



Worldwide Organizations Involved in Seed

(* Ramesh Kumar, Ruchi Bishnoi and Kamal Kumar Sharma)

College of Agriculture, Kota, Agriculture University, Kota

*Corresponding Author's email: yramesh617@gmail.com

International Seed Testing Association (ISTA)

ISTA was founded IN 1924, with the aim to develop and publish standard procedures in the field of seed testing. It fulfils its vision *uniformity in seed quality education worldwide*, through global network of 201 member laboratories, 52 personal members and 42 association associate members representing 79 countries. 120 of ISTA Member Laboratories are Accredited by ISTA and entitled to issue ISTA International Seed Analysis Certificates. ISTA is an independent autonomous non-profit organization. ISTA facilitate seed trading nationally and internationally, Security. Headquarter of the association is located in Zurich, Switzerland. Major services provided by ISTA are:

- ❖ Annual updation of seed testing methods for uniform adoption at global local level.
- ❖ Accreditation. of seed testing laboratory at global level.
- ❖ International movement of seed by providing ISTA international seed Lot certificates.
- ❖ Promotion for research and training in the field of seed science and technology.
- ❖ Publication of research general Seed Science and Technology and other newsletters and information bulletins.

International Union for the Protection of new varieties of plants (UPOV)

The mission of UPOV an Intergovernmental organization with headquarter in Geneva is to provide and promote an effective of system plant variety protection with the aim of encouraging the development of new variety of plant for the benefit of society. UPOV has been established by the International Convention for the Protection of New Varieties of Plant (the "*OPOV convention*") which was signed in Paris in 1901. The convention entered into force in 1968. It was revised in Geneva in 1972, 1978 and 1991. The 1991 Act entered into force on April. 24,1998.

The objective of UPOV is to ensure acknowledgement for achievements of breeders of new varieties of plants by granting them an intellectual property rights, on the basis of novelty, distinctiveness, Uniformity and Stability. So far, it has 70 members countries. The main activity activities of UPOV are concerned with promotion of international harmonization and cooperation between its member and with assisting countries and certain organization in the introduction of UPOV system of plant variety protection.

World Trade Organization (WTO)

WTO was established on January 1,1995 at Geneva under the Marrakech Agreement, to replace the general agreement on Triffcs and Trade WTO of 1948 and supervise the international trade. The mandate of WTO is to regulate trade between participating countries, provide framework for formalizing trade agreement, and to solve disputes of trade among the members countries, most of the issue are focused on the decision made during Uruguay

Round (1986-1994). The organization is focused on addressing the need of developing countries based on Doha Round 2001.

National Seed Corporation (NSC)

NSC a schedule 'B' - Miniratna Category-I company, wholly owned by Government of India under the administrative control of Ministry of Agriculture was established in 1963 to undertake production of Foundation and Certified through its 10 regional offices and 77 Areas offices/ Sub-units spread all over the country. At present, it is undertaking seed production of nearly 600 varieties of 60 crops through its about 8000 registered seed growers spread all over the world country.

NSC has established five quality control laboratories, one each at New Delhi Secunderabad, Bhopal, Kolkata. And Pune to undertake seed testing to check the quality of seed besides, production and distribution of quality seeds, NSC is also involved in the production of Tissue culture plants like bananas. It also undertakes supply of seedlings/Samplings of fruits crops through procurement from the MOU partners. There are about 2800 dealers of the corporation who accounts for more than 65% of the sale turn over. With the launching of national seed project (NSP) in 1974, NSC was assigned the lead role to develop the seed industry in the country on sound lines. NSC has also contributed in the establishment of various State Seed Corporation under the NSP during seventies.

National Seed Corporation plays a key role in the independent implementation of various schemes of the government of India like integrated schemes for oilseeds, pulses, "Oil and Palm and Maize" (ISOPOM). "National Food security mission" (NFSM) and "National horticulture mission" and (NHM). It provides technical Support to the seed producing agencies, including State seed Corporation by imparting training of personnel engaged in the production of seeds. in that and organization. The seed bank maintained by the corporation with the grant in aid of the Government of India holds larger quantity of seed of different crops/varieties that are meant to meet the demand during natural calamities like flood, drought etc. NSC also takes care to meet the demand for quality seed of the farmer in north eastern state and other hilly regions. The address in National Seed Corporation, Beej Bhawan, Pusa Complex, New Delhi. 110012.

State Farm Corporation of India (SFCI)

The first mechanized farm at Suratgarh in the Thar Desert of Rajasthan in collaboration of erstwhile USSR established in 1956 to increase the food production. In 1969 to manage the affair of these farms. an autonomous organization under the Ministry of Agriculture was set up within the name of SFCI has six large. mechanized farm situated in four states. In 1974, With the lanch of first National Seed Project, seed production of high yielding varieties become the objective of SFCI. In 1978, SFCI was also assigned the duty of produce Foundation seed two carter the foundation seed requirement of State Seeds Corporation and National Seed Corporation. SFCI is producing Breeder, Foundation Certified and Test stock seeds of about 30-35 crops and about 300 varieties. The headquarter of the state Farmers Farms Corporation of India Limited (A Govt. of India undertaking) is located at Farm Bhawan, 14-15, Nehru Palace, New Delhi-110019.

Director of Seed Research (DSR)

Realizing the importance of seed. The ICAR launching the All India Coordination Research Project on the site the National Seed Project in 1979. Based on the overall progress and development of the national seed project and growing importance of seed in modern agriculture ICAR has upgraded the Project Coordinator Unit of National Seed project to the status of the Project Directorate in X Plan named as "Directorate of Seed Research". DSR started operating since 31st December, 2004. From Kushmaur village in the district of

Mauntha Bhanjan UP. The mission of *directorate enhancing genetic and physical characteristics of seed to increase productivity, quality and sustainability* is fulfilled by conducting basic applied, strategic and anticipatory research in diverse field inside science and technology. It functions as apex of center for coordination trial for quality seed production in the country and undertaking human resource development (HRD) through importing training to field staff and scientist in different fields of seed production, testing and certification in the field crops.

Protection of plant variety and Farmers Right Authority (PPV&FR)

In order to establish an effective system for protection of plant varieties, the right of farmers and plant builders, and to increase the development of new varieties of plants, it has been considered necessary to recognise and protect the right of the farmers in the respect of their contribution made at any time of conserving improving and making available plant genetic resources for the development of new plant varieties. Moreover the accelerate agricultural developments It is necessary to protect plant breeders right to stimulate investment for research and development, for the development of new plant varieties, such protection is likely to facilitate the growth of the seed industry, which will ensure the availability of high quality seed and planting material to the farmers. India having ratified the agreement on trade related aspects of the intellectual property right has to make provision for giving effect or effect to agreement. To give effect to the aforesaid objectives the Plan Protection of Plant varieties and Farmers Rights Act, 2001 has been and enacted in India. For the purpose of this act Protection of plant varieties and farmers Rights authority has been established.

National Seed Research and Training Centre (NSRTC)

NSRC was established at Varanasi in 2005 by the Government of India, Ministry of Agriculture, Department of Agriculture and Corporation with the vision to contribute integrated approach towards quality seed availability; maintain uniformity in seed testing and seed quality control at national level to make Indian seed industry globally competitive and NSRTC is engaged in downstream programmes on site science and quality control to disseminate the value of seed production. and availability of quality seed to the need of national and international seed community. It organised national and international seed related conference, symposium, training workshops and seed congress for the benefit of personnel involved in seed production, quality control programme, seed law enforcement and stakeholders of seed industry for updating their knowledge and skills.

Central Seed Testing Laboratory (CSTL)

National Seed Quality Control Laboratory established in an NSRTC Varanasi services as Central Seed Testing Laboratory, Referral Lab for court and member laboratory of International Seed Testing Association, (ISTA), Switzerland. CSTL coordinates and monitors the functioning of all the 108 notified State Seed Testing Laboratories for uniform seed quality regulation at national level. It is mandatory for all the 108 notified Seed Testing Laboratory to submit 5% samples. CSTL for resetting and confirmation of the result.

Organization for economic Cooperation and development (OECD)

OECD is an international organization of 34 countries committed to democracy and market economy, founded in 1961 to stimulate economic progress and World Trade. It provides a platform to compare policy experiences seek answers to common problems, identify good practices, and coordinate domestic and international policies.

The main objective is of OECD are to achieve the highest sustainable economic growth, employment and rising living standard while achieving financial stability for development of the world economy and to contribute to the expansion of world trade and on a multilateral non-discriminatory basis on accordance with international obligations.

Association of Official Seed Certifying Agency (AOSCA)

AOSCA was established in 1990. Here's the international crop improvement association to promote and here the international Crop Improvement Association to promote and facilitate the movement of seed or plant product and local national and international markets through the coordinates effort of official site certification agency acting to evaluate documents and verify that a seed or plants product meets specified accepted standards. At present, AOSCA has a number of member agencies across the USA with other member agency located in Canada, South America, Australia and New Zealand. It establishes seed certification standard, standardizes seed testing procedures and cooperates with seed regulatory agency for movement of seed different levels. It also cooperate with OECD. and other international organizations to expedite movement of seed and encourage international commerce and improved varieties.