

# **The Right of Farming Communities to Access Improved Plant and Seed Varieties: A Critical Analysis of the Impact of the Intellectual Property Regime on Sustainable Development**

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## **Background**

The global population has exceeded the 7 billion mark, and this places severe constraints on the finite resources of the planet. One of the key factors in feeding this ever-increasing population is the development of new plant and seed varieties that are high-yielding, pest and weather-resistant, and that will mature over a shorter period of time. In order to produce these “miracle” crops, much money has to be spent on research and development. Consequently, the plants or seed so developed are expected to bring in profits for the company, as well as cover the costs of research already sustained.

The current intellectual property regime has fully supported the right of the innovator to a monopoly over the innovation. While TRIPS, the World Trade Organisation’s agreement on trade-related intellectual property rights provides a 20 year monopoly for most other inventions, it permits different standards to be used for the protection of plant varieties<sup>1</sup>.

However, it is a fact that new plant and seed varieties<sup>2</sup> are far more expensive than their ordinary counterparts, and many farmers in developing countries are unable to afford them. In addition, farmers in developing countries are used to being given access to low-cost (or free) newly developed seeds and plants where the innovator is a state agency. The option of having to pay for plants and seed is therefore, bound to increase production costs unbearably.

This study identified the key issues that surround the debate of allowing farming communities to access protected plants and seed, and proposed meaningful steps that would promote sustainable development through equitable benefit-sharing.

## **Methodology**

The study was conducted using library and field research, on the following lines:

- Identification of the importance of new seed varieties in combating the food crisis and promoting sustainable development.
- Analysis of the international legal regime that operates to protect innovated seed
- Description of the current position of the local law on the protection of new seeds and plants.
- Comparative analysis of selected jurisdictions.

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<sup>1</sup> Article 27 (3) (b), TRIPS Agreement

<sup>2</sup> By “new” what is meant is “newly developed”

- Based on these comparative studies, proposition of a formula that might be workable from a domestic point of view, to enable equitable access to new plant and seed varieties.

### **Outcomes**

The following results have been obtained:

- The importance of access to new plant and seed varieties to respond to the food crisis:

Traditional crops can no longer support the world's food needs. While state-sponsored agencies in countries like Sri Lanka do develop new plants and seed, the seed developed by private innovators is more advanced in expected yield, resistance and nutrition, but also more expensive. As a result, farmers currently use sub-standard seed and low-quality plants resulting in waste of farming land and time. This could impact on sustainable development by causing farmers to destroy bio-diversity to increase the amount of farming land.

- The legal regime governing access to new seed varieties:

The operative local laws dealing with plants and seeds are the Seed Act, No. 22 of 2003 and the Plant Protection Act No. 35 of 1999. However, these laws do not deal with accessing or protecting new plants or seeds. The Intellectual Property Act of 2003 does not permit plants to be patented<sup>3</sup>. Legislation for the protection of new plant varieties and breeder's rights is in the pipeline. As for new seeds, they are capable of being patented under the IP Act, provided that they meet the criteria for patentability. Hence, very few foreign applications are filed in Sri Lanka as Sri Lanka does not provide a strong enough legal framework. This does not stimulate local innovation either.

On the global platform, several covenants are important. The WTO's Trade – Related Intellectual Property Agreement (TRIPs) agreement allows members to exclude new plant varieties from patent protection, provided an effective sui generis system can be found. Accordingly, many countries have utilised the system proposed by the Union for the Protection of New Plant Varieties (UPOV). Sri Lanka is not a member of UPOV, but is reported to have contacted UPOV for assistance in drafting legislation on the protection of new plant varieties. The Convention on Biological Diversity (CBD), which Sri Lanka has ratified, mandates that genetic resources cannot be obtained without prior informed consent and mutually agreed terms. The International Treaty on Plant Genetic Resources for Food and Agriculture (IPTGRFA) considers plant genetic resources from the viewpoint of sustainable agriculture and food security. It recognises farmers' rights and calls for a system of benefit-sharing and access. Unfortunately, Sri Lanka is not a party to this Convention.

### **A comparative analysis of the efforts taken by other countries**

India faced a food crisis in the 1960's but thanks to the Green Revolution, it achieved some sort of self-sufficiency and is now in quite a stable position. The means by which this was done was through the creation of new seeds and plants that were modified so as to

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<sup>3</sup> Section 62 (3) (a)

suit the population's needs as well as climate conditions. Incidentally, India is now moving towards UPOV membership and has a large research and development capacity in the breeding of new plant and seed varieties.

### **Conclusions and Recommendations**

Sri Lanka could benefit greatly by joining the global initiative to solve food problems by recourse to new technology. This may become necessary in the near future, where arable land is no longer sufficient to support conventional farming methods. However, several safeguards need to be introduced. Legislation is needed to regulate rights arising from the creation of new plant and seed varieties, and to ensure that traditional knowledge will not be exploited unreasonably especially in the form of plant genetic resources and crop wild relatives from which new strains can be developed.

One feature noted in many countries that introduced plant variety and seed protection is that local innovation was initially stifled by foreign competition. This is a very real threat to Sri Lanka, and policymakers should make provision to deal with this eventuality

Even if new plant and seed varieties are introduced, it is debatable as to whether local farmers would be able to access these varieties due to their high price. The government will then have to take steps to ensure that such varieties are available to farmers at subsidised rates, or through some other system of benefit-sharing. If not, it will be of no use to have many patented seeds, if none of them are actually used in the fields.