

developmental policies in small islands, fisheries management in the context of climate change and case-based analysis for stakeholder-friendly appropriation in coastal zone regulations.

The workshop ended with a brainstorming session through a round table discussion pertaining to the oceanographic facets and technological aspects in

CZM, socio-economic issues in the coastal zone and its governance. The major outcomes derived from the discussion are: to develop high-resolution coastal modelling, preparation of coastal atlas, empowering women, creation of alternative income for the fisherfolk, sustainable fisheries, markets as solution like creating cooperatives, ecosystem services

valuation, institution-building and strengthening.

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MEETING REPORT

Perspectives and challenges of Protection of Plant Varieties and Farmers' Rights Act in floriculture*

Floriculture in India is being viewed as a high growth industry and as an important commercial activity. Commercial floriculture has higher potential per unit area than most of the field crops and is therefore a lucrative business. Floriculture being a profitable venture is attracting big investors and at the same time has remained a viable alternative to small and marginal farmers. Indian floriculture industry is expanding. Not only more traditional flowers are being grown, but there is diversification into to cut flowers as well for export purposes. According to the estimate of the National Horticulture Board (NHB), about 242.39 thousand ha area is under floriculture during 2013–14 in the country. During the same period, the country exported 22,485.21 MT of floriculture products valued at Rs 455.90 crores, according to the records of Agricultural and Processed Food Products Export Development Authority (APEDA).

Export-oriented production of cut flowers started with the liberalization of industrial and trade policies of the country. The National Seed Policy–2002 made it feasible to import planting material of international varieties. Cut flower industry started with buy-back agreements from international agencies catering to the export market. Over a period, the domestic market has expanded and the flower cultivation of imported varieties has started catering to the growing

demand of the domestic market. Though these varieties are protected outside the country, in India they are multiplied and flowers traded without payment of any royalty as they are not protected within the country, since there is no provision to do so. With the establishment of Protection of Plant Varieties and Farmers' Rights (PPV&FR) Authority, international breeders have started applying for protection of their varieties in India under the PPV&FR Act and registration of varieties has also begun. With the changing scenario, legal implications of the Act on researchers, nurserymen and growers needed deliberation. An interactive meeting on Protection of Plant Varieties and Farmers' Rights Act was organized recently at the Indian Institute of Horticultural Research, Bangalore involving all the stakeholders of floriculture industry to discuss the challenges and prospects of plant variety protection. Legal experts, researchers, floriculture consultants, growers and exporters, members of the International Floriculture Auction Center, Bangalore (IFAB) and South Indian Floriculture Association (SIFA) participated in the discussion.

Ramakrishna (Centre for Intellectual Property Research and Advocacy, National Law School of India University, Bangalore) opened the deliberations with his presentation on 'PPV&FR Act and its implications on floriculture industry'. Pranav Kumar Mysore (K&S Partners, a company of Intellectual Property Attorneys, Bangalore) provided clarity regarding 'Royalty issues and legal impact on flower crops for domestic and export market'. After the presentation by legal

experts, representatives of the floriculture industry presented their views and the ground realities.

PPV&FR Act of India came into effect in 2001. The Act was implemented with the main objectives to establish an effective system for the protection of plant varieties, to protect the rights of farmers and plant breeders and to encourage the development of new plant varieties. The idea is to ensure the availability of high-quality seeds and planting material to the farmers.

During the initial years of the floriculture industry in India, export-oriented floriculture units paid the royalties and imported new varieties into the country. Once the flowers enter the market, due to inherent ability of the varieties for vegetative propagation, they multiply and face competition by other growers who have not paid the royalties. These varieties are protected under UPOV, but are not protected in India. As long as these varieties are not protected in India, nurseries and growers can take up multiplication, cultivation and trade of these varieties in domestic market as well as in countries where these varieties are not protected. However, once these varieties get protection by PPV&FR Authority in India, multiplication and cultivation need the consent of the breeder and for every plant multiplied and cultivated for commercial production, royalty has to be paid to the concerned breeder. In turn, the breeding programme gets encouragement and new varieties will be available for the growers.

Novel flower varieties get the premium price. The life of a variety in the

*A report on the interactive meeting on 'Protection of Plant Varieties and Farmers' Rights Act', organized by the Indian Institute of Horticultural Research, Bangalore on 22 August 2014.

market is short, with the existing varieties quickly getting replaced by those with new colour and new form. To sustain in the international market, growers need constant supply of new varieties for cultivation. Breeders are willing to introduce new varieties once they are ensured of getting incentives in terms of royalty. Implementation of PPV&FR Act has paved the way for both breeders and growers to benefit from each other. Novelty of a variety compared to the existing ones is the prerequisite for registration and protection of a variety. In general, novelty is assessed by the existing varieties within the country. Unlike in other crops, most of the flower varieties are traded in the international market and free flow of material in and out of the country is a regular phenomenon. Once a variety starts getting traded in the international market, irrespective of its entry time into India, it loses its novelty for global trade. According to the growers, the PPV&FR Act should consider the duration of international availability of the variety, while assessing the novelty status and should not be merely dependent upon its availability in the domestic market. Authority should make it mandatory for breeders to indicate other countries of its registration and number of years the variety has completed in those countries, which need to be considered for the duration of protection in India.

The PPV&FR Act has provision of compensation for farmers for non-performance of a variety under Section 39(2). According to the growers, the claim of productivity and quality by the breeders is realized in countries like Kenya, but not in India. Growers felt that breeders should disclose the exact production and quality in India, while

protecting their varieties in the country and farmers should get compensation under the Farmers' Right provision, available under the Act in case they do not realize the claimed productivity.

Under the PPV&FR Act, farmers are given certain privileges. The discussion clarified that, the Indian law gives exemption only to farmers and not to the companies. Most of the floriculture export units are registered as companies. It was clarified that according to the Act, 'farmer' is defined as any person who cultivates crops by cultivating the land himself; or cultivates crops by directly supervising the cultivation or land through any other person; or conserves and preserves, severally or jointly, with any other person any wild species or traditional varieties or adds value to such wild species or traditional varieties through selection and identification of their useful properties.

Legal experts clarified that under Section 47 of the PPV&FR Act, 2001, there is provision, wherein the Authority may grant license to a third party if plants of protected variety are not available after 3 years in adequate quantity and at reasonable price. It emerged that having a repository of registered material, is essential to safeguard the interest of the growers.

Industry representatives explained the situation of royalty being collected by the representatives of the breeders and clarity regarding sanctity of the situation. Under the Act, when the variety gets protected, its breeders will have exclusive rights to produce, sell, market, distribute, import or export the protected variety. A breeder can appoint agent/licensee and may exercise for civil remedy, in case of infringement of rights. To the question

on who is 'breeder', the Act is clear that a breeder means a person or group of persons or a farmer or group of farmers or any institution which has bred, evolved or developed the variety.

Cut flower industry mostly consists of crops of the temperate zone and as such the international breeders located in temperate zone countries have the climatic advantage to breed new varieties. During the deliberations, essentiality of strengthening breeding programmes and related research in floriculture sector was realized for a long-term advantage of the country. The Indian Act has given rights to the researchers to use any of the registered varieties under the Act for conducting experiments or research. This includes the use of a variety as an initial source for the purpose of developing another variety, but repeated use needs prior permission of the registered breeder. A registered variety can be used for the breeding of a new variety. However, commercialization would require the permission and sharing of royalty with the original breeder depending upon the extent of genetic contribution of the registered variety.

The programme highlighted and clarified important issues related to implication of the PPV&FR Act on growers, academicians and the floriculture industry in general.

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