

ISSUES IN CONTEMPORARY PATENTS

BRIEF OUTLINE

- ✕ The Background
- ✕ Patents and Genetic Resources
- ✕ Patents and GM crops
- ✕ Patents and Biotechnology
- ✕ Pharmaceuticals and Public Health
- ✕ Conclusion

THE BACKGROUND

- Patents system is associated with mainly two distinct risks: internal and external
- Fair operation of the patents system is the internal challenge
- On the other side, external threat is the execution of the patent system at the policy level, as well as the socio-economic impact associated with patents
- The patent system especially in the developing world, is perceived by mistrust, doubt and unrest
- It has generated heated public debate world wide

THE BACKGROUND...

- There are **multifaceted concerns** regarding the patent system
- The negative impact ranges from the controversy that **patents** may be hampering governments' ability to deal with policy issues
- Apprehensions about the awarding of patent protection to **biotechnology and pharmaceutical patents may hinder the access to cheap life saving drugs**
- Concerns about the granting of fallacious patents, which unduly limit both the public sphere and competition

GENETIC RESOURCES

- ✗ Genetic Resources (GRs) originate from nature and thus can not be treated as the creations of human intellect, so they can not be straightly protected by IPRs
- ✗ Though, there are intellectual property concerns coupled with GRs
- ✗ 'Plant breeders' rights' is the channel through which these plant varieties are developed using GRs are protected and are also patentable

GRS CONT..

- ✗ Granting of unfairly patent protection should be prevented which do not fulfill the prerequisite of originality and innovativeness for those inventions based on or developed using GRs
- ✗ Unauthorized use should also be prevented

PATENTS AND GM CROPS

- ✗ The major issue associated with genetically modified (GM) food is the patent
- ✗ However, GM foods' effect on health is not clear
- ✗ Although, their consequences on farmers, scientists, and the market is far reaching
- ✗ The probable disadvantages of the patented GMO (genetically modified organism) are the threats that MNCs and companies can monopolize the food supply

PATENTS AND GM CROPS...

- For instance, the 'terminator genes' or 'suicide seeds' make sterile next-generation plants and compel farmers to buy seeds for the next harvesting season
- The utility patent protection unlocked the doors for MNCs like *Monsanto* to inter into the global seeds and pesticide business
- Patents of seeds by MNCs prevent farmers to preserve patented seeds for the next crop season

CASE 1: THE NEEM CONTROVERSY

- ✗ The US Department of Agriculture (USDA) and US MNC WR Grace were granted a European patent (No. 0426257 B) by the European Patent Office (EPO) in 1994, on techniques to control fungal contaminations in plants using a certain proportions that included excerpts from the Neem tree (*Azadirachta indica*)
- ✗ The patent was protested by different groups from European Union and India in 2000

THE NEEM CONTROVERSY...

- The International Federation of Organic Agriculture Movement, The EU Green Party and Vandana Shiva opposed this patent
- In 2005, The WR Grace filed an appeal, but **lost the appeal**
- The natural fungicidal properties of Neem is well known to India and Nepal
- The patenting of the insecticide property of Neem is an example of bio-piracy and works over unjust claim and granting of patents to genetic reserves and TK

BIOTECHNOLOGY AND PATENT

- ✘ Application and use of cell and molecular biology for the transformation, modification and enrichment of produce or methods comes under biotechnology
- ✘ On the one side, patent system has conferred intellectual property protection to innovations in biotechnology, however, on the other side it has initiated confrontation of the interests of public and private parties

BIOTECHNOLOGY...

- ✘ Widespread debates have been generated around the issue of the patents of genetic materials, either derived from living beings or isolated from them
- ✘ Two diverse sets of arguments have been leveled: one argues that such biological materials are just discoveries and thus, not novel to be patented
- ✘ However, the others perceive it as invention and argue in favor of patenting these materials

BIOTECHNOLOGY...

- ✖ Activists and some farmers alleged that *Monsanto* and other companies have resorted to **unfair patent protection to exploit the natural rights of farmers** to save new seeds produced during yield
- ✖ Parallel accusations have been levelled against *Myriad Genetics* (US) which is facing its own Supreme Court patent challenge

CASE 2: BASMATI RICE

- ✗ RiceTec, US based company patented (No. 5663484) certain crossbreeds of basmati and half-dwarf long-grain rice in 1997
- ✗ The patent was awarded by US Patent and Trademark Office (USPTO)
- ✗ The government of India interfered and three of the 20 claims granted to RiceTec were annulled by UPSTO in 2001

OTHER INSTANCES

- ✗ Turmeric, Indian wheat, Jasmine rice (Thailand), Thaumatin (Western Africa), chickpea seeds from India, Coloured Cotton (South America), and many others are some of few examples that became the victim of bio-piracy
- ✗ This has elevated rage and led to massive protests by the bio-resource rich countries against the mal-practices of US and the EU

PHARMACEUTICALS AND PUBLIC HEALTH

- ✗ Pharmaceutical patents have increased the cost of essential and life savings drugs
- ✗ This has created a barrier to access to medicines and put the masses out of the reach

PHARMACEUTICALS AND PUBLIC HEALTH...

- ✘ Many parts of the world, especially, Africa and Asia are facing severe health hazards like HIV/AIDS, tuberculosis, malaria, and recently, avian influenza and swine flu
- ✘ According to WHO, more than 100 million people in the East Mediterranean Region (Afghanistan, Iraq, Lebanon, Palestine, Sudan, Somalia), do not have access to medicines

PUBLIC HEALTH: DOHA ROUND

- ✘ Detrimental consequences of patent protection or patent misuse is dealt under the TRIPS Agreement of the WTO, however, its use is not easy in order to check the barriers to access to cheap medicines
- ✘ In 2001, The 4th WTO Ministerial Conference was commenced in Doha, Qatar ---approved declaration on TRIPS and public health
- ✘ National governments can take measures for protecting public health by the means of 'compulsory licensing'

For more details follow the link: <http://www.who.int/intellectualproperty/topics/ip/tHoen.pdf>

PUBLIC HEALTH: DOHA ROUND...

- In compulsory licensing the government permits third parties to manufacture the patented products without the approval of the owner of the patent
- Doha declaration underlines the grounds on which the 'compulsory licenses' are awarded by the members and they are free to do so
- The duration of the transition period for the adoption of the TRIPS commitments were increased from 2006 to 2016 for Least Developed Countries by the Doha Declaration
- However, it did not resolved all of the issues related with the patent protection and public health

CONCLUSION

- ✗ Patents on the one hand promotes R&D and on the other side grants monopoly powers in the hands of big corporations in the developed world
- ✗ The problem becomes severe when there is fraudulent patents filed and granted by the authorities
- ✗ Traditional knowledge, bio piracy and pharmaceutical patents are the major issues in the developing and least developed countries world wide

FURTHER READINGS

- ✕ Canada -Patent Protection of Pharmaceutical Products
https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds114_e.htm
- ✕ Fact Sheet: Trips And Pharmaceutical Patents
https://www.wto.org/english/tratop_e/trips_e/factsheet_pharm02_e.htm#compulsorylicensing
- ✕ Monsanto <http://www.monsanto.com/newsviews/pages/why-does-monsanto-sue-farmers-who-save-seeds.aspx>

THANK YOU