

FSII VISION – INDIA A GLOBAL SEED HUB

ROBUST POLICY FRAMEWORK, FINANCIAL INCENTIVE, IP PROTECTION VITAL



The Federation of Seed Industry of India (FSII) is a 39-member led association of R&D-based plant science industry. Member companies are engaged in the production of high-performance quality seeds for food, feed and fibre in the country. They are focused on research-based breeding applications and seed technologies, enabling farmers to adopt

technology-driven farming solutions to improve agricultural productivity in a sustainable manner, minimizing pre- and post-harvest losses. FSII is affiliated to International associations including International Seed Federation (ISF), The Asia Pacific Seed Association (APSA), Croplife Asia (CLA) and Asia-Pacific Association of Agricultural Research Institutions (APAARI).

FSII members are driven by the fun-

damental values of respecting research and intellectual property rights of associate members and companies committed to the seed business, IP creation and IP protection while working for the welfare of Indian agriculture at large. The activities of member companies of FSII are based on fair dealings, mutual trust, respect for each other's intellectual property and honouring contractual obligations.

FSII and its member companies collaborate with multiple stakeholders to

engage closely with farmers, seed companies, rural communities, regulatory authorities, policy makers, government officials, scientific community, grower organizations, NGOs and other stakeholders to create an enabling environment for the growth of research-based seed industry.

Our members represent about 56% market share and approximately 70% of the R&D spend of the seed industry in India.

Every year FSII founding members spend about Rs 500 crores approximately on seed R&D, while closely engaging with nearly 900 highly qualified trained breeders, scientists and technologists.

Through seed research, seed commercialization and working closely with Indian farmers, FSII members aim to contribute towards realizing the vision of doubling the farmers' income, as envisioned by the Hon'ble Prime Minister.

The objective of FSII is to help its members and other stakeholders holistically understand seed issues, advocate the seed industry position for the benefit of farmers and agriculture as a whole, awareness of member companies on trends and innovations globally and propagate the success stories of farmers and innovations of member companies for the betterment of science, farmers and agriculture sector.

FSII's vision for the Indian seed market is to see the industry become self-reliant by increasing R&D in India, make India a global seed export hub, acceptance of new innovation and technology and make it a robust industry with strong IP rights.

Climate change, biotic and abiotic stress, sluggish yields are challenges faced globally. Significant investment is needed to develop varieties that can adapt to this change. The seed industry can be encouraged to increase investment from the current 3 pc to 10 pc. Given a favourable policy framework, R&D in the country can be adopted. It is a process that requires long gestation investment and commitment to develop new products suiting the market.



The IP regime should be strengthened to encourage research investments and prevent proprietary parent seed from being stolen from seed production fields for producing copy products, fake products or breeding purposes. Respect for IP will bring more investment as well as improved germplasm into India.

A robust policy framework, financial incentive and IP protection will help Indian seed companies to compete with international companies. It will provide new varieties for farmers, generate future demand in Indian seeds and create opportunities for Indian talent to involve in R&D.

Acceptance of technology and innovation like GM and gene-editing products can work wonders for Indian agriculture. Deregulation cost for biotech traits and their stewardship costs are significantly high. The only GM crop approved so far is Bt cotton which has seen a tremendous success. Data shows the impact of Bt cotton where yields have doubled, cotton production has tripled and made India the largest producer globally and the second-largest exporter. There is opportunity in India to increase yields further when compared to countries that have been using even more advanced GM traits.

The Indian seed industry is INR 18,000 crore and is constantly growing. Looking at the country's well-developed seed industry and expertise in the sector, it has all the potential to become a global hub for seed export and can start from exporting seeds to South Asia and Africa. Currently, India's seed export is

less than 1,000 crore per annum. Annual global seed trade is \$14 billion (INR 10,460 crore). India has potential to capture 10 per cent share which is \$1.4 billion or INR 747 crore by 2028.

Three categories of seed exports have been identified by FSII.

i) Custom Production, where a company located outside India gives production orders to an Indian seed company and supplies parent seed for production in India. The Indian company exports the production back to them.

ii) Export-oriented production, where varieties will be developed in India by domestic companies purely for export. These varieties can go to other tropical markets globally.

iii) For both markets, these are varieties developed in India for export and also domestic sales

All the above needs conducive policy support. Dry Port facilities should be developed closer to production centres with modern warehouses suitable for seed storage, good seed quality testing laboratories recognized globally and efficient processing and packaging facilities. Future drivers of seed growth will be technological breakthroughs to mitigate biotic, abiotic stresses and climate resilience. FSII advocates for a favourable regulatory environment, including those for GM crops, policies to promote investments in seed technology, related R&D and seed production. Provisions of National Biodiversity Act (NBA), particularly concerning restrictions on germplasm access and exchange, will also have to be suitably amended. Adequate protection and enforcement of IPRs through both Patent Office and the Protection of Plant Varieties and Farmers' Rights (PPV&FR) Authority would accelerate the growth of Indian seed industry and exports and need extra focus.

Given India's varied agro-climatic conditions coupled with seed production expertise, seed quality management systems and the necessary policy support, Indian seed industry can utilize this opportunity similar to its international counterparts.