BOOK REVIEW

## GLOBAL BIOPIRACY: PATENTS, PLANTS, AND INDIGENOUS KNOWLEDGE

**BY IKECHI MGBEOJI** 

## **Reviewed By Christopher Peng\***

CITED: (2008) 13 Appeal 95-98

Legal control and ownership of plants and traditional (indigenous) knowledge of the uses of plants (TKUP) is often a vexing issue, particularly at the international level, because of the conflicting interests of states or groups of states. The most widely used form of juridical control of plants and TKUP is the patent system, which originated in Europe. This book rethinks the role of international law and legal concepts, the major patent systems of the world, and international agricultural institutions as they affect legal ownership and control of plants and TKUP.<sup>1</sup>

Two important aspects of property law are the rights given to property owners and the eligible subject matter to which those rights may apply. These aspects of property law vary from jurisdiction to jurisdiction. Some cultures emphasize the importance of private ownership by granting a broad scope of rights to a large variety of subject matter. In other cultures, the concept of private ownership is alien because property is held communally.<sup>2</sup> Given these types of fundamental differences, conflicts are bound to arise where there is increasing interaction between cultures.

*Global Biopiracy* examines a very specific area of property law where tension between different legal regimes exists. It discusses how patent and plant breeder's rights are used by the more developed countries (referred to as states of the North) to misappropriate the plants and TKUP from less developed countries (referred to as states of the South).

*Global Biopiracy* provides a very detailed and thorough explanation of the development of the modern patent system and its effect on plants and TKUP. To accomplish this, Ikechi Mgbeoji considers evidence from a variety of different disciplinary perspectives. For example, he considers legal perspectives when he discusses the international law concept of the Common Heritage of Mankind (CHM),<sup>3</sup> political perspectives when he discusses the backdrop against which the Trade-Related Aspects of Intellectual Property Rights agreement was included in the 1994 amendment to the general World Trade Organization agreement, anthropological perspectives

<sup>\*</sup> Christopher Peng is a third year law student at the University of Victoria.

<sup>1</sup> Ikechi Mgbeoji, Global Biopiracy: Patents, Plants, and Indigenous Knowledge, (Vancouver: UBC Press, 2006) at xi [Global Biopiracy].

<sup>2</sup> For example, Aboriginal title in Canada.

<sup>3</sup> See generally John Currie, *Public International Law*, (Toronto: Irwin Law, 2001) at 230.

when he discusses religious and philosophical conceptions of plants and economic perspectives when he discusses the effect that modern consumerism has on the diversity of plant species.

Ikechi Mgbeoji is currently an associate professor at the Osgoode Hall Law School at York University. Before moving to Osgoode, he taught at the Faculty of Law at the University of British Columbia. For five years, he was an attorney with a Nigerian law firm practicing in commercial and intellectual property law litigation. His teaching and research interests are in patent law, trademarks, copyrights, trade secrets, international law on the use of force, international environmental law, biotechnology and law, comparative intellectual property law, indigenous peoples and anthropology.<sup>4</sup>

It is clear from the outset that this book is very well organized. The first eight pages of the introductory chapter include a detailed roadmap of the entire book. I found this helpful not only to get a sense of the direction of the book before reading it but also because it was something I could refer back to while I was reading the book to see where it was going.

In the introduction, Mgbeoji states that "[t]he main objective is to contribute to a more transparent and open debate, free from the obfuscation and technical shenanigans that have hampered an appreciation of the global forces at play in the appropriation of indigenous peoples knowledge."<sup>5</sup>

While the book is listed as 311 pages long, the last 102 pages are composed of footnotes and a selected bibliography. The structure of the arguments is excellent and Mgbeoji's writing style is clear and concise. The one factor which slightly hinders this book from achieving its objective is its sometimes overly negative tone. Mgbeoji makes it clear from the outset that his intention is to critique the patent system: "it is not enough to analyze what the legal norms of the patent system seek to protect; what they neglect to protect is equally relevant. In short the patent system must be thoroughly interrogated and its intellectual integrity should not be presumed."<sup>6</sup> While there is nothing wrong with this position, it struck me right from the beginning of the book that there was a strong, consistently negative tone towards the modern patent regime. This was especially evident during his discussion of the origins of the patent system where he criticized almost every aspect of it. I found that this position made me automatically wary of his arguments, and made me read carefully to ensure that this apparent bias did not affect the reasoning in his arguments. While I did not find that any of the arguments were advanced in a biased manner, I think that his strong position made me less receptive than I otherwise could have been.

In the second chapter entitled "Patents, Indigenous and Traditional Knowledge, and Biopiracy", Mgbeoji discusses the term "biopiracy", the origin and development of the patent system and the current international regime with respect to patents. Mgbeoji defines "biopiracy" as "the unauthorized commercial use of biological resources and/or associated traditional knowledge, or the patenting of spurious inventions based on such knowledge, without compensation."<sup>7</sup>

Mgbeoji also provides a good explanation of two relevant areas of law. First, Mgbeoji discusses various aspects of the patent system including its origin, underlying philosophies and theories, diffusion and colonial migration, historical evolution and development and some of its implications with respect to biopiracy. This discussion would serve as a good introduction for anyone studying patent or intellectual property law. Second, Mgbeoji presents the relevant

<sup>4 &</sup>quot;Ikechi Mgbeoji" (January 22, 2008), online: Osgoode Hall Law School <a href="http://www.osgoode.yorku.ca/faculty/Mgbeoji\_lkechi.html">http://www.osgoode.yorku.ca/faculty/Mgbeoji\_lkechi.html</a>.

<sup>5</sup> Global Biopiracy, supra note 1 at 1.

<sup>6</sup> *Ibid.* at 13.

<sup>7</sup> *Ibid.* at 13.

international law principles. Most importantly, it is made clear that there is not an international patent system, only "a multiplicity of international, regional, multilateral, and bilateral agreements seeking to harmonize the process of granting patents."<sup>8</sup>

In the third chapter entitled "Implications of Biopiracy for Biological and Cultural Diversity", there is an interesting discussion of how different societies view and value plants and TKUP as well as some of the causes of contemporary extinction of plant species. Here, Mgbeoji does a good job illustrating that the patent regimes of the states of the North are highly reflective of their cultural values.

Continuing in the fourth chapter entitled "The Appropriative Aspects of Biopiracy", there is detailed discussion of the factors central to the appropriative nature of biopiracy. Mgbeoji sets out three main factors: sociocultural, mechanisms by which the states of the North have established and the patent system. The first two factors are discussed in this chapter while the patent system is taken up in the fifth chapter.

With respect to the first factor, Mgbeoji provides a persuasive argument that racial and gender discrimination has denied the validity of "the intellectual input of traditional farmers and breeders, particularly women, in the improvement of plants and the creation of TKUP".<sup>9</sup> To support this argument, he provides examples of how racial and gender discrimination have led the states of the North to disregard the existing cultures when "discovering" plant products such as quinine and stone seeds.

With respect to the second factor, Mgbeoji argues that the evidence supports that the states of the North have established international agricultural research centres as research institutions and gene banks for the South's plant genetic resources to facilitate the misappropriation of plants and TKUP. Mgbeoji also discusses the historical development of institutional misappropriation dating back to colonialism, the attempts to justify the misappropriation by using the international law concept of CHM and the role of International Agricultural Research Centres with a focus on the Consultative Group on International Agricultural Research. This section neatly illustrates how modern appropriation of plants and TKUP is akin to colonialism.

In the fifth chapter entitled "Patent Regimes and Biopiracy", Mgbeoji examines the appropriative nature of patents and plant breeder's rights. This chapter illustrates exactly how the patent system has been manipulated to facilitate biopiracy. In the first part of this chapter, Mgbeoji looks at some of the common features of most patent systems including novelty, utility and industrial application. Mgbeoji notes that there is a lack of a generally agreed upon international standard for the requirements of novelty and utility which has allowed states of the North to determine the nature of these requirements in a manner that facilitates the appropriation of plants and TKUP. Mgbeoji further argues that the requirement for industrial application creates an unfavourable barrier for the protection of plants and TKUP because states of the South often do not consider industrial applications important.

Mgbeoji brings his arguments together in the conclusion of the book when discusses "some of the consequences of the erosion and appropriation of plant life forms and TKUP by both international institutions ... and the patent systems of powerful states."<sup>10</sup> The consequences he identifies include global food security, health and environmental integrity, the potential application of the precautionary principle, human rights and the crisis of development in the Third World. Finally, Mgbeoji concludes that all affected states must come together to understand each others values and interests and proceed in a manner sensitive to these interests.

<sup>8</sup> Ibid. at 42.

<sup>9</sup> *Ibid.* at 87.

<sup>10</sup> Ibid. at 179.

## 98 = APPEAL VOLUME 13

This book sets out a very thorough and clear argument that patents and plant breeder's rights have the effect of allowing states of the North to misappropriate the plants and TKUP of the states of the South. *Global Biopiracy* accomplishes this by providing a substantial amount of evidence from a variety of sources. The biopiracy of plants and TKUP is a complex issue with numerous consequences and a satisfactory solution to it is likely to be extremely complicated. Mgbeoji does not attempt to provide a solution to the problem but rather attempts to "to contribute to a more transparent and open debate"<sup>11</sup> and to that end, this book is absolutely successful.