

What is Biopiracy?

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Context

The vast majority of countries formally recognize that cross-border exchange of genetic resources and traditional knowledge (TK) be carried out in compliance with the principles of the Convention on Biological Diversity. For a number of reasons, intellectual property rights, particularly patents but also plant variety protection, have become central to discussions on this matter. These reasons relate to the following:

- The conviction - widely held among developing countries and NGOs - that biodiversity and associated traditional knowledge have tremendous economic potential;
- The fact that patent claims in various countries may incorporate biological and genetic material including life forms within their scope;
- The belief, also shared by developing countries and NGOs, that this feature of the patent system enables corporations to steal, misappropriate or unfairly free-ride on genetic resources and associated traditional knowledge;
- The ability of modern intellectual property law to protect the innovations produced by industries based mainly in the developed world and its *inability* to protect adequately those in which the developing countries are relatively well-endowed; and
- The perception that as a consequence of the above reasons, the unequal distributions and concentrations of patent ownership and the unequal share of benefits obtained from industrial use of biogenetic resources are closely related.

This paper deals with the third of the five phenomena, and seeks to shed some light on the meaning of the term “biopiracy” and to consider what should be done about it, bearing in mind that agreement on what is and isn’t biopiracy, and how much of it there actually is, is still lacking.

Biopiracy as a Counter-Concept

“Biopiracy” has emerged as a term to describe the ways that corporations from the developed world claim ownership of, free ride on, or otherwise take unfair advantage of, the genetic resources and traditional knowledge and technologies of developing countries. While these and other corporations have been complaining about “intellectual piracy” perpetrated by people in developing countries, the latter nations counter that their biological, scientific and cultural assets are being “pirated” by these same businesses. Intellectual piracy is a political term, and as such is inaccurate and deliberately so. The assumption behind it is that the copying and selling of pharmaceuticals, music CDs and films anywhere in the world is intellectual piracy irrespective of whether the works in question had patent or copyright protection under the domestic laws. After all, if drugs cannot be patented in a certain country, copying them by local companies for the domestic market and/or overseas markets where the drugs in question are also not patented is hardly piracy in the legal sense of the word.

Similarly, biopiracy is an imprecise term, and there are good reasons to keep it so, at least in the international arena. But “strategic vagueness” is not a helpful approach for those working on legal solutions in such forms as national laws, regulations or international conventions.

Let us start by elucidating, as far as we can, the actual meaning of the word. To start with the obvious, “biopiracy” is a compound word consisting of “bio”, which is short for “biological”, and “piracy”. According to the Concise Oxford Dictionary, “piracy” means the following:

1. the practice or an act of robbery of ships at sea
2. a similar practice or act in other forms, esp. hijacking
3. the infringement of copyright

Apart from the use of “piracy” for rhetorical effect, the word does not seem to be applicable to the kinds of act referred to as biopiracy. But let us now turn to the verb “to pirate”. The two definitions given are

1. to appropriate or reproduce (the work or ideas etc. of another) without permission for one’s own benefit
2. to plunder

These definitions seem to be more appropriate since inherent to the biopiracy rhetoric are the notions of unauthorised appropriation and theft. In essence, “biopirates” are those individuals and companies accused of one or both of the following acts: (i) the theft, misappropriation of, or unfair free-riding on, genetic resources and/or traditional knowledge through the patent system; and (ii) the unauthorised and uncompensated collection for commercial ends of genetic resources and/or traditional knowledge.

For biopiracy to mean anything at all, however, it cannot be considered merely as a matter of law but as also one of morality and of fairness. Accordingly, we need to acknowledge that where lines should be drawn between acts of biopiracy and legitimate practices is very hard to establish. The difficulty in drawing the line is compounded by the (deliberate) vagueness in the way the term is applied. To illustrate this point, it may be useful to explain and distinguish the terms ‘theft’, ‘unfair free-riding’ and ‘misappropriation’ by pointing out that they can encompass a broad continuum of activities from criminal acts causing serious harm, to legal but unfair activities, and even to legal, fair and socially-welfare enhancing uses of other people’s property. For example, free-riding does not require there to be a victim, whether we speak of the person whose knowledge or goods have been freely ridden upon or of society as a whole. Indeed, some acts of free-riding may be of benefit to society and should therefore be allowed.¹ Consequently, there is likely to be considerable disagreement about how to distinguish between uses of somebody else’s property that are legal, fair and social welfare enhancing, and other uses that are unfair or illegal and/or socially perverse in its effects. Behind much of the debate about biopiracy is disagreement on whether and to what extent such terms as theft, misappropriation and unfair free-riding should apply.

To show how differently the term is applied, what follows is a list of actions that have been labelled as acts of biopiracy.

¹ See MA Lemley, ‘Property, Intellectual Property, and Free Riding’. Stanford Law and Economics Olin Working Paper No. 291, 2004.

Traditional Knowledge Biopiracy

Collection and use:

- The unauthorised use of common TK
- The unauthorised use of TK only found among one indigenous group
- The unauthorised use of TK acquired by deception or failure to fully disclose the commercial motive behind the acquisition
- The unauthorised use of TK acquired on the basis of a transaction deemed to be exploitative
- The unauthorised use of TK acquired on the basis of a conviction that all such transactions are inherently exploitative (“all bioprospecting is biopiracy”)
- The commercial use of TK on the basis of a literature search

Patenting:

- The patent claims TK in the form in which it was acquired
- The patent covers a refinement of the TK
- Patent covers an invention based on TK and other modern/traditional knowledge

Genetic Resource Biopiracy

Collection and use:

- The unauthorised extraction and use of widespread resources
- The unauthorised extraction and use of resources that can be found in one location
- The unauthorised extraction and export of resources in breach of ABS regulations of the relevant country
- The unauthorised extraction and export of resources in countries lacking ABS regulations
- The authorised extraction of resources on the basis of a transaction deemed to be exploitative
- The authorised extraction of resources on the basis of a conviction that all such transactions are inherently exploitative

Patenting:

- The patent claims the resource itself
- The patent claims a purified version of the resource
- The patent covers a derivative of the resource and/or is based on more than one resource

What to do about Biopiracy?

The problem with the biopiracy rhetoric and the strategic vagueness behind it is that if you cannot agree on what it is, you cannot measure it. Neither can you agree on what should be done about it. One extreme view is that all bioprospecting is biopiracy. If so, the answer is to ban access outright. If biopiracy is merely an irritation, then such a ban need not be enforced

too rigorously, since legal enforcement of higher-stakes areas of the law would have to take priority. If biopiracy causes demonstrable economic and/or cultural harm, the country should invest in enforcing the ban. On the other hand, if the problem is that provider countries or communities are unable to negotiate beneficial agreements, the answer may be to improve the provision of legal and technical assistance so they can. If the problem is that the patent system legitimises or encourages misappropriation, then we may need to improve the standards of examination, ban patents on life forms and natural, or even modified, compounds, or incorporate a disclosure of origin requirement. In short, how you define biopiracy goes a long way towards determining what you should do about it.

Finally, I would like to suggest that it's possible to be too concerned about biopiracy. It's not at all clear that there is more bioprospecting now than there was in the past anyway. There's a lot of anecdote but very little data. Certainly, the pharmaceutical corporations generally consider themselves to be less dependent than ever on natural product research. For the Like-minded Megadiverse Countries, the main challenges are to enhance economic and social welfare through the more effective use of biodiversity at local and national levels, and how to ensure that traditional knowledge holders and the societies responsible for generating and maintaining TK get better protection from corporations and governments.