Clarion University of Pennsylvania, Clarion, Pennsylvania

# UNMASKING THE NEXUS BETWEEN NATURAL IMPERIALISM AND THE RESONANCE OF EUROPEAN LABELS ON AFRICA'S GIFTS OF NATURE IN THE UNDERDEVELOPMENT OF AFRICA

## Gilbert Tarugarira

Department of History, Midlands State University, Zimbabwe

#### ABSTRACT

Nature is the work of God and as a habitat of humankind; it merits attention and calls for study for hospitability and sustainable development. The zeal to understand nature has led to researches in natural sciences. Through imperial logic, scientific knowledge has now been divided along racial lines. The penultimate hierarchy of knowledge has created and continues to nourish natural imperialism. This paper attempts to sterilize the celebrated falsehood that the Europeans have the scientific spirit while the Africans have a magic conception of nature. The paper unveils and confirms that African indigenous knowledge systems, although rarely acknowledged, have provided the solid foundation upon which Europe has claimed dominance over the environment by cataloging and classifying plants, insects, animals and many other creations according to modern criteria. The European portrayal of science has relegated local ideas to the position of 'folk beliefs' which have incidentally been transformed into a single, closed system of knowledge dominated by Europe. Through biopiracy it is argued, Europe has continued to exploit Africa's biological wealth and obtained rights of intellectual ownership to the resources.

**Keywords**: Natural resources, Imperialism, indigenous knowledge, bio-piracy, intellectual property rights.

#### INTRODUCTION

When Watt and Breyer-Brandwijk published a book entitled The Medicinal and Poisonous Plants of Southern Africa in 1932, it was well received because it was written as a result of constant requests from Europe for information regarding the botanical identity, medicinal uses, chemical composition and pharmacological and toxicological effects of the plants in people and animals in Southern Africa. The book was not only a fascinating study, but also a profitable one scientifically. Although many of the newer drugs were discovered in the laboratory, it was an interesting fact that many important drugs had originally been discovered in use as native medicines or as native poisons (Watt and Breyer-Brandwijk, 1950:73). The reader may ask about the possible results of such studies and where they led to. Obviously, indigenous knowledge was transferred to Europe and elsewhere while Africans were not acknowledged as custodians of such valuable medical knowledge. This marked the genesis of bio-piracy. According to Watt and Breyer-Brandwijk(1950:73) the onslaught of European medicine, on the medical lore of the Bantu, Hottentot and Bushman was not only going to force it to totter to dissolution but that a proper study of native medicines and poisons was the possible addition of new remedies to their modern armamentarium'. As a result, European pharmaceuticals, agrochemical and seed multinationals have continued to wantonly milk Africa of her gifts of nature and hence the call by the African countries for legislation to protect the biodiversity.

It is the prime objective of this paper to show how bio-piracy resulted in the undervaluing of the biosources in Africa, created impoverishment among the African people; crippled the inventive and innovative spirit; exposed the medicinal secrets of indigenous communities and muscled out African indigenous knowledge contributions from celebrating rights of intellectual ownership to the resources.

## AFRICA'S UNDERDEVELOPMENT: HISTORICAL UNDERPINNINGS

Imperialism is basically a system of domination and exploitation of one country by another or a group of countries by another group of countries. According to Onimode(1988:17), 'the fundamental goals of imperialism and imperial system are to maintain political, economic, technological and cultural domination of foreign countries in order to achieve territorial expansion, foreign markets, sources of raw materials, outlets for capital exports, and even a safety valve for surplus population'. Thus, any serious account of the historical origins of African underdevelopment has to grapple with the central roles of slavery, colonialism and contemporary neo-colonialism in the context of world imperialism. The basic reason for this is that researches have demonstrated beyond doubt that up to the 17<sup>th</sup> century, Africa was not generally inferior to the rest of the world. Even God's intricate design of the African anatomy would not make them savages.

Bryant (1949) lamented how the African's exceptionally fine set of teeth were rapidly spoiled by civilization through the supplanting of coarse-ground food of older times by the finely ground meal of the European stores. Darwin (1883) accepted the inferiority of Europeans in comparison with the so-called savages in regard to eyesight. Bryant (1949:107) concluded that the vision of African people was sharper and much more superior than that of American Indians and Europeans. As regards near-distance vision, Prof. Woodworth expressed astonishment at the ease with which Africans (Zulu boys and girls in particular) would detect small objects in dense grass, when Europeans had been searching for them without success (Bryant, 1949:108). In yet another development, Sir Harry Johnston (1908:508) declared the sense of smell among the Congo Pygmies to be extraordinarily developed than that of the Europeans. The point being made here is that the Africans were also not biologically inferior to Europeans.

While the earliest and best known method of imperialism is violence through the military conquest of weaker states, it is important to note that trade has also been a major strategy of imperialism. Colonial trade, Ake (1981) argues, not only destroyed traditional crafts and craftsmanship but also robbed Africa of natural resources through processes which were infused with assumptions about racial superiority that buttressed colonial domination. Walter Rodney has indeed summarized how the transitional conjectures produced by the Euro-American slave trade, colonialism and neo-colonialism laid the basic structural foundation for the systematic underdevelopment of the continent.

Arguably, without slave trade, slavery and colonial subjugation, it is clear that Africa's story of scientific innovation and technological advancement would have been different today. Most traditional African scientists had their fame and innovations hijacked by racist whites who never thought that Africans could make discoveries that could prove to be useful

to humankind. Indigenous people had a great deal to teach European scientists about the utility of plants. According to Harries (2007:138), on several occasions, Junod 'invited natives to his museum where they supplied him with the local names and uses of plants in exchange for a shilling'. Junod admired African old women and specialist medicine-men who exhibited an encyclopaedic knowledge of the medicinal, nutritional and magical properties of plants. The *n'angas or* medicine-men, Harries (2007:138) notes, 'were familiar with real, powerful drugs which they administered in conjunction with therapeutic practices'. The truth is emerging of African traditional herbalists whose quality of work and philosophy continues to astonish the world's medical fraternity.

In fact, many inventions associated with African indigenous knowledge have been captured in European history books but the African intellect and ingenuity exhibited in the discovery not acknowledged.

#### CONCEPTUALIZING INDIGENOUS KNOWLEDGE

Larsen (1998), in Ntsoane (2002:72), defines indigenous knowledge systems as 'concepts, facts, perceptions, beliefs, information and values, as well as particular economic, social and traditional political arrangements' associated with any given community. For Ntsoane (2002:72) indigenous knowledge is a fusion of both traditional and local with a heritage component, as an acknowledgement that as Africans, we have inherited our own method of knowledge from our ancestors. Kaya and Maleka (1996) argue that indigenous does not necessarily mean traditional. Their stance is augmented by Lalonde and Morin-Labatut (1993) who also advance that indigenous knowledge systems are not monolithic, given that these undergo constant transformation through knowledge transmission across generations and the subsequent innovations and integration of foreign practices. However, Ntsoane (2002:70) warns against searching for a definition based on the colonizer's language and culture, arguing that, the definition, conceptualization and operationalisation of the term should be based on the need to reintroduce an Afro-optimistic approach to knowledge production. Indigenous knowledge embraces both the physical and metaphysical world. Despite the fact that the metaphysical is non-technical or intangible, it carries insights, wisdom, ideas, perceptions and innovative capabilities that pertain to ecological, biological, geographical and physical phenomena (Ntsoane 2002). In other words, indigenous knowledge connotes local knowledge that is unique to a given culture or society and is usually, orally passed on from generation to generation. Ntsoane (2002:71) observed that 'most scholars in anthropology and the social sciences use the term indigenous knowledge synonymously with traditional and local knowledge to differentiate the knowledge developed by a given community from knowledge systems generated through universities, government research centers and private industry. 'The essence of this discussion on the conceptual framework is to lead to an understanding that terms defined in the interests of Western epistemology have shunned African definitions of the world. What is equally mind-boggling is how indigenisation, critical thinking and theory have been correlated easily with the colonial invention of the native, the rural, the uneducated; the whole list of pejorative and derogatory terms that can be found in the euphemism lexicon. From this perspective, science and enlightenment were ranged on the side of Europe against the purported superstition and darkness that was claimed to pervade life in Africa. This notion of science as a closed system of knowledge regulated by Eurocentric rules, supported by imperial logic, gave little recognition to the collection of data by Africans and ignored the systems and arrangements through which they ordered knowledge and infused it with meaning. In the absence of policy legislation, enforcing agencies and empowered communities, the consequences are that country-related

intellectual property rights and genetic resources have been exploited and dictate that if people have rich biodiversity and intellectual wealth, they can meet their needs for health care and nutrition but if on the other hand the rights to both resources and knowledge have been transferred from the community elsewhere, members of the community end up paying high prices or royalties for what was originally theirs and which they had for free. European labels and trademarks are then used to suppress and eventually obliterate indigenous knowledges.

### PROTECTING THE GIFTS OF NATURE

A study into areas of sustainability and intellectual property rights, and their implications with respect to local knowledge systems, is crucial for purposes of protecting local knowledge systems from capitalist exploitative interest. Shiva (2001) notes that the bio-piracy and patenting of indigenous knowledge is a double theft of creativity and innovation. In addition, the exclusive rights established by patents on stolen knowledge rob the indigenous communities of economic options of everyday survival. Through the passage of time, the patents would be used to establish monopolies which will push the prices of products beyond the reach of many. Patenting products developed from biological material poses a threat to the communities of origin. Anuradha (2002) argues that this exposes the secrets of the communities to the outside world. Such a scenario becomes an open invitation for corporate and research interests to freely use indigenous knowledge. What then follows is the commercial harvesting of the plants by the multinational corporations. Africa and other third world countries have lost huge benefits from their biodiversity due to lack of legal protection. While Europeans plunder African biodiversity, their medicine is protected. The rights of holders of traditional knowledge who indeed should share benefits arising from the innovation are not recognized. To indicate that Junod had a genuine desire to coax medical cures from local plants, he assembled a 'Ronga pharmacopoeia' in the ethnographic museum in Neuchatel and sent plants to Geneva for analysis (Harries, 2007). The plant Hoodia cactus from the Kalahari Desert has been used for centuries among the San people of Southern Africa to starve off hunger and thirst. It had become a secret of the community. However, once discovered, the Parastatal Council for Scientific and Industrial Research found in it the molecule that curbs appetite and sold the rights to develop an anti-obesity drug to Pharmaceutical companies (Limson, 2002). The Devil's Claw was collected by a German researcher from the San of Namibia where it was used to treat heart problems. Sir Thomas Fraser worked out the cardiac effects of a poison scraped from some Central African arrows. This proved to be a new advance in cardiac therapy and later the botanical identity of the poison was traced to Strophanthus Kombe Oliv (Watt and Breyer-Brandwijk 1950). The Egyptians claimed that garlic was an effective treatment for stomach disorders, skin problems, respiratory illnesses and numerous other medical difficulties. Clinical experiments carried out in the United States of America have demonstrated that the right amount of garlic in food can offer protection against certain types of cancer (Sosa Gomez 2004). These simple but eloquent examples speak volumes about African indigenous medical herbological ingenuity. The search for new medicinal plants has led to many expeditions into the African jungles. According to Githens (1949) there are over 14 000 drug plants in Africa but it is unfortunate that most of these species are vanishing at an alarming rate. This explains why many African countries which never had property rights protection systems for plants are now in the process of designing some.

The spread of intellectual property rights is facilitated by the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). It prescribes that members of the World Trade Organization (WTO) provide for patent protection of all inventions. Africa has been haunted by problems encountered when dealing with trade related intellectual property rights and the WTO. At the Ouagadougou summit of 1996, the Organisation of African Unity (now the African Union) endorsed a draft Convention on Access to Biological Resources and the Protection of Community Rights. This marked the foundation upon which African countries pass national legislation enabling them to regulate access to their genetic resources and to legally protect the rights of their communities.

In Botswana, the Agricultural Conservation Act (1977), prohibits the extraction and distribution of devil's claws (*Harpogophytum Procumens*) and requires that even members of the public possess a permit to dig and sell plants. The Kenyan government has teamed up with Non-Governmental Organizations in an effort to bring indigenous knowledge systems into mainstream natural resources management. The government has instituted the Indigenous Plant Programme (IPP), Indigenous Agricultural Knowledge Systems Programme (IAKSP) and the Ethnobotany Forestry Project. Zimbabwe has drafted a legal framework for Medicinal Plants and created the Department of Traditional Medicines in the Ministry of Health. Organizations like the Association of Zimbabwe Traditional Religious Ecological Conservationist (AZTREC), Zimbabwe National Traditional Healers Association (ZINATHA), Southern Alliance for Indigenous Resources (SAFIRE) and many more, are taking an active role in promoting indigenous knowledge systems. It therefore suggests that the role of Africans and other peoples from regions that suffered the effects of colonialism and the appropriation by the West of intellectual property rights is to share their experiences in promoting the protection of their indigenous knowledge and natural resources.

### **CONCLUSION**

Africa has been and continues to be a lucrative market for European manufactures and yet the knowledge about the raw materials and their utility has been imbibed from the Africans. The Africans' knowledge of the medicinal, nutritional and magic properties of plants has been a source of commercial gain for multinational companies through bio-piracy which imperial logic seems to have justified. It is paramount that Africans promote the protection of their indigenous knowledge and natural resources by drafting laws that will protect the rights of indigenous communities. Although developing countries would need to collaborate with laboratories in advanced countries in order to benefit from their knowledge, this calls for African countries to choose their friends carefully because, except for a few committed Western non-profit making environmental groupings, most have an agenda and interest in looting Africa's resources. Unless Africa revitalizes her legitimacy over indigenous knowledge systems, modern science perceived through African products carrying European labels and trademarks, it will continue to be considered as the product of a civilization diffused from Europe to a grateful continent-Africa.

## REFERENCES

Ake, C. (1982) A Political Economy of Africa. Longman: London.

Anuradha, R.V. (2002) 'Biopiracy and Traditional Knowledge'. Accessed at

### http://www.hinduomet.com/folio/focus/01050380.htm

- Bryant, A.T. (1949) The Zulu People: As they were before the white man came. Shutter and Shooter: Pietermaritzburg.
- Darwin, C (1883) Descent of Man. Murray: London.
- Githens, T.S. (1949) Drug Plants of Africa. University of Pennsylvania: Pennsylvania.
- Johnston, H (1911) Pioneers in Southern Africa. Hutchinson: London.
- Kaya, H.O. and Maleka, S. (1996) 'Building on indigenous'. *Journal of African Studies* 10 91, Pula, Botswana.
- Harries, P. (2007) Butterflies and Barbarians: Swiss Missionaries and Systems of Knowledge in South-East Africa. James Currey: Oxford.
- Lalonde, A. And Morin-Labatut, G. (1993) 'Indigenous Knowledge and Innovation: Its

  Contribution to Sustainable and Equitable Development', paper presented at

  The 1993 Annual Meeting of the African Studies Association, Boston, Mass.
- Larsen, J. (1998) *Perspectives on Indigenous Knowledge Systems in Southern Africa*. Environment Group Africa Region: The World Bank.
- Limson, J. (2002) 'Focus on biopiracy in Africa'. Accessed at <a href="http://www.science">http://www.science</a> in Africa.co.za/2002/September/biopiracy.htm.
- Mushita, A. (2007) Biopiracy of biodiversity. Africa World Press: Asmara.
- Ntsoane, O. (2002) 'Indigenous Knowledge Systems and their Economic Potential in South Africa'. In Savage, M and Naidoo, P. (eds) *Popularisation of Science and Technology Education: Some Case Studies from Africa*. Commonwealth Secretariat: London.
- Onimode, B. (1988) A Political Economy of the African Crisis. Zed Books: London.
- Rodney, W. (1981) How Europe Underdeveloped Africa. Zimbabwe Publishing House: Harare.
- Shiva.R (2001) Protect or Plunder? Zed Books, London.

# **ABOUT THE AUTHOR:**

Gilbert Tarugarira is a lecturer in the Department of History at Midlands State University.