

Right to Food and Intellectual Property Rights: Where is the Paradox?

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Abstract

As it is known over past couple of years, we have got an opportunity to witness the increasing debates over international human rights law and intellectual property law. This paper is such an approach to shorten the rift between human right to food and intellectual property rights. India would not have been food sufficient without green revolution but on the other hand agriculture biotech and expanding market have seriously affected poor farmers. Firstly, the paper delves into the historical foundation of human rights framework for intellectual property by evaluating Art 27 of UDHR, 1948, Art 5(1) of ICESCR 1966 and Art 7 of TRIPS. Secondly, it emphasizes over the recent unsettled human right to food. Thirdly, it discusses the legal substratum of right to food and IPRs. It draws attention towards impact of TRIPS and pros and cons of UPOV on world food security. Fourthly, it analyzes intellectual property legislations in India and their influence over traditional agricultural techniques, farmer's rights and food security. The paper ends with a conclusion of how right to food and intellectual property right can co-exist without contradicting each other by utilizing flexibility of TRIPS and a holistic approach of maintaining balance between biodiversity and inventors rights.

Keywords: Agriculture, Intellectual property rights, Biotechnology, Food, Human right

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INTRODUCTION

"In a world overflowing with riches, it is an outrageous scandal that almost 900 people suffer from hunger and malnutrition and that every year over 6 million children die of starvation and related causes. We must take urgent action now. This is my ongoing fight for the right to food" [16].

Jean Zigler

It is an acrid truth that in the progressing world, hunger, malnutrition, and abject poverty are increasing alarmingly [1]. As global hunger Index 2013 attains value of 13.8, it indicates a serious food and nutrition insecurity. Usage of land, water and energy demonstrates the state of food sufficiency. Issue demands more concern as these resources go scarce [2]. Alleviation of hunger and establishing food freedom were taken as key challenges in World Food Security 2009 at Rome as world population will grow by 50% and reach 9 billion by 2050 [3]. Food security is closely related to the agricultural policy, economic development, and trade if we apply a bird's eye view, thereby, establishing its

link with intellectual property rights [4].

It has been argued in several discussions, where on one hand intellectual property protection encourages technological innovations in agriculture, on the other hand it adversely affects food security by monopolizing the seeds and the plant genetic resources [5]. In lieu of traditional framing techniques, agricultural biotechnology has caused boom in food production, e.g., green revolution in 1960s in India. If intellectual property rights remain imbalanced with global right to food, the poor farmers will be affected by the appropriation of genetic resources. In such cases, it becomes sacrosanct for developing countries to exclude plant breeds from patentability in order to increase its access and food production [6].

International obligations imposed under TRIPS, use of patent of plants may drastically transform the pattern related to the free flow of agricultural technologies over the past few centuries [7]. Progress in plant breeding for food has historically been based on open propagation of materials and knowledge and

this is one of the main objectives of UN Food and Agriculture Organization Treaty on Plant Genetic Resources for Food and Agriculture [8]. Food security constitutes the central concern. However, intellectual property protection of plant breeds is fully justified to encourage food security in the long term [9].

HISTORICAL GROUNDWORK OF INTELLECTUAL PROPERTY LAW

Intellectual property law finds its origin in Jewish law which included several considerations and facts which pointed towards IPRs. The word *intellectual property* was first coined in the ruling of *Davoll et al. V. Brown* of Massachusetts circuit court in which chief justice was J. Charles L. Woodbury. He gave his opinion about protecting intellectual property. He said, "The labors of the mind, productions and interests are as much as a man's own....As wheat he cultivates or the flocks he rears" [10]. Modern IPRs seemed to be originated in Europe where sovereigns used to award "letters patents" to favored inventors [11]. Later on, establishment of World Intellectual Property Organization (WIPO) in 1967 added to the impulse of process of development of IPRs [12].

The global intellectual property rights have been recognized to protect creator's monopoly on the scientific, artistic, etc., innovations. IPRs and human rights law move hand in hand as we go through Art. 27 of UDHR, 1948. It provides for right to share scientific innovations simultaneously with the protection of moral and material interests resulting from any scientific, literary or artistic production of which he is author [13]. Similarly, Art. 5 (1) of ICESCR, 1966, clearly states for not interpreting any right so that it may mutilate anyone's right to engage in any activity [14]. Also not forgetting Article 7 of TRIPS, which pleads for dissemination of technology along with protection of intellectual property of the inventor [15]. It covers the benefit of both producers and users. Therefore, international conventions and agreements balance the individual rights of inventors with the collective right of users to enjoy the fruits of technological innovation. It can be said that human rights and

IPRs collectively work on to excel socio-economic front of the world.

HUMAN RIGHT TO FOOD: EVOLUTION AND JUSTIFICATION

As its obvious that right to food is a recent and unsettled ambition, the world's actors are laboring hard to recognize it as a fundamental human right throughout. Right to food got its base from the speech of President Franklin Roosevelt in 1941 in which he said, "Freedom from want" [17]. Later on, it was included in Art. 1(3) of UDHR, 1948, which provides both for a right to food and its enforceability [18]. One cannot survive without food and that is why "Right to Food" is absorbed in "Right to Life" which is an inalienable human right. The World Food Summit of Rome in 1996 was a strong effort to establish human right to food forcefully [19]. Sometimes, food is available but non-accessible and sometimes it is totally non-available has remained beneath the spread of hunger [20]. Food freedom can be achieved only by increasing the technological innovation and its proper dissemination. Biotechnology in agriculture has made it possible to report huge amounts of produce, thereby encouraging patentability on this subject. Article 11(2) of ICESCR, 1966, spells out fundamental right to freedom from hunger [21]. Some of the important conventions and international regimes on right to food are given below:

- The universal declaration of human rights, 1948.
- The universal declaration on the eradication of hunger and malnutrition, 1974.
- The Rome declaration on world food security, 1996.
- The World Food Programme, 1977, etc.

Thus, world won't be called on the track to meet the MDGs (Millennium development goals) along with other future goals without full implementation of human right to food.

INTELLECTUAL PROPERTY PROTECTION AND AGRICULTURAL BIOTECHNOLOGY

IPRs have the potential to enhance agricultural productivity with the increasing interference of biotechnology. Agro-biotech as a sub-sector is one of the fastest growing sectors of

biotechnology, globally and in India [22]. Biotechnological innovations in agriculture urge for intellectual property protection cover to foster the inventions and thereby achieve food sufficiency. Plant breeders' rights can be read along with TRIPS, not in contrary, if we want proper inclusive growth [23]. Biotechnology is in the essence of holistic approach to the legislations of IPRs and their applicability on human right to food [24].

LEGAL AND CONCEPTUAL FOUNDATION OF RIGHT TO FOOD AND IPR

Following constitutes legal bedrock to ensure not only food security but also the intellectual property rights:

- **Plant Breeders' Rights:** Plant breeders' rights propose to protect the rights of persons, who invented and developed innovative plant breeds, thereby providing exclusive control over the propagating materials, e.g., seeds, cuttings, divisions, tissue culture, and harvested material like flowers, fruits, foliage, etc., of new varieties for a number of years [25]. The holder is allowed to license other persons with some commercial rights to new variety. It allows the license to produce or reproduce the material, conditioning of material, sale, import, export, stock of materials, etc. [26]. Plant breeders' rights are granted by national offices after examining the breed. Seed is checked for its distinct, stable and uniform for a period of twenty years or (twenty-five years for trees and vines). Annual renewal fee is required to maintain the rights [27]. Tension exists between patenting and plant breeders' rights. However, it is to be understood that both are not mutually exclusive as by obtaining standard patent one can be protected against certain exemption and dilution of rights under PBR. On the other hand, PBR offers additional protection to plant variety names and synonyms are important from marketing point of view [28].
- **Patents:** "A patent is a right that is granted for any device, substance, method, or process that is new, incentive and useful" [29]. Botanical concepts have been advanced by the advent of biotechnology and thereby modernizing our agricultural

system. A shift or paradigm due to recent breakthroughs in molecular biology and plant genomics from traditional agricultural practices to the modern one is quite visible. Recent developments in plant biotechnology requires strong intellectual property protection law to support it [30]. An invention to be protected by a patent is required to be in practical use, must show an element of novelty or new characteristics, an inventive step and its subject matter must be accepted as patentable under law [31]. An owner is empowered to decide who may or may not use the patented invention for the period in which the invention is protected [32], but it is generally observed that the food security is negatively affected by patenting plant varieties, as it will prevent further research and breeding or limit the possible sources of supply of seeds. However, both PBR and patenting share common strategy with IPR at base to foster food production. It is very much evident from the Art. 27.3(b) of TRIPS which does not impose obligation to exclude plants from patenting. Thus developing countries can strengthen their IP laws by time and then can implement TRIPS provisions better [33].

- **Geographical Indications:** "A geographical indication is a sign used on goods that have a specific geographical origin and possess qualities, reputation as characteristics that are essentially attributable to that place of origin" [34], for instance, Bordeaux (wine), Darjeeling (tea) and Tuscany (olive oil) [35]. Protection of geographical indications is needed because false use of geographical indication by unauthorized parties is harmful to consumers and legitimate producers. Geographical indication of new varieties helps to enhance goodwill of variety, i.e., inventor and reliance on it [36].

IMPACT OF TRIPS ON WORLD FOOD SECURITY

Around 75% of the world's population depends on agriculture for their livelihood, especially in developing countries [37]. The introduction of IPRs in agriculture needs to be debated on as agriculture directly relates to the economic development, agricultural management, and environmental management and most

importantly to the food security. Hence, a holistic approach must be adopted to develop such legal framework that includes all these dimensions together [38]. TRIPS (Trade Related Aspects of Intellectual Property Rights) agreement guides states how to reorient their intellectual property laws in the field of agriculture at the same time trade aspect is benefitted, though PBR and traditional agricultural knowledge are some areas it does not properly deal with. However, its provisions are much flexible to provide developing countries a room for overhauling their IP laws as per international needs along with nations [39]. Critics sometimes raise the question of democratic bargaining formulated by Australian scholar 'Peter Darhos' and it states for three essentials:

- All relevant interests to be represented during negotiations.
- States participating in negotiations must have knowledge of its repercussions.
- One party must not coerce the other.

However, in the negotiations of TRIPS most of the decisions on IPRs were taken by a quorum of developed countries like United States, Europe, Canada, etc., and developing countries were rarely represented. As a result, developing countries were unable to put on a coherent position in regard to TRIPS [40]. Impact of TRIPS on biodiversity is often overlooked. For instance, 95% of traditional rice varieties were lost in Andhra Pradesh state of India after arrival of green revolution. Thus TRIPS contradicts with CBD [41]. Apart from TRIPS makes us benefitted, if it makes us to oblige to grant patents in all fields of technologies as it will foster the indigenous technology that would generate local products for domestic market of economical range. It imposes burden of proof on defendant to prove the process to obtain an identical product is different from the patented product [42]. The United Nations economic and social council sub-commission on human rights stated in August 2000 that there are apparent conflicts between the intellectual property rights regime enshrined in TRIPS and international human rights law [43]. However, by going through TRIPS one can come to know about the flexibilities offered in it in the form of exceptions to the standards it sets. Developing countries have sufficient room

to reorganize their IP laws so as to meet national needs as well as obliging international law at the same time.

UPOV AND WORLD FOOD SECURITY

It is an intergovernmental organization; it was adopted in Paris in 1964 and revised in 1972 [44]. The Convention set up an intellectual property rights regime to protect new plant breeds to encourage agricultural biotechnology; in turn, food sector will be revolutionized with higher yield of crops through new varieties. TRIPS has continuously been infringing farmer's rights. Losing farmers their rights is detrimental to food economy, development and diversity of plants. However, UPOV assumes that more protection always has a positive impact on production and productivity thereby food security [45].

CONVENTION ON BIOLOGICAL DIVERSITY (CBD) AND IPR

The CBD was signed at the Earth summit in 1992 at Rio de Janeiro by the majority of members of WTO. According to CBD, the genetic resources and biodiversity which contribute in boosting agriculture must be preserved and promoted. It is believed that CBD is inconsistent with TRIPS. However, the industrialized group of countries insists to read Art. 16(2) of CBD with TRIPS. Overall, biodiversity conservation is an important issue for biotechnological innovation in agriculture to prosper [46]. Reliance on sustainable development with conservation of biodiversity contributes to world food security.

ROLE OF FAO IN ENSURING FOOD SECURITY

Establishing human right to food regime is at the heart of FAO. It aims to make higher-quality food accessible to the people for their healthy living. FAO works with government, private sector, and non-government organizations to increase the volume of investment in agriculture, and rural development investment in agriculture is targeted to have higher yield by investing new varieties. Successful inventors of plant breeds aid in greater crop productivity, thereby reducing hunger and poverty which is the first goal under millennium development goals [47]. The largest share of investment in agriculture is

done by farmers where it becomes vivid that FAO supports PBR (plant breeders' rights). Right to food can only be realized wholly when government stands on the ideals of transparency and accountability. Where food is available but it is made non accessible due to corrupt system, people used to suffer. Accessibility can only be achieved when governance is good. Right to food is not new, however, unsettled and was entrenched under the civil and political right of 'right to life'. Amartya Sen, a noble laureate in economics, argues, "Famines are much less likely to occur when basic civil and political rights are respected." It makes evident the need for recognition of civil and political rights to wholly establish a hunger and poverty free state [48]. When patentability of plants and genetic resources is debated upon, the rights of farmers are felt curtailed. TRIPS and several free trade agreements are being signed in order to remove hurdles in agricultural trade in developing countries. Similar was the Concern in second Uruguay round of General Agreement on Tariffs and Trade (GATT). These measures are negatively affecting the access of technology essential for development. Here FAO has a key role to play by promoting awareness among states that persistent march towards IPRs without assessing its impact on development shall put agricultural productions and export at risk [49]. It also needs to draw out conclusions from expanding IPR regime whether they have positive ethical implications. It should urge government to review their patent laws that allow the propagation of traditional knowledge and indigenous technology. Fostering IPR regime may augment inventions and innovations that will help in agricultural trade and generation of nutritive food. But at the same time plant breeders' rights or farmers' rights are needed to be preserved.

IPR AND RIGHT TO FOOD IN INDIA

India is a country where hunger and malnutrition are predominant especially in rural areas. 70% of Indians are those whose mainstay is agriculture. In such case, agricultural trade has continuously been contributed to their serious plight [50]. Farmers study the seeds, experiment them, do simple back-crossing to get new breeds to improve yields. Although HMT rice was invented by a poor farmer of Maharashtra but the credit went to Panjabrao

Deshmuka Kashi Vidyapeeth for inventing the slightly modified breed of HMT rice [51]. For instance, patenting of more than half of the known plant species in Brazil known for approximately highest, i.e., 55,000 species of flora by multinational companies raises a great concern [52]. According to Dr. Altieri, biotechnology has come into play to make profit and not to solve the problems of poor farmers. It is evident that liberalization of agricultural sector due to biotechnological innovations and IPR regime has excluded millions of landless and small-scale farmers. IPR regime has controlled piracy but it stole traditional and indigenous knowledge of farmers and made developing countries like India vulnerable to the first-world countries. UNESCO paper presented in UNCTAD experts meeting in Geneva in November, 2000, stated that present IPR arrangement was unsuitable to protect indigenous knowledge systems. The International Labour Organization also reiterated the same [54]. India has adjusted so well to join UPOV in the past. Its plant varieties and farmers' rights are in compliance with UPOV-1978. UPOV, which was designed for European commercial breeding interest, restricts the participation of the states [55]. Patents Act 1972 (amended in 1999) is an important IP law in India; consequences are the increasing concentration of control over seeds and genetic resources of few agribusiness companies [56]. Focus has shifted on expanding country's market ignoring peoples' needs. Therefore, country's IP legislation needs urgent amendments to respond to socio-economic concerns such as food security. National leaders are under immense responsibility to realize food sufficiency, at the same time implementing provisions of TRIPS to foster trade for a healthy economy. IPR framework can be utilized to strengthen biotechnology industries at national level which really contribute to the development instead of hampering farmers' rights at large.

TOWARDS SUI GENERIS SYSTEM

"Knowledge is proprietary. It belongs to corporations and is not accessible to farmer." [53].

-Dr. Altieri

Limitations of the current intellectual property

regime such as non-recognition of community rights and 'traditional knowledge' propagation has led the parties to TRIPS insert a new article that is Article 27(3)(b) that allows member states of the World Trade Organization to use a *sui generis* protection system [57]. Article 27(3)(b) authorizes member states to exclude the patentability of plants and animals. This provision is very important from point of view of food security. Developing nations under member's category can take advantage to adopt their domestic laws in this field and fulfil their specific needs [58]. This kind of flexibility which has been inserted into TRIPS is called *sui generis*. In intellectual property rights, it refers to a special form of protection regime to meet a certain need outside of legal frame work [59].

CONCLUDING REMARKS

Tension which had been existing since the UPOV's establishment, is now vanishing on the realization that the two fields, once seen isolated are actually intertwined. Conflict remains between TRIPS and realization of economic, social and cultural rights. As hunger and poverty levels continue to be high, there are demands for urgency of action for establishing food security. Vast rural sector in developing countries still depends on agriculture, which should be uplifted by investment and micro financial institutions.

For developing countries like India, agriculture is the bedrock of economy; any crisis of farmers' rights will hit economy hard. On the other hand, TRIPS fosters trade and technological innovations. Since issues like farmers rights and traditional IPRs were not raised in TRIPS negotiations before, developing countries may face negative impact of it; however, *sui generis* system in some provisions of TRIPS set the states on their own discretion to adopt the policy that may suit best to narrow down the rift between first world and third world country. FAO states that seed certification and food patents have posed threat to the food security and biodiversity. The third-world countries need to overhaul their intellectual property laws, which could fortify food security instead of hampering it. Trade and technological booming should be continued but with the conservation of biodiversity. TRIPS and CBD should strategically move forward

together without contradicting themselves. Biodiversity conservation and food security must be focused well. Integration of human rights law with intellectual property rights will increase the credibility and legitimacy of WTO and WIPO. Consequently, international and domestic law making agencies will emphasize more on defining coherence and consistency among human rights and intellectual property rights that will escalate both individual and global welfare.

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