africa’s situation at present is that of IK in oral format, not documented, scattered, fragile and unprotected

• If we do not know our IK assets, participating in the knowledge economy is impeded and undermine social cohesion, hence no identity

Until the orally transmitted and rapidly disappearing IK is collected, there will be no IK to protect or establish as a source of innovation
ACKNOWLEDGEMENT AND THANKS

• Limpopo IKS Documentation Centre (Vuwani Science Centre)
  – Sinthimule Community
  – Mutale Community
  – Tshedea Community
  – Mpheni Community
  – Thengwe Community
  – Nesengani Community

• North West IKS Documentation Centre
  – Bakgatla Ba-Kgafela Community

• Free State IKS Documentation Centre (University of the Free State)
  – Thaba Nchucu Community

• Eastern Cape IKS Documentation Centre (Fort Hare University)
  – Tshengiwe Community

• KwaZulu Natal IKS Documentation Centre (s) (University of KwaZulu-Natal)
  – Warwick Muti Market (Healers)

• University of Zululand (Unizul Science Centre)
  – Umhlabuyalingana Community
    – Nkandla Community
    – Mkwanazi Community