Nagoya Protocol and ABS Case Studies

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New Considerations under Nagoya

• Derivatives/biochemical extracts included
• Access to traditional knowledge (TKaGRs) needs PIC
• Compliance and user measures
• Encourage recognition of customary law/community protocols
• Clearing House Mechanism – portal for permits/compliance certs
Issues and Challenges:

• What is PIC? (A written permission/permit)
• Can there be tiers of PIC, including local PIC (YES! There should be for customary leaders/owners/TK holders)
• Which GR/TK holder? (different approaches, emphasis on point of ACCESS)
• Is Access for Research and DEVELOPMENT (two words here! Can be non-commercial etc)
Issues and Challenges:

• What about ‘national’ or transboundary GRs?
• What about widely held TK? (national ABS fund may be needed)
• What about secret TK? (special protections?)
• What about sacred TK? (Automatic PIC refusal?)
• What about ‘third party transfers’ (limit them in contract/MAT)
• Endemic species a priority - ABS origin clear
Issues and Challenges?

- Export/biosecurity permits for commercial GR trade – it is probably worth having a clause that says R&D not allowed, permit void etc.
- Reaching MAT – it is a contract for access/BS. May need 2 ‘model MATs’ for academic and commercial R&D activities.
- Benefit-sharing – consider various non-monetary and monetary benefits. LOTS of options here, not just royalties.
Santo MOU

• Purpose: collaboration to inventory, document, describe biodiversity of Santo.

• Obligations of the museum (MNHN): access to sites and collection of samples only after prior informed consent of the customary landholders and stakeholders.

• Commits to collect information and specimens for academic and management purposes only (not commercial or industrial use).
Vatthe Conservation Area, Santo
PIC Process

• Permit obtained from DoE plus agreement (MoU) with Govt.
• Provincial authority also gave approval
• Chiefs gave prior informed consent
• Different departments involved
• TK was deliberately excluded after concerns raised by VKS
The 2006 expedition:

• Identified 650 species of plants, 350 fungi, 1700 terrestrial animals, 650 species of fish etc
• Published a detailed/accessible illustrated book on the ‘Natural History of Santo’
• 500 posters for schools of species and weeds
• Surveyed from mountain to sea floor, Butmas/Central Santo, West Santo, Big bay, marine sampling near Luganville etc
Santo Outcomes

- 1 Ni-Vanuatu got a scholarship to study in France
- Scientific discovery! (but for whom?)
- Distribution of 400 Santo books to schools in Santo
- Some shared articles/reports after prompting by Robinson and Hickey
- Benefits for Fisheries/Marine dept (boat and equipment)
- Samples not returned to Forest Dept (?) due to lack of storage cabinets and air con (put in MAT).
- Tourism benefits
Samoa: The Mamala tree and Prostratin drug

- Mid-1980s Dr Paul Cox conducted ethnobotanical studies in Samoa.
- He identified an interesting cure for ‘yellow fever’ in Falealupo village from the Mamala tree (*Homolanthus nutans*).
- Collected in Falealupo forest and sent to US National Cancer Institute in 1986.
• Prostratin molecule identified as having ‘potent cytoprotective activity.’

• But is a ‘phorbol’ so thought it can promote tumour growth...

• Further testing at NCI and Aids Research Alliance revealed it might be a potential anti-retroviral.
Falealupo and Savai‘i (http://www.botany.hawaii.edu acc 18/5/12)
The Falealupo Covenant

• Agreed in 1989.
• Dr Cox and associates pledged to fund the building of the local school to prevent further felling of the rainforest by a logging company (logging was paying for construction).
• The Covenant required the community to protect the forest for 50 years.
• It allowed Dr Cox to continue to conduct ethnobotanical studies there (retrospective access agreement?).
Falealupo Rainforest Reserve
Access/Permission (Prior to CBD):

- The Falealupo Covenant was reputedly signed by every chief in Falealupo in a kava ceremony attended by the whole village.
- Dr Cox also met with the Samoan Prime Minister to notify him of the preliminary research findings and the NCI’s commitment to both honour the Falealupo Covenant and to require any licensee to negotiate fair and equitable terms of benefit-sharing of any proceeds arising from a patent (issued later in 1996; Cox 2001).
Seacology and Cox:

- Dr Cox and associates established Seacology through which Dr Cox directly or indirectly claims to have contributed the following:
  - School construction ($85000);
  - Water tanks ($2500);
  - School rebuilding after cyclone Ofa (75000);
  - Emergency relief – Ofa (10000);
  - School rebuilding after cyclone Val (65000);
  - Water tanks inland (10000);
  - Rainforest walkway (75000);
  - Annual maintenance of walkway (15000);
  - Goldman environment prize in a perpetual fund for the village (112500 plus corporate matches), etc
- Total $480,000.
Rainforest walkway:
School:
Prostratin:

- Currently in pre-clinical testing (hasn’t entered phase I clinical trials in the USFDA).
- Make ‘best endeavour’ indications regarding sourcing of prostratin from Samoa (but natural yield quantities very low and scraped from stem/bark).
- Now mainly synthetically produced by Stanford researchers.
Mamala: Distribution of benefit issues

• Internal conflict in community – some chiefs dominating control of ecotourist walkway
• Royalty sharing under ARA agreement with healers (TK holders) in other parts of Samoa – what about healers in Falealupo?!
• Benefits for government – where did they go? Agriculture (milestone $10,000)?
ICBG Madagascar:

• With 3 national centres for scientific research (Marine, Pharmaceutical, Enviro), Conservation International and Missouri Botanical Gardens
• US NIH/ICBG funds, plus Dow Agrosciences and Eisai Pharma
• Agreements cover permits, collection process, scope (microbial GRs from soil and marine, plus some plant GR samples)
• 15 years, 3 funding phases
• Focus on cancer, some on heart disease, some diarrhoeal diseases and malaria.
ICBG Madagascar

- Collection by MBG with local assistants and scientists
- Processing of samples and some analysis done in National labs in Tana
- Biochemical extracts sent overseas (not GRs) – impt distinction under Nagoya
- Much equipment for National labs
ICBG Madagascar

• To date no major discoveries/breakthroughs so no milestone or royalty payments

• But ICBG/industry funds used to build several schools, wells, conservation projects, marine parks, fishing boats, ecotourist trails

• Several sites across Mada
ICBG Madagascar:

- Some concerns from NGOs about tracing/tracking biochemical resources – are benefits shared?
- Project end has meant no further maintenance for equipment
- Focus of project on US/‘first world’ diseases
Other important cases:

• Cook Islands CIMTECH case: Maori researcher based in Sydney using unique local TK but generic GR (Hibiscus), and other GRs

• Moroccan Argan – Fair Trade type ABS agreement where purchase of argan oil by-product for cosmetic uses by L’Oreal is 40x local market prices -> Social fund for Berber (Amazigh) women
Berber women collect & dry fruit, crush nuts, extract almond.

Cooperatives press almond for oil and filter

Cooperatives bottle oil and sell to locals/tourists

Targanine coordinates cooperatives, conducts basic QC and testing

Targanine sells to locals/tourists, other companies and ships

Cognis conducts QA/QC, extracts toxics (Phthalates), and formulation. Also extract proteins and flavanoids for specific patented uses (licensed to L’Oreal).

Cognis formulates and sells their own cosmetics through ‘LS’

L’Oreal sell high end skin care products and lower end hair care etc with Argan extracts and oil content

Income stream

Income stream

Income stream and fair trade

Benefit sharing

Income stream

Income stream
References:
