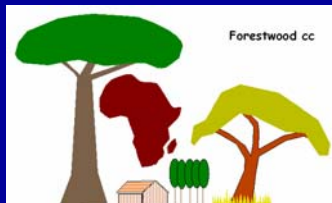


ACTORS & MANAGEMENT SYSTEMS: integration of bark prescriptions into forest management plans



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Outline

- General background
- The Bark Problem
- Concepts for sustainable development
- Solving the problems
 - Institutional structures
 - Alternative resources
- Lessons learned & Recommendations

General background

Discussions on Non-timber Forest Products show

- Diversity of
 - Interests
 - Focus
 - Capacity (knowledge, technology, finances)
- Multi-disciplinary nature of policy & management
- Various constraints on progress
 - Bureaucratic procedures
 - Perceptions of different stakeholders
 - Costs of technological development
 - Professional 'jealousy' (institutions & individuals)
 - Lack of effective collaboration
 - Political agendas
- Lack of efficient resource management

Key Policy Issues of Non-timber Forest Products

- Sustainable development
- Poverty alleviation
- Environmental conservation

- 
- R & D Framework
 - Multi-disciplinary actions

- 
- Implementation along value chain
 - Cost-benefit (business) focus
 - Socio-cultural constraints

COMMERCIAL PRODUCTS FROM THE WILD

OBJECTIVES

To develop

Sustainable utilization,
Commercialization &
domestication

of products from

Natural forest &
Woodland Ecosystems

PHASE 1: STATUS REVIEW

- Survey: current uses of tree & non-tree products
- ID: High potential species for Commercialization

Selected 4 product groupings

PHASE 2: SPECIES DEVELOPMENT STUDIES

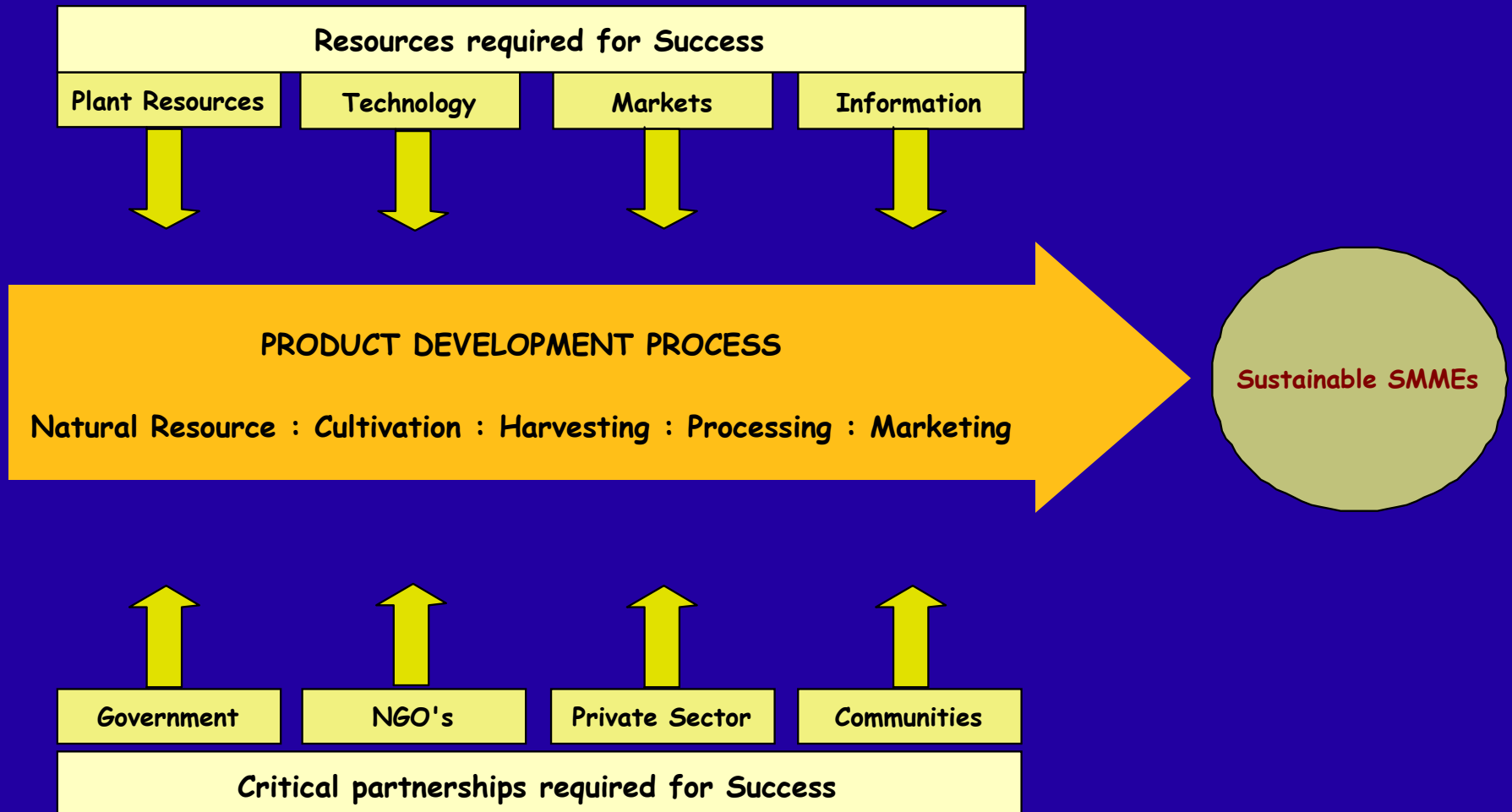
Development of ACTION PLAN OF RESEARCH
for BUSINESS DEVELOPMENT

for sustainable utilization, commercialization and
domestication of products derived from indigenous
woody ecosystems

PHASE 3: SMME DEVELOPMENT

- ID potential useful BUSINESS PARTNERS
- Develop BUSINESS PLANS for Commercialization and Domestication of Selected Products

General Approach



Develop models of success:

Different product groups : Different areas : Different parts of value chain

Some basic Concepts

Biophysical:
Sustain natural
forest diversity &
processes

Social:
Satisfy people's
cultural & livelihood
needs

**Sustainable
Rural
Development**



**Ibisi community and
Nzimankulu forest**



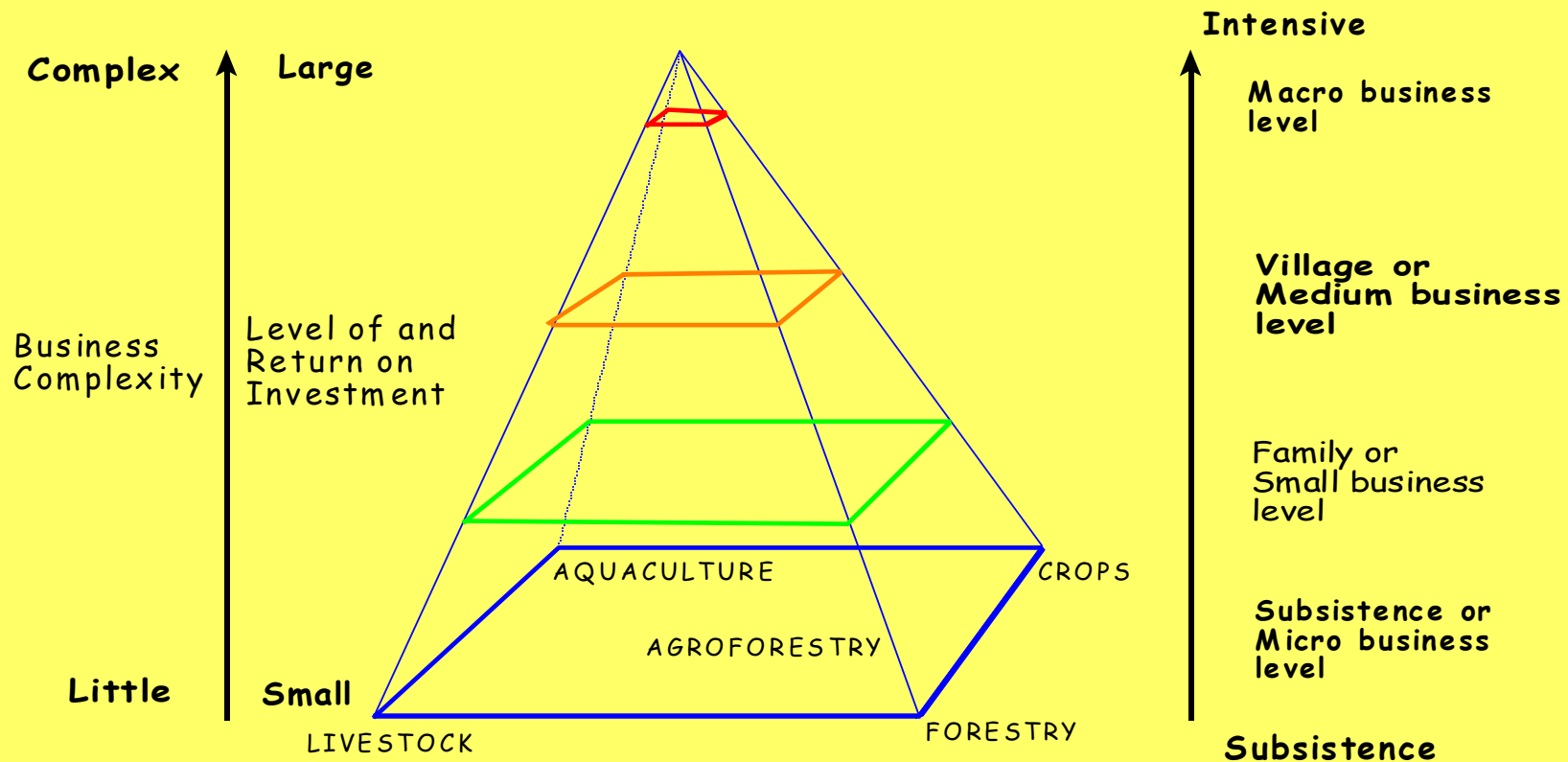
**Bark products sold at
Durban Herbal Market**

Economic:
Develop viable
alternatives to
sustain small business

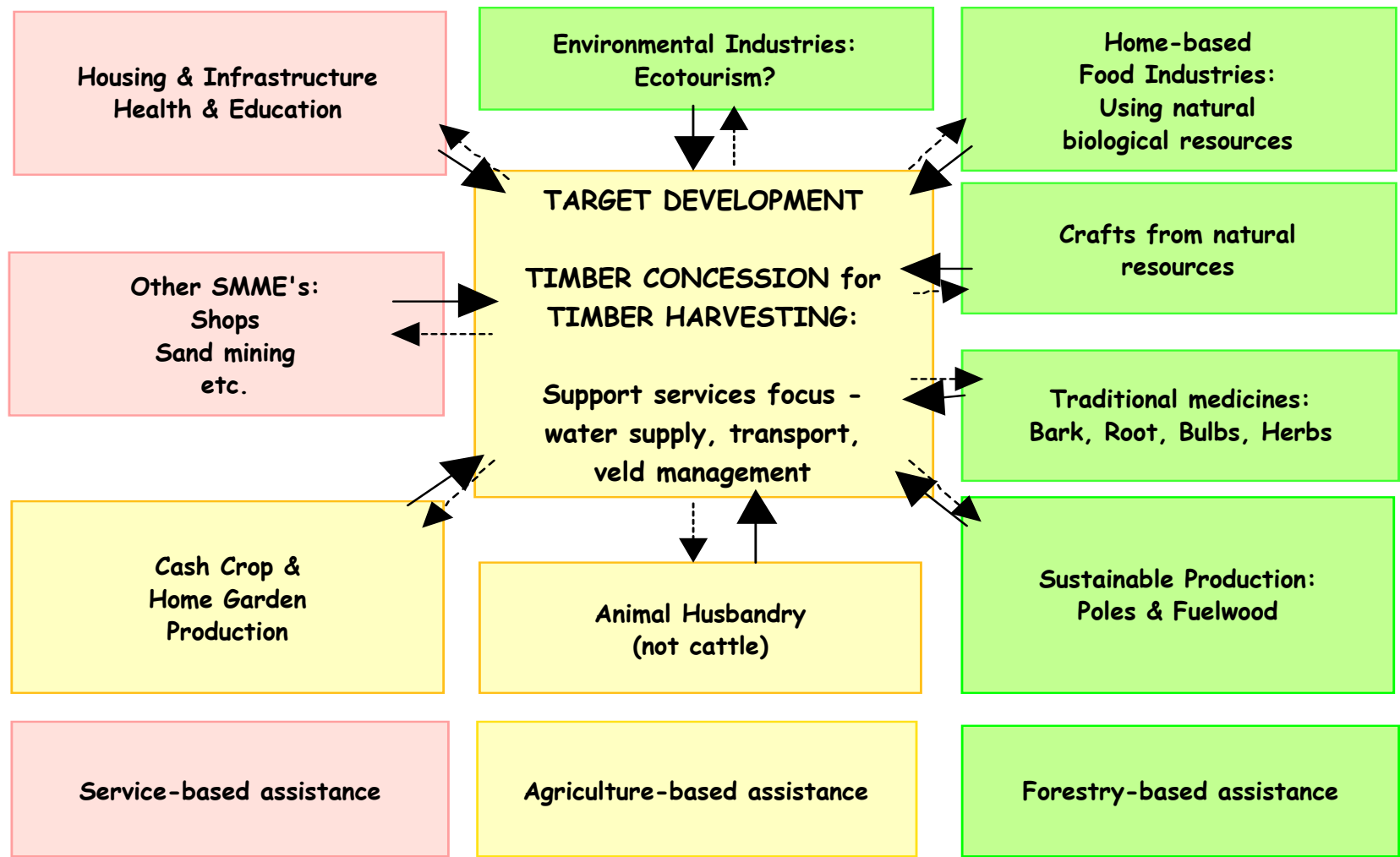
Business complexity at different levels of business organization

- Macro business level: very organized, focused, high technology
- Subsistence level: very informal, diverse, low technology

RESOURCE DEPENDENT BUSINESS DIVERSIFICATION OPTIONS



From short-term business development options around target development

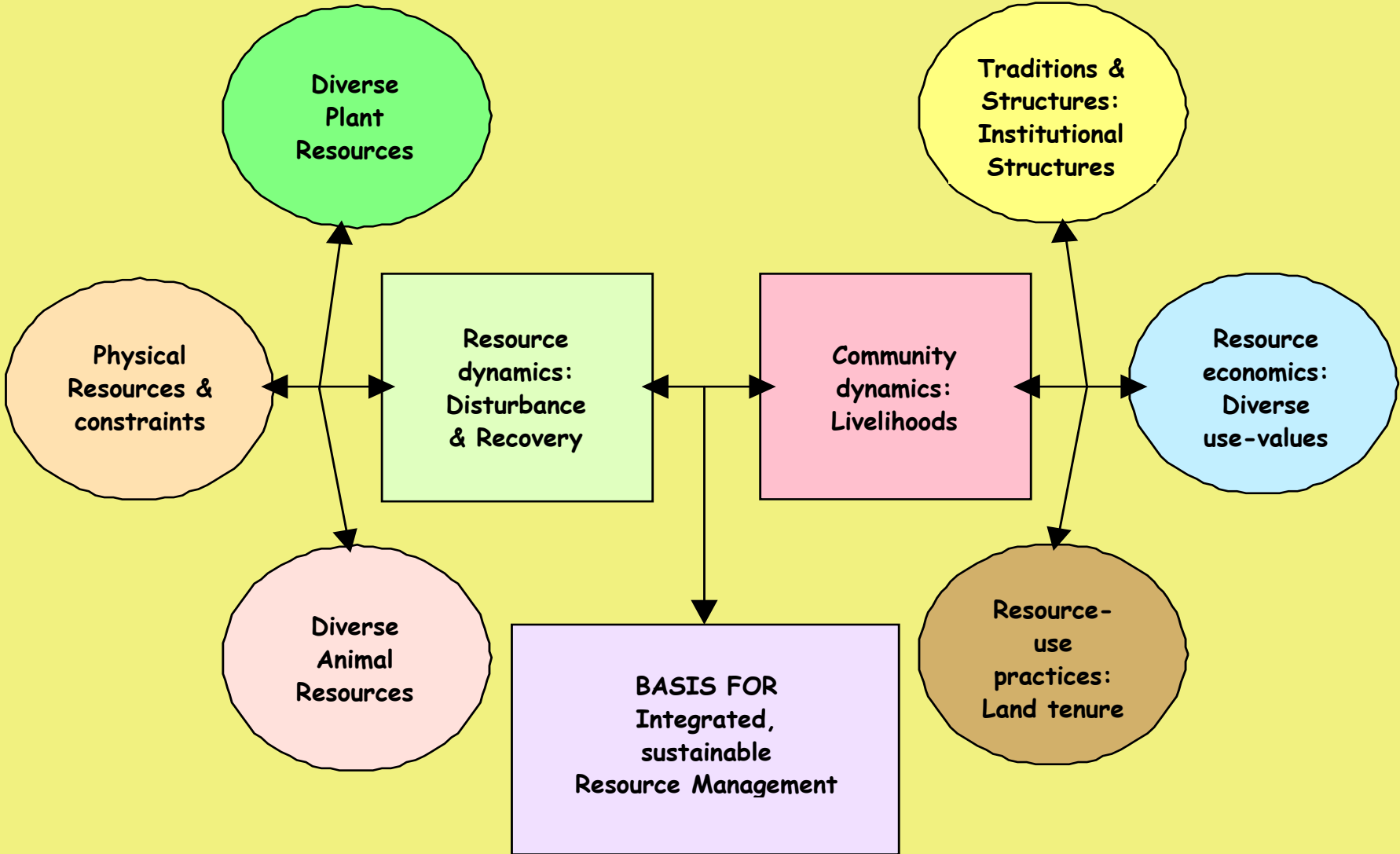


To long-term, sustainable & integrated community development

CONCEPTUAL BASIS OF SUSTAINABLE RESOURCE MANAGEMENT

Biophysical Resources

Human Resources



Adaptive Management Research Approach (Learning by doing)

- Many unknowns & Limited time
- Option: Wait for research results:
 - resources may get lost;
 - resource users get frustrated
- Our approach: Implement conservative practices based on logic with participatory monitoring (including local knowledge)
 - Implement scientific studies of critical issues
 - Maintain demonstration areas
 - Monitor outcomes & compare with scientific studies
 - Adapt management regularly through participatory approaches

Short, Medium & Long-term Strategies

- Short-term: issues requiring immediate attention
- Medium-term: steps towards long-term solution
- Long-term: ideal approach to sustainable resource and/or product development

Short term		Medium term			Long term	
Better practices in source area(s); Institutional structures						
	Develop alternative resources for future production; Processing, packaging & trade chain - market demand					
			Integrated resource management with other products & services			

The Bark Problem



Degrading forest



Flourishing Market



Declining protected species:
Ocotea bullata & *Prunus africana*



CP Wild Product Groups: Bark & Roots/bulbs for Medicinal Use



Processing & Packaging
of medicinal products



Improved resource management



Range of tinctures,
teas & creams,
developed from
medicinal plants

Key to Sustainable Bark Use

- Integrated action plan for sustainable business development through adaptive management research
- Coordinated & effective resource management & research
- Organized, controlled, participatory sustainable bark harvesting practices & rates from forest
- Dedicated Actors to deal with issues

Development of Institutional Structures: Who are the Actors?

Two levels: Resource managers & Resource users

- **Resource managers**
 - DWAF as custodian: National Forests Act 1998
 - Nationally responsible for policy & regulations
 - Local managers of State & Communal forests
 - Involved in negotiations with bark users
 - Provincial authorities
 - Discussions & training sessions
- **Support services:**
 - Scientists: Ecological, Social, Economic ...

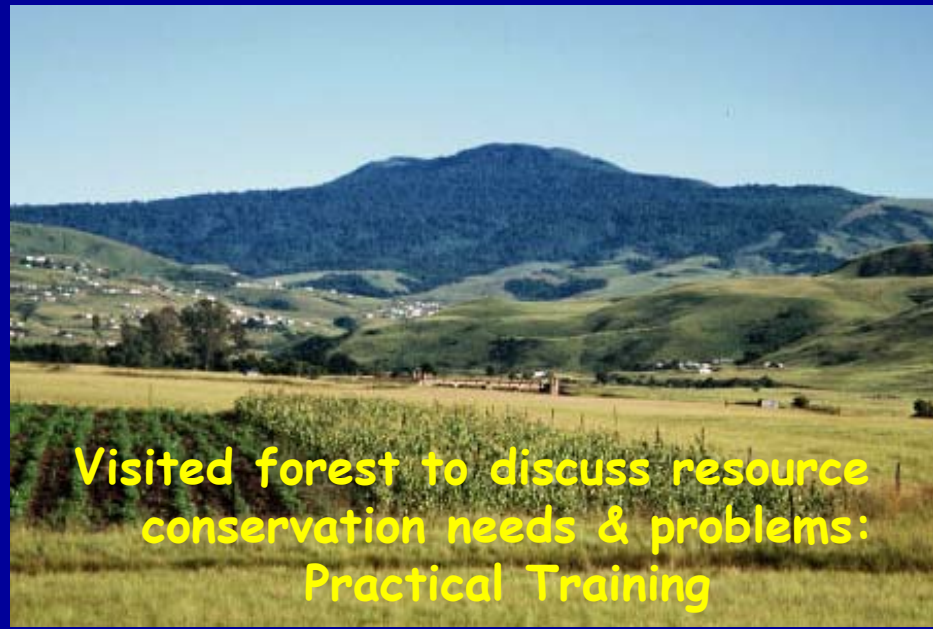
Development of Institutional Structures: Who are the Actors?

Resource users: Two options for approach

- Through DWAF/PFM community forums
 - Process slow & expensive
- Communication through specific user group (Bark)
 - Common & vested interest in sustainable bark use
 - Members came from communities around Umzimkulu forests
 - Directly involved in illegal uncontrolled bark harvesting
 - Sold products primarily at Durban Herbal Market



Meet Bark Users at Market (not communities) with DWAf forester: to discuss needs & problems



Visited forest to discuss resource conservation needs & problems: Practical Training



Assist formation of Sizamimphilo Association with own Constitution: Identification tag

Growing number of Members: From 12 to >200



Training sessions with Forestry, Nature Conservation authorities & Bark harvesters

Formation of Bark User Group

- Sizamimpilo Association for medicinal plant harvesting
 - Formed with assistance of external facilitator
- Constitution developed, with key SFM clauses
 - to train, uplift, educate & develop its members
 - increased business skills & profits
 - enhanced harvesting skills to protect environment & sustainability of targeted medicinal plant species
 - all members sign agreement with Association
 - binding set of standards, rules, objectives or laws.
- Draft legal agreement between Association & DWAF negotiated with DWAF
- DWAF issued permit

Sizamimpilo Association requirements

- Sustainable resource harvesting practices should help forest recovery & conservation
- Bark harvesters should continue with bark harvesting
 - with improved operating conditions
 - reduced effort & costs
 - minimized resource harvesting impacts
 - better opportunities for viable, productive small business
- Rules for controlling resource harvesting
 - simple, practical & easy to manage
 - cause minimal interference with effective harvesting
- Constructive, collaborative relationship with DWAF should
 - facilitate effective & sustainable bark harvesting
 - eliminate undesirable, destructive & illegal commercial bark harvesting from the forests.

DWAF requirements

- **DWAF Forester in Charge must ensure**
 - adequate consultation to know attitude of communities surrounding forests in question
 - PFM Committee is established with Association represented
 - a process for establishing the scientific basis for sustainable off-take of bark & a monitoring program
- **Association must ensure**
 - their constitution is acceptable to DWAF
 - it is represented on PFM Committee in area of operation
- **Additional special conditions**
 - licensee shall honour rules & regulations of management plan
 - licensee is responsible for damage resulting from non-compliance
 - licensee must pay license according to license tariffs
 - license reviewed annually

Legal, controlled Bark Harvesting implemented



30 May 2002



Handing over by DWAF of General License under sections 7, 15 & 23 of National Forests Act no 84 of 1998,

to Sizamimpilo Association,

for harvesting of bark under guidance of Management Plan for Natural Forests in the Umzimkulu Area.

Management Plan components

- Harvesting guidelines
- Monitoring plan
- Arrangements between DWAF & Association
 - DWAF managers mark trees for bark harvesting
 - according to specific criteria
 - in presence of representatives of the Association.
 - Harvesters collect bark from marked trees according to stated harvesting guidelines
 - DWAF managers cut a tree marked for felling
 - Harvesters harvest bark & use branches to cover stump to prevent browsing of the developing shoots.
- Rehabilitation plan



Development of Alternative Approaches

- Harvesting guidelines for individual species
 - Strip harvesting
 - Tree cutting & coppice management
 - Selective cutting of trees in dense stands
- Coppice management



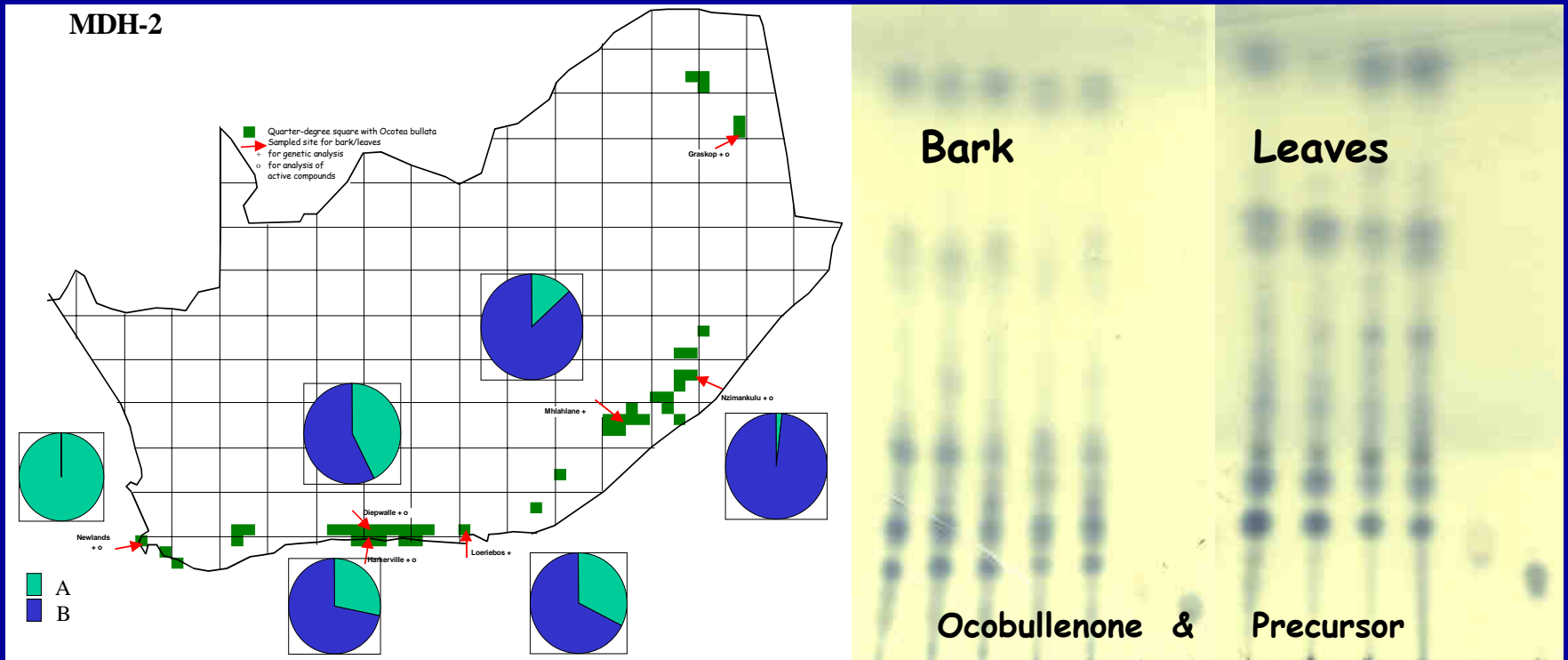
Develop alternative resources

- Planting trees in Forest rehabilitation systems
 - Gaps
 - Disturbed margins



Develop alternative resources in Production

Variation in genetics & active compounds



- Genetic variation: observable in field; Collect planting stock locally
- Active compounds: same in bark & leaves, lower concentration

Can harvest leaves for bark,
need changed mindset of healers

Develop alternative resources

- Planting trees in Production systems
 - Riparian zones within plantation estate
 - Community home gardens & selected sites
- Using leaves instead of bark



Bark species planted in production systems to harvest leaves (not bark)



Train Traditional Practitioners to collect plants of bark species to plant in home gardens



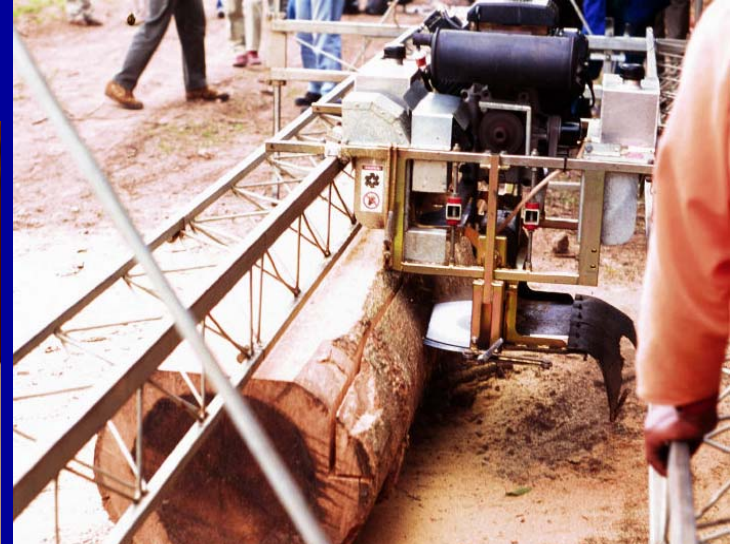
Sources of planting stock



Better processing and packaging



Association shop at Market with affordable hygienic packaging



Better use of quality timber on steep slopes

Is management of bark harvesting working sustainably?

- **Bark harvesters of Association**
 - Rapidly responded to new arrangements
 - Drastic reduction in bark harvesting in Umzimkulu forests
 - Adapted to harvesting in vertical strips
 - Frustrations its limited production options
- **DWAF**
 - Very slow to no implementation of management plan
 - No to very little communication with Association
 - Fixed mindsets on traditional practices
 - Difficult to accept cutting of dying protected trees will ensure their survival
 - Lack capacity to implement new approaches in NTFP management
 - Confidence develops with implementation

LESSONS LEARNED & RECOMMENDATIONS

- People needs can be harmonized with forest production potential : USER GROUPS - not community at large
- Involvement of all relevant stakeholders from the start
- Integrated approach with focus on sustainable business development
- Market needs matched with Resource availability - not the other way round
- Shortfalls supplied through alternative resources/products

LESSONS LEARNED & RECOMMENDATIONS

- Short, medium and long-term strategies to address critical issues
- Legal framework PLUS Action on ground: Implemented Management Plan & Monitoring, continued communication
- Training at all levels

THANKS FOR YOUR ATTENTION

