

Biopiracy: a system of appropriation

review by **GRAIN**

In this well-documented book,* Ikechi Mgbeoji, professor of law at York University, Toronto, launches a closely argued attack on the way the industrialised countries, working in collusion with multinational corporations, are using an array of weapons to appropriate and privatise the extraordinary wealth of knowledge about the use of plants built up over centuries by traditional people in the developing world. The objective of the industrialised countries, he says, is not only to plunder this knowledge for their own financial benefit, but also – and this is even more important – to build up their own stores of genetic material so that they can usurp the developing world's position as the genetic centre of the world.

Mgbeoji uses the term “biopiracy” to describe the process. There are, he says, three main ways in which it operates:

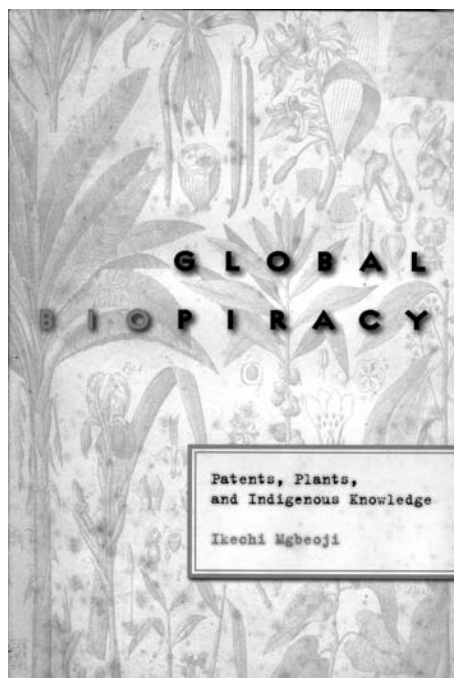
- a) The first is socio-cultural. It refers to the constant “denigration and denial of the intellectual input of traditional farmers and breeders, particularly women, in the improvement of plants and the creation of TKUP [traditional knowledge of the use of plants]”.
- b) The second is institutional. It concerns the systematic collecting of plant materials from the South (long sponsored by the US and UK governments, for example) and the setting up of an international system of genebanks. Since the 1960s,

Northern-sponsored international agricultural research centres have been strategically located in centres of genetic diversity in the South, to collect precious traditional varieties of major crops. These seed collections have been massively transferred to the gene-poor North.

c) The third is legal, through the patenting of plants and TKUP. This has been made possible “by a deliberate lowering of the threshold for patentability and several other forms of judicial and legislative intervention in the patent law system that have resulted in serving the ever-expanding appetite and interests of Western corporate seed merchants and pharmaceutical and biotechnological companies”.

Mgbeoji has a detailed section on the history of the patent system. It originated in Florence in 1421 when the architect Filippo Brunelleschi, who became famous for designing and constructing the Santa Maria del Fiore cathedral in Florence, needed some way of transporting huge blocks of marble up the River Arno from Pisa. He designed an enormous boat for the task but, before building it, he demanded and achieved something quite unprecedented – that the city of Florence should grant him sole rights over the design of the craft. The boat sank on its first voyage – and along with it a sizable chunk of Brunelleschi's wealth – but the patent system was born. With some setbacks, it spread first to Europe and then to the rest of the world.

Until relatively recently, patent systems were almost entirely restricted to mechanical inventions and artifices, while food, medicines and life forms, including plants, were explicitly debarred. It is interesting to note that in the 18th and 19th centuries the United States, in vigorous defence of its interests as a developing nation, was, as Mgbeoji puts it, “a notorious pirate of foreign technology, flouting patent norms in defiance of the then technologically superior European states”. But as the USA emerged in the 20th century as the world's dominant industrial nation, it became uncomfortably aware that, even though it was the world's major food producer, it was heavily reliant on foreign germplasm – potatoes from Latin America, maize from Central America, soya bean and rice from China, wheat from Syria, and so on. In fact, for crop diversity, North America is 85 per cent dependent on the South. To reduce its vulnerability, it began to design “an array of cultural institutions, legal norms and mechanisms ... to relocate the genetic centre of the world and to extract surplus profit by inserting the appropriated plant life forms into the stream of commerce as commodities of trade”.




US seed merchants and commercial plant breeders realised fairly early in the century that their most effective weapon would be the expansion of the concept of patentability. However, according to Mgbeoji, they deliberately decided against a big, public campaign: "Although the initial plan was to have patents on seeds and plants of agricultural importance, the industry sensed that such a bold proposition would be drowned in public outrage and indignation." Instead, he says, they decided on a gradual, piecemeal strategy: the first legislative proposal was to allow a seemingly benign group – rose breeders and horticulturalists – to be permitted patents on the plants they bred. Using careful language and quoting from an array of treaties, laws and agreements, Mgbeoji then painstakingly traces the expansion of the patent system as it spreads across the world.

The book adds up to a damning exposition of the systematic appropriation of traditional knowledge by the powerful states and corporations of the North. It becomes clear that biopiracy is not something that arises from abuse of, or glitches in, the system. Rather, it is the patent system itself, which deliberately denigrates the worth of traditional and indigenous peoples, especially local women farmers, and seeks to disenfranchise them. Working together, Mgbeoji says, the patent system and gene-banks are allowing the increasingly integrated food corporates and biotechnology companies to tighten their control over the world's food and farming sectors.

The book is less incisive on the question of where we go from here. Not surprisingly perhaps, given that Mgbeoji is a law professor, he does not believe that traditional communities should reject legal process. "It would be unrealistic for the world to continue to pretend that they [local farmers and traditional communities] do not need to be legally protected from the predatory practices of appropriators." Mgbeoji believes that, as a first step, the patent system must be radically reformulated. At the very least, he says, the same strict criteria should be adapted for plants and TKUP as are used

for mechanical inventions. "Unless this happens, the patent system, especially in its application to plants and TKUP, will remain an engine of mischief and deception and society will continue to pay rent for undeserving 'inventions'."

But how is patent law to be reformulated? Mgbeoji is vague. He believes that "gene-rich but politically/economically weak states" in the South should form regional alliances to push through a new policy, perhaps looking at the EU as some kind of model. But he seems to harbour little hope that this might happen. On several occasions he is scathing in his criticism of governments in the South: "While it might be fashionable to highlight the inequities of the global legal and economic order, particularly in the context of the North-South divide, it is equally true that domestic factors have wreaked as much, if not more, havoc on marginalised people and cultures. The oppression and domination of indigenous peoples and other marginalised cultures seems far more acute in their domestic jurisdictions, in both North and South, than any conceivable hardships they may experience within the context of the notorious North-South divide." Mgbeoji does not explain why indigenous peoples should expect support from such governments in their struggle to protect their biodiversity and their knowledge.

It is only on the very last page of the book that he starts to discuss the involvement in policy-making of local communities, something which he says is essential for an effective strategy. That has been a professed goal of many governments, NGOs, intergovernmental fora and treaties for over 20 years, yet little has been achieved. Mgbeoji gives a comprehensive exposition of the problem but leaves us as far as ever from a solution. 

* Ikechi Mgbeoji, *Global Biopiracy – Patents, Plants and Indigenous Knowledge*, Cornell University Press/UBC Press, New York, 2006, US\$22.95, paperback, ISBN: 978 0 8014 7311 1



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