

Reconciling Breeder's Rights and Farmer's Rights for Food Security in Sri Lankan Context: A Comparison with India

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Abstract— Sri Lanka owns a noticeable history of agricultural sector that has been flourishing since ancient times, where food security had been ensured for decades. The advancement of technology unwrapped new capacities in science which enabled new plant varieties to play a key role in agriculture, which diminished the traditional knowledge of farmers. Sri Lanka as a developing state has ratified International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), which has granted recognition for farmer's rights while Sri Lanka has not been able to ratify International Convention for the Protection of New Varieties of Plants (UPOV) that has prioritized breeder's rights. However, the significance of creating new plant varieties should be addressed in the domain of food security of the world and likewise in a context where sustainable development goal has set to end hunger, achieve food security and improve nutrition and promote sustainable agriculture. Yet Sri Lanka has failed to introduce any legislation where states such as India has been able to enact proper mechanisms to reconcile the rights of both breeders and farmers without even joining the UPOV convention. Thus, the objectives will concentrate on methods where these rights can be settled, examine the international legal regime, examine loophole in Sri Lankan system and to make the second goal of sustainable development goals a reality. The information regarding this will be derived from primary sources; conventions, legislations of Sri Lanka and India. Qualitative data will be gathered through books and journals while interviews will be also incorporated. Discussion comprise mainly an analysis and have emphasized on the conflicting interest of rights of breeders and farmers. Finally, this paper will encourage to generate recommendation for the existing loopholes while proposing a unique legislation for Sri Lanka in order to reconcile breeder's rights and farmer's rights.

Keywords: Breeder's rights, Farmer's rights, Sri Lanka, food security

I. INTRODUCTION

Since the origination of mankind human beings tend to find ways in which they could end their hunger where they hunted for food until they discovered agriculture that a way of growing plants to end their starvation. The relationship between human and agriculture is always together since humans relied upon food. Different eras

have proven that agricultural methods became more progressive day by day. The technological advancements have altered the methods of traditional agriculture and have widen the scope of food industry through the intervention of biotechnology, where traditional knowledge of farmers have been less recognized. Thus, it is observed that existing farmers who utilize traditional knowledge are in conflict with the group of persons who are developing new crops for the agricultural sector. However, in a global context where food security is been debated new methods within agricultural sector, new crops that provide rich harvest has already become a necessity, which has highlighted the importance of biotechnology. A breeder is someone who produce a novel plant variety for a farmer to grow on farmer's field, which utilizes science and technology for advancing an existing plant variety. On the other hand farmers utilizes traditional knowledge to develop and maintain a particular plant variety. Both these parties engage in developing plant varieties that attract intellectual property rights protection while securing the right to food as a basic human right. However, the conflict between breeder's rights and farmer's right still remain due to the conflict of interests of developed and developing states. Developed states usually desire more towards breeder's rights while developing states comply with farmer's rights within the scope of plant variety protection, which shall be reconciled for achieving food security in future especially in least developed states.

A) Relevancy of the topic

The essence of this topic relates to food industry where right to food has been recognized in many international platforms. Lack of food leads to various types of abnormal health conditions for humans, thus food is concerned as an essential in our daily lives. Universal Declaration of Human Rights (UDHR, 1948) is the foremost documents which has recognized the importance of adequate food under Article 26 which stipulates "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food..." moreover, the international covenant of economic, social and cultural rights (ICESCR, 1966) elaborates broadly on right to food under its article 11, which also recognizes adequate food for individual and for his family while emphasizing government's commitments recognizing the fundamental right of

everyone to be free from hunger through individual and international corporation (Article 11 (2), ICESCR). Further, subsection 2(a) of Article 11 discuss about improving methods of production which demonstrate the full use of technology and scientific knowledge, that denotes indirectly regarding breeder's commitments.

Apart from the right that has recognized food security, global community has also debated on the same topic under sustainable development goals (SDGs) which came into effect on 1st of January 2016. Thus, the relevancy of this topic strictly speaks how it is important to the changing global environment. The second SDG focusses on eliminating hunger, achieve food security and improved nutrition, and promote sustainable agriculture which demonstrate how each state should adhere according to the current needs and how breeders and farmers should cooperate each other in order to make this goal a reality and to supply of nutritious food in the aspect of growing populations. Several international conventions have discussed on this global issue and have made member states obliged towards them, which will be examined under this research paper. Moreover, Sri Lanka was selected as a developing state which still depends on agriculture and Indian jurisdiction was selected as a state which possess similar cultural, social, economic and political background for the purpose of comparing.

B) Research Problem

Whether Sri Lanka is effectively implementing international obligations and what are the loophole in plant variety protection system in Sri Lanka and why it has not signed the Convention for the Protection of New Varieties of Plants (UPOV).

C) Research Objectives

The research will be directed towards achieving the second goal of SDGs; "End hunger, achieve food security and improve nutrition and promote sustainable agriculture." Further it will focus onto make authorities realize the current political culture that have developed with sustainable development in order to create necessary legislation that will reconcile rights of breeder and farmer which is unique to Sri Lankan context.

II. METHODOLOGY

The study adopts an empirical research methodology which uses both qualitative approach using materials include conventions and legislation as primary sources and books, electronic/ internet sources, journal articles as secondary sources while quantitative approach will be used through interviews of expertise persons and small group discussions in order examine the practical defects of the current system in Sri Lanka and to seek the public awareness about his subject. The author will use the international and comparative research methodology

since it has selected a jurisdiction (India) for comparative purposes.

III. DISCUSSION

Holding to the objective of food security, plant variety protection debates about two groups; breeders and farmers. Both these groups deal their work with plant genetic resources which are essential for improving plant varieties. On this point it is worth to note that new varieties attract intellectual property rights (Helfer 2004, p. 03), which has become the reason why some international communities have prioritized breeders to preserve what they have created to attract financial gains/investments. On the other hand, farmers use their traditional knowledge of securing plant varieties that they have developed using basic procedures of their own. However, protecting both these parties is essential for the purpose of food security as well as for gaining economic benefits. The international and national commitments will be discussed as follows;

A. International Regimes

1) International Convention for the Protection of New Varieties of Plants (UPOV Convention): The international union for the protection of new varieties of plants (UPOV) is an intergovernmental organization based in Geneva, which was established in 1961 by the international convention for the protection of new varieties of plants. Plant variety protection under UPOV convention is a sui generis form of intellectual property protection (Jordens 2005, p. 239) that encouraged the expansion of new varieties of plants, for the benefit of humanity. It made state members bound to grant and protect breeder's rights under Article 2 of its convention, which demonstrates the priority of the convention. A breeder is defined as a person who bred, or discovered and developed, a variety, a person who is the employer of the aforementioned person or who has commissioned the latter's work, where the laws of the relevant contracting party so provide, or a successor in title of the first or second aforementioned person according to Article 1 of the convention. Article 5 specifies the criteria of granting a breeder of its rights which states that plant variety that was developed need to be new, distinct, uniform, and stable. Furthermore, the convention discusses about duration that is being granted for a protected breeder under its Article 19 (2); "said period shall not be shorter than 20 years from the date of the grant of the breeder's right. For trees and vines, the said period shall not be shorter than 25 years from the said date".

The scope of rights can be categorized as follows; production or reproduction, conditioning for the purpose of propagation, offering for sale, selling or other marketing, exporting, importing, and stocking, which seems a wide array of rights (Article 14, UPOV). On this occasion it should be noted that contracting parties for this convention can be either states or any

intergovernmental organization. Breeders sometimes are employed in private research institutes despite serving on government sector which is crucial at this point since developed states usually invest more share on research and development which is aimed for earning. Suppose that a breeder obtain a sui generis protection for a plant variety, then a commercial farmer will have to obtain authorisation from the breeder to grow them. However, few exceptions can be found under Article 15 which illustrates that "each contracting party may, within reasonable limits and subject to the safeguarding of the legitimate interests of the breeder, restrict the breeder's right in relation to any variety in order to permit farmers to use for propagating purposes, on their own holdings, the product of the harvest which they have obtained by planting, on their own holdings, the protected variety or a variety as covered by Article 14(5)(a)(i) or Article 14(5)(a)(ii)". Yet, it is significant to understand that the main objective of this convention is to protect breeder's rights rather than of farmer's. Moreover, UPOV operates with a strict revision system, where a state that wants to become a member, it must get its national implementation Act approved by the UPOV before becoming accepted as a member (Article 34(1)). These conditions are rather unfavourable for developing states that depends on traditional and inherent knowledge of their farmers (The UPOV Convention, Farmers' Rights and Human Rights 2015, p. 47). Thus, it shall be noted that granting breeder's rights may not earn the best for the developing state in present global context where multinational corporations (MNCs) play a major role in global affairs and even in food industry. Therefore, recognition of farmer's contribution is equally important.

2) Agreement on trade-related aspects of intellectual property rights (TRIPS): It is an agreement that came into force as an additional protection mechanism for intellectual property rights in relation to trade and investments. It has also recognized plant variety protection under its Article 27(3) (b) which states that "...However, Members shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof." It impliedly highlights regarding the tradability of these plant varieties which can hinder the domain of traditional knowledge of farmers, which can be contrary to farmer's rights and also will grant the breeder exclusive right to prevent third parties from selling, making, importing or using his or her product (Plant variety) (Article 28, TRIPS). However, the term breeder has not been defined under this agreement and one could argue that even a farmer may come within the purview of this Article, where there will be no conflict of interest between two groups (breeders and farmers). Additionally this document takes a liberal approach in implementation giving sufficient authority for states to make necessary national legislation for make prescribed standards a reality (Article 1, TRIPS). Thus, this international document also

demonstrates the significance of plant variety protection for ensuring food security.

3) International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA): The international treaty on plant genetic resources on food and agriculture was adopted on 3rd November 2001 by the support of world food and agriculture organization (FAO), after seven years of negotiations. This legally binding treaty covers all plant genetic resources relevant to food and agriculture. The objectives of this treaty are the conservation and sustainable use of plant genetic resources for food and agriculture and the fair equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity (CBD), for sustainable agriculture and food security (Article 1, ITPGRFA). This convention focuses on issues not covered by the CBD or any other convention such as farmers' right (Hossam, James, & Grace, p. 24-25).

The scope is being discussed under Article 3 of the convention which states that "This Treaty relates to plant genetic resources for food and agriculture." It indicates that this treaty also concern about plant varieties that are utilized for ensuring food security. The treaty does not confer power upon breeders rather it has empowered traditional knowledge through recognizing farmer's rights in the scope of plant generic resource management. The concept of farmers' rights were developed in order to counterbalance the intellectual property system, and to ensure that barriers were not created against the farmer's use and development of plant genetic resources. Article 9 elaborates about farmer's rights specifying that; "the contracting parties agree that the responsibility for realizing farmers' rights, as they relate to plant genetic resources for food and agriculture, rests with national governments. in accordance with their needs and priorities, each contracting party should, as appropriate, and subject to its national legislation, take measures to protect and promote farmers' rights, including, protection of traditional knowledge relevant to plant genetic resources for food and agriculture, the right to equitably participate in sharing benefits arising from the utilization of plant genetic resources for food and agriculture, and the right to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture (Article 9.2, ITPGRFA)."

Unlike the UPOV convention ITPGRFA does not devalue sovereignty values as per said in Article 10.1; "Contracting parties recognize the sovereign rights of States over their own plant genetic resources for food and agriculture, including that the authority to determine access to those resources rests with national governments and is subject to national legislation." And the convention act as a coordinating party which strengthens the relationship among states through a multilateral system of sharing resources, information and even supporting each other at crucial conditions as per

said under Article 12.6; "In emergency disaster situations, the contracting parties agree to provide facilitated access to appropriate plant genetic resources for food and agriculture in the Multilateral System for the purpose of contributing to the re-establishment of agricultural systems, in cooperation with disaster relief co-ordinators." Thus, this convention move forward with a sustainable fashion attracting both developed as well as developing states. It seems moral to uphold the recognition of traditional knowledge, since there are parts of the world that still depend on basic agricultural methods and who are vulnerable against colossal multinational corporations. Further, it shall be noted that Sri Lanka as a developing state has become a member of this treaty, yet Sri Lanka has not come up with any specific legislation, which is seen as a deficiency in plant variety protection system.

B. Indian Jurisdiction

As one of the most powerful states in the South Asian region India consist with an agricultural based economy. Considering about plant variety protection and food security in the Indian context it has contributed itself with a unique system of protection which is a sui generis protection provided through a particular legislation which is known as the "The protection of plant varieties and farmers' rights Act, 2001" since it excluded agriculture from its patent Act of 1970 (Sastry. 2003-04, p13). Although it has not joined to UPOV convention it has made some valuable effort in recognising breeder's rights through this Act while securing farmer's rights as well. The rights of breeder's are protected under section 28 (1) of the Act which mentions that "Subject to the other provisions of this Act, a certificate of registration for a variety issued under this Act shall confer an exclusive right on the breeder or his successor, his agent or licensee, to produce, sell, market, distribute, import or export the variety". It allows a breeder to authorize any other person to produce, sell, market or even export the protected variety. Moreover, looking into farmer's rights, it has been elaborated under sixth chapter and the section 39 (1) (i) emphasizes that "a farmer who has bred or developed a new variety shall be entitled for registration and other protection in like manner as a breeder of a variety under this Act". What is fascinating about this legislation is that it has also established a specific tribunal (Plant varieties protection appellate tribunal) to exercise jurisdiction of the authority established by this Act under section 54, while introducing offences, penalties and procedures for remedies in breach of any rights stipulated in this Act (Government of India 2001, s. 64). Thus, it seems that India's legislation comprise a strong complex mechanism for reconciling the rights of breeder and farmer. It demonstrate the intention of the Central government and even of the legislation of ensuring food security within their territorial limits.

C) Sri Lankan Jurisdiction

Sri Lanka was known as the "granary in the East" as Sri Lanka was able to even export food for other countries. From the ancient times Sri Lanka has been an agricultural country that fulfilled its food requirements locally. At present 65% of the total land area of the country have been used for agriculture, 40 % for paddy, 38% for plantation crops and 22% for other crops. More than 70% of the country's population are living in rural areas whose main livelihood being agriculture (Food production national programme 2015, p. 51). Biodiversity regarding agriculture is so vast and Sri Lanka is home for many endemic species of plants and animals. However, in present day scenario Sri Lanka has become a food importer according to statistics (approximately Rs. 100 million annually) and food security has become a serious factor for economic conditions as well. Thus, strengthening farmers as well as the domain of new plant varieties are significant at the moment.

Considering on food security, plant variety protection is the major area of this research that focuses on protecting genetic resources of a particular variety that connects two stakeholders; breeders and farmers. It shall be noted that while Sri Lanka has not been a party to UPOV convention, it has acceded to the ITPGRFA in 17th September 2013. Thus, Sri Lanka is a contracting party which commit themselves for the treaty obligations, and for an international obligation to become binding in a country, the legislation of that state must incorporate the obligations into the domestic legal domain. Furthermore, even though Sri Lanka consented to TRIPS, the local legislation which is the Intellectual Property Act No 36 of 2003 excluded plant variety protection that was admissible under TRIPS (Article 62(3)(b), Intellectual Property Act No 36 of 2003). Apart from this legislation it was revealed that Sri Lanka had made two attempts to draft document regarding plant variety protection. The drafted document of 2001 (Protection of New Plant Varieties (Breeder's Rights) Sri Lanka 2001) was failed due to grant of priority for breeders (it consisted with provision that were included in the UPOV convention) while the second attempt was developed in 2011, which is seen as a comprehensive document that recognized both breeders and farmers rights. The document was titled as "Protection of New Plant Varieties Act" (Kamardeen 2013, p. 52).

D) Analysis

The author does not intend to describe specific provision of the drafted documents in the Sri Lankan legal system, since it has broadly discussed under previous researches (Harankaha H, p. 163) (Wijesooriya (as cited in Kamardeen, 2013)). Therefore, the author will intend to elaborate on the social implication of enacting such law and what needed to be done in order to generate an effective plant variety protection mechanism. It was found during the research that plant variety developments are done specifically by government funded institutes such as Sri Lankan tea research institute,

industrial technological institute etc. while there are few private parties such as Hayleys and CIC etc. who are devoted for plant improvements through technical methods. Both these public and private sectors develop plant varieties and disseminate them for farming which is the usual procedure that was in existence for years in Sri Lankan context. However, it shall be understood that these efforts are not sufficient for a country which is having a growing population and local private sector should be empowered to play a main role while having strong regulations to monitor their practices for the interest of the country. A protection mechanism regarding plant variety is significant as development of a plant will come as a result of a long term research techniques with money as well. It was found that state funding for plant variety development is not in satisfying levels and the absence of a protection mechanism for breeder has caused unwillingness for investment in plant breeding domain, since a breeder might lose the ability to gain profits out of its effort (creations of one's mind), which indeed the particular plant variety will be used for commercial purposes by others (for selling and reproduction). In another perspective, it can be argued that use of biotechnology might make traditionally developed plant varieties (and knowledge used for such creations) vulnerable hence it could be misappropriated by others especially through biopiracy. "Biopiracy, refers to the appropriation of the knowledge and genetic resources of farming and indigenous communities by individuals or institutions that seek exclusive monopoly control (patents or intellectual property) over these resources and knowledge" < www.etcgroup.org/issues/patents-biopiracy>. In Sri Lanka there are no adequate law to protect the biopiracy (Galhena 1995, p. 23). Therefore, if someone could export a valuable plant variety to another country or if someone offer it to a private party, then if that party obtains the patent protection from another jurisdiction, a country that inherited the plant might have to pay compensation for using such variety for the party who had obtained the patent, which is not a worthy situation for Sri Lanka which is rich with biodiversity. Thus, generating a system that recognize breeder's rights while having strong mechanism to combat against biopiracy issues is significant in a country like Sri Lanka because once a developed variety is granted protection through either patent or a sui generis system it will earn for itself when someone else uses it.

On the other hand, protecting agricultural bio diversity of Sri Lanka and the rights of the farmers are also equally important. As the case demonstrates most of the rural population rely on agriculture. Farmers rely on government funds and they usually rely on loans to buy seeds as well as fertilizers and other elements for agriculture. Despite hardships, they contribute massively for food security in Sri Lanka, therefore, it is not ethical if the legislature do not recognize their rights. From ancient times farmers have carried down special varieties that

are resilient for Sri Lankan context (climate conditions), which need to be protected within the scope of farmer's rights. The problems within farmers community is also a crucial problem apart from the domain of plant variety protection.

It was found through interviews that the plants were excluded from the intellectual property Act no 36 of 2003, since the authorities were intending to propose a new law for plant variety protection, which never came into force even sustainable development goals were recognized in Sri Lanka. Further, it was clarified that there is lack of political will and the lack of awareness and knowledge among farmers too, which have lessen the importance of such legal piece.

Considering about the international treaties UPOV convention strongly recommend breeder's rights which is unfavourable for a developing state like Sri Lanka. On the other hand, Sri Lanka became a member of ITPGRFA in 2013 where they recognized farmer's rights globally. Moreover, Sri Lanka as a member of the world food and agriculture organization (FAO), which govern the ITPGRFA, Sri Lanka obliges to send national report regarding the implementation activities (in accordance with the Article 21 of ITPGRFA which discuss about compliance procedures). Looking into the TRIPS agreement it has allowed states to adopt unique systems for plant variety protection and the ideal example that can be found is through the selected Indian Jurisdiction which have broadly reconciled rights of breeders and farmers, which can be even acceptable for Sri Lankan context.

IV. RECOMMENDATIONS AND CONCLUSION

The research has broadly discussed about the international legal regime as well as the Sri Lankan jurisdiction along with the Indian Act for comparative purposes. It shall be stated that all these mechanisms are created for ensuring food security of the whole community. It was unveiled that UPOV convention is taking some steps for granting breeder's rights while ITPGRFA has recognized farmer's rights and acts as a balance legal document. However, both these document have their own issues (while UPOV prioritize breeder's rights ITPGRFA does not state regarding an implementation process of farmer's rights in its document). Thus, an unique legislation is proposed for Sri Lanka. The Indian Act is a good example and it has compressively created a mechanism even for settlement of disputes. Thus, it is recommended to learn lessons from the neighbouring state.

National food production programme of Sri Lanka (2016-2018, Pg.51) had already commenced and it has recognized the plant protection Act which was proposed in 2011. However, it has not specified on the method that the authorities will implement such programme within two years. It is satisfying of the recognition but is shall be

noted that a legislation will not totally eliminate the social issues. Therefore, continued awareness should be given for farmers as well as breeders. If the community is unaware of their rights that would not properly give effect for the provisions. Thus, it is recommended/proposed to use National food production programme of Sri Lanka as a platform in disseminating awareness and both private and public parties should be gathered in order to ensure food security since it a collective effort. Sustainable development goals emphasizes on food security and such targets mentioned under the second SDG shall be incorporated into the national implementation process, which will attract International Corporation as well. Plant variety protection was debated for a long period and a proper outcome is a necessity where political will shall be generated within the legislature and from outside the legislature by both breeders and farmers. This will ensure food security as well as a basic human right. Thus, reconciling Breeder's rights and Farmer's rights for food security in Sri Lankan context is at utmost important stage.

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