Environmental News

Hands off - India defends its ancient lore

(EIN) - *NEW DELHI, India | Dec 24, 2005 - 12:34 pm*

For thousands of years Indian villagers have been using an extract of the seeds of the neem tree as an insecticide on their crops. So when a US company patented the process in 1994, India reacted with outrage.

After a decade of protracted court battles and millions of dollars spent on legal fees to successfully revoke the patent, India has embarked on an innovative project - using its modern skills to create a 30 million page database to protect its ancient lore

Called the Traditional Knowledge Data Library or TKDL, it aims to make information available to patent offices around the world to ensure that traditional remedies are not presented as new discoveries, said VK Gupta, chairperson of India's National Institute for Science Communication and Information Resources.

"If they are taking out patents on knowledge that is widely available here in the public domain, that is simply not on," said Shiv Basant, a senior official at the Indian health ministry's department of AYUSH - an acronym for Ayurveda, Yoga, Unani, Siddha and Homeopathy - India's traditional health and medical disciplines. "If societies have been using it for centuries, why should it be patented?" he asked.

India has also successfully challenged patents on the use of turmeric, a spice, to heal wounds and rashes, and a patent on a rice derived from India's famed Basmati rice.

But that is a tiny fraction of the problem. A 2003 study by NISCAIR estimated that some 7 000 patents worldwide are based on Indian indigenous knowledge, Gupta said.

While India will not challenge all these patents because of the expense, officials hope the project will save future legal battles.

"If we have all the data in TKDL, we will not have to spend all those millions of dollars," said Ajay Dua of the commerce ministry's department of industrial policy and promotion.

It's not just knowledge of plants and herbs which have been exploited. Yoga poses have also been patented, often by Indians living abroad, Basant said.

Currently it is difficult for overseas patent researchers to prove that these are not innovations, because while the information is widely published in India, it is often in ancient languages like Sanskrit or modern regional languages like Tamil.

"We decided we have to break the language and access barrier," Gupta said.

To do so, he convened a group of 150 experts in traditional medicine, scientists, doctors, patent lawyers and computer programmers to put together the database of traditional knowledge.

Instead of laboriously translating the manuscripts, the scholars structured the texts into classifications widely used by patent examiners. These texts are saved into a database, where specially developed software translates them into Hindi, English, German, French,

Japanese and Spanish.

"We created knowledge conversion software that converts local names of diseases and plants into modern names," Gupta said.

A patent researcher can search the data base using key words or phrases. So if the plant aloe vera is entered, the traditional term Kumari will come up with a list of its known medicinal uses

More than 10 million pages have been uploaded already into the system and another 20 million pages will be available by the end of 2006, Gupta said.

Several international patent offices have applied for access to the database and it will be made available to them as soon as the group finishes establishing technological and legal safeguards to prevent the knowledge from being wrongly exploited, he said.

Other countries facing similar issues are interested. A South African team recently came to view the project and a Mongolian mission is due to visit in January, Gupta said.

Fending off bio-piracy is not just a matter of national pride. It also has major financial implications.

It costs pharmaceutical companies billions of dollars and years of research to bring a new drug to the market. This is cut significantly if they get a head start using traditional knowledge, Gupta said.

"About 25 percent of new drugs are plant-based, and it is not the scientists who have maximum knowledge, it is the tribal people who have been using these plants for generations," Gupta said.

Also, one aim of the project is to ensure that if pharmaceutical companies do use the traditional knowledge, local peoples will benefit from the profits, said Dua, the commerce ministry official.

"Developing countries as a whole are saying that there should be benefit sharing," Dua said.

On the Net:
http://tkdl.res.in
http://indianmedicine.nic.in