The Basmati Patent—A Blessing in Disguise?

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There are three possibilities on which patent can be obtained for natural products based on: a newly-developed genetic variation in raw material, or on creating or modifying the process of manufacturing, or on establishing an indisputable ancient knowledge belonging to a group of people. The challenge for India is also three-fold. One is a challenge to the Indian scientists; another a challenge to Indian media-men and image builders; and the third, a challenge to the Indian legislators and the government. All three are required to protect the rights of Indian varieties of crops, medicinal plants as well as drug formulations. Sometimes we realize the greatness of our potential only when an outsider tries to exploit it. It is in this sense, an attempt is made in this paper to prove that the basmati patent is a blessing in disguise.

When the Lumiere Brothers invented and screened the first motion picture in the world in 1895, they did not realize that they were sitting on a gold mine. They did not patent their technology. They considered it as a novelty that would last for a short while and began to screen their motion pictures in hotels and amusement parks in various parts of the world. If only they had taken a patent right for the process of motion picture, the Lumiere Brothers may have overtaken everybody else and become the richest in the world.

A century later, we have come a very long way from that. Every scientist, technician and inventor has become extremely conscious of his or her commercial rights. The controversies over granting of a US patent for basmati rice recently, and for neem as well as turmeric sometime ago, have rightly evoked a lot of reaction in India.

Right to Indigenous Knowledge

In layman’s terms there are three aspects to be understood in this situation. Imagine for this purpose an American company getting a patent for making idlis. First, you cannot contest the patent if the newly-patented idli has additional ingredients over and above what is traditionally used in India and/or if there is a methodology-change in making the new idli. This,
however, will not mean that our Udipi hotels will have to buy the technology from the American patent holder to continue to make idli in our hotels. It merely means that the new, modified idli (however excellent or horrible it may be), cannot be made without taking rights from the patent holder. The conventional idli will continue to remain outside the purview of the patent.

Secondly, there is a growing opinion that if blackgram is proved to be a crop native to India (this is strictly hypothetical), products made with blackgram shall be made outside India, only by paying a royalty to India, irrespective of the fact whether the original Indian formula of making idli is followed or the formula is changed. As of today, while this opinion is gathering strength; it is not yet legally valid because suitable enactments of this kind have not been made.

Thirdly, there is the other opinion that a product like idli is the result of many centuries of a cultural evolution native to a certain country and, therefore, this knowledge of making it even if it spreads outside should be deemed to be and treated as intellectual property on which a royalty is to be paid to the country which originally evolved the concerned product, however ancient or modern the product-concept may be.

The above illustration concerning idli is by no means accurate in terms of its application, either for patenting medicinal formula from India or for patenting products like gene produced by new techniques of biotechnology. This is more by way of an illustration to present the three angles which are: (a) the legitimacy of a new patent for anything that is an improvement on the existing product or species/gene; (b) a potential patent that can be claimed on the basis of geographic origin and development of a given plant/product based on plant species/gene of the region which are ethnic to a given geographic origin; and (c) the potential right of a community to own the cumulative wealth of knowledge accumulated and fostered over the centuries for the use of plants, herbs and so on either for culinary or for medicinal value.

The Rio de Janeiro convention on biodiversity has endorsed the third point; but the legal difficulty faced is that a "community" is not a legal entity and, therefore, the question of ownership of the collective wisdom and collective knowledge of the people by the present generation of that community is difficult in the present legal circumstances. However, there is a strong and growing Third World opinion in favour of enacting suitable legislation for this purpose.

Texmati is the name registered for the patented variety of basmati rice in the US. If on proper scientific analysis it is found that Texmati is indeed a new gene developed in the laboratory by genetic engineering, then there is no way we can stop the patenting. The closeness of the variety to the traditionally grown basmati variety in the Indian sub-continent will determine whether the DNA fingerprinting of the two species are identical or not. If they are not identical and if the DNA fingerprint of the new Texmati developed in America is different from the DNA fingerprint of the varieties of the Indian basmati, then the American company will be legally right to hold their patent.

**The Challenge**

The challenge for India in this region is three-fold. One is a challenge to the Indian scientists; another a challenge to Indian media-men and image builders; and the third, a challenge to the Indian legislators and the government. All three are required to protect the rights of Indian varieties of crops,
medicinal plants as well as drug formulations.

With tremendous access to the flora and fauna described in our pharmacopoeia of Indian traditional medicines, the modern Indian scientists should be able to bridge the knowledge gap between traditional medicines and modern scientific methodology. The efforts put in this direction by organizations such as the Central Council for Ayurveda and Siddha are meagre, uninspiring and bureaucratic in approach. A dynamic new research policy and action are required. After all, we have the access to the plants, we have the access to the traditional literature and we have the access to new original research, to find new expanded usage for traditional medicinal formulations as well as new standardization procedures for the traditional pharmaceutical preparations. We are lagging behind in all these areas. One reason for this, however, is the lack of political will. During the dark age of colonialism, Indian pride in the efficacy of our system was beaten-up by the onslaught of Western allopathic medicine.

While admiring the fantastic progress achieved by science and technology in the West in the field of medicine, this should concurrently have the sobering part that there are drug formulations and treatment methods in India which have seen the test of time over the centuries and which have been known to be efficacious in the treatment of many ailments. Perhaps there is a blessing in disguise in the theft of India’s intellectual property by Western mercenary pharmaceutical organizations. The blessing is that the educated and powerful classes in India, who have a hangover racial complex from the colonial era, will begin to sit up and recognize that there is a certain wealth called Indian medicine which may be stolen, unless it is preserved. Thus, it is time for the Indian entrepreneur, and the Indian pharmaceutical companies to come together and formulate processes by which the intellectual property of traditional India can be safeguarded. As said earlier, the contemporary Indian scientist is at the same time put in a great position of advantage because he has easier access to information, to materials, and for identification of the plants and species described in traditional medicinal register. Thus, he is in a position of advantage to overtake the rest of the world in ensuring that Indian medicine is resurrected to a new level of efficacy and glory. He has been handicapped in the past by the reluctance and the lack of enthusiasm from both the government and the industry. This position will now change as a consequence of Westerners taking interest in Indian medicinal plants. Hence, the new challenge will really belong first to the Indian scientist.

At the level of the legislators, two important legislations have to be carefully considered and passed, at the earliest opportunity. A number of European countries have enacted legislation in regard to the manufacture of wines and spirits which are geography-based legislations. Some emerging countries like Philippines and Mexico have followed the formula suggested at the Rio conference and enacted legislation to protect the intellectual property of traditional knowledge. Both these patterns require serious study by experts drawn from science and technology on the one hand, and law on the other.

The most known geographic example is Champagne. Although sparkling wine can be produced anywhere in the world, and champagne is also a sparkling wine, the name "Champagne" can be used only for sparkling wine that is produced in the district of Champagne in France. The quality of the bubbling wine loosely called Geor-
gian Champagne which is produced in the State of Georgia, in Central Asia, is arguably superior even to the French Champagne. But it is not officially called Champagne. While whisky can be made anywhere, "Scotch" can be made only in Scotland. You cannot use the word Scotch even to the best of whisky made anywhere else in the world. These rights are legally protected. Similarly, there must be a method of protecting our geographic rights in a case like basmati as being of origin in the Indian sub-continent over which no country except India and Pakistan can claim any rights. It is unfortunate that in the absence of such legislation in the past, "Darjeeling Tea" is being grown in many parts of the world and some of them compete with the original Darjeeling tea exported by India. It is conceivable that by using the method of DNA finger-printing, the major varieties of Indian plant species used in Indian cuisine as well as in Indian medicine can be listed and legally protected. It is entirely up to India to formulate the required legislation for this purpose.

The third area of importance is that of image building by the Media and by Indian business establishments. Although chocolates are made everywhere in the world, the Swiss have established their supremacy as the original inventors of chocolate. The association of ideas between chocolates and Switzerland has been ingrained in the public mind around the world. Indian companies should establish the expertise in building up the image for Indian food products and Indian medicine. *amla, asvagandha, and brahmi* are just a few names that immediately come to one's mind when you think of the fantastic opportunity available to propogate Indian herbal medicine as global phenomena. With more and more Westerners getting frustrated with canned-meat and frozen food, and more and more of them turning to health foods, *Yoga* and Eastern philosophy, it is time for the Indian media-man to capture the imagination of the world at large and attract attention to our medicine. Our allopathic doctors in India have started prescribing multi-vitamins combined with *Ginseng* (Chinese and Korean) in new formulations. Why not combine multi-vitamins with *amla* or *asvagandha*?

**Strategies**

The strategy to protect the Indian rights will have to encompass many things:

1. Scientific vigilance by Indian scientific bodies to ensure that, any patent taken by anyone abroad, which has any Indian component in that, is carefully examined to see if the patent has been properly granted on the basis of any new scientific input even though the original ingredient may be Indian.

2. More crucially, by the pro-active Indian scientists, expanding the horizon of Indian knowledge based on new, original research safeguarding our ownership of Indian plant species and their medicinal as well as culinary usage.

Our boasting that India has the second largest trained scientific manpower in the world, will be an exercise in futility if our Indian scientific community cannot rise up to this occasion. There is no point in being destructively critical about Western scientists developing new methodologies. It is the right of every individual, everywhere in the world, to progress with science and technology and they will be within their legal right to improve upon any formulation that India may have held as its own for centuries.

3. It is important for a group of legislators to convene themselves, cutting across...
party lines to protect Indian rights in this area. Legislation in such critical scientific areas reminds you immediately of Parkinson's Law. While the majority of party men in Parliament can be engaged in their mutual acrimony and ego-trips, a few constructive and educated parliamentarians can get-together cutting across political divisions, to put their brains together and arrive at a proper legislation for this purpose. Such legislation will need to protect both our hereditary knowledge of centuries as the intellectual property of a nation, and the plant species that belong to this nation as ethnic property of the country.

4 The business houses should promote the image of our plant products.

If the basmati (Texmati, American patent) proves a blessing in disguise to provoke the above actions from India, let us thank Texmati patent for that.