

## BIBLIOGRAPHY

1. DELIWE, M. 1998. *Prolegomena to a policy framework on indigenous knowledge systems in South Africa (draft 3)*, CSIR Policy Group. National Steering Committee Indigenous Knowledge Systems Program.
2. HARRIS, L.E. 1997. *Digital Property: The Currency of the 21st Century*. Toronto ON: McGraw-Hill Ryerson. ISBN 0-07-552846-0.
3. DE WAART, P. & WEISS, F. 1998. *International Economic Law with a human face: an introductory review*. In *International Economic Law with a human face 1 – 11, 2* (Friedl Weiss, Eric Denters and Paul de Waart, eds., 1998).
4. LIPINSKI, T.A. & BRITZ, J.J. 1999. *Deconstructing (the concept of) Intellectual property: designing and incorporating alternative models of property ownership in the new millennium and the protection of indigenous knowledge*, The 4<sup>th</sup> ETHICOMP International Conference on the Social and Ethical Impacts of Information and Communication Technologies.
5. HICKMAN, B.V. 1998. *The importance of biological diversity and the possible application of intellectual property rights as mechanisms for its conservation*, University of Natal, Durban, Kwazulu-Natal, South Africa, Law, LLM (Private Law).
6. ESSEL, P.K. 1996. *Use of indigenous knowledge in management systems: the case study of Maphunwane district, Swaziland*, University of the Witwatersrand, Gauteng, South Africa, Political Science and Public Administration - Development Administration and Politics, MSc (DP).

7. TSOMPI, O.K. 1997. *Indigenous wildlife management knowledge systems and their role in facilitating community-based wildlife management projects in Botswana*, University of Natal, Pietermaritzburg, Kwazulu-Natal, South Africa, Geography and Environmental Studies, MSc (Environment and Development).
8. FIRST NATIONAL WORKSHOP OF THE INDIGENOUS KNOWLEDGE SYSTEMS PROGRAM, 21 – 23 September 1998, University of North West, South Africa, National Steering Committee Indigenous Knowledge Systems Program.
9. Draft Bill for the Promotion and Protection of Indigenous Knowledge.
10. Intellectual Property Laws Act (1997).
11. MUNDY, P. 1999, *Recording and using indigenous knowledge: A Manual*, International Institute of Rural Construction, Silang, Cavite 4118, Philippines, Pact Publications: U.S.A. ISBN0-942717-70-8.
12. GAWORA, D. Nov.– Dec. 1994, *Indigenous knowledge in Amazonia – Opportunity or danger*, 7 – 9, Matlhasedi; Vol. 13, Iss 3.
13. PURI, K. 2000. *Is traditional or cultural knowledge a form of intellectual property?* Presented at the Oxford Intellectual Property Research Seminar on 18<sup>th</sup> January 2000, WP 01/00, Oxford, Oxford Electronic Journal of International Property Rights. [on-line] Available World Wide Web URL: <http://oiprc.ox.ac.uk/EJWP0100.pdf>
14. JOHNSON, M. 1992. *Research on traditional environmental knowledge: its development and its role*. In M. Johnson (ed.) *Lore: Capturing traditional environmental knowledge* (IDRC, Ottawa), p.4.



15. INDIGENOUS KNOWLEDGE FOR DEVELOPMENT A FRAMEWORK FOR ACTION November 4, 1998; Knowledge and Learning Center; Africa Region; World Bank.
16. WARREN, D.M., SLIKKERVEER, L.J., BROKENSHEA, D. (eds.) 1995. *The cultural dimension of development. Indigenous knowledge Systems.* Intermediate Technology Publications, London.
17. RIFKIN, J. 1995. *The end of work. The decline of the global labor force and the dawn of the post-market era.* G.P. New York: Putman's Sons.
18. BRITZ, J.J., BLIGNAUT, J.N. & PONELIS, S.R. 1999. *Information rich – information poor: critical evaluation, description and proposed solutions.*
19. BOON, J. A. 1992. *Information and Development: Some Reasons for Failures.* The Information Society, 8(4): 227-242.
20. PONELIS, S.R. & FAIRER-WESSELS, F.A. 1998. *Knowledge Management: a Literature Review.* South African Journal of Library and Information Science, 66 (1):1-9.
21. AGRAWAL, A. 1995. *Indigenous and scientific knowledge: some critical comments.* In: Indigenous knowledge and development monitor 3(3): 3-6.
22. CONVENTION ON BIOLOGICAL DIVERSITY (CBD). [on-line] Available World Wide Web URL: <http://www.biodiv.org/>
23. VAN WYK, B., VAN OUDTSHOORN, B. & GERICKE, N. 1997. *Medicinal plants of South Africa.* Briza Publications, Pretoria, South Africa.
24. JORDAAN, B. & BRITZ, J.J. *Indigenous knowledge in South Africa.* Unpublished manuscript. University of Pretoria, South Africa, May 2000.

25. POSEY, D.A. 1996. *Protecting indigenous people's rights to biodiversity*. *Environment*, 38, 6 – 9.
26. KAREHED, J., ODHULT, E. 1997. *An ethnobotanical study among the Maasai of the Loita Hills, Kenya*. Swedish University of Agricultural Sciences, no. 14; 85pp. Upsala, Sweden.
27. MASINDE, P.S. 1996. *Medicinal plants of the Marachi people of Kenya*. The biodiversity of African plants. Proceedings of the 14<sup>th</sup> AETFAT Congress 22 – 27 August 1994. Wageningen, Netherlands. Kluwer Academic Publishers, Dordrecht. Pp. 747 – 753.
28. NOVY, J.W. 1997. *Medicinal plants of the Eastern region of Madagascar*. *Journal of Ethnopharmacology*, Vol. 55 (2) : 119 – 126.
29. RANDIMBIVOLOLONA, F. 1996. *Research and Exploitation of biomedical resources for medicinal purposes in the Malagasy Republic (Madagascar)*. *Journal of Ethnopharmacology*; Vol. 51 (1/3) : 195 – 200.
30. MERZOUKI, A., ED-DERFOUFI, F. 1997. *Medicinal plants used by local Bouhmed population (Morocco)*. *Fitoterapia*; Vol. 68 (5) : 444 – 460.
31. VAN DAMME, P. 1998. *Wild plants as food security in Namibia and Senegal*. Pp. 229 – 247. In: *The arid frontier: interactive management of environment and development*. Kluwer Academic Publishers, Dordrecht, Netherlands.
32. GREEN, S.V. 1998. *The Bushman as entomologist*. *Antenna* (London); Vol. 22 (1) : 4 – 8.
33. BHAT, R.B., JACOBS, T.V. 1995. *Traditional herbal medicine in Transkei*. *Journal of Ethnopharmacology*; Vol. 48 (1) : 7 – 12.



34. TYISO, S., BHAT, R.B. 1998. *Medicinal plants used for child welfare in the Transkei region of the Eastern Cape (South Africa)*. *Angewandte Botanik*, Vol. 72 (3/4): 92 – 98.
35. MCGAW, L.J., JAGER, A.K. 1997. *Prostagalandin synthesis inhibitory activity in Zulu, Xhosa and Sotho medicinal plants*. *Phytotherapy Research*, Vol. 11 (2): 113 – 117.
36. NGWENYA, J.B et al. 1999. Personal Communication. Traditional Healers. Wakkerstroom, Mpumalanga, South Africa.
37. ORYEM-ORGA, H., KAKUDIDI, E.K.Z. 1995. *Preliminary ethnobotanical studies of the Rwenzori mountain forest area in Bundibugyo district, Uganda*. *Bothalia*, Vol. 25 (1): 111 – 119.
38. PHILLIPS, J & FIRTH, A. *Introduction to Intellectual Property Law*. 2nd Edition. Butterworths, London. 1990.
39. GURNSEY, J. 1995. *Copyright theft*. Aslils Gower: England.
40. ENDESHAW, A. 1996. *Intellectual property policy for non-industrial countries*. Dartmouth Publishing, London.
41. DRAHOS, P. 1995. *Thinking strategically about intellectual property rights*. *Telecommunications Policy*, 21 (3): 201-211.
42. HAMELINK, K. 1998. *Digital fatsoen, mensenrechten in Cyberspace*. Amsterdam.
43. LEWIS, C. L. & DAVIDSON, J.S. 1993. *Managing Intellectual Property Rights*. New York: Wiley Law Publications.

44. KING, S.R., CARLSON, T.J. AND MORAN, K. April 1996. *Biological diversity, indigenous knowledge, drug discovery and intellectual property rights: creating reciprocity and maintaining relationships*, J Ethnopharmacol, 51, (1 - 3).
45. BLAKENEY, M. April 1995. *Milpurrurru & Ors v Indofurn & Ors: Protecting expressions of Aboriginal folklore under copyright law*. Intellectual property law, 2 (1). [on-line] Available World Wide Web URL: [http://www.murdoch.edu.au/elaw/indices/title/blakeney\\_abstract.html](http://www.murdoch.edu.au/elaw/indices/title/blakeney_abstract.html)
46. EDELMAN, B, 1979; *Ownership of the image: elements for a Marxist theory of law*, ASIN: 0710001037).
47. BOSMAN, M. & MARAIS, J.L. 1998. *Local Knowledge – untapped resource in the development saga*. In Focus Forum 6 (3) : 19 – 23
48. BOONZAAIER, C.C. 1990. *Die familie-erf en opvolgreg van die Nkuna van Ritavi met verwysing na ander aspekte van die privaaterfreg van so 'n persoon*. D.Phil. Universiteit van Pretoria: Pretoria.
49. AUGUSTO, G. 1997. *Building Knowledge, Sharing Knowledge: Indigenous Technology and the Building of South African Intellectual and Social Capital for Innovation*. [on-line] Available World Wide Web URL: <http://www.parliament.gov.za/committees/iks/iksknow.htm>
50. ADAM, R. 1997. *Indigenous Knowledge and Innovation in South Africa*. [on-line] Available World Wide Web URL: <http://www.parliament.gov.za/committees/iks/iksinn.htm>
51. MOWSZOWSKI, R. 1998. *Searching for cures in local muti*. Electronic Mail and Guardian. 05 March 1998:1-2.



52. ENVIRONMENTAL LIAISON CENTRE INTERNATIONAL (ELCI). 1996. *Medicinal plants and local communities*. [on-line] Available World Wide Web URL: <http://www.elci.org/medicina.htm>
53. LIPINSKI, T.A. & BRITZ, J.J. 2000. *Protecting indigenous knowledge: legal problems and ethical potentials in designing and incorporating alternative models of property ownership in the 21<sup>st</sup> century*. Unpublished manuscript. University of Pretoria, South Africa.
54. DAVIS, M. 1998. *Biological Diversity and Indigenous Knowledge*. Science, Technology, Environment and Resources Group, 29<sup>th</sup> June 1998. Research Paper 17. . [on-line] Available World Wide Web URL: <http://www.apb.gov.au/library/pubs/rp/1997-98/98rp17.htm>
55. BODEKER, G. 2000. *Indigenous medicinal knowledge: the law and politics of protection*. University of Oxford. Presented at the Oxford University Intellectual Property Research Seminar on 25<sup>th</sup> January 2000.
56. DUTTON, P. & DUTTON, S., 1997. *Environmental consultants Paul and Sheila Dutton look beyond the healing values of medicinal plants*. *Out There* 1997:1 –2
57. VAN WYK, B. & GERICKE, N. 2000. *People's plants. A guide to useful plants of Southern Africa*. 1<sup>st</sup> edition. Briza Publications, Pretoria. ISBN 1 875093 192.
58. LECOMTE, A. & COSTA, J.P. 1992. *Harpagophytum dans l'arthrose: Etde en double insu contre placebo*. *Le Magazine*, 15:27-30.
59. CHRUBASIK, S. 1996. *Effectiveness of Harpagophytum procumbens in treatment of acute low back pain*. *Phytomedicine*, 3:1-10.

60. BRADY, L.R. 1981. *Pharmacognosy*. 8<sup>th</sup> edition. Lea & Febiger, Philadelphia.
61. AXFORD, B. 1995. *The Global System: Economics, Politics and Culture*, 81.
62. THE CRUCIBLE GROUP. IDRC. 1994. *People plants and patents. The impact of intellectual property on trade, plant biodiversity and rural society*. ISBN 0 88936 725 6.
63. LIEMER, S.P. 1998. *Understanding Artist's Moral Rights: A primer*. 7 Boston Public Interest Law Journal, 41.
64. PEELER, C.D. 1999. *From the Providence of Kings to Copyrighted Things (and French Moral Rights)*, 9 Indiana International and Comparative Law Review, 423.
65. KURUK, P. 1993. *Protecting folklore under modern intellectual property regimes: a reappraisal of the tension between individual and communal rights in Africa and the United States*, 48, American University Law Review, 842.
66. McEVOY, A. 1998. *Market and ethics in United States property laws, Who Owns America? Social Conflict over Property Rights*, 94, 100 (Harvey M. Jacobs ed.)
67. CAPUTO, J.D. 1997. *Deconstructing in a Nutshell: A conversation with Jacques Derrida*, 130.



## **ANNEXURE 1**

### **DRAFT IKS BILL SUMMARY (GOYVAERTS, LETSOALO, JUNE 2000) NATIONAL RESEARCH FOUNDATION (NRF)**

#### **Short definition of Indigenous knowledge (IK)**

Indigenous knowledge (IK) means productions, including works and technologies, both tangible and intangible, consisting of characteristic elements of the traditional artistic heritage developed and maintained by a community of South Africa or individuals reflecting the traditional artistic expectations of such a community.

#### **Characteristics of IK**

Every element of IK has traditional owners, who may be the whole community, a particular family or clan, an association or society, or individuals who have been specially taught or initiated to be custodians.

The traditional ownership of IK must be determined in accordance with traditional communities' own customs, laws and practices.

#### **Implementing structures**

Regulatory authorities convened by a chairperson as appointed by the minister

- Duties include the performance of all acts and other things that a juristic person may perform by law or do subject to the provisions of this act.
- The objects are:

- To coordinate and advise on IK
- To promote IK and regulate liaison between IK in the interest of the public
- To conduct and coordinate research on the protection of IK
- To determine strategic policy with regard to Intellectual Property Right Protection (IPRP) and IK
- To solicit advise for the promotion and protection of IK from the general public in the form of competitions
  - To promote mass participation
  - To develop a directory of inventors
  - To establish a tariff of fees payable for authorization of utilization of technologies
  - To protect the vested IP of individuals, strengthening of research, linkage to provincial structures and government small business support initiatives and the development of a suitable approach to the management of information and data assembled with assistance by community partners.
- Funded by the minister
- Income: funds generated by collection of tariffs and fines
- Special committees established by the Authority to assist with any function deemed necessary
- Appointment of experts
- Collective community administration agencies
  - Defend economic right stipulated in the act on behalf of the community
  - Require state authorization
  - Disseminate information to members and mandatories

### **Establishment of Directorate of Indigenous Knowledges**

- Headed by a Registrar



- Functions: registration, deposit, supervision and inspection
- Publish periodical bulletins on IK

## **Regulations**

Minister may make regulations after consultation with the Regulatory Authority to prescribe the conditions of granting protection if community administration is inadequate. The Regulatory Authority may issue guidelines and advise with regard to IK protection specifically to:

- Researchers and scholarly institutions:
  - Comprehensive inventories of IK must be provided to communities
  - All elements of IK must be returned to the rightful owner or agreements for shared custody, use and interpretation of IK must be obtained
  - Offers for the donation or sale of elements of IK can only be considered in consultation with traditional owners
  - When studying undescribed species of plants, animals and microorganisms or naturally occurring pharmaceuticals prior consent of traditional owners must be sought and documented
- Business and industry concerning:
  - No incentives may be offered to individuals to claim IK in violation of community trust and traditional laws
  - No scholars or scientists may be employed to acquire and record IK in violation of these guidelines

## **Offences and penalties**

- Any person who knowingly contravenes the act
- Convictions liable to a fine equal to three times the value of the gain derived from IK or imprisonment not exceeding 20 years jail
- A magistrate can impose an additional fine



## **Appointment of inspectors**

### **Transitional procedures**

- Current utilization must apply for authorization from the Regulatory Authority within six months

## **ADDENDA**

### **Forms of Intellectual Property Right Protection (IPRP)**

- **Patents:**
  - Must be filed, requires payment for filing
  - Criteria: inventive step, novel, commercial use
  - Protection for sole commercial exploitation valid for 20 – 25 years
- **Copyright:**
  - Not necessarily filed
  - Criteria: original work by an artisan including books, paintings, works of art, etc.
  - Not to be copied without explicit permission of the artisan
  - Protection valid for 50 – 100 years
- **Trademark:**
  - Must be filed
  - Criteria: original and not part of a language
  - Extends the sole right to sell products or services under the trademark
  - Renewable ownership against payment

Please note the limitations, the time spans of protection and regulations of the above IPRP systems.



The protection of knowledge *per se* does not contribute to welfare; on the contrary it often costs money. It is the successful commercial exploitation of such that may contribute to welfare. Most IK *per se* will not qualify for a patent as it may not be an invention, or it may be difficult to identify the inventor, or it may be published before either orally or written.

- Does the bill only cover tangibles as current works are protected under the copyright act?
- The bill is proposed to act retroactively: “return to its rightful owners”: is this possible?
- Some IK only developed in interaction or after exchange of knowledge with other cultures. How far back will the bill retro-act? How long will such a process of identification of IK take? Will it hinder exploitation and income generation?
- Is this a new form of IPRP or are IK being covered under the existing IPR with modifications? What are the rights enjoyed e.g. filing requirements, life-span of protection etc.
- Under existing IPRP, the owner of the IPR determines the amount of utilization of the IPR.
- Much IK is in the custody of many communities and individuals crossing cultural, tribal and country boundaries. How is it possible to determine ownership of such communal goods and within South Africa’s borders?
- The promotion of exploitation and economic gain from IK and their improvement in view of the cost of protection and the strong legislation concerning protection and illegitimate exploitation (regulations)
- The bill only covers undescribed species?
- How does the bill conform to the international agreements under WIPO?
- How does the bill relate to the convention on biological diversity that specifies ownership of biodiversity to a country?
- How does the bill allow for protection of IK originating from other countries?



## The Rooibos Tea Production Cycle



1) Rooibos tea is only found in the beautiful Cedarberg area of the Cape, where the climate is ideal for growing this unique tea.



2) The Rooibos tea plant is hard seeded by nature and the seeds are scarified to increase their germinating potential before being sowed.



3) During February to March, the tiny seeds are sowed in well prepared seedbeds. Between June and July, the plants which have by then reached a height of 10-15cm, are planted out into plantations.



4) The producer can harvest his first Rooibos tea after one and a half years, and thereafter the plant is harvested every year by cutting off the branches 35cm above the ground.



5) The sheaves are then cut by a cutting machine to uniform length of 5mm.



6) The tea cutting are then transported to the bruiser. This rolling process ensures that the important chemical reaction which develops the characteristic color and flavor of the tea can take place.



7) After watering and airing the tea is left to "sweat" in heaps. During this time the tea obtains its typical reddish brown color and develops its sweet flavor.



8) After the sweating process has been completed the sheaves is spread out to dry in the sun.





9) When dry, collection starts



10) The finished product is delivered to the Rooibos Tea Board, where the tea is sorted and graded according to cutting length, color, flavor and taste.



11) After sifting the tea is purified by steam pasteurization after which it is dried over hot air beds



12) Quality and bacteriological control is maintained throughout.



13) The dried tea is weight and packaged



14) Packers then buy from the Rooibos Tea Board



The Rooibos Tea is packaged by various packers in a variety of brands, either in tea bags or as leaf tea.

[Back to Main Page](#) | [The Rooibos Tea Story](#)