ABS and Biotrade: Marula oil from Namibia

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Marula (*Sclerocarya birrea* sub-sp. *caffra*) occurs widely in Southern and East Africa

*Sclerocarya birrea birrea* ("bir") occurs widely in West and Central Africa

Might be a third sub-species in Tanzania, which is believed to be original centre of genetic diversity

Very important traditional resource in North-Central Namibia (former "Owamboland" or NCRs)
Omuongo and people

- Namibian NCRs represents south-western edge of marula distribution area
- Clear evidence of ancient link with human settlement (e.g. improved on-farm trees, 3000-year-old pips in Matopo caves)
- Still the most important “wild” fruit in NCRs today
- Elaborate ownership and use customs
Development on demand

- In 1994 Dept. of Women Affairs in Office of President conducted development needs survey in NCRs

- Seven women’s groups identified marula oil market development as priority

- Phase One of Trial Marula Oil Production (TMOP) project started in December 2005 with support from Namdeb Social Fund and Ministry of Trade

- CRIAA SA-DC contracted as technical and marketing service provider
‘Sorry, your oil is no good...’

- Review of scientific literature showed marula oil is world’s most stable against oxidative rancidity – reason not known exactly but CSIR researchers suggested due to fatty acid composition.

- CRIAA decided to target cosmetics market as most suitable niche, due to lower technical and regulatory entry barriers.

- But survey showed traditional *ondjove* was too variable in quality for formal markets.
Research and development

- In 1996 marula kernel supply chain organised – formation of Eudafano Women’s Cooperative, 7 ton trial purchase
- Trial purchase used to test available technologies – none suitable
- Special 30-ton cage-and-plate hydraulic bridge press (KAPMond30) designed, prototype built, first commercial samples
- CRIAA SA-DC secured in-principle commitment from Body Shop’s Community Trade programme – if at least 3 tons oil
Outsourced research

- CRIAA SA-DC designed trial protocol to establish effects of various processing methods on stability
- Laboratory trials were outsourced to UK labs under confidentiality agreements
- Results suggested it would be worthwhile pursuing patent, but costs would be high – at least US$150K, maybe US$1M
- Could not secure needed funds from Namibian sources or foreign donors
Regional ABS issues

- Marula is also an important resource with strong TK in other SADC countries
- CRIAA SA-DC secured funding from Gaia Foundation’s GRAIN project for regional consultations with potential producers in Botswana, Zimbabwe and South Africa (no organised producer groups existed in Swaziland or Mozambique at the time)
- As far as we know this was the first time anyone had consulted primary producers in SADC directly about ABS issues
Outcomes of regional consultations

- Formation of Southern African Marula Oil Producers Network (SAMOPN)
- SAFIRE in Zimbabwe inspired to secure IFAD seed funding for development of regional network – Southern African Natural Products Trade Association, today known as PhytoTrade Africa
- Technology and market opportunity transferred (with DFID funding) to Zimbabwe, Botswana and South Africa (later also to Swaziland)
Outcomes (cont.)

- After 5 years and 4 tons of ‘wasted’ oil (marketed locally, made into soap) marula included in Body Shop’s make-up range
- PhytoTrade Africa has grown to more than 50 members in 8 countries; designated SADC Centre of Excellence
- Marula Natural Products (SA) has left network and competes with former allies
- Kgetsie ya Tsie (Botswana) still produces for national market
- Zimbabwe never produced at any scale
- Swazi Indigenous Products formed later
The Maruline™ patent

- PhytoTrade Africa formed partnership with Aldivia S.A. (small French company specialising in cosmetic lipids)
- Research into ‘super stable’ marula oil was continued by this partnership
- ‘Product by process’ patent filed in 2004 and granted 2006 – first example of a patent owned jointly by company from North and producers from South
- Namibia agreed PhytoTrade was best co-owner from region, on condition it forms regional IP trust
The Ubuntu Natural™ Charter

Ubuntu Natural™ is a range of African natural lipids brought to you through a partnership between Aldivia and PhytoTrade Africa, the Southern African Natural Products Trade Association.

Aldivia's lipids know-how and unique green technologies ensure consistently high quality required for effective cosmetic formulations. PhytoTrade Africa guarantees indigenous African plants raw materials that have been sustainably wild-harvested by, and for the benefit of, poor rural people.

Ubuntu Natural™ lipids are produced in accordance with clear social and environmental guidelines, enshrined in the Ubuntu Natural™ Charter.

The Charter guarantees:

1. Fair and reliable supply chain
   - Priority to disadantaged producers
   - Trust, mutual respect and transparency
   - Pre-Qualified Suppliers (PQS)
   - Clear lead times
   - Fair and sustainable pricing
   - Prompt payments
   - Full traceability

2. Commitment to biodiversity conservation
   - Renewable indigenous species
   - No use of synthetic pesticides, fertilisers and mono-cultural plantation agriculture
   - Sustainable harvesting practices
   - Reduced climate change impact through selected indigenous plants
   - Biodiversity management due to direct economic incentives
   - Supplier Environmental Charter

3. Social and regulatory equity
   - Unequivocal respect for human rights
   - Access and Benefit Sharing (ABS) arrangements, including shared Intellectual Property (IP)
   - Stakeholder prior informed consent complying with Convention on Biological Diversity (CBD)
   - Positive promotion of cultural heritage and values of producers
   - Synergy between PhytoTrade Africa's constitution and Aldivia's mission
   - Supplier Fair Trade Charter

4. Green technology
   - No solvents
   - No GMOs
   - No irradiation
   - Good Manufacturing Practice (GMP)
   - Organic certified process

Ubuntu Natural™ lipids of Africa are unique indigenous actives with the following advantages:

- 100% natural origin
- Specifications and literature support
- Systematic microbiological standards
- Not tested on animals

Ubuntu Natural: bringing trade to life

Signed by:

Pierre Charlery de Chilly
CEO of Aldivia

Signed by:

Gite Le Breston,
CEO of PhytoTrade Africa

16th March, 2006
Why a patent?

- Large companies will not invest in product R&D unless key ingredients are patented.
- A patent application is the best way to put IP in the public domain if the patent is not pursued, or not granted.
- Shows investors the Aldivia/PhytoTrade partnership is both serious and competent.
- Demonstrates that rural producers are not powerless when it comes to exploiting the value of their own resources and TK.
What it means (and not)

- Namibian producers have preferential (but not exclusive) access to market for Maruline™ raw material for 10 years, and to first licence to manufacture in region.
- No-one is prevented from making and marketing ‘ordinary’ marula oil.
- Even if the partnership ends PhytoTrade is allowed to ‘work the invention’ alone.
- Large clients feel re-assured and have since developed many new products.
Benefits created and shared

- Eudafano Women’s Cooperative (EWC) now has more than 5000 members organised into 14 local associations (for face-to-face trust)
- EWC has also secured additional large market for Kalahari Melon Seed oil
- Model has been replicated and two additional oils have been commercialised
- EWC has built own modern factory in NCRs and have taken over production and export of oils
Benefits (cont.)

- Rural women earn additional cash income at crucial times of the year from home-based, flexi-time, low-input activity

- Success led to formation of national Indigenous Plant Task Team and formulation of national ‘pipeline’ strategy, which has potential to deliver up to 30 new products over next 10 years

- Experience and lessons learnt have fed into developing Namibia’s national ABS legislation and regulations
Key lessons

- Be pro-active: assert ownership over biological resources and TK, develop them as far as you can and then seek partners
- Work closely with the market and develop ability to respond rapidly to market signals
- Use contracts to substitute for gaps in national legislation and/or absence of international ABS regime