Medical Research Council

“Building a healthy nation through research”

Indigenous Knowledge Systems [Health] Lead Programme

“Going back to our roots for Innovative health solutions”
Access and Benefit Sharing: Case Studies and International Experience

Topic Three:

South African Medical Research Council Case Studies: Indigenous Knowledge Systems Lead Programme

FICCI INTERNATIONAL ROUNDTABLE ON TRADITIONAL KNOWLEDGE

FICCI, Federation House, Tansen Marg, New Delhi

13th November 2009, NEW DELHI INDIA

Dr Motlalepula Gilbert Matsabisa
FORMAT of the PRESENTATION

• South African Medical Research Council
• Indigenous Knowledge Systems Lead Programme
• MRC IKS Research Translation - Access and Benefit-sharing

CASE STUDIES

• Case Study 1: Partnerships, Training and Knowledge Generation - (Non-monetary)
• Case Study 2: Antimalarial Discovery – Monetary Beneficiation Principles
• Case Study 3: Poverty Alleviation and Wealth Creation – (Monetary and Non-monetary)

Case Study 4: IKS Business Model for Commercial exploitation of IK IP 
(Industrialization of ATM n contribution to 2o economies)
To promote and advance indigenous knowledge systems through research and development by making it a valued health model in the global environment and to redress health traditions, which until now have neglected health research priorities and issues.

To be a centre of excellence in traditional medicines research regionally and to be competitive globally

To give the South African traditional Medicines research an international perspective
Our Laboratories

- IK Holders / THPs
- Medicinal Garden
- Analytical & Discovery laboratories
- Manufacturing
- Resource Centre
African Traditional Medicines Research and its Development

Research makes no difference to economy, health and quality of life of the people unless such research is translated into:

**GRRIPPPP**: Getting Research Results Into:
- Policy (Influence)
- Practice
- Promotion and Products
CASE STUDY 1: PARTNERSHIPS, TRAINING AND KNOWLEDGE GENERATION - (NON-MONETARY)
• **Research and Discovery:**
  - Clinical Research
  - Research development & partnerships

**Training Programs and Workshops**
  - GCP, IPR, Product development etc.

• **Community Entrepreneurship and Business Development**
  - Business and Leadership development

• **Political**
  - IKS Bill
  - DTI patent amendment bill
  - National Biodiversity Management Act
  - MCC - ATM Expert Committee
CASE STUDY 2: ANTIMALARIAL DISCOVERY – MONETARY BENEFICIATION PRINCIPLES
Benefit-sharing Model
(Profits Generated)

National Trust Fund
Indigenous community and traditional healers

1/2

MRC

1/2

Different community Companies jointly with Private Partners

1/2

1/2

1/2

1/3

2/3

1/2

Investigators

Re-invest into IKS Research

Individuals who supplied the Information &/or the Genetic material

1/2

1/2

1/2

1/3

??
The Benefit-sharing Model

Consortia

1/2

National Trust Fund
Indigenous communities and traditional healers

1/2

CONSORTIUM of Institutions

1/2

X1 X2 X3 X4 X5 Xn

1/2

Trust Account / s
For
Different communities and
Traditional doctors

Investigators

Re-invest into IKS development, education & research

Individuals who supplied Information &/or the Genetic material
CASE STUDY 3: SOCIAL IMPACTS FOR POVERTY ALLEVIATION AND WEALTH CREATION
IKS and competitiveness

• The programme is based on the production, industrialization and commercial development of scientifically validated medicinal plants as sources of competitive advantages for entrepreneurial based community projects.
Different Components of Industrial Viability

- Institutional viability
  - Local Authorities
  - Science Institutions
  - Private Sector, VCs, BRICs, Government Depts.
  - Science Councils
  - Institutions of Higher Learning

- Commercial viability

- Technical viability

- Entrepreneurial viability

Economic growth environment (INDUSTRIAL VIABILITY)

Markets
Geographical Scope of the Projects

Breede Valley Municipality

Nama Khoi Municipality

Tsolwana Municipality

Hofmeyr/Starkastad
CASE 4 –

IKS BUSINESS DEVELOPMENT: COMMERCIALIZATION MODEL FOR SOCIAL IMPACTS FOR POVERTY ALLEVIATION AND WEALTH CREATION
**Proposed MRC IKS Commercializing Entity**

- **CO 2**: 25%  
  - Raise capital, Create new companies, buy, acquire etc
- **CO 1**: 25%
- **COMPANY = IKS Spin-out**: 40%
- **MRC TRUST**: 10%
  - Pay royalties, Support Research related to company activities, clinical trials, students  
  - Royalty payouts only on NET profit

**JV COMPANY**

- **NewCo 1 / Project 1**
- **NewCo 2 / Project 2**
- **NewCo 3 / Project 3**

Create new partnerships, Translate selected research into businesses
Funding
Loans / Preference shares to be redeemed upon maturity or converted to equity upon listing of underlying companies

Loans
Preference shares
Ordinary shares
Donor Capital

Funders

Business Partner/s

MEDRES

New MRC initiative from the proceeds of research

Company / Project 1

Company / Project 2

Company / Project 3

JV company with Business Partner/s

Create new companies - buy, acquire, etc

MEDRES

100%

PHEDISANANG

100%

Creating Partnerships and turning selected research into business

Royalty to applicable sources

MRC (Research Arm)

Funders

Business Partner/s

Government bodies
Corporate
Financial Institutions
Donors
Conclusion

- Establishing and securing markets for ATM
- Looking for serious industry partners for community commercial exploitation of ATM
- Technical skills exchange and development
- Community empowerment, involvement and wealth creation
- Horizontal & vertical integration development within the areas surrounding the medicinal plant projects
- Industrialization of African herbal medicinal plants (2nd economies)
- Local production of quality “Essential Traditional Medicines”
- Contribution to MDGs (MDG 4, 5 and 6)
IKS Staff Complement

**Staff:**
- Dr MG Matsabisa – Programme Director & Research
- Ms J Petersen - PA and Office administrator
- Mr Gustavo Luis Alfaro-Altuve – Business Development
- Ms Neo Mooketsi MSc – Discovery Research
- Mr D Ndiitwani MSc – Discovery Research
- Ms MT Javu BA - THP and Community Liaison
- Mr J Nyelimane - Technical support
- Ms T Mbobo - Research support
- Mr TK Lemena – Analytical chemistry
- Mr M Ndumiso - Microbiology
- Dr N Bapela – Pharmacology and Bioassays
- Dr M Sekhoacha - Animal and Clinical Research
- Dr D Molefe - Chemistry

**Students & Interns:**
- Mr. P Legoale, PhD UWC
- Ms A Rankoana, PhD, UL
- Ms M Lekhooa, MSc intern FS
- Mr B Sehume, MSc intern, UWC

**Project Leaders and collaborators**
- Dr Y Seier – Primate Unit MRC
- Dr M Mdhluli – Primate Unit (Operations) MRC
- Dr M Faber – Nutrition Intervention Unit MRC
- Dr M Smuts - Nutrition Intervention Unit (NWU)

**Physicians and PI**
- Dr O Ebrahim – Brenthurst Clinic
- Dr E Yoosuf – Brenthurst Clinic
- Dr MA Dhansay – MRC
- Dr MD Khumalo – GP Botshabelo
- Prof A Dhai – Wits
- Prof A Walubo – UOVVS
- Dr M Mhlakaza – Centre for Diabetes
- Dr P Moodley - GP
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