



ANNUAL REPORT 2019



www.nsai.co.in

ABOUT NSAI



National Seed Association of India (NSAI), as the apex body representing the industry of the world's fifth largest seed economy, continued its leadership role by engaging with the national and state governments for pursuing its main agenda of working towards providing an enabling and favourable policy environment for the growth of the industry. The continued patronage of its members encouraged NSAI to work harder for ensuring an inclusive growth for all stakeholders. The enhanced effectiveness was visible in the various engagements with the policy makers, who not only appreciated the role of NSAI, but also respected the views / opinions expressed in various meetings. NSAI continues to be invited to nominate its representatives to various decision making bodies, as well as, as resource persons / speakers at leading scientific meetings related to agriculture development. Indian Seed Congress, the flagship event of NSAI, is now a much awaited event in the seed industry calendar, due to the rich scientific content of the Conference and the business generation in the B2B sessions. The visibility for NSAI has grown over the years and the request for our logo to be displayed at various agri- exhibitions and conferences is increasing.

OUR VISION



The vision of NSAI is to create "A dynamic, innovative, internationally competitive, research based industry producing high performance, high quality seeds and planting materials which benefit farmers and significantly contribute to the sustainable growth of Indian Agriculture". The Association is also working towards the responsible use of biotechnology for modernizing Indian agriculture and enhancing the livelihood of Indian farmers. Increasing the general awareness about crop biotechnology amongst the many stakeholders, technology upgradation and engaging in a continuous dialogue with regulators for the establishment of a transparent, fair and equitable regulatory system, are some of the other activities of NSAI.

OUR MISSION



The mission of NSAI is to encourage investment in the state of the art R&D to bring to the Indian farmer superior genetics and technologies, which are high performance and adopted to a wide range of agro-climatic zones. It actively contributes to seed industry policy development, with the concerned government, to ensure that the policies and regulation create an enabling environment, including public acceptance, so that the industry is globally competitive.



OBJECTIVE

- To create a policy environment for the seed industry
- To create better interaction & provide business opportunities among our stakeholders
- To hold meetings and interactions between the public & private sector to discuss common issues
- To facilitate Public Private Partnership.

WHAT WE DO?

Scientific Seminars & Interactive Meetings across the globe

- Communication & Knowledge Dissemination through Seed Magazine, News mailers, Seed Handbook and other publications
- Policy Advocacy by engaging with Government and scientific entities in enabling the favourable policy environment and furthering the stakeholder's interest
- Brain Storming Sessions/ Roundtables/Conferences & Seminars
- Works towards globalizing the seed industry, harmonization of regulatory environment, promoting export of seed and investment in seed industry
- Promoting international collaborations with stakeholders and industries
- Knowledge and skill enhancement of Human resources through:
 - Capacity building & training
 - Internship
 - Exposure to the industry visits & on job training
 - Training & Capacity building of agri-entrepreneurship
 - Training & Capacity building of Government Officials
 - Study Tours
- Collaborative trainings with various institutes, organizations & universities

OFFICE BEARERS



President
M. Prabhakar Rao
(Nuziveedu Seeds Ltd.)



Vice President
Sameer Mulay
(Ajeet Seeds Pvt. Ltd.)



General Secretary
Pranjivan P Zaver
(Farm Tech Biogiene Pvt. Ltd.)



Treasurer
Pawan Kumar Kansal
(Kohinoor Seeds Fields India Pvt. Ltd.)

GOVERNING COUNCIL MEMBERS



G.V. Bhaskar Rao
(Kaveri Seed Co. Ltd.)



N.P. Patel
(Western Agri
Seeds Ltd.)



Janak Peshrana
(Seeds India)



K. Niranjana Kumar
(GARC Seeds Pvt. Ltd.)



Arun Kumar Agarwalla
(West Bengal Hybrid
Seeds & Biotech Pvt. Ltd.)



Ashwin Garg
(Super Seeds Pvt.)



Kamal O. Zunzunwala
(Safal Seeds &
Biotech Ltd.)



K.S. Narayanaswamy
(Karnataka Maize
Development Association)



Manish Patel
(Integrated Coating and
Seed Technology India Pvt. Ltd.)

NSAI SECRETARIAT



R K Trivedi
Executive Director



Indra Shekhar Singh
Program Director for Policy and Outreach



Yash Pal Saini
Sr Manager - Admin
& Accounts



Priyank Samuel G
Asst Manager -
Brand Alliance and
Communications



Deepankar Pander
Asst Director



Neetu Thapliyal
Research Associate



Sher Singh
Office Executive

Complied, Designed & Edited by:

Priyank Samuel G
Neetu Thapliyal

Published by:

National Seed Association of India, 909, Surya Kiran Building, 19, Kasturba Gandhi Marg,
New Delhi - 110001 (INDIA) Ph.: 011-43553241-43; Fax: 011-43553248 | E-mail: info@nsai.co.in
Web: www.nsai.co.in

Message from Desk of the President



Dear members,

2019 has been great year for the National Seed Association of India. We have faced challenges, obstacles and hardships together and yet with our deep conviction and hard work surfaced against the odds. The Indian seed industry today stands stronger. NSAI is face of India for the global seed sector. Our hard work has gained us respect and admirations from the government and farmers within India. NSAI Annual Report 2019 is only a glimpse of our collective efforts throughout the year. It is my privilege to present it you all.

The report peeks into our successful events including the Indian Seed Congress 2019, meetings with various stakeholders for the cause of Indian seed industry and the story of our efforts during the last year. With the support of the NSAI members, we have tried to create convergence on many issues, so the world sees us one single force striving constantly for excellence within the seed sector.

National Seed Association of India with the small, medium and large seed industry members is diverse body, marked by integrity and professionalism. Over the last year, we have triumphed as leaders of industry and recognised by the government as an apex body representing the seed industry and India.

We have achieved all these recognitions with the support of our members. And through the last year, we have ensured that our members have the maximum ease of doing business. Your issues have been the top priority for NSAI and we have worked tirelessly to resolve each one of them. From the state governments to the central government, we have left no stone unturned to ease the seed business especially with reference to various regulatory enactments like the Seeds Act, Seed (Control) Order, Biodiversity Act, Environment (Protection) Act, PPVFR Act etc. Not only that, the association with the help of meetings with EXIM committee has helped the members in the effortless import and export of seeds.

But that is not all NSAI is dedicated to our nation and Indian farmers. We have kept their interest always in our heart too. We made intervention to curb illegality and offer the correct interpretation in the implementation of Intellectual Property laws of the country. This benefited the seed industry but also millions of farmers and consumers.

We have made Indian Seed Congress as the premiere platform for innovation, knowledge sharing and networking. Through the Indian Seed Congress (ISC) various stakeholders, scientists, agronomists, pathologists, breeders, other experts, policy makers and industrialists incubate and ideate on problems. And by discussing, debating and sharing bring out solutions in forms of new ideas, research, new inventions and products. This time we organised the 9th edition of ISC at Hyderabad on the theme "Seed for Sustainability".

Sustainability is the current issue which itself encompasses of seed quality along with the sufficient quantity to improve the agriculture production. In ISC 2019, we invited global renowned scientists to provide solutions to resistance, crop loss, challenge of newer pests and diseases, etc. The international and Indian participation in the ISC 2019 speaks of the success of the event.

As an association, we have also not been shy from our role as knowledge creators. Over the year we have brought Seed Times on various themes. Needless to say NSAI Newsletter continues to be a regular source of information for all members. Embracing the digital age, we have started the process to revamp our digital persona. We are now active on all social media and our website is updated with all our representations.

The government continues to honour us as a trusted partner and we are regularly invited to various forums and meetings.

The Secretariat is even stronger and strives round the clock for enhancing visibility of the Association. Our team is dedicated to enhance the NSAI brand. We want to be a strong source of information exchange and engage more in social initiatives of Seed Donation programs. NSAI is stronger, more diverse and motivated more than ever before and all this is only possible due to the trust and support provided by our loyal members.

In time to come, I hope we grow bigger and bolder. We compete with ourselves to scale greater heights of excellence. I wish you thank all members and the secretariat.

Best Wishes,

M Prabhakar Rao

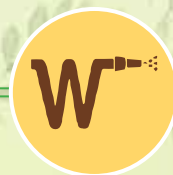


Contents

AGM Agenda	7
Minutes of Annual General Meeting 2018	11
Resolutions passed in Annual General Meeting 2018	25
Annual Report 2018-2019	33
A. Management	35
B. Membership	36
C. Communication	36
D. NSAI Meetings	42
E. Events/ Conferences/ Workshops	55
F. Seed Industry Issues	70
G. NSAI in News	84
H. News Links	86
I. Audit Report	92



AGM AGENDA





AGM AGENDA

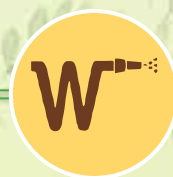
13th ANNUAL GENERAL MEETING

27th SEPTEMBER, 2019, 09:00 AM – 06:00 PM,
Lecture Hall, Ground Floor, NASC Complex, Pusa, New Delhi

REGISTRATION & TEA	09:00 AM – 09:30 AM
1. Registration	
INAUGURATION	09:30 AM – 10:30 AM
1. Welcome of Chief Guest and GC Members 2. Welcome address by Executive Director 3. Highlights of Industry issue by President, NSAI 4. Address by Chief Guest 5. Vote of Thanks by General Secretary, NSAI	
TEA BREAK	10:30 AM – 11:00 AM
ANNUAL GENERAL MEETING	11:00 AM – 12:30 PM
1. Commencement of AGM 2. Procurement of Quorum 3. Confirmation of the Minutes of Last AGM (12 th September, 2018). 4. Presentation of General Secretary's Report 5. Presentation of the Statement of Accounts & Auditor's Report by Treasurer, NSAI 6. Appointment of Auditor for FY 2019-20 7. Approval of Annual Budget for FY 2019-20 8. Approval of Resolutions 9. Farewell & felicitations of GC members by Executive Director, NSAI 10. Speech by outgoing GC members 11. Address by the President NSAI 12. Vote of Thanks by Vice President, NSAI	
LUNCH	12:30 PM – 01:30 PM
1. Lunch	
NSAI ELECTIONS 2019	02:30 PM – 06:00 PM
1. Announcement of the Election Process by Returning Officer 2. Address by Contesting Candidate 3. Voting 4. Announcement of results 5. Announcement and Welcome of Office Bearers and Newly Constituted Governing Council	
DINNER	07:00 PM – 09:00 PM



MINUTES OF ANNUAL GENERAL MEETING 2018



MINUTES OF ANNUAL GENERAL MEETING 2018

The 12th Annual General Meeting of the National Seed Association of India (NSAI) was convened on Wednesday 12th September, 2018 at The Metropolitan Hotel, New Delhi. The AGM was chaired by NSAI President, Shri. M Prabhakar Rao. The AGM was attended by participants from states like Andhra Pradesh, Telangana, Delhi, Gujarat, Haryana, Karnataka, Maharashtra, Punjab, Uttar Pradesh, & West Bengal. The total number of participants (individuals) in the AGM were 63, representing 41-member companies (organisations) from ordinary category, 4 from Association category and 2 from Associate category and 1 Non-Member Companies.

Inaugural Session



The AGM began with a warm welcome by Shri RK Trivedi, Director-Technical NSAI. He also highlighted the past achievements and future strategy of NSAI. He thanked all the members for providing continued support to the Association for carrying out various activities. As per rules and regulations governing the conduct of National Seed Association of India (NSAI), a minimum quorum of 10% of the effective Ordinary Members is mandatory to start the proceedings of Annual General Meeting of NSAI. The Director- Technical informed that as on 21st August, 2018, NSAI had 274 effective ordinary members and hence we need minimum 27 Ordinary Members for requisite quorum for the conduct of A.G.M. Based on the attendance, of 41 ordinary members present, the 12th AGM was declared open.

Key Proceedings

- The minutes of the Eleventh AGM held on 8th September 2017 at New Delhi, was circulated earlier among the members and included in the annual report were put up for discussions and adoption.
- The general body unanimously approved minutes of the meeting.



The Agenda of the AGM 2018

ANNUAL GENERAL MEETING

1. Welcome Address from Secretariat
2. Procurement of Quorum
3. Confirmation of the Minutes of Last AGM (8th September 2017)
4. Presentation of General Secretary's Report
5. Presentation of the Statement of Accounts & Auditor's Report by Treasurer
6. Appointment of Auditor for FY 2018-19
7. Approval of Annual Budget for FY 2018-19
8. Approval of resolution that "Accommodation for GC members for attending GC meetings @ INR 7500 per night."
9. Address by President, NSAI
10. Vote of Thanks by the Mr. Sameer Mulay, Vice President, NSAI

Presentation of General Secretary's Report

- The Annual Report 2017-2018 was presented by Shri Pranjivan P Zaveri, General Secretary, NSAI. He also applauded the high visibility of NSAI as a true representative of the Indian seed industry. He highlighted on the various achievements of NSAI under the following heads:



A. Membership Status

- GS informed the house that total NSAI membership is of total 498 for FY 2018-19. NSAI continues to be patronized by the major seed sector players and our membership is increasing. From an aggregate of 498 members, as on 31st August 2018, 300 members have renewed (Ordinary 264; Associate: 28; Association: 07; and Public Sector: 01). 26 were new members in ordinary category.



B. Industry Issues

GS stated that NSAI has worked relentlessly for taking up various industry issues for overall benefit of members. The gist of the various Industry issues taken up by NSAI in this financial year were:

- Decision of Delhi High Court on patenting of Bt Cotton Technology
 - ✓ Landmark Judgement for Indian Seed Industry. Hon'ble Delhi High court decided matter on the strength of law of land.
 - ✓ Section 3(j) of Indian Patent act – No patent to Plants and animals in whole or any part, no technology provider can charge high trait value can be claimed under patent act
 - ✓ The IPR claim and trait value can be claimed only under PPV&FR Act through a mechanism of benefit sharing to cover investments.
 - ✓ Under the PPV&FR Act no permission is required from the owner of the variety including transgenic variety for conducting research on that variety for development of new varieties as the researcher's rights provide for universal access with an obligation to pay benefit sharing.
 - ✓ Further, innovations are encouraged under PPV&FR Act to make available superior varieties to the farmers.
 - ✓ This provides for universal access to all the breeders of small, medium or large companies including public sector to develop new plant varieties with any transgenic trait subject to its biosafety approval. The farmer shall have availability of more varieties from a wide range of seed companies. There shall be more competition and fair play in the market. It will increase R&D on new products.
- Position of NSAI on harnessing IPR for agricultural growth submitted to TAAS
 - ✓ All Plant breeders access traits from the available germplasm under the rights available to them under section-30 of the PPVFR Act. All such contributions for development of a trait are rewarded under benefit share mechanism defined in section-26 of the PPVFR Act.
 - ✓ The trait developers also should mandatorily register their transgenic Plant varieties which will become source material (donor seeds) for subsequent GM plant varieties after obtaining biosafety clearance for claiming benefit share in future.
 - ✓ PPVFR Authority should revise and develop new benefit sharing guidelines for contributions to all traits including transgenic traits developed by biotechnological methods by issue of necessary guidelines as per the benefit sharing rules to bring clarity on this important provision of PPVFR act. By making necessary changes in the rules, the National gene fund (NGF) can expect significant revenue inflows, which can be further used for farmer's welfare and funding relevant public goods for Plant genetic improvement and agricultural growth.
 - ✓ PPVFR Act has some good safeguard provisions for farmers, researchers and consumers especially not permitting registration for harmful technology like terminator technology, GURT and also compensation to farmers if variety is not giving expected performance, and invoking compulsory licensing if reasonable requirement of seed of public at reasonable price is not met.
 - ✓ These provisions are not available in Patent Act. Therefore, for transgenic seeds and varieties also PPVFR is the most appropriate Act for IPR protection.



- For RIB concept, specifications for sample size, sampling procedure, testing procedure and tolerance levels for Bt cotton seed lots.
 - ✓ NSAI has requested Government of India, Ministry of Agriculture & farmers' Welfare on 16th July 2018 to revise the seed sample size and to specify sampling procedure, testing protocols and Tolerance Levels and also direct the State Departments of Agriculture not to launch prosecution based on such unscientific reports.
- Reopening of settled issue of NOC from technology provider for Registration of Bt Cotton Hybrids under PPV&FRA
 - ✓ NSAI has requested PPV&FR Authority for not to insist for NOC from technology provider for registration of Bt Cotton Hybrids under PPV&FRA.
 - ✓ In the 27th meeting of PPVFR Authority held on 31-5-2017, it was decided by the members after taking into consideration the valuable opinion of Ld. Additional Solicitor General of India and examining the relevant provisions of the Act that the requirement of submission of a No Objection Certificate from the concerned Technology Provider as a part of the application will be dispensed with for registration of the Bt cotton plant varieties.
 - ✓ Now, after joining of new Chairperson in PPV&FRA the Authority has again initiated exercise to bring back NOC requirement for registration of Bt Cotton. However, on the petition of Seeds man Association Kurnool, the Hyderabad High Court has stayed the matter.
- HT Cotton
 - ✓ NSAI supports the removal of HT cotton from the Environment.
 - ✓ However, NSAI wants compensation to the farmers and seed companies whose seed lots are contaminated with HT cotton from the company responsible for its spread.

C. Meetings and Engagements

The General Secretary briefed the general body about the various meetings and engagements undertaken. The General Secretary also mentioned in his presentation about the key areas of progress for NSAI through meetings and engagements.

D. Events/ Conferences

INDIAN SEED CONGRESS 2018

The GS informed the house about Indian Seed Congress 2018 organized at Colombo, Sri Lanka on 5th -6th February 2018. It saw active participation from 288 industry leaders (seed & allied), policy makers, scientific community, developmental agencies and various other organizations. This year the theme of Indian Seed Congress was 'Seeds beyond Boundaries'. On 4th February 2018, CEO conclave was organised. Over the years, CEO conclave has been viewed by industry leaders as a platform for strengthening industry voice and exchange of new ideas for renewed vigour among industry leaders. The CEO Conclave was attended by 37 Business leaders.

The other key events in which NSAI participated included Krishi Unnati Mela 2018 and 'RMS seed workshop'.



E. Communication & Publications

The GS stated that NSAI website has become an important source of information for the members. The 'What's New at NSAI' section informs the members about the latest developments of the industry, workshops and conferences. The Website has a section on 'Important Circulars and Representations', under this section all-important notifications and circulars are uploaded for benefit of members. The section on 'Important Notifications' places important notifications of Government. The 'Latest News' section informs members about the current updates of Indian Agriculture & Seed sector. Any member can now visit the website and access information about representations and notifications.

The GS informed the house that NSAI is also maintaining Twitter and Facebook Accounts for directly connecting with its members and information sharing as well. Communication with members has improved through daily and weekly mailers.

The GS informed that 'Seed Times', is our main vehicle for communicating new knowledge and reports on NSAI and other events, etc. It continues to receive appreciation and accolades for its informative content and production quality. We continue with our practice of theme based content in every issue. During the period under report, we have published 02 issues of the magazine. The Seed Times Volume 10 No. 2, Journey of Seed and the next volume Seed Times Vol 11 No.1, Seed Sectors around the Globe.

Another important vehicle for communicating with members is NSAI monthly Newsletter 'Seed News', is an important medium for communicating industry news. The newsletter is now a regular issue with emphasis on reaching out to members with new updates and activities of NSAI. It also covers various important notifications issued by Government. NSAI also communicates to its members Weekly news which features important updates on Agriculture and Seed Sector.

Other key publications during the period included Indian Seed Congress Souvenir, Indian Seed Congress Report and NSAI Brochure for Exhibitions and Conferences.

Brain Storming Session on "Key Issues Related to IPR in Seed Sector for Accelerating Agricultural Growth in India"



A Brain Storming Session on “Key Issues Related to IPR in Seed Sector for Accelerating Agricultural Growth in India” was also organised on 12th September 2018 along with the AGM. The key recommendations of NSAI based on deliberations in seminar were as follows:

1. The IPR laws related to transgenic plant varieties and traits of our country are far ahead , balanced clear as compared to laws of other countries. There are provisions to balance interests of all stakeholders while protecting Rights of Farmers & Breeders. The MoA and Seed industry shall strive to protect the law and work for its implementation in letter and spirit.
2. There is a need for PPVFR Authority and the MoA to work for more robust implementation of these provisions going forward. The benefit share guidelines to bring clarity to decide the same for transgenic traits after they are approved under EPA are necessary. NSAI is willing to bring recommendations holding consultations across country.
3. The improper implementation of provisions of Seeds Act and EPA needs to be prevented in future to ensure Farmers/ breeders rights are not blocked leading to monopoly despite clear provisions in the law to contrary during approval of GM traits. The approval of a GM trait shall be in domain of GEAC while approval of varieties with such GEAC approved traits shall be entirely under provisions of the Seeds Act and Seed Control Order 1983. This will lead to no distortions in future.

The general body of AGM developed, approved and adopted the above recommendations of the brain storming session.

F. Corporate Social Responsibility

GS informed the house that NSAI members have actively contributed to the cause of helping farmers during. With the view to aid farmers of Bihar Flood victims, Members of National Seed Association of India actively participates in donating seeds of Maize, wheat and vegetable seeds. We appreciate and thank our Members who helped for a social cause.

The companies who donated seeds were Ajeet Seeds Ltd., Ankur Seeds Pvt Ltd., Crystal Crop Sciences Ltd., Kaveri Seeds Co Ltd., Nath Biogene India Ltd. and Nuziveedu Seeds Ltd.

- The ‘Annual Report’ was approved and adopted the members present appreciated the growth of the Association.

Presentation of the Statement of Accounts & Auditor’s Report by Treasurer





This was followed by presentation of financial report by Shri Pawan Kumar Kansal, Treasurer. He highlighted the significant aspects of the annual statement of accounts and appreciated President, NSAI under whose leadership a lot has been achieved.

Financial Highlights

During the current year total income of the association was Rs 91,19,730/- as against an income of Rs. 95,01,711/- during the previous year. There is a decrease in income as Indian Seed Congress 2018 was held in Colombo (Outside India).

- **Membership**

This year we have received membership fees of Rs. 1,23,35,500/- compared to Rs. 1,12,52,000/- in the previous year, which is an increase of almost Rs. 10,83,500/-, there is an increase of 9.63%. In the year 2016-17 membership was 380; while in the year 2017-18 membership increased to 472 members.

I would thank our members for paying their membership fees on time which is very vital for successful running of NSAI.

- **Conference**

During the current year we have organised INDIAN SEED CONGRESS at Colombo, Sri Lanka. We have earned the income of Rs 13,87,143.

The proposed Annual Budget for FY 2018-19, was presented by the Treasurer. He informed the house that the Legal and professional expenses is 65 Lakh, for undertaking 2 projects with support of KPMG i.e. Rule based Income tax, Market Survey – Impact of Mergers and Acquisitions on Indian Seed Industry. NSAI has allocated INR 3 Lakh for CSR funds, He also informed the house that the GC has decided to support state associations to function through NSAI's property for which the overall capital allocated is Rs. 3,10,00,000.

- Ahmedabad - Rs. 75 Lac
- Guntur - Rs. 75 Lac
- Kolkata - Rs. 85 Lac
- Aurangabad - Rs. 75 lac

The treasurer also informed that Rs. 20 Lac has been allocated for NSAI office renovation.

An issue raised by Mr. Vaibhav Kashikar (Member NSAI), was on purchase of a new office property. To this NSAI President responded that even earlier in GC meetings this aspect was taken upon consideration but after discussion with NSAI Auditor, its best that NSAI Corpus money may be kept undisturbed as it can gain more interest than investing it on office property.

Members questioned on the increase in employee salary savings, the Treasurer responded that due to some resignations of staff in secretariat the overall salary amount is more.

Members raised another concern that the members be informed in due time if some staff from secretariat leaves NSAI.

- The Statement of Accounts & Auditor's Report was unanimously approved and adopted by General body.
- The NSAI Budget for FY 2018-19 was unanimously approved and adopted by the General body.
- The resolution for continuation of the services of the present auditor M/s A K Gupta for one more year, was unanimously approved and adopted by General body.

The President moved to the next item for proposal for bearing the cost of accommodation for GC members to attend GC meetings, after in-depth discussions among members and GC members the general body unanimously decided to drop this item.

Issues Raised by Members in AGM

- Issue of PBW in Maharashtra: Members raised an issue about compensation awarded by Maharashtra against Seed companies. The President responded, after discussion about this in GC meetings, NSAI has decided to fight this case in Bombay High Court and if the house agrees to this NSAI would make a case writ petition. To this G V Bhaskar Rao (Kaveri Seeds) proposed and Shri Raghu Babu (Shatavahan Bio Science Pvt Ltd) seconded this.
- Mr Ashwani Garg (GC Member) raised an issue of every year testing of cotton varieties by Punjab Govt. for giving permission for sale of Cotton seeds. This creates big hurdles for seed trade in Punjab. He therefore suggested NSAI may take up this with GOI and Punjab Govt. and if no solution, NSAI may consider to file a case on this issue in Punjab High Court.
- Another point he raised was about application of GST on cotton produced which is used for seed purpose particularly in NARMA variety of cotton. Therefore, he suggested to take up issue with GOI by NSAI for exemption of GST for cotton produce which contains seed for sowing.
- The President asked the newly elected General Secretary of Seedsmen Association, AP, Mr Jayveer Rao to address the gathering about the issue faced in Telengana. Mr. Jayveer Rao informed about the legislation that has been passed by the Telengana Govt. on 25th Nov 2017, about a PD (Preventive Detention) Act which is meant for controlling the unlawful activities in society. This act should not be misused for harassing the seed companies holding valid license for seed business and also fall under the ambit of Seed Act and Seed Control order. NSAI may represent to the concerned State Government for not covering the seed license holders under the PD Act.
- Maharashtra Issue:
Mr H C Baxi, USA Seeds stated that there is issue of license and other problems for Maharashtra state. He requested to constitute a small team to interact with regulators from time to time for sorting out the arbitrary changes being made from time to time.
- He further suggested a workshop to make Seed Import & Export regulation simpler for members to understand and enhance business.
- Mr Vaibhav Kashikar, Ankur Seeds proposed that NSAI should represent on the issue of 100% FDI in Agriculture as it might lead to unethical monopoly. There are many countries who are not allowing 100 % FDI; there should be provision of local partner with majority stake. President informed the house NSAI has already represented on the issue and with support of all members would further fight for this cause. A resolution was passed regarding supporting NSAI stand against 100% FDI in agriculture. NSAI members agreed to the proposition and would take the matter aggressively at both Parliament and Prime Minister's level. A workshop would be organised for benefit of members.
- Shri Keyur A Shah, Navkar seeds raised the issue that some of the State Agriculture universities especially in Haryana, Punjab, Orissa etc are charging the high licence fees for the breeder seed allocated by Govt, of India. This high and extra cost for breeder seed is affecting the seed business of small and medium seed companies which are dependent on public sector varieties. NSAI should take up this issue with Govt. of India, ICAR and SAUs.



The General body approved and adopted the above discussions.

Address by the President NSAI



- Shri M Prabhakar Rao, President, began by thanking each member for extending unrelenting support to NSAI during the last year. The President briefly informed the members that NSAI has worked tirelessly to create consensus among all our members for ensuring the better cause of Indian Seed Industry and farmers welfare.
- The President informed about the next Indian Seed Congress 2019 which will be held in Hyderabad, as decided and announced in ISC 2018 Colombo itself. The Core NOC group is set and has actively started coordination. The dates finalized would be 6-7th February 2019, at HICC Novotel, Hyderabad.
- The President expressed Indian Seed Congress is a very vibrant platform, we'll be able to strengthen the platform not only as a body to represent the Association but to become a force in the International arena.
- The President informed the next years main agenda would be Harmonizing the Seed Act implementation and Seed Control Order Implementation, with particular reference to product inclusion across the country. Also, we would take up the problems of Punjab and Andhra Pradesh as discussed earlier.
- The President informed and requested the members to take up seriousness towards Plant Variety Authority as in future it will have a very big role in IPR aspects, and to generate business models as per this Law for their firm. Also, requested secretariat to do some paid seminars on this aspect in upcoming year.
- The President expressed the point which was touched by the JS (Seeds) earlier, about the same variety which is sold by various companies in different names. The Govt, has formed an opinion to stop this by DNA finger printing. Director NBPGR has formed a committee for variety DNA finger printing verifications. So, he requested members to understand these protocols.

The President ended his address by expressing hope that member's excellent support for the work being done continues to grow and NSAI continues to work with more passion and energy for all its members.

The AGM ended with vote of thanks offered by K S Narayanaswamy, GC member, NSAI. He expressed his thanks to all members for attending the 12th AGM and also to the GC Members for offering their selfless service to NSAI.

Glimpses of AGM 2018



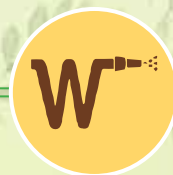


Glimpses of AGM 2018





RESOLUTIONS PASSED IN ANNUAL GENERAL MEETING 2018





RESOLUTIONS PASSED IN ANNUAL GENERAL MEETING

2018


Resolution No. NSAI/2018/1

The minutes of the meeting of the 11th Annual General Meeting held on 8th September 2017 in Delhi are confirmed and approved by the General Body unanimously.

Proposed By:

 (K S Narayanaswamy)

Seconded By:

 (Avaneesh Kumar Singh)



RESOLUTIONS PASSED IN ANNUAL GENERAL MEETING

2018

RESOLUTION No. NSAI/2018/2

Resolved that the Annual Report for the year 2017-18 are accepted and approved by the General Body unanimously.

Proposed By: *Vaibhav Kashikar* - VAIBHAV KASHIKAR

Seconded By: *Pankaj Tanuja* - PANKAJ TANUJA



RESOLUTIONS PASSED IN ANNUAL GENERAL MEETING

2018

RESOLUTION No. NSAI/2018/3

Resolved that the Statement of Accounts and Auditor's Report for the year 2017-18 has been accepted and approved by the General Body unanimously.

Proposed By:

Arjun (ARUN K. AGARWAL)

Seconded By:

Vaibhav (VAIBHAV KASHIKAR)



RESOLUTIONS PASSED IN ANNUAL GENERAL MEETING

2018

RESOLUTION No. NSAI/2018/4

Resolved unanimously that the M/s A.K. Gupta & Associates, New Delhi be appointed as Statutory Auditors of NSAI for the year 2018-19 at a remuneration of Rs 25,000 per annum.

Proposed By:

 (ASHWANI GARG)

Seconded By:

 (MANISH PATEL)



RESOLUTIONS PASSED IN ANNUAL GENERAL MEETING

2018

RESOLUTION No. NSAI/2018/5

Resolved that the Annual Budget for the FY 2018-19 has been accepted and approved by the General Body unanimously.

Proposed By:

N. P. Patel, N. P. Patel

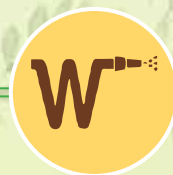
Seconded By:

Janak Peshwara, Janak Peshwara



ANNUAL REPORT

September 2018 - September 2019





ANNUAL REPORT

September 2018 - September 2019

National Seed Association of India has continued to enjoy the strong support of its members and government both at state and national level, in representing the cause of Indian Seed Industry and partnering national agenda for agricultural growth. Over the years, NSAI and its members have strongly believed that for Indian Agriculture to progress; the farmers of the country must progress. The Industry participation in the NSAI events, meetings and Issue based Workshops has been very encouraging. The increased convergence of efforts can be witnessed through active and regular engagement with policy makers for consultations on important issues of prime importance. This has indeed established the leadership role of NSAI as true representative of Indian Seed Industry. NSAI is now a regular participant in seminars of National and International repute, as both speakers and delegates.

A. Management

The Governing Council met on three occasions during the period since last Annual General Meeting (AGM) on 17th Dec. 2018 (Hyderabad), 13th March 2019 (Hyderabad) and 27th July 2019 (New Delhi). During these meetings, the GC reviewed the progress of various activities and initiatives, and planned future programs. For the overall benefit of Seed Industry many Key Initiatives were implemented.



S.No	Governing Council Meeting	63 rd	64 th	65 th
	Venue	Hyderabad	Hyderabad	New Delhi
	Date	17 th Dec. 2018	13 th March 2019	27 th July. 2019
1	Mr. M. Prabhakar Rao Nuziveedu Seeds Ltd.			
2	Mr. Sameer Mulay Ajeet Seeds Ltd.			
3	Dr. Pranjivan P Zaveri Farm Tech Biogene Ltd.			
4	Mr. Pawan Kumar Kansal Kohinoor Seed Fields India Pvt. Ltd.			
5	Mr. G.V. Bhaskar Rao Kaveri Seed Co. Ltd.			
6	Dr. N.P. Patel Western Bio Vegetable Seeds Pvt. Ltd.			
7	Mr. Janak Peshrana Seeds India			
8	Mr. K. Niranjan Kumar GARC Seeds Pvt. Ltd.			
9	Mr. Arun Kumar Agarwalla West Bengal Hybrid Seeds & Biotech Pvt. Ltd.			
10	Mr. Ashwini Garg Super Seeds Pvt. Ltd.			
11	Mr. Kamal O. Zunzunwala Safal Seeds & Biotech Ltd.			
12	Mr. K.S. Narayanaswamy Karnataka Maize Development Association			
13	Dr. Manish Patel Integrated Coating and Seed Technology			

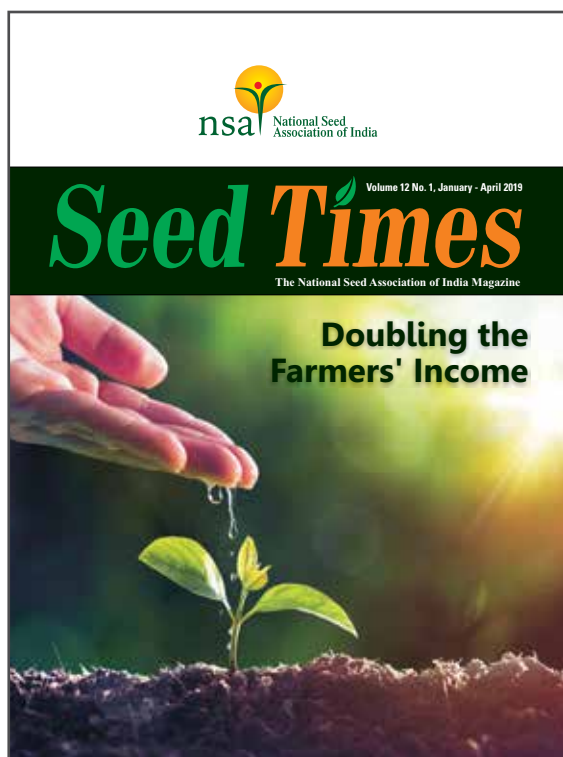
B. Membership

NSAI continues to be patronized by the major seed sector players and requests for our membership is increasing. From an aggregate of 439 members, as on 31st August 2019, 351 have renewed (Ordinary 309; Associate: 33; Association: 08; and Public Sector: 01). 53 were new members spread across the 3 categories of Ordinary, Associate and Association.

C. Communication

I. Seed Times

The NSAI magazine 'Seed Times', is our main vehicle for communicating new knowledge and research on agriculture and other events, etc. It continues to receive appreciation and accolades for its informative content and production quality. We continue with our practice of theme based content in every issue. During the period under report, we have published 02 issues of the magazine. The Seed Times (Vol 12 No. 1) issue focused on 'Doubling the Farmers Income'. While the next volume (Vol 12 No. 2) focused on 'Digital Agriculture'.



Seed Times Volume 12 No. 1
Doubling the Farmers Income



Seed Times Vol 12 No. 2
Digital Agriculture

II. NSAI Newsletter- Seed News

NSAI monthly Newsletter 'Seed News', is an important medium for communicating industry news. The newsletter is now a regular issue with emphasis on reaching out to members with new updates and activities of NSAI. It also covers various important notifications issued by Government.



September, 2018



October, 2018



November, 2018



December, 2018



January, 2019



February, 2019



March, 2019



April, 2019



May, 2019



June, 2019



July, 2019

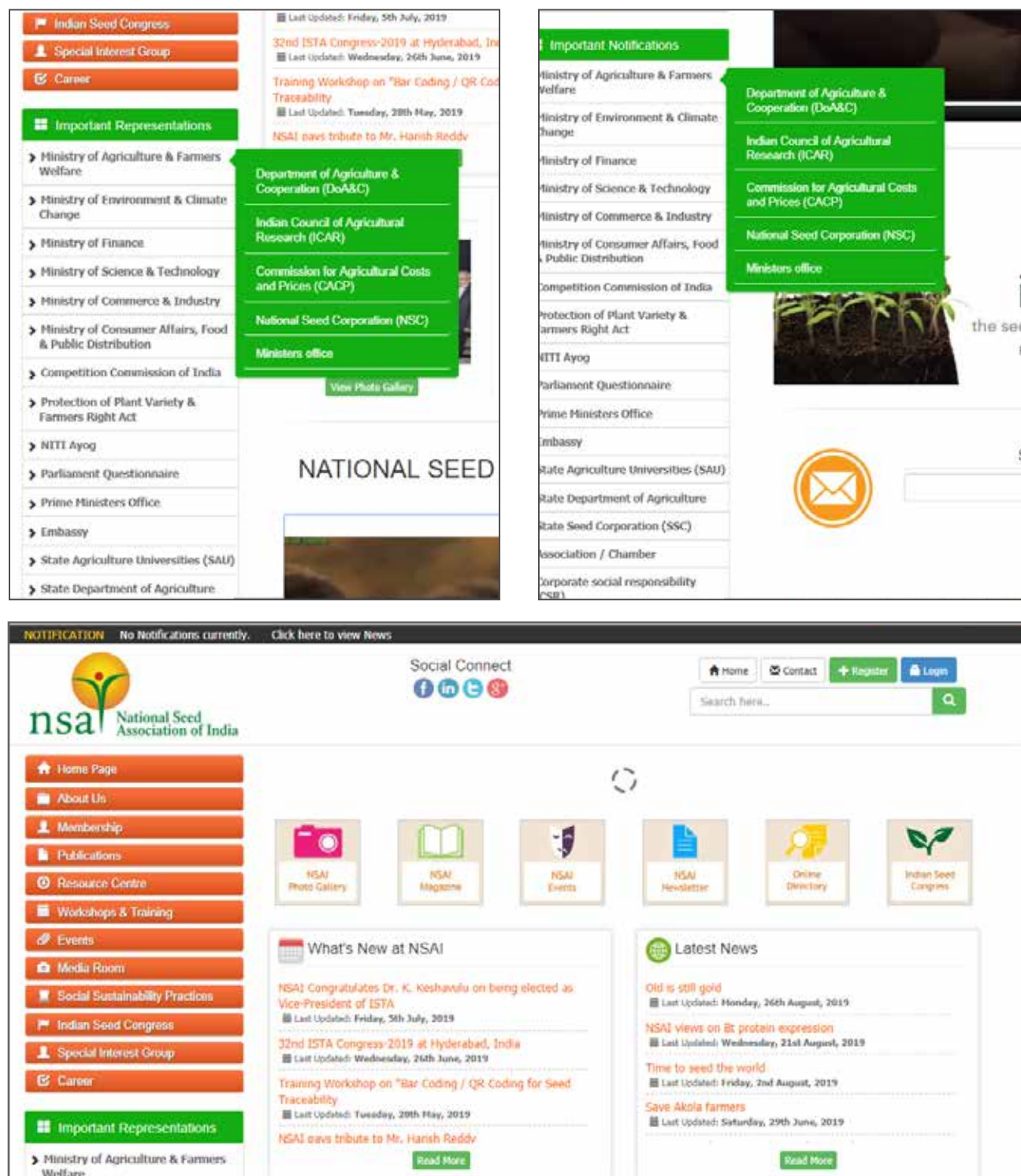


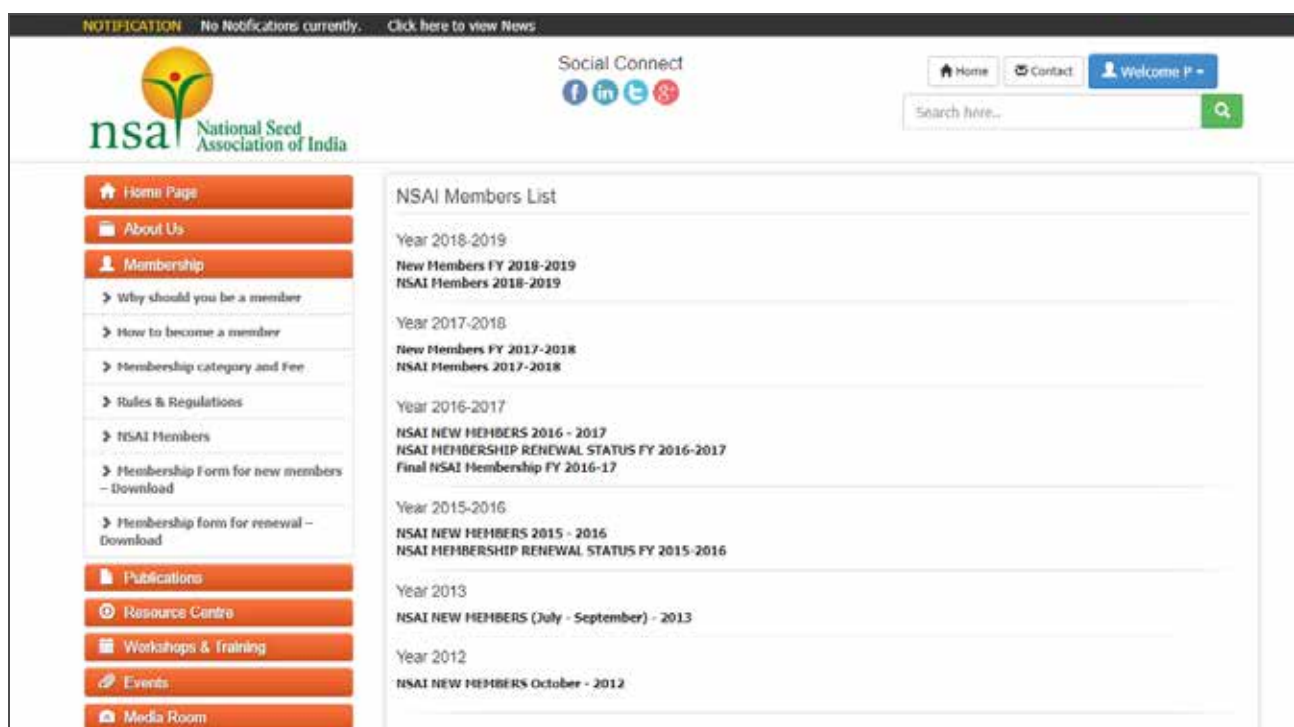
August, 2019



III. NSAI Website

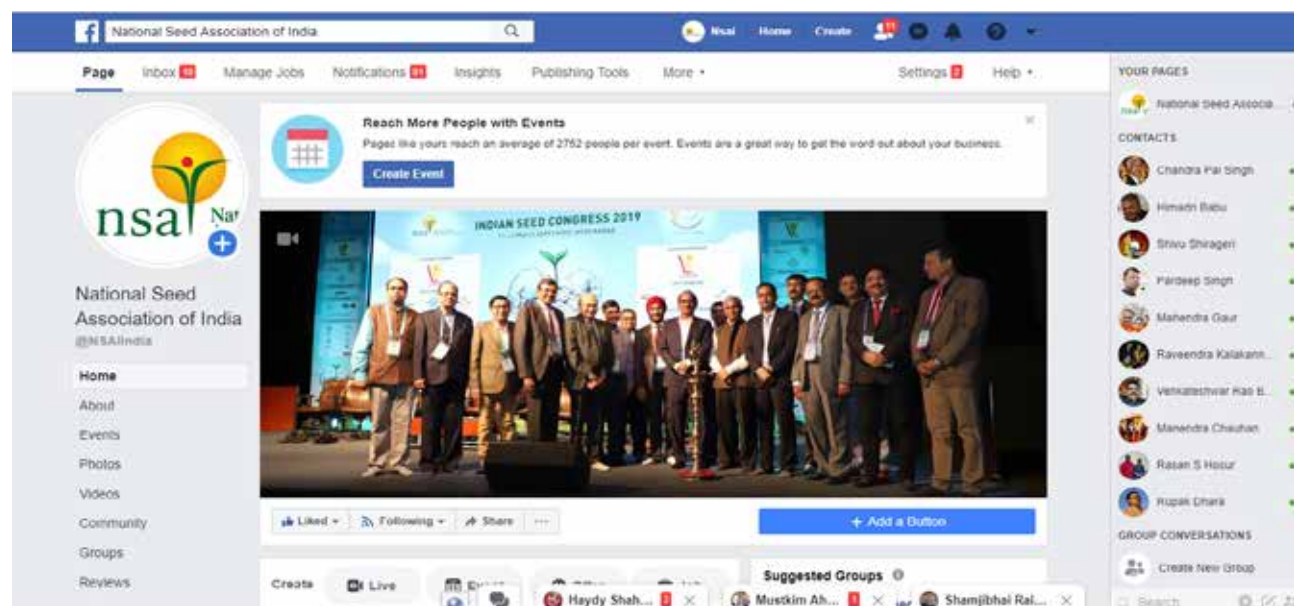
The NSAI website has become an important source of information for the members. The 'What's New at NSAI' section informs the members about the latest developments of the industry, workshops and conferences. The Website has a section on 'Important Representations', under this section each department are subcategorized with important notifications and circulars which are uploaded for benefiting members. The section on 'Important Notifications' places important notifications of Government. The 'Latest News' section informs members about the current updates of Indian Agriculture & Seed sector.

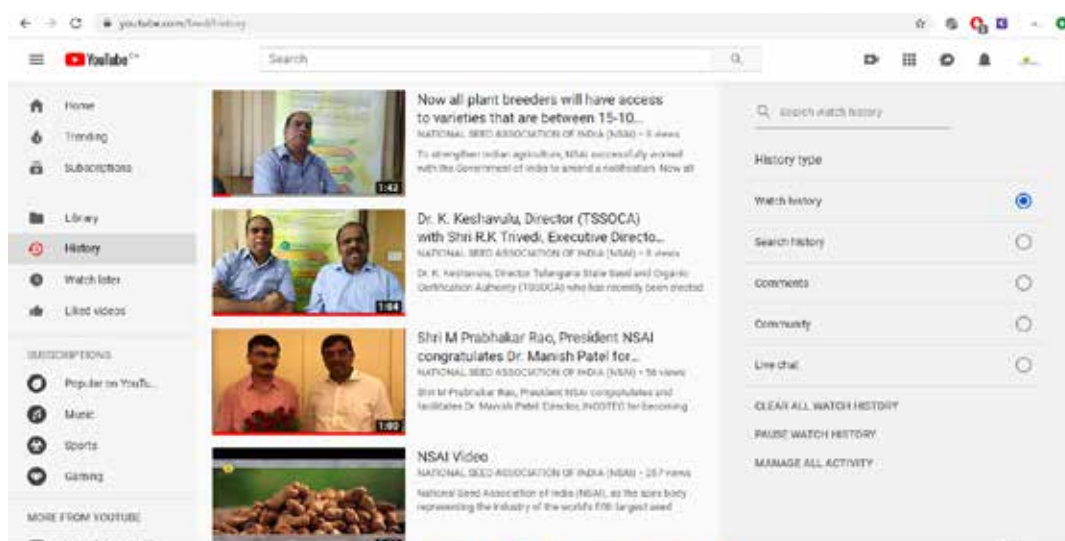
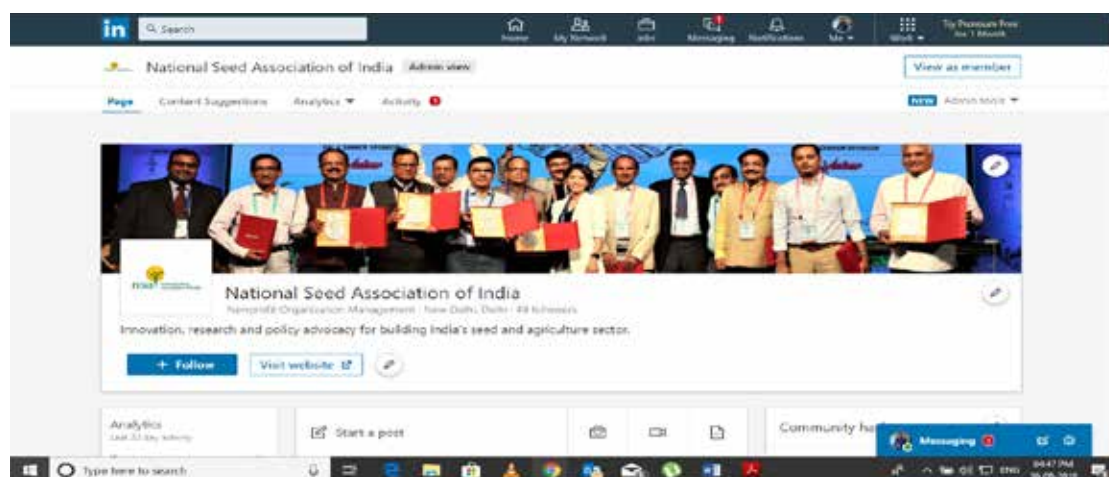
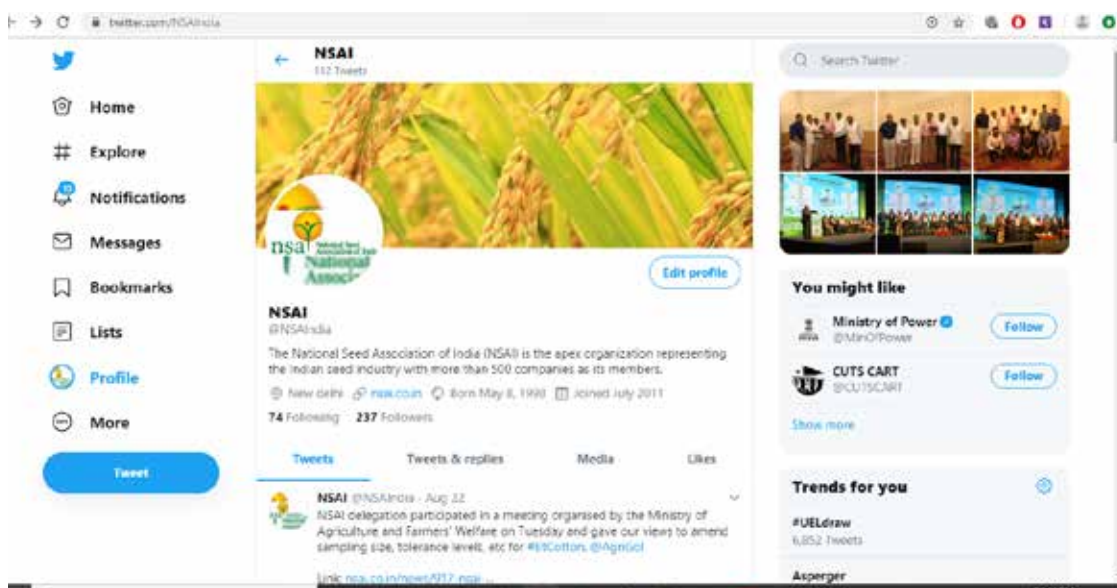




IV. NSAI Social Networking

NSAI is also maintaining Twitter and Facebook Accounts, Facebook Page, LinkedIn Page and YouTube Page for directly connecting with its members and information sharing as well.





V. Daily & Weekly Mailers

NSAI communicates with its members through daily and weekly mailers. We have a dedicated email id i.e. info@nsai.co.in for communicating to members about latest industry developments, important notifications etc.

D. NSAI Meetings

Meeting on “Implement the compulsory use of bar coding on seed packets / containers for traceability of the seed”

Venue: Krishi Bhawan, New Delhi

Date: 15th November 2018

Minutes: NSAI participated in a meeting held under the chairmanship of Ashwani Kumar, Joint Secretary (Seeds), regarding issue of “Implement the compulsory use of Bar coding on Seed packets / containers for traceability of the seed”.

It was informed in the meeting that presently due to absence of sound system of seed traceability, there are some challenges being faced by Seed Law Enforcement Agencies. These challenges are infiltration of counterfeit seeds into the supply chain; absences of unique and harmonized identification mechanism for seeds produced by the producers’ other than the certification labels, in order to enable tracking of seed in supply chain; lack of Central Seed Registry / Portal to track and authenticate seed packets & its quality. In absence of seed traceability mechanism, farmers (especially the small & marginal one) are highly impacted, as they have no means to confirm whether the seed bought is genuine. It was therefore proposed in the meeting to make system of Bar Code and / or QR code for seed traceability.

Barcodes are applied to products as a means of quick identification and Traceability is “ability to follow the movement of a product through specified stage(s) of production, processing and distribution”. Traceability and labelling are well-established, integral parts of seed production and marketing systems. They can serve to maintain product quality, capture value, inform the consumer and ensure the safety of agricultural products. Therefore, it was decided in the meeting that DAC&FW, Government of India will implement barcoding of the seed packets for the seed traceability as compulsory w.e.f July 2019.

Name of the attendees: Dr Deepanker Pandey

SAARC Seed Bank Board Meeting

Venue: Krishi Bhawan, New Delhi

Date: 17th January 2019





Minutes: National Seed Association of India, member of the ad hoc Committee of SAARC Seed Forum, attended the second meeting of the SAARC Seed Bank Board. The Meeting began with the welcome address by Mr. Sanjay Agarwal, Secretary (DAC & FW), Ministry of Agriculture and Farmers' Welfare of the Government of India.

Mr. Ashwani Kumar, Joint Secretary (Seeds), Ministry of Agriculture and Farmers' Welfare of the Government of India in his remarks mentioned that the establishment of SAARC Seed Bank is a momentous development in ensuring food security through seed security in the region, particularly addressing the adverse effect of natural and man-made calamities.

Shri Vijay Pal Singh Tomar, Hon'ble Member of Parliament attended the meeting as a Farmers' Representative in the Board emphasized that seeds were one of the most important and critical input in agriculture and welcomed the initiative of establishment of SAARC Seed Bank.

Ms. Ishrat Jahan, Director of the SAARC Secretariat and representative of the Secretary General of SAARC briefed the meeting of the genesis of the SAARC Seed Bank, which was established for recognizing the importance of attaining Seed Security as a means of ensuring Food Security and importance given to it by the SAARC Leaders. She also briefed on the formation of the SAARC Seed Bank Board and outcome of the First Meeting of the Board. The Board reviewed the progress made in implementation of the decisions taken at the First Meeting of the SAARC Seed Bank Board.

Member of the SAARC Seed Forum from India, Mr. R.K. Trivedi, Director, National Seed Association of India (NSAI) expressed their willingness to cooperate and collaborate with SAC to hold the Fourth Meeting of the SSF and to organize other activities of SSF.

Name of attendees: Mr R K Trivedi and Ms Neetu Thapliyal

Meeting on Seed Rolling Plan for Kharif 2021-22

Venue: Krishi Bhawan

Date: 18th March 2019

Minutes: The meeting was organised to review the State seed rolling plan for Kharif 2021 based on the Breeder Seed indent of agricultural crop varieties. NSAI represented the private seed industry in this meeting.

Name of attendees: Dr Deepanker Pandey & Mr Sher Singh

with Israel Embassy representative for NSAI- Mashav Collaboration

Venue: NSAI office

Date: 27th March 2019

Minutes: Mr. Vinod Mehta Israel Embassy- Agriculture from the Israel Embassy visited NSAI office at New Delhi. He invited NSAI for the meeting with Mr Dan Allouf, Head of Mashav in India in Israel Embassy for the NSAI- Mashav Collaboration and also proposed an Israeli garlic seeds company for NSAI membership.

Name of attendees: Mr R K Trivedi, Dr Deepanker Pandey & Ms Neetu Thapliyal

Meeting on Finalization of Breeder Seed Indent

Venue: Krishi Bhawan

Date: 28th March 2019

Minutes: A meeting was organised to finalize the Breeder seed indent for Kharif 2020 of agricultural crop varieties. NSAI represented the private seed industry in this meeting.

Name of attendees: Dr Deepanker Pandey & Mr Sher Singh

Brainstorming Meet: Potential of Berseem Seed Production

Venue: ICAR-IGFRI, Jhansi

Date: 29th March 2019



Minutes: A Brainstorming meeting on Potential of Berseem Seed Production at ICAR-Indian Grassland & Fodder Research Institute, Jhansi (U.P.) on 29 March 2019. This meeting was chaired by Shri Ashwani Kumar, Joint Secretary (Seeds) and co-chaired by Dr D K Yadava, ADG, (Seeds) and Dr V K Gaur, CMD-NSC. The aim of the meeting was to discuss and suggest strategies to reduce Berseem seed import and activate & revitalize Berseem seed production chain in India. The meeting deliberated upon the issues confronting the enhancement in the productivity and production of Berseem seed in the country.

This meeting also discussed about the various strategies to overcome these issues. This meeting was included discussion as well as field visit, farmer's field and showcasing of public sector varieties. This meeting was attended by various stakeholders including DACFW, ICAR, IGFRI, AICRP forage crops, NDDDB, NSC, Milk federations, NSAI's members (including Dr Deepanker Pandey-Assistant Director, Secretariat NSAI), NSA, Private seed growers, Progressive farmers, Seed importers, experts etc.

Name of attendees: Dr Deepanker Pandey

Meeting to resolve various issues raised by Seed Associations with JS (Seeds)

Venue: Room No. 142, Krishi Bhawan, New Delhi

Date: 1st April 2019

Minutes: A meeting was organised under the chairmanship of Joint Secretary (Seeds) to discuss and resolve the various pending issues pertaining to seed industry. The meeting was attended by the ADG(Seeds), representatives of State Seed Corporations, NSAI members and some other seed associations.



NSAI in its representation pointed out the various pending issues viz. uniform rules to carry seed business in all states as per Seeds (Control) Order, marketing of propriety hybrids, Bt cotton resistance to BGII, HT cotton, revalidation of certified seeds after the expiry of validity period, uniform subsidy for both public and private sector, etc. On the Bt cotton issue, NSAI requested that the government may clarify to all the states that the trait efficacy is a responsibility of the trait developer, as all seed lots of all seed companies are having susceptibility to PBW, which proves that this is not a seed quality related issue. Revalidation of certified seeds after the expiry of validity period was also discussed in the meeting. The Government had given the relaxation for revalidated period of certified seeds till the end of 2018 and also decided ICAR may conduct a study in this regard. NSAI requested that as this study may take 3-4 years, DAC&FW may take in to account the trial result of GSSCA conducted on this aspect and accordingly amend IMSCS and bring back the original procedure and implement the OM 18-17/88-SD-IV dated 28 April 1989.

NSAI again cleared its stand on the sale of HT cotton seeds and assured to keep extending the support to the government efforts. NSAI requested in the meeting for issuance of a clarification to distinguish between the illegal players willing fully spreading the HT cotton trait and genuine players whose few lots may be contaminated. The specifications for sample size, sampling procedure, testing procedure and tolerance levels for Bt cotton seed lots was also discussed in the meeting. NSAI appealed to revise the seed sample size and specify the tolerance levels for testing Bt cotton seed. Some of the issues mentioned in the meeting seek government immediate attention and action.

Name of attendees: Mr M Prabhakar Rao, Mr PP Zaveri, Mr R K Trivedi, Dr Deepanker Pandey and few NSAI members.

Science & Society: Annual India Symposium

Venue: Vigyan Bhawan, New Delhi

Date: 4th April 2019

Minutes: The NITI Aayog, The Office of the Principal Scientific Adviser to the Government of India, and The Lakshmi Mittal and Family South Asia Institute, Harvard University's Science & Society organised Annual India Symposium at Vigyan Bhawan, New Delhi. The symposium was organised to bring together academics, government, and industry leaders to illustrate the possibilities for scientific advancement. The Session 2 was focussed on Technological Advancements in Agriculture. The session addressed the new developments in genomics, genetics, next generation sequencing and gene editing, as well as the creation of a regulatory framework that helps marshal these new developments in the service of society were discussed.

Name of attendees: Ms Neetu Thapliyal

22th Annual Breeder Seed Review Meeting, 2019, Joint Annual Group Meeting 34th AGM, AICRP-National Seed Project (Crop) and 14th ARM, ICAR Seed

Venue: CCSHAU, Hisar

Date: 7-9th April 2019



Minutes: Annual Breeder Seed Review Meeting was held at CCSHAU, Hisar. Being a part of the system, we were invited for giving our valuable input, wherever required.

In continuation of that the Annual Group meet of (i) AICRP-NSP (Crops) and (ii) ICAR Seed Project was also held from afternoon of 7th April 2019 to till 9th April 2019. The meeting was chaired by Shri Trilochan Mohapatra, Secretary DARE & DG-ICAR, co-chaired by Shri Ashwani Kumar, Joint Secretary (Seeds) and Shri D K Yadava, ADG-Seeds. This meeting was attended by various participants including DACFW, ICAR institutions as well as AICRP centres, State Agriculture Universities, NSC and NSAI's Secretariat team.

Name of attendees: Mr R K Trivedi, Dr Deepanker Pandey and Ms Neetu Thapliyal.

Meeting with Principal Secretary and Director General- Agriculture, Govt of Haryana

Venue: Chandigarh & Panchkula, Haryana

Date: 8th April 2019

Minutes: NSAI secretariat had meeting with Principal Secretary and Director General- Agriculture, Govt of Haryana, and discussed the issue of compulsory Barcoded stickers on the Bt cotton Seed Packets.

Name of attendees: Mr R K Trivedi, Dr Deepanker Pandey & Ms Neetu Thapliyal



National consultation meeting on Seed Traceability- ICFA

Venue: India International Centre- New Delhi

Date: 10th April 2019

Minutes: The Indian Council of Food & Agriculture (ICFA) was organized a National Round Table conference on Seed Traceability to discuss MoA proposal for affixing a QR code or Bar code on every seed packet can be called as "Computerization of seed production and distribution records" to enable instant tracing of the production data for effective quality control for the welfare of the farmers and work towards developing a bar code which can reflect the actual quality of the seed, its value and its origin, to safeguard the interest of the farmers.

Traceability is the process of documenting the origin, production, participants and handling steps involved in production and management – is the basis for seed certification and attempts to ensure and guarantee the seed quality for the farmers. The labelling often fails to guide the farmers about the value (e.g. organic) or safety (e.g. biotech traits) or spurious nature of the seed being used.

The NSAI supports this endeavour of GOI and submitted NSAI views to ICFA.

Name of attendees: Mr R K Trivedi, Dr Deepanker Pandey & Ms Neetu Thapliyal

Expert committee meeting on Expression of Interests (EOI) bids for conducting DUS testing on outsourced basis-PPVFRA

Venue: NASC complex, New Delhi

Date: 22nd April 2019

Minutes: An expert committee meeting was organised on Expression of Interests for Outsourcing of the DUS centres at PPVFRA under the chairmanship of Dr J P Tandon, Ex ADG(FFC) at NASC complex, New Delhi. Dr. T K Nagarathna, Registrar, PPV&FRA & Member Secretary, welcomed all the members in the meeting. Currently there are around 120 DUS centres being maintained for 156 notified crops and the Authority has empanelled to SAUs and ICAR institutions for conducting DUS testing. She also pointed out some of the difficulties faced in getting appropriate cooperation from some of the DUS testing centres which has necessitated the need for outsourcing these tests.

NSAI gave its suggestions for development of format for outsourcing of DUS testing centres in the meeting. Director Technical- Mr R K Trivedi emphasised enrolment of private sector and giving equal opportunities to private sector enterprises in conducting the DUS trials. It was agreed to involve both public as well as private sector for outsourcing of DUS testing centres and invite EOI from all eligible establishments.

Name of attendees: Mr R K Trivedi & Ms Neetu Thapliyal

Conference on Agriculture Extension- FICCI

Venue: FICCI, Federation House, New Delhi

Date: 23rd April 2019

Minutes: A Conference on Agriculture Extension organized by FICCI with a view to identify key challenges and constraints in reviving a robust extension system. The objective of the conference was to bring together Agri experts, Private sector representatives, Policy makers and Agri institutions to deliberate upon the bottlenecks and challenges in the sector and suggest ways to address it.

Name of attendees: Mr R K Trivedi, Dr Deepanker Pandey & Ms Neetu Thapliyal

Breakfast Seminar on “Genome Editing and Global Governance” at RIS

Venue: RIS, New Delhi

Date: 30th April 2019

Minutes: A Breakfast Seminar on “Genome Editing and Global Governance”, was organised by Department of Biotechnology (DBT), Ministry of Science and Technology at 08.30 a.m. on Tuesday, 30 April 2019 at G. Parthasarathi Hall, RIS. Amb. Bhaskar Balakrishnan, Science Diplomacy Fellow, RIS. The seminar was chaired by Dr. S R Rao, Adviser, Department of Biotechnology (DBT) and Dr. Anurag Agrawal, Director, CSIR Institute of Genomics and Integrative Biology was also present as the Lead Discussant.

In the meeting, various socio-economic, ethical and safety issues associated with the nanotechnology-biotechnology-information technology and cognitive (NBIC) technologies such as genome editing and synthetic biology were discussed.

Name of attendees: Ms Neetu Thapliyal

Meeting for display of goods in Thessaloniki International Fair (Greece)

Venue: Krishi Bhawan

Date: 1st May 2019

Minutes: A meeting was organised with the representatives of various seed association at Krishi Bhawan to discuss the issues in display of good seeds in 84th Thessaloniki international fair.

Name of attendees: Mr R K Trivedi

Meeting for National Genomics and Genotyping Facility Launch- NIPGR

Venue: NIPGR -New Delhi

Date: 4th May 2019



Minutes: The National Seed Association of India (NSAI) attended the launch of the National Genomics and Genotyping Facility, (NGGF) at the National Institute of Plant Genome Research, (NIPGR) New Delhi on 4 May, 2019. The National Genomics and Genotyping Facility (NGGF) was inaugurated by Dr Renu Swarup, Secretary, Department



of Biotechnology, Government of India. The platform would be supported by a State-of-art Bioinformatics facility. The event was also graced by the presence of dignitaries Dr. Ramesh V. Sonti, Director, NIPGR, Dr. S. R. Rao, Senior Adviser, DBT, Dr. Deepak Pental, Chairman DBT TEC on Agricultural Biotechnology Dr. Sanjay Kalia, Scientist E, DBT and Dr. Sabhyata Bhatia, Staff Scientist VII, NIPGR, researchers, policy makers and representatives of seed industry.

This facility would be established in Public Private Partnership and would serve as a “Single-window service system” providing advanced genomics-based solutions to the custom research stakeholders of Agriculture Biotechnology. Stakeholders encompass government and academic labs and industries. The major objective of this facility is to fast-track development of improved varieties using genomics assisted breeding. This would be done by providing access to new and improved genomic tools to breeders in public and private sectors along with consultancy and advice on choice of appropriate technologies, study design and data analysis. Additionally, this platform would act as a nodal centre for DNA fingerprinting of lines and varieties for certification purpose in coordination with Plant Variety Protection Authority.

Name of attendees: Mr R K Trivedi, Dr Deepanker Pandey & Ms Neetu Thapliyal

National Conference on “Uniformity in Seed Certification and Seed Testing”

Venue: NASC complex, New Delhi

Date: 7- 8th June 2019



Minutes: The Govt. of India, Ministry of Agriculture & Farmers Welfare, Department of Agriculture, Cooperation & Farmers Welfare, Krishi Bhawan, New Delhi organized a two-day National Conference on “Uniformity in Seed Certification and Seed Testing” from 7th – 8th June 2019 at NASC complex, New Delhi. The meeting was held under the Chairmanship of Joint Secretary (Seeds), MoA, DAC&FW, Shree Ashwani Kumar at NASC, New Delhi.

Dr S K Malhotra, Agriculture Commissioner, Ms. Dolly Chakrabarty, Additional Secretary, Dr VK Gaur, CMD, National Seed Corporation, Dr D K Yadava, ADG(ICAR), representatives of Seed Certification Agencies and Seed Testing laboratories of various states and representatives of Seed Associations took active part in the deliberations.

Dr V K Gaur, CMD, NSC, New Delhi on first day briefly described the issues faced by the seed sector and the pathway for the uniform system of seed certification via the uniform registration number of the grower, necessity of GOT and ODV, uniformity in the seed sampling and seed certification charges, development of guidelines for the certification of enhanced seed, necessity of timely-result by the Seed Certification Agency and revalidation of certified seeds for some crops. The presentations were also made by various States viz. U.P., A.P., Gujarat, Maharashtra, Tamil Nadu, Uttarakhand

and Odisha. The representatives of state highlighted the status of seed certification system in their respective states. In some states the seed certification and testing system is online which has resulted in the timely completion of work, with high precision and less error. The other issues highlighted were ODV standard revision for some crops in the text and annexure, uniform administration setup in SCAs all over India, Thrashing Certificate, uniform guidelines of seed testing etc. In the afternoon session, discussion was held with the States on “Seed Control Order: Status and Changes Required”. The representatives of states such as AP underlined the various points in the Seed Control Order to be reframed according to the present need. Also, it was mentioned license could be issued at different levels (3 levels) based on the individual’s work i.e. selling, import or growing the seeds. GS1 India representative, Mr Ankit Arora presented on the implementation on Bar coding in seed. He touched on the bar-coding standards and necessity of bar coding in the sector.

The next day 8th June 2019, the morning session began with the deliberation by Dr. Arvind Singh, Director NSRTC on Seed Testing Status- Strength and Weakness. The Representatives of States touched upon various developments that had taken place in seed testing in India. They stressed the need of establishment of DNA laboratory at every state seed testing laboratory. They also underlined the precise seed evaluation must be there, the variation in the CSTL and other state must not be too big, the online system must be followed to bring transparency in the system and the ODV standards of some crops that need to be revised. The issues and stand of the private sector on the seed certification and seed testing system was discussed by the representatives of seed associations. Mr R K Trivedi, Executive Director NSAI touched on the current need of ISTA notified laboratories in every state in India. He also stressed upon the revised manual with the uniform guidelines for all the states and a forum of SCAs so that such meetings could be organised more frequently.

The session was concluded by the Sh. Ashwani Kumar, Joint Secretary (Seeds), Dr. S. K. Malhotra, Agriculture Commissioner and Additional Secretary, Ms. Dolly Chakrabarty. They welcomed the suggestions given by the representatives of States & Associations and emphasized on the need of active participation from the states to reach the goal.

Name of attendees: Mr R K Trivedi, Dr Deepanker Pandey & Ms Neetu Thapliyal

Meeting to discuss Pending Issues of Seed Industry

Venue: Krishi Bhawan

Date: 7th June 2019

Minutes: Pending issues of Seed Industry were discussed with Secretary (Agriculture), MoAF, Gol. He gave assurance that he will resolve all the pending issues with DACFW as soon as possible.

Name of attendees: Mr M Prabhakar Rao, Mr R K Trivedi, Dr Deepanker Pandey and some NSAI members

Meeting for the follow up of the Pending issues

Venue: CR 142, Krishi Bhawan

Date: 10th June 2019

Meeting was held with Agriculture commissioner, Sri S K Malhotra for technical discussion and follow up on the pending issues of Seed Industry.

Name of attendees: Mr R K Trivedi & Dr Deepanker Pandey



Brainstorming meeting on “Translational Genomics for Pulses & Oilseeds Agriculture”

Venue: NASC complex

Date: 2nd July 2019

Minutes: To develop a road map starting from demand, development, adoption and promotion of improved varieties, a brainstorming session on Translational Genomics for Pulses & Oilseeds Agriculture dealing with partners from public and private sector was organised by ICRISAT on July 2, 2019.

Among the participants of the brainstorming was Directors of several institutes -Indian Institute of Pulses Research (IIPR), Directorate of Groundnut Research (DGR), Indian Institute of Soybean Research (IISR), Directorate of Rapeseed Mustard Research (DRMR), National Institute of Plant Genome Research (NIPGR) and Research Directors of several companies such as BioSeed, Ruchi Seeds, Basant Agro Tech, MARS Wrigley and other senior researchers.

Name of attendees: Mr R K Trivedi & Mr Indra Shekhar Singh

Meeting for follow up on the pending issues

Venue: Krishi Bhawan

Date: 2nd July 2019

Minutes: Meeting was held with the Assistant Commissioner, (QC) to take follow up on pending issues of the seed industry. It was informed that the minutes of the committee meeting were still under process.

Name of attendees: Ms Neetu Thapliyal

Meeting to discuss issues in Potato Seed Production

Venue: Krishi Bhawan

Date: 4th July 2019

Minutes: A meeting was organised on 4th July 2019 among various stake holders and government to discuss various issues related to Potato Seed Production. In the meeting, ICAR-CPRI gave the detailed information about the current status of Potato seed production and challenges through their presentation.

Name of attendees: Dr Deepanker Pandey

Meeting on State seed rolling plan for Rabi 2021-22.

Venue: Krishi Bhawan

Date: 8th July 2019

Minutes: A meeting was held on 8th July 2019 to review the State Seed rolling plan for Rabi 2021-22 of agricultural crop varieties. In the meeting, discussion on varietal replacement and popularization of new varieties and biofortified varieties.

NSAI suggested that there should be local cluster farm demonstrations of new variety for farmers and private seed company. All the description of new variety (in detail) should be available at specific portal. NSAI can also circulate new variety list to those members who are indenting breeder seed through NSAI.

Name of attendees: Dr Deepanker Pandey & Mr Indra Shekhar Singh

Meeting on Discussion & Finalization of Breeder Seed Indent of NSAI for Rabi 2020-21

Venue: Krishi Bhawan

Date: 13th August 2019

Minutes: A meeting was held to discuss and finalize Breeder Seed Indent of NSAI for Rabi 2020-21 under the chairmanship of JS(Seeds). ADG(Seeds), ICAR, Joint Director (Seeds) and Assistant Commissioner (Seeds) were also present in the meeting. It was discussed in the meeting to replace the old varieties with the new varieties released. NSAI agreed to the fact that replacement of old varieties is necessary however it was requested that those varieties which have higher demand, do not have replacement variety for that region and less than 15 years old (after 2005) should be considered for allotment.

Name of attendees: Mr R K Trivedi, Mr Sher Singh and Ms Neetu Thapliyal

Meeting of National Task Force (NTF) on OECD Seed Schemes

Venue: Aurangabad

Date: 16th Aug 2019

Minutes: Fifth meeting of the National Task Force (NTF) on OECD Seeds Scheme was held on 16th Aug 2019 at Aurangabad.

Key Points for OECD meeting

1. Formation of export council under ministry of agriculture for exports of seeds with inclusion of NSAI and Indian seed companies as we are stakeholders in the process.
2. Indian varieties of crops should be part of economic diplomacy with OECD countries. India seeds should be given as aid.
3. Indian embassies in countries may facilitate seed trade by identifying potential markets and encourage seed trade within African and Asian countries.
4. NBA should draft special provisions for export of seeds and importing of germplasm for seed breeding for these countries.
5. Single window quarantine through one agency for exports/import of seeds.
6. Special focus on African signatories like Egypt as destination for seed export.
7. NSAI can jointly develop research papers on export in partnership with the agriculture ministry.
8. Ministry may have NSAI as knowledge partners to provide technical support for a social media campaigns for spreading information on policy, schemes, export/import procedures.
9. NSAI will prepare export proposal for SAARC countries.

Name of the attendees: Mr Indra Shekhar Singh



Expert Committee Meeting for Inviting Expression of Interest (EOI) bids for conducting DUS testing on outsource basis

Venue: NASC complex, New Delhi

Date: 19th August 2019

Minutes: PPVFRA conducted third Expert committee meeting for Inviting Expression of Interest (EOI) bids for conducting DUS testing on outsource basis. The meeting was held under the chairmanship of Dr J P Tandon, Ex ADG(FFC) at NASC complex, New Delhi. Dr T K Nagarathna, Registrar, PPVFRA & member secretary welcomed the chairman and all the members to the meeting and discussed the minutes of the previous meeting.

Dr K V Prabhu, Chairperson, PPVFRA welcomed the members present in the meeting and explained the need of outsourcing of DUS centres. He further explained that to avoid any conflict of interest only those organisations (public or private) which are not involved in breeding activities should be eligible for the bid for conducting DUS trials. The members present in the meeting gave their suggestions on the Performa and eligibility criteria to bid for DUS trials.

Name of the attendees: Mr R K Trivedi and Ms Neetu Thapliyal

Meeting on various issues related to expression of protein in Bt Cotton, testing protocol including sampling of Bt Cotton seeds and HT cotton

Venue: Krishi Bhawan

Date: 20th August 2019

Minutes: A meeting under the chairmanship of Joint Secretary (Seeds), DAC&FW at 11.00 AM on 20th August, 2019 in committee room no. 138, Krishi Bhawan, New Delhi was organised on to discuss various issues related to expression of protein in Bt Cotton, testing protocol including sampling of Bt Cotton seeds and HT cotton. NSAI represented its views on the existing sampling size and tolerance levels of the Bt cotton. NSAI requested the DAC&FW the following points for consideration:

- Comparative evaluations of various quantitative ELISA protocols and calibration methodologies as provided by various reputed ELISA suppliers.
- Based on the rationale for the correction factor and increase in OD/absorbance values provided by the present kit suppliers, CICR may consult other national referral laboratories on protein diagnostics to finalize the ELISA protocol and the correction factors as per process.
- The number of seeds tested is too small to accurate results and there is need to enhance the sample size and the seed number i.e. minimum number of seeds to be tested should be atleast 400 suggested to obtain statistically accurate results.
- There is also a need for developing tolerance tables in line with the Seed inspector manual which prescribed the tolerance limit for germination and genetic purity etc.

Name of attendees: Mr M Prabhakar Rao, Mr R K Trivedi, Mr Indra Shekhar Singh, Dr Deepanker Pandey and Ms Neetu Thapliyal

Preparatory meeting with the stakeholders under Indo-German bilateral cooperation on seed development

Venue: Krishi Bhawan

Date: 21st Aug 2019

Minutes: A preparatory meeting with the stakeholders under Indo-German bilateral cooperation on seed development was held under the chairmanship of JS(Seeds) on 21 Aug 2019 at 3:00 PM in R no 138, Krishi Bhawan, New Delhi. In the meeting representatives of the national level partners in the project i.e. DAC&FW, PPV&FRA, NBPGR and NSAI and state level public organisations were invited to give their suggestions for the next phase of the project with duration of 2019-2022.

Name of attendees: Mr R K Trivedi and Ms Neetu Thapliyal

Meeting of Stakeholders of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) issues

Venue: Krishi Bhawan

Date: 23rd Aug 2019

Minutes: Meeting of the stakeholders of the ITPGRFA was held under the chairmanship of JS(Seeds) on 23rd Aug 2019.

Key discussion from the meeting

1. Ministry of Agriculture will form an expert committee to work on GB8 of ITPGRFA
2. NSAI along with FSII will be given observer status for the global meetings. NSAI has to nominate one member for the expert group.
3. Next meeting to be held on September 9th. NSAI has to give suggestions on documents of GB8 of ITPGRFA.
4. JS proposed that NSAI and FSII host a dinner each for the Asia regional conference to be held in New Delhi 8-10 October 2019.
5. Four members from NSAI to participate in this meeting.
6. 11-16 November is the GB meeting in Rome. NSAI should be part of government delegation as observer.
7. Three themes of discussion are - Revision of SMTA
 - Expansion of coverage (what species to be included)
 - Dematerialised use of PGR

Name of attendees: Mr Indra Shekhar Singh



E. Events/Conferences/Workshops

Indian Seed Congress 2019



The ninth edition of Indian Seed Congress - "Indian Seed Congress 2019" was organised in Hyderabad, on 11th – 12th March 2019 at HICC, Novotel, Hyderabad. The event witnessed participation of more than 600 important national and international delegates from 16 countries. In the ISC 2019, important addresses were from policy makers, industry leaders, scientists and techno-legal professionals.

On 10th March 2019, the CEO Conclave was organised. Over the years CEO conclave has been viewed by industry leaders as a platform for strengthening industry voice and exchange of new ideas for renewed vigour among industry leaders. The CEO Conclave was attended by 45 Business leaders. The conclave saw address by eminent personalities like Vinesh Sukumaran, Santhosh Babu and Priya Kumar.

ISC 2019 was formally announced open for all participating delegates on 11th March 2019, The event was inaugurated by Dr Praveen Rao, Vice Chancellor, PJTSAU, Dr K.V. Prabhu, Chairman, Protection of Plant Varieties and Farmers Rights Authority (PPVFRA), Government of India, Dr Kuldeep Singh, Director, National Bureau of Plant Genetic Resources (NBPGR), Dr V.K. Gaur, Chairman and Managing Director, National Seed Corporation (NSC), along with National Organizing Committee (NOC) of NSAI comprising Shri M. Prabhakar Rao, President, NSAI, CMD Nuziveedu Seeds and Chairman-NOC, Shri Ch. Bhaskar Rao, CMD Kaveri Seeds and Hon. Chairman NOC, Dr Manish Patel, Convener, NOC, Shri Sameer Mulay, Vice President NSAI and CMD, Ajeet Seeds, Shri NP Patel, MD Western Agri Seeds, Seeds India, Shri K. Niranjana Kumar, GARC Seeds Pvt Ltd, Shri Janak Peshrana, Shri Vaibhav Kashikar, Director, Ankur seeds, Shri Pawan Kumar Kansal, CMD, Kohinoor Seeds, Shri Arun Kumar Agarwalla, West Bengal Hybrid Seeds & Biotech Pvt. Ltd, Shri Ashwani Kumar Garg, Super Seeds Pvt Ltd, Shri Kamal O Zunzunwala, Safal Seeds & Biotech Ltd, Shri K Narayanswamy, Karnataka Maize Development Association and Shri RK Trivedi and Director (Technical), NSAI.

President NSAI Shri M Prabhakar Rao in his welcome address credited positive growth of the seed industry to the "healthy trend of farmers choosing quality seeds produced by the organised sector." Seed quality plays an important role in ensuring the proper crop stand and yield to the farmers. He also emphasized for the strengthening of R & D sector and uniformity of regulatory provisions all across the country.

Shri G V Bhaskar Rao, Honorary chairman, NOC, NSAI mentioned the need of public and private partnership for the growth of the industry. He also requested for the cooperation & encouragement from the government for the betterment of the industry and well as agriculture growth. He also praised Telangana government for their farmer friendly policies and suggested the other states may follow the same.

Dr PP Zaveri, GS, NSAI in his speech emphasised on the role of SMEs in agriculture and requested the government for solving issues concerning to SMEs. Dr Manish Patel, Convenor ISC in his speech welcomed all the dignitaries present on the Dias and also, explained about the importance of the Indian seed congress (ISC) as an excellent congregation of seed industry professionals across the country.

Dr Praveen Rao, VC, PTJSAU, Special Guest in his address said with the changing scenario and climatic conditions industry needs to shift its focus and change its strategy. The importance of increasing the SRR, adoption of new technology and the availability of quality seeds to farmers was mentioned is a top priority.





After the formal inauguration of ISC 2019, exhibition and trading tables were formally inaugurated by the NOC of ISC 2019 and Dignitaries. Several seed companies, equipment manufacturing companies, seed processing companies, seed treatment chemical companies had put their stalls in the exhibition area and also b2b Trading tables.

Technical Sessions

The technical sessions were the most educative and learning part of ISC which covered the topics on various important subjects relevant to the seed industry. In the technical sessions of ISC 2019 world renowned scientists had made presentations. Dr Bruce Tabashnik, Head & Professor Entomology, University of Arizona, Tucson delivered his talk on the Insect Resistance Management of Pink Bollworm on Bt cotton in India. The topic of his talk was "Lessons from global patterns of resistance to Bt crops for managing pink bollworm in India". In his lecture, he concluded that to control the Pink bollworm (PBW) damage IPM Strategy can be followed. IPM strategy includes shortening of crop cycle, deep summer ploughing, destruction of crop residues, crop rotation, field scouting, use of refuge crop, mass release of sterile insects, use of mating disruption technologies and chemical spraying at threshold level. Dr Pawel Wiatrak, Cytozyme Laboratories emphasized on the use of bio-stimulants and bio-inoculants as a part of integrated crop management. Dr Rajeev Varshney, ICRISAT explained how genome sequencing, genomics assisted breeding and Gene editing are the new innovation landscape for seed industry in the next decade.

Other renowned scientists who delivered the lecture in ISC included Dr Kuldeep Singh, Director-National Bureau of Plant Genetic Resources; Mr. Ashish Bahuguna, Ex Secy Agriculture, Govt of India; Dr. B.M Prasanna, Director (Global Maize program), CIMMYT; Dr K. Keshavulu, Director, Telangana State Seed & Organic Certification Authority, Hyderabad & Executive member ISTA; Dr. Rashmi Yadav, Principal Scientist, Division of Germplasm Evaluation, NBPGR; Dr. Pradyumna Raj Pandey Senior Program Specialist (Crops), SAARC Agriculture Centre, Dhaka and many more.

Secretary Agriculture, Govt of India Shri Sanjay Aggarwal and Shri Ashwani Kumar Joint Secretary (Seeds) were the honourable guest in the valedictory session on 12th march 2019.











M Prabhakar Rao while addressing the audience in the valedictory sessions highlighted the key issues faced by the industry. He pointed out that state regulations of the seed businesses are not in harmony across the country. Presence of an organised seed sector is beneficial to the farmers as it enhances quality seed availability and reduces scope for illegal operators. Regulatory bodies such as the PPVFRA, BDA and the GEAC (Genetic Engineering Approval Committee) need to adopt procedures and processes in line with the legislative provisions.

Shri Ashwani Kumar, Joint Secretary (Seeds), during his address in the session emphasised that the government will try to ease out the seed business in the country by taking remedial measures.

While delivering the address Shri Sanjay Aggarwal, Secretary, DACFW, Government of India said that the private seed sector is the mainstay of the industry. He further assured that government is keen to build an organised sector and their all problems will be resolved by the central government soon.

During the valedictory session, NSAI awarded a certificate to the Telangana State Seed and Organic Certification Authority (TSSOCA) as a model Seed Certification Authority in India. The certificate of appreciation was given to TSSOCA by Agriculture Production Commissioner of Telangana and Principal Secretary C. Parthasarathi by the hand of Union Agriculture Secretary Sanjay Agarwal. This recognition was given to "TSSOCA" and Dr. Keshavulu for contribution in supporting and strengthening of seed industry through national and international seed certification systems and also for creating awareness about seed certification among the seed industry, farmers and policy makers."

Entertainment Program and Felicitation

The event was followed by cultural evening, during the event Welcome dinner and Gala Dinner were also organised. The Sponsors of the event were felicitated for their support to the event. The Sponsors of the event were Platinum Sponsor – Lorven Flex and Sack India Pvt. Ltd., Gold Sponsor - Agro Star, Kaveri Seed Company Limited, Nuziveedu Seeds Ltd. Gala Dinner Sponsor - Ankur Seeds Pvt. Ltd., Silver Sponsors - ANSEME S.p.A, Ajeet Seeds Pvt. Ltd., Reliance Automation Solutions, Bronze Sponsors - Meenakshi Agro Chemicals, Incotec India Pvt. Ltd., Vriksha Agro Ventures, Swarup Chemicals Pvt. Ltd., Super Seeds (P) Ltd., Tierra Agrotech Pvt. Ltd., Novo Gold Seeds Pvt. Ltd., Western Agri Seeds Ltd., Classic Hybrid Seeds Pvt. Ltd., Gubba Cold Storage. Lunch Sponsors- Kohinoor Seed Fields India Pvt. Ltd., Indo-American Hybrid Seeds I Pvt Ltd., Hi-Tea Sponsors - Cytozyme Laboratories Inc., Intertek India Pvt. Ltd., Safal Seeds & Biotech Ltd., Green Gold Seeds Pvt. Ltd.







Glimpses of Indian Seed Congress











NSAI Training Workshop on Barcoding/ QR Coding for Seed Traceability

Report

National Seed Association of India organised a training workshop on **Barcoding/ QR coding for Seed Traceability** on 28 May 2019 at The Metropolitan Hotel, New Delhi. More than 65 representatives from more than 50 seed companies have participated in the event. The event was inaugurated by Joint Secretary (Seeds), DACFW, MoA, Government of India.

Mr R K Trivedi, Executive Director, NSAI in his introductory speech welcomed the dignitaries and explained the idea and need for organising the workshop. He asserted that NSAI supports the Government of India efforts in ensuring the quality of seeds being supplied to farmers and will continue to organise such trainings in future to prepare the seed industry for the new system of Barcoding of seed packets. In the welcome speech, Mr Pawan Kumar Kansal, Treasurer NSAI welcomed all the participants, dignitaries and raised the concerns of the Small and Medium seed companies for applying the barcoding on seed packets. Mr Ashwani Kumar Garg, GC member, NSAI highlighted some issues of industry especially the issue of sale of Bt cotton seed in Punjab State and breeder seed supplied by ICAR/ SAUs.

While addressing the participants, the Chief Guest Sh. Ashwani Kumar, Joint Secretary (Seeds), DACFW, MoA, Government of India appreciated NSAI efforts to organise such a training workshop at industry level. He mentioned that Government will issue the order for Barcoding on seed packets in a holistic manner to assure supply of quality seeds to the farmers. He said government will start implementation of the system from July 2019 however as far as SMEs are concerned, it may be launched in a phased manner so that SMEs may get some time to prepare for the new system. The government may give the time upto March 2020 for the SMEs. Also, the government is working on a 4-tier system for barcoding i.e. at farmers/growers' level, company's level, registration and the retailer end. On the issue of "revalidation of certified seeds" which is also a big concern of seed industry, he said as this is a complex issue, the government is waiting for the ICAR results which may take 2-3 years. However, if seed companies have details of the seed lot information for revalidation of seed, they may share with the ministry to hasten the process. The inauguration session was ended by the vote of thanks proposed by Dr Deepanker Pandey, Assistant Director, NSAI.

In the training workshop resource persons from the leading Technical Companies such as GS1 India, Bar Code India Limited, Tata Consultancy Services Ltd and Nuziveedu Seeds Ltd were present. Each resource person gave the detailed information about the barcoding system and explained how the companies could provide them end to end solution.

The first presentation on "Basics of Barcoding: Introduction to the concept and Registration" was presented by Mr Ravinder Singh Negi, GS1 India. He explained in detail the concept and need of traceability by barcoding and the GS1 standards for barcoding. He introduced the participants with the Web Interface- Data Kart and described each step from creation of the product, location to creation of barcode labels using the interface.

Next presentation was given by Mr Inderjeet Kakkar, BCIL who explained the MobiVUE® - 4.0 Agri Industry Solution as a Seeds Supply Chain Process Automation Solution from Farm to End Consumer. He also explained that by deploying the BCIL Seed Portal one can connect each identity in the supply chain and track LOT / Batch, seed inventory and health condition at each stage.

In the afternoon session, Mr Aditya Tiwari and Mr Siddhesh Nar from Digital farming Initiatives, TCS presented the topic "Real time visibility from production to the point of sale and beyond" and explained how TCS Digital Farming Initiatives is ICT enabling the agri-input/output supply-chain.

Mr Dilip, IT head, Nuziveedu Seeds Ltd later presented the Practical Aspects of Barcoding of Seed Packets. During his presentation he described the industry process of QR Code labeling of the primary & secondary package. He showed that barcoding seed SKUs augments many additional benefits.

The queries of the participants were well taken up by the resource person and the practical solutions were given. The training workshop was concluded at the end by Mr R K Trivedi, Executive Director, NSAI with the remarks that the seed companies should always be ready to adopt the new technology & innovation for augmenting their seed business and the seed quality that includes barcoding which is a well-tested system and also being using by many agri and non-agri sectors successfully.





F. Seed Industry Issues

The National Seed Association of India (NSAI) is the leading industry association of Indian seed industry, which has been working relentlessly on various issues affecting Breeders, Researchers, Seed producers, marketers and more importantly farmers since its inception in 2006. The Indian seed industry is among the most vibrant sector within agribusiness and is poised to grow rapidly in the next decade. However, such growth is possible in a conducive business environment and supporting regulatory framework.

NSAI has been consistently working towards development of enabling business environment and regulatory system for smooth functioning of the seed industry to deliver best quality seeds of improved plant varieties for meeting the end objective of improved profitability to farmers. The details of the issues represented by NSAI to concerned authorities for resolution are described as follows:

1. Issues related to Genetically Modified Crop (Bt & Ht cotton)

Issue 1.1 Specifications for sample size, sampling procedure, testing procedure and tolerance levels for Bt cotton seed lots

In order to regulate the quality of seeds being sold to the farmers, the Government of India enacted the Seeds Act, 1966 and made the Seeds Rule 1968 and specified the seed quality standards thereunder. Further, the Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India also brought out three important seed publications i.e. (i) Seed Testing Manual (1967), (ii) "Handbook of Seed Testing" (1993) and (iii) "A Handbook for Seed Inspectors" to regulate the quality of seeds being sold in the market. The above three publications mainly focus on the importance of seed testing and seed sampling. They emphasize that the accuracy of seed testing result is mainly dependent on how precisely the seed sample has been drawn which should be a true representative of the seed lot. The other important factor which affects seed testing results are tolerance levels for accepting variations in results. There are five sources of variations. These are: (i) bag to bag variation, (ii) in-bag variation, (iii) working sample variation, (iv) among analysts variation and (v) in-analyst variation.

The Handbook for Seed Inspectors also emphasizes the importance of Seed Sampling and specifies the submitted sample size and also the use of tolerance Levels. The Sample Size is also very important for accuracy of the result and tolerance levels have been specified based on the sample size. There is significant negative correlation between size of the sample and variation in analytical results. Lower the sample size, greater the variation in the analytical results and hence the greater tolerance level is specified for the smaller sample size. For instance, in case of 75% specified germination standard, the tolerances given are: 4 for 800 seeds, 6 for 400 seeds and 9 for 200 seeds in all the above three manuals. It is pertinent to mention that sample size and tolerances are specified for all the quality parameters.

Bt cotton with first generation trait was commercialized in 2002 and the second generation was commercialized in 2006. The Submitted Sample Size and the Working Sample Size were specified under rule 33 of the Seeds Rules, 1968 as 25g and 10 seeds, respectively vide Office Memorandum No. 17-8/2005-SD. IV dated 02.11.2005 of the Ministry of Agriculture (Department of Agriculture & Cooperation), Government of India for testing Bt cotton seeds. These sample sizes, contrary to the principles of seed sampling laid down in the above three manuals, are very small and such samples cannot be considered as representative sample of the said seed lot. Further, tolerances are also not specified. This could result in a bad seed lot being passed and a good seed lot being declared fail by the seed analyst.

Suggestion: NSAI has requested Government of India, Ministry of Agriculture & farmers' Welfare several times to revise the seed sample size and to specify sampling procedure, testing protocols and Tolerance Levels and also direct the State Departments of Agriculture not to launch prosecution based on such unscientific reports.



It is proposed that the minimum number of seeds to be tested may be specified as 400 and the same tolerance table suggested for germination in the "Hand Book for Seed Inspectors" table no. VII, Page 76 may be adopted for gene purity based on 400 seeds testing.

Issue 1.2. Bt Toxin protein concentration standards and detection methods.

To enforce quality control of Bt Cotton seeds under Seed Act 1966, Government of India issued the following notifications.

- 1) As per office memo. F-No 18-2005 dated 2nd November 2005, it has been prescribed that 90% of the Bt Cotton seeds should contain Bt protein/toxin. It has been further decided that standard sample size for Bt Cotton shall be 25g out of which working size shall be 10 seeds with minimum lethal level of Bt (toxin) 420 nanograms/sq cm or per gram of seed. The memo also mentions that the Central Seed certification board has approved the procedure which has been developed in consultation with CICR and circulated vide Compendium of Technical proceedings of Central Seeds Certification Board (1986-2004).

It is pertinent to note that NSAI submitted to the DACFW that the number of seeds tested is too small to accurate results and there is need to enhance the sample size and the seed number to be tested to obtain statistically accurate results. There is also a need for developing tolerance tables like in case of other minimum standards of germination and genetic purity etc. This is under consideration.

- 2) As per Gol notification dated 27th December 2016, for specifying gene purity in Bt and minimum level of Bt toxin for Separate Pack (SP) and Refugia in Bag (RIB) for labelling Bt genes in cotton seeds.
 - a. Toxin concentration: 420 nanogram of each toxin per sq. cm of leaf or per gram of seed/leaf.
- 3) As per the Gol notification dated 16th June 2017 which is an amendment to the earlier Gol notification 27th December 2016 as above, the following standards were submitted to column-4, i.e. minimum level Bt toxin concentration which is 420 ng toxin per sq cm of leaf or per gram of seed or leaf.
 - a. Cry1Ac: 4 microgram dry weight of tissue (leaf / square / boll)
 - b. Cry2Ab: 280 microgram dry weight of tissue (leaf / square / boll).

Based on the notified toxin / protein expression standards prescribed in 2005 by the Government of India, the concerned regulatory authorities of Gol have assessed Bt toxin protein concentration for release of hundreds of Bt Cotton hybrids for nearly 11 years from 2005 to 2016 and all the released Bt Cotton hybrids have successfully performed and delivered expected outcomes in terms of controlling target Lepidopteran pests. The same protocols prescribed in 2005 have also been adopted by regulatory authorities for Bt Cotton hybrid and also State Seed testing laboratories for enforcing their regulatory functions. The Bt toxin levels for released hybrids as approved by regulatory authorities are provided in Annexure-1 of this letter.

The amendment of 2017 on the minimum toxin values for both Cry 1 Ac and Cry 2 Ab translates to 10 fold increase of toxin concentration of Cry 1 Ac from 0.420 ug/g to 4 ug/g of tissue for Cry 1 Ac and 666 times increase from 0.420 ug/g to 280 ug/g for Cry 2 Ab, if it is considered that the new prescribed standards replace the 2016 minimum Bt toxin level.

It is not clear on how such high variation in standards has been recommended in 2017 notification for modification of the already notified Toxin concentration standards compared to previous notifications. From the plain reading, it appears that the expression level for Cry 2 Ab alone was to be notified in 2017 since it was not notified ever since the MON 15985 event was approved for environment release by GEAC in 2006. Also, the standard should consider the minimum toxin concentration which is based on LD 50 and LC 50 values for optimal lethal action on target pests and not based on the average expression of Bt as reflected in the form Bt protein concentration since the protein expression varies from part to part of the plant, stage to stage of the crop growth and is also subject to environmental stresses like water lagging, drought etc.

The protein concentration notified on dry weight basis for Cry 2 Ab appears to be very high in 2017 Gol notification. The minimum standard will have to be provided for leaf, seed or other plant parts separately or the least value may have to be taken to make it applicable to all parts without any description. In any case, the bioassay is a more reliable and comprehensive test which can be relied upon. This may be assessed more comprehensively and minimum standard values of optimal expression may be considered including LD 50 value rather than mean or average values of cotton plant gene expression of Cry 1 Ac or Cry 2 Ab.

Suggestion: Based on the above facts, it can be concluded that Bt toxin values (on dry wt. basis) in 2017 notification are not correct and new appropriate values need to be notified by CICR/ICAR considering primarily the bioassay (LD 50 values) for Cry 2 Ab and for the Cry 1 Ac the old notification of 2005 may be continued.

Issue 1.3. Insect resistance management strategy through RIB approach to be adopted for Pink bollworm management.

Pink Bollworm developed resistance against Bollgard-II trait in many parts of India and was rapidly spreading. To address this problem, National Seed Association of India represented to the Secretary (DAC&FW), Government of India vide letter dated 02.09.2015 for immediate approval of concept of Refuge in Bag (RIB), so that it could be implemented even for Kharif-2016 itself and further spread of insect resistance is prevented. NSAI took initiative to ensure that RIB concept is adopted at the earliest to address insect resistance problem.

RIB is a new concept, for which the sampling and testing procedures are yet to be specified under the Seeds Act, 1966, though the gene purity parameter in terms of transgene *Bacillus thuringiensis* (Bt) and minimum level of Bt Toxin both for "Refuge as Separate Pack" (SP) and Refuge in Bag" (RIB) have been specified vide Notification S.O.4215(E) dated 27.12.2016 by Government of India.

For RIB concept, purity in terms of transgenics/transgenes and minimum level of Bt. Toxin is specified as follows:

"Purity in terms of transgenics/transgenes

Bt. Cotton RIB seed pack (475 g) having minimum of 90% and maximum of 95% seeds positive for each gene. The 475 g RIB packet shall contain minimum of 5% and maximum of 10% non-Bt. cotton seeds.

Minimum level of Bt. Toxin

420 nanogram of each toxin per sq. cm of leaf or per gram of seed/leaf."

As purity in case of RIB concept is specified for both minimum and maximum, tolerances have to be provided accordingly.

We state that the seed analysts are analysing the Bt cotton seed samples drawn from SP and RIB packets despite that there are no sampling and testing protocols. The specified sample size is against the scientific principles of seed sampling and testing and no tolerances are specified and the seed inspectors are issuing Show Cause Notices and also launching prosecutions, based on such reports. This is resulting in unnecessary harassment to the seed companies.

Despite NSAI and its members have conducted numerous programs for awareness about prevention of pink bollworm damage to the crop in affected areas, the State Governments, especially in Maharashtra is slapping cases against the Seed companies and awarding damages to farmers to be paid by Seed companies.

The responsibility and accountability of the BG-II trait remains with the trait developer Monsanto and the seed quality parameters such as genetic purity, germination of the seed and the required gene purity are responsibility of the seed company. By penalizing seed companies, regulatory agencies in Maharashtra are creating an atmosphere of terror and vitiating business environment.

**Suggestion:**

For checking Bt gene purity in RIB packets, the regulatory authorities are using sampling and testing protocols which are designed for SP approach and notified in 2005. Without proper sampling size and procedure, false positive results which are erroneous are being considered by regulatory authorities and cases are being lodged on seed companies creating panic and unnecessary hardship, when actually there is no offence from the side of seed companies. There is a need for scientific understanding of the issue for proper resolution of the issue.

Issue 1.4. HT cotton

It is a well-known fact that the HT cotton has illegally spread in several States. It is also well known that the HT cotton seeds are multiplied and sold by the illegal operators who do not even obtain a seed license or marketing permission for their hybrids from the State Agriculture Departments. NSAI has been on record repeatedly condemning the sale of HT cotton seeds and supporting the efforts of the various departments of Govt. of India and the States.

Due to such a large-scale illegal seed production and cultivation of HT cotton, few seed lots of the organized players are found to be contaminated with the HT cotton trait in the States like Maharashtra, Andhra Pradesh, Telangana etc., in the past 2-3 years. It is pertinent to note that NSAI has offered to the State Governments to draw samples of each and every lot of the genuine players before the seeds are sold in the market so as to detect and remove any seed lots with contamination.

It is also pertinent to note that it is easy to differentiate between a genuine seed player whose seed lot is contaminated from a fly-by-night operator who is willfully selling HT cotton. The HT cotton is adopted by the farmers and cultivated for ease of weed management by spraying Glyphosate. Glyphosate is a broad-spectrum herbicide which kills all plants including weeds and even cotton plants if the HT gene is not present. Therefore, the farmers can use the advantage of HT cotton trait subject to the seed lot having 98-100% presence of HT gene. When the farmers sprays Glyphosate, the 1-2% plants without the gene only may get killed. The crop is not damaged. In case of a contaminated lot with 5-10 or even 50% presence of gene the seller of seed may not be aware and will not be in a position to advocate the use of Glyphosate. Even if the farmer detects it and sprays Glyphosate it can result in 80-90% of the cotton plants getting killed leading to total crop loss to the farmer.

Due to the above reasons, it can be easily differentiated whether a seed company whose lot is having contamination or has developed HT cotton seed purposely to gain benefit of the HT trait.

Suggestion: There is a need of issuance of a clarification to distinguish between illegal players who are willfully spreading HT cotton trait by maintaining HT gene presence in above 90% V/s. genuine players whose few lots may be contaminated due to various reasons such as cross pollination, accidental admixtures in ginning and processing or any other reasons. As out of 100s of seed lots tested from organized players, only few lots have been found with such contamination which is a further proof of the operations of the genuine players.

2. Revalidation of Certified Seed after the expiry of validity period

In Indian Minimum Seed Certification Standard, 2013 the provision for revalidation of seed has been changed stating that the request of revalidation should be made before the expiry of validity period. The change in the provisions of revalidation is unfavourable for the seed Industry. Even if there is no sale season or demand of seed, one will have to get their seed revalidated. Since the seeds are revalidated for six months only, the validity of revalidation will be over before the sowing season hence it cannot be put in the market and the second revalidation will have to be done for all seeds. The chances are high that due to procedure of second revalidation, the sale of seed will lose the second season.

NSAI, Dept. of Agriculture, Gujarat, JAU, Junagadh, Gujarat Seed Corporation and Seed Associations have been requesting to the Ministry of Agriculture & Farmers Welfare to amend the IMSCS, 2013. A huge quantity of seed was pending for revalidation and quantity information had also been submitted to JS (Seeds). DAC&FW had decided ICAR may conduct a study in this regard. Gujarat State Seed producers Association (GSSPA) had also submitted relevant data on this practice of two-time revalidation of seed lots in different crops without any problem or complaints from user farmers.

Suggestion: DAC&FW may take in to account the practical results of GSSCA for several years on this aspect and accordingly amend IMSCS and bring back the original procedure and implement the OM 18-17/88-SD-IV dated 28 April 1989. All data was submitted to JS (seeds) previously and requested to please extend the date of seed revalidation per old procedure till we have scientific set of result to conclude on period of revalidation.

Outcome of NSAI efforts: DAC&FW has given the relaxation for revalidation of seed lots after expiry period up to 31st December, 2020 for first and second revalidation of seed lots only. The extension of re-validity will be valid for six months only as per IMSCS, 2013.

3. Issues with PPVFR Authority

3.1. Public Notices put on PPV&FRA Website

Issue 3.1.1. The Registrar General, PPV&FR Authority has issued Public Notice 1 of 2019 dated 17-05-2019, under section 20(1) of the PPV&FR Act, 2001, on "The guidelines/procedure for DUS testing of a hybrid variety compulsorily with its parental lines in the case of seed propagated notified plant species".

In this connection, we state: Section 20(1) of the PPV&FR Act, 2001 does not provide for laying down guidelines/procedure for DUS Testing. Section 20(1) deals with acceptance of application by the Registrar, after making such inquiry as he thinks fit with respect to the particulars contained in the application. Under sub-rule (8) of rule 29 of the PPV&FR Rules, 2003, the PPV&FR Authority shall notify the adopted methods of conducting the DUS and special tests. Therefore, the Public Notice 1 of 2019 issued by the Registrar General, under section 20(1), on guidelines/procedure for DUS testing of a hybrid compulsorily with its parent lines is contrary to the provisions of the PPV&FR Act, 2001 and PPV&FR Rules, 2003 and is also not issued by the competent authority. Furthermore, the said guidelines are very important to the stakeholders. Therefore, they should have been put on the Authority's website calling for the comments from the stakeholders i.e. breeders, farmers, seed companies etc.

NSAI has observed certain discrepancies in the Public Notice 1 of 2019, as mentioned and discussed in the table hereunder:

I. The new guidelines envisage DUS testing of a hybrid compulsorily with its parental lines in the case of seed propagated notified plant species.	It is not mentioned therein whether the new guidelines are applicable to plant species, notified under section 5 of the Seeds Act, 1966 or specified under section 29(2) of the PPV&FR Act. This needs clarification to remove ambiguity.
II. As per para (a) of the guidelines, single cross hybrids alone shall be registered and three-way crossed/double crossed/multi parent chain-crossed hybrids are not registrable.	NSAI agrees that there can be issues with regard to stability and uniformity of such hybrids. However, there is need to consider a feasible mechanism by the PPV&FR Authority to provide protection to such hybrids also under the PPV&FR Act



III. As per para (e), the protection period of the hybrid shall be restricted to the protection period of the parent line registered earliest.	This condition is against the provisions of the PPV&FR Act. The hybrid, developed from the parent line registered earliest under the PPV&FR Act or developed from the public domain parent line, shall qualify for registration under the NEW category and will have protection for full 15 years from the date of registration. The status of protection of the parent line(s) has no bearing on the protection period of the hybrid, developed from the said parent line(s). The hybrid will be registered as New with full 15 years protection from the date of registration.
IV. As per para (f), separate DUS Testing for hybrids and parent lines is proposed. Hybrids shall be tested at notified DUS centers. Parent lines shall be tested at PPV&FRA centers to maintain confidentiality for two years. The second-year testing of the hybrids and the parents shall comprise of two plots of the parents and hybrids; one from the hybrids and parent seeds produced by the Authority and the other as supplied by the Applicant.	It is not clear whether this procedure is applicable to Varieties of Common Knowledge and also to the extant varieties, notified under section 5 of the Seeds Act.
V. As per para (f) (wrongly numbered), the hybrid along with its parents shall be rejected, if the hybrid variety fails on Uniformity Test, or parents fail on uniformity test or parents fails on stability test.	Lack of uniformity could be due to various reasons, which could be rectifiable or addressed. Hence, NSAI suggests that the Authority should repeat uniformity test.
<p>** Apart from the above suggestion, NSAI points out that there is conflict between wrongly numbered para (f) and para (h). As per wrongly numbered para (f), parent line is rejected, if hybrid fails on Uniformity test, However, as per para (h), if hybrid is rejected on account of uniformity and any of the parent or parents pass the DUS test, parent(s) can be registered.</p> <p>The PPV&FR Authority may look into this discrepancy and give clarity.</p>	
<p>VI. In para (g) of the Public Notice 1 of 2019, the following special test is specified in case where genotyping is not possible due to lack of genomic resources in the species:</p> <p>"In such cases two sets of hybrids shall be produced by involving the two non-distinguishable parents in two crosses with the other distinct parent of the candidate hybrid. The hybrids thus produced shall be more likely distinctive if the two non-distinguishable parents differed genotypically...."(Emphasis added)</p>	The mentioned special test is not clear. The Authority may describe the above procedure more clearly.
VII. As per para (h), hybrid can be rejected on lack of uniformity, but its parent(s) can be registered as new variety.	Para (h) is in conflict with para (f) (wrongly numbered), as mentioned above.
<p>VIII. As per para (j) the validity period of registration of seed propagated non-perennial hybrid shall be as follows (as on 10.05.201):</p> <p>New Hybrid Variety: 15 years if none of the parents involved is previously registered. If one or more of the parents is previously registered, the validity period of the hybrid will be that of the earliest parent.</p>	Under per para (j) of the Public Notice 1 of 2019, the words given in parenthesis "as on 10.05.201" lack clarity. Further, the contention that "if one or more of the parents is previously registered, the validity period of the hybrid will be that of the earliest parent" is against the logic and law. The comments, mentioned for para (e) of the guidelines, are deemed to be reiterated herein.

IX. i. This comes into force with immediate effect and is applicable to applications which are yet to be registered also. Henceforth, a hybrid will be tested only with its parents and vice-versa.

ii. In case of hybrids advertised in Plant Variety Journal, for inviting oppositions, these shall be registered subject to the testing of parental lines.

iii. In case the involved parents of a hybrid are in public domain or are obtained through license or outsourcing under agreement of non-disclosure or agreement of non-accessibility to IP protection, then in such case the parents as well as the hybrids resulting shall not be eligible for protection. iv. However, in case of such new hybrids one of whose parents is in public domain then the hybrid with the other parent will be eligible for protection.

i. With regard to para (k), it is stated that it contains certain inconsistency and lacks clarity, as mentioned hereunder:

With regard to contention that "Henceforth, a hybrid will be tested only with its parents and vice-versa", it is stated that how parents, applied for registration, can be tested with the hybrid, if the hybrid, assuming, has not been developed on the date of filing of the applications for registration of the parent lines or if the applicant of the parental lines is not interested to register the hybrid. Hence, testing of parents with the hybrids may not be a case always.

ii. The second point in para (k) is also not clear as to what it means.

iii. The third point in para (k) i.e. "In case the involved parents of a hybrid are in public domain or obtained through license or outsourcing under agreement of non-disclosure or agreement of non-accessibility to IP protection, then in such case the parents as well as the hybrids resulting shall not be eligible for protection" is also contrary to law.

It is stated that the hybrids shall be eligible for protection as NEW.

iv. Even the fourth point in para (k) "However, in case of such new hybrids one of whose parents is in public domain then the hybrid with the other parent will be eligible for protection" is also incorrect:

The above contention is not correct. As commented in para (e) above, the hybrid, developed from the parent line registered earliest under the PPV&FR Act or developed from the public domain parent line, shall qualify for registration under the NEW category and will have protection for full 15 years from the date of registration, irrespective of the fact whether one or both the parent lines are registered or are in public domain.

** As per para (k), the guidelines come into force with immediate effect and these guidelines are even applicable to the applications, which are yet to be registered and pending with the Registry.

Suggestion: In view of the inconsistencies in the guidelines, pointed above, and for the fact that the guidelines are very important for the stakeholders including public and private sector breeders, it is imperative that their comments are also obtained by putting up the said guidelines on PPV&FR Authority website and to keep the present guidelines in abeyance, as they are not notified under relevant provisions of the PPV&FR Act and also not notified by the competent authority. The PPV&FR Authority may notify the finalized and duly corrected guidelines under rule 29(8) after receipt of the comments of the stakeholders.



Issue 3.1.2. Application for registration of a variety notified under Section 5 of Seeds Act, 1966 will be considered under the category of Extant Varieties notified under Section 5 of Seeds Act, 1966 as per Public Notice under Section 20 of PPV&FR Act, 2001. (Public Notice 10 of 2019 dated 06.06.2019 put on the PPV&FRA Website – Reg)

As per the Public Notice 10 of 2019 dated 06.06.2019, henceforth the application for registration of a variety notified under section 5 of the Seeds Act, 1966 will be considered under the category of extant variety notified under section 5 of the Seeds Act, 1966 and that if any such application is filed under any other category, the applicant will be directed by the Registrar under section 20(2)(a) to amend the application.

Comment: If a Variety, notified under section 5 of the Seeds Act, 1966, meets the criteria of Novelty, laid down under clause (a) of sub-section (3) of section 15 of the PPV&FR Act, 2001, it shall be eligible for registration under the category NEW, if It meets the criteria of, apart from Novelty, distinctiveness, uniformity and stability, with protection for full 15 years from the date of its registration. An Extant variety, notified under section 5 of the Seeds Act, 1966, shall be eligible for registration under the category “Extant Notified Variety”, as per sub-section (2) of section 15 of the PPV&FR Act, if it conforms to such criteria of distinctiveness, uniformity and stability as specified under the regulations. The extant variety, notified under section 5 of the Seeds Act, on registration under the provisions of the PPV&FR Act, shall have protection period for 15 years from the date of notification under the Seeds Act.

Suggestion: NSAI state that when a variety meets the criteria, laid down under section 15(3)(a) of the PPV&FR Act, it shall be deemed to be novel. Therefore, to consider such variety for registration under the category of extant variety, notified under the Seeds Act, 1966, because it is notified under section 5 of the Seeds Act, 1966, as mentioned in the Public Notice, is incorrect and contrary to the provisions of the PPV&FR Act. Further, it is unjust and unfair to the applicant, if the New Variety is registered under the category of extant variety notified under the Seeds Act, 1966, as the protection period of 15 years, in such case, would be from the date of the notification of the variety under section 5 of the Seeds Act, 1966 and not from the date of registration. It is to be noted that, if the said variety is registered under the category NEW, as per its eligibility, the variety shall have protection for full 15 years. We also state that, if a variety meets the criteria of Novelty, laid down under section 15(3)(a), the Registrar cannot direct the applicant, under section 20(2)(a) to amend the application.

In view of the above, it is requested to withdraw the Public Notice 10 of 2019.

Issue 3.1.3. Public Notice under section 28 of PPV&FR Act, 2001 regarding registration of Agents and licensees – Reg. (Public Notice 11 of 2019 dated 12.06.2019 put on the PPV&FRA Website)

It is stated that the provisions of section 28 of the PPV&FR Act in respect of an agent or licensee with regard to right to produce, sell, market or otherwise deal with the registered variety are ambiguous and lack clarity. It is also not clear what is difference between sell, market or distribute used in the provisions. It is also not clear what is meant by “to otherwise deal with” the registered variety. Even the relevant rules in PPV&FR Rules, 2003 and relevant regulations in PPV&FR Regulations, 2006 also do not give any clarity on the above matter.

In addition to the ambiguity mentioned above, it is to be stated that Annual Fee, specified vide Notification S.O. No. 2182(E) dated 26.08.2009, referred in the above-mentioned Public Notice, is contrary to the provisions of Section 35 of the PPV&FR Act, 2001 and we have already pointed out this in our letters dated 07-11-2014, 11-05-2016, 08-07-2018, 03-10-2018 and 09-11-2018 .

Comment: As per Section 35, the annual fee is to be determined on the basis of benefit or royalty gained by such breeder, agent or licensee, as the case may be, in respect of the variety, for the retention of their registration under the PPV&FR Act. Contrary to this, the notification S.O. No. 2182 dated 26.08.2009 specifies the annual fee on the basis of sales value of the seeds of the registered variety during the previous year, which is incorrect both logically and legally.

As the said notification is contrary to the provisions of law, it is deemed to be not legally valid and, hence, cannot be enforced.

Suggestion: In view of the above, it is prudent to issue notification at the earliest strictly in accordance with Section 35 of the PPV&FR Act, so that the same can be lawfully enforced. Furthermore, the PPV&FR Authority may issue a clarification on the issues raised with regard to section 28, mentioned above. It has come to the notice of the association that the Registry is issuing letters to the seed companies invoking the provisions of section 28 seeking the details of agents and licensees.

Issue 3.1.4. Rejection and closure of applications for non-submission of seeds of parents as well as candidate hybrid – Reg (Ref: Public Notice 12 of 2019 dated 13.06.2019 put up on the PPV&FR Authority Website)

As per the Public Notice, issued under Section 19 of the PPV&FR Act, pending applications, where no seeds of parents as well as candidate hybrid have been submitted, are to be rejected and closed.

Comment: In this connection it is stated that Section 19, under which the Public Notice is issued, does not provide for rejection or closure of application for non-submission of seeds of parents as well as candidate hybrid. Further, there is no provision under the PPV&FR Act, 2001, which allows the Registrar to close any application. Therefore, the Registrar cannot act beyond the scope of the PPV&FR Act and close the applications. There are certain provisions under the PPV&FR Act, like Section 20(2)(b) and 24(3), under which an application can be rejected on grounds, specified therein. However, these provisions do not give scope to the Registrar to reject the applications without giving an opportunity of being heard to the applicant or without giving notice to complete the application.

Suggestion: NSAI requests that, till the above issues are sorted out, the Public Notices may be kept in abeyance and no further action be taken on the letters issued to the seed companies.

3.2. PPV&FR Authority to protect the Breeders Rights and fully implement Act in letter and spirit

NSAI members are highly disturbed from the lack of proactive actions by PPVFR Authority in protecting Researchers Rights granted to breeders in private and public sector as per objectives of Act. This has led to monopoly of Bt cotton seeds even eroding the rights of farmers contrary to provisions of the Act. This was due to erroneous interpretation of applicability of the Patents Act to seeds. After representations of NSAI and even WPs of some State Seed Associations, the matter was referred to law officer of Government of India and the PPVFR Authority in its 27th meeting held on 31st May 2017, after meticulously deliberating the issue on merits, removed the provision of No Objection Certificate (NOC), which was sole reason for the monopoly in Bt trait market and was found to be illegal. Now the information is that the PPVFR Authority (Authority) is again trying to bring back the NOC regime, which had been dispensed with after extensively and meticulously deliberating the issue on merits by the Authority. The matter, which had been appropriately closed by the Authority after taking legal opinion from one of the top most and competent law officers of Government of India, is being reopened by the Authority, as per the minutes of its 29th meeting, merely based on a simple representation of an association of MNC companies and their supporters giving a different twist to the subject to overcome the existing legal opinion obtained by the Ministry of Agriculture after considering representations of NSAI and farmers.

NSAI has submitted a representation against the revival of No Objection certificate by trait developer on 1-5-2018. Curiously, this is happening even after the Hon'ble Delhi High Court has categorically ruled that Patents Act is not applicable to seeds and that all rights to breeders including developers of transgenic varieties and trait are provided and protected under PPVFR Authority.

It has been provided by our law makers, by insertion of section 3(j) in the Patents Act, that seeds and plant varieties are outside the domain of Patents to avoid monopoly in agriculture and seed sector, which is very vital to farmers and agriculture, even as per new Seed policy 2002, transgenic plant varieties are covered under the PPVFR Act. The Ministry of Agriculture obtained legal opinion which clarified these aspects. It is surprising to see the renewed efforts of the PPVFR Authority to bring back NOC regime, despite the Hon'ble High Court judgment holding that there cannot be patent on seeds or plant varieties. An Authority, functioning under a statute, working against its mandate and pushing breeders and farmers into domain of another Act only to benefit few MNCs is indeed a serious matter.



The Ministry of Agriculture & Farmers Welfare, as a nodal ministry to the PPVFR Authority, may have to look into this, as the farmers and breeders' interest and rights available under the PPVFR Act are at stake with serious implications to Indian agriculture. Statutory authority cannot work against the legislative intent of the Parliament. We are constrained to submit that, by trying to re-impose NOC, the PPV&FR Authority is deviating from its duty, enshrined under section 8 of the PPV&FR Act, besides violating the provisions of section 30 and 39 of the PPV&FR Act. The seed industry had been very much concerned with the fallout of the imposition of NOC by statutory Authority like GEAC, RCGM and PPVFR Authority without backing of law, in as much as many small and medium seed companies were forced to close down their cotton seed business due to suppression of researchers' rights provided under Section 30.

Some of its member associations and seed companies of NSAI have even gone to court in the matter based on which previous decision to do away with NOC was taken. Farmers will also be adversely affected if NOC is re-imposed by PPVFR Authority, contravening the provisions of section 30 and 39 of the PPVFR Act, as it suppresses their rights, which they have under section 30 and 39 of the PPVFR Act. It is pertinent to note that NSAI represented to GEAC and RCGM, who had also wrongly imposed the NOC, having realised that their action was a mistake have simply transferred the subject of new GM Cotton hybrid approvals to ICAR, to avoid legal scrutiny of the unlawful and adhoc requirement imposed by them. After request for transfer of the subject from GEAC, ICAR promptly removed this NOC stipulation for already approved "events".

Suggestion: The Division Bench of the Hon'ble High Court of Delhi by holding in its recent judgment that Monsanto does not have patent rights on plants, varieties, seeds and essentially biological processes by virtue of section 3(j) of the Patents Act, 1970, has confirmed the decision of the Authority's 27th meeting as perfectly right.

Under section 93 of PPVFR Act, the Ministry of Agriculture, Government of India can issue directions to PPVFR Authority to function as per Act. As this matter needs intervention of Ministry of Agriculture, we seek such directions so that farmers and breeders rights are not trifled with by the PPVFR Authority itself.

3.3. Exorbitantly high fee prescribed under Second Schedule of PPV&FR Rules, 2003 and applicability of Delhi High Court order dated 31-01-2017 to all seed companies for payment of renewal/annual fee

The National Seed Association of India (NSAI) has been making representations against fixation of exorbitantly high renewal fee and has requested PPV&FR Authority to review and make it reasonable. Despite these representations, the PPV&FR Authority is collecting high renewal fee, which works out to Rs.7,20,000/- for renewal of balance period of 9 years @Rs.80,000/- per annum. Prior to revision of the fee structure vide Gazette notification GSR No. 494(E) dated 15-06-2015, the renewal fee was Rs.10,000/- per annum which works to Rs.90,000/- for 9 years. Thereby, the enhancement in the renewal fee is enormous and 8 times.

One of the seed companies viz., Maharashtra Hybrid Seeds Company Pvt Ltd challenged the renewal fee of Rs.80,000/- per annum before the Registrar General, PPV&FR Authority on the grounds that it is violative of rule 39(3) (a) of the PPV&FR Rules, 2003. However, the Registrar General vide his order dated 21-10-2016 rejected the contention of Maharashtra Hybrid Seeds Company Pvt Ltd on the grounds that Rule 39(3)(a) and Rule 39(3)(b) of the PPV&FR Rules, 2003 are totally contrary and inconsistent with section 35 of the PPV&FR Act and accordingly cannot be given effect to. Based on this reasoning, the Registrar General directed Maharashtra Hybrid Seeds Company Pvt Ltd to pay renewal fee in accordance with S.No.9 of Second Schedule of PPV&FR Rules 2003. Maharashtra Hybrid Seeds Company Pvt Ltd challenged the above order of the Registrar General before the Hon'ble High Court of Delhi by filing WP(C) 788/2017. The Hon'ble High Court of Delhi vide order dated 31-01-2017 passed the following directions:

"Since the respondents themselves admit that there is a conflict between the two provisions, requiring the petitioner to pay a sum of Rs.7,20,000/- per variety in place of Rs.80,000/- would be too harsh. In this petition, there are two varieties in issue, and it would thus translate to Rs.14,40,000/- in place of Rs.36,000/-. As the fee is calculated on an annual basis, the operation of impugned order is stayed, subject to the petitioner paying the admitted amount of Rs.36,000/- and also furnishing a corporate guarantee to the respondents equivalent to one year annual fee claimed by the respondents, i.e. Rs.80,000/- per variety."

Suggestion: NSAI brings to the notice of DAC&FW that the above observations of the Hon'ble High Court of Delhi that the levying of fee of Rs.7,20,000/- in place of Rs.80,000/- would be too harsh on Maharashtra Hybrid Seeds Company Pvt Ltd are equally applicable to all the seed companies including members of this association. In view of this, it would be just and fair to consider the above observations and directions of the Hon'ble High Court of Delhi as deemed to be applicable to all the seed companies, who approach the PPV&FR Authority for renewal of their registered varieties. The seed companies will pay the renewal fee in accordance with the Hon'ble High Court order. We request DAC& FW to direct the Protection of Plant Varieties and Farmers' Rights Authority to consider the above facts and accordingly the Registrars, PPV&FR Authority adopt the directions of the Hon'ble High Court of Delhi given in WP(C) No.788/2017 in respect of all the seed companies for renewal of their registered plant varieties.

4. Issues relating to Seed law enforcement by certain states and need for harmonization of laws for registration and sale of seeds across the country.

Under the Seeds (Control) Order, 1983, all the seed manufacturers and dealers are required to obtain a license for marketing the seed. Most of the States are also adding the varieties / hybrids to be marketed in the seed license. While this is not laid down under the Seeds (Control) Order / Seeds Act, the members of the Association are cooperating with the licensing authorities by submitting the necessary information about new varieties developed by them to the licensing authority for inclusion of varieties / hybrids in the seed license. However, different States are coming up with different requirements with reference to the performance evaluation data. Some States are insisting for the data from the State Agriculture Universities (SAUs) while the others are allowing it based on an affidavit from the seed company, which includes the evaluation done in their own R&D farms.

We request for communication of uniform guidelines wherein an affidavit from the applicant giving the morphological characters and the performance evaluation data as per their own R&D trials shall be made adequate for all the States.

Issue 4.1. SAU trial, registration of all varieties of seeds DNA finger printing, centralised licencing, DUS testing, being conducted by Maharashtra Agri. Dept. without any authority of law

As per notification issued by Min. of Agriculture, GoI, Joint Secretary (Seeds) is the controller of whole of our country, he is the only authority to issue directions to all states within the framework of Central Enactment. But contrary to Central Enactment, MS Govt. has made compulsory SAU trial, registration of all seed's varieties, DNA finger printing centralized licencing, DUS testing as a prerequisite for issue of seed licence. Under "approved event-based approval mechanism" only new Bt Cotton Hybrids are required to undergo for SAU trial after recommendation of "Standing Committee" of GOT and not any other variety of seed. Dy. Commissioner (QC), Min. of Agric GOI has clarified this in Office Memorandum dated 29.4.2016. This action of MS Govt. is totally illegal, arbitrary and without any authority of law as there are no provisions for all these tests in Seed (Control) Order 1983.

Issue 4.2. Unnecessary redundancy in issue of Licence approvals, SAU trials and document submission:

a). License approvals: As per Office Memorandum dt.29.4.2016 issued by Dy. Commissioner (QC), Min. of Agric, GOI in case, if any seed company has seed licence of a state and it does not possess its own seed storage/sale outlet in other state(s) and selling seeds through its authorised dealers having valid seed licence of that particular state, then the company is not required to take the seed licence of other state(s). But contrary to this office memorandum and contrary to provisions of Seed (Control) Order 1983, Maharashtra (MS) State and Chhattisgarh Agric. Deptt, are insisting to take seed licence of MS State by showing seed storage of 2 dealers of Maharashtra. This should be stopped and uniform rules should be framed for all states.

b). Difference in SAU trial period and Duplication in submission of Documents: In Maharashtra and Gujarat state, there is 2 years SAU trial and sale permission is granted for 3 years and 4 years respectively. Whereas, in M.P., SAU trial is for 3 years and sale permission is granted for one year only. This creates lot of difficulties to companies they are required to submit documents every year to get sale permission for new and old Bt. Cotton hybrids. Hence, uniform rules should be framed for all States.



c). Parallel control on seed certification by M.P. Agric Deptt: - M.P. Agric. dept. had issued directions to seed companies to submit list of seed growers showing details of their addresses, crop variety wise area registered with M.P. State Seed Certification Agency, payment made to seed growers etc. This is a parallel control on Seed Certification without any jurisdiction of M.P. Agric. Deptt, which should be stopped.

d). Tolerance limit not followed by M.P., Agric. Dept.: In MS State, tolerance limit at seed stage is followed whereas in M.P., it is not being followed as per recommendations of ICAR. This should be followed by all states.

Harmonization of Seed law across the country and making regulation and operational procedures uniform in all the States develops a standardized system which enables predictability and smooth business for Seed companies. Restrictive regulations lead to productivity loss and hampers overall economic development.

Issue 4.3. Cotton Seed Act 2009 of Maharashtra: -

In 2006, Cotton seed was excluded from Seed (Control) Order 1983 and EC Act 1955 but re-included in 2009. Even then MS Govt. is continuing Cotton Seed Act 2009 in MS, which is not at all required as it leads to harassment to seed companies by additional regulation and also breeds corruption. It is also totally illegal and contrary to Central Enactment and needs to be abolished so that only a single uniform law prevails across the country. Hon'ble High Court of Gujarat, Ahmedabad quashed Cotton Seed Act in 2010 in W.P. National Seed Association of India v/s State of Gujarat. In M.P, Cotton Seed Act was passed by Legislative Assembly and sent to Hon'ble President of India for approval but Hon'ble President of India did not approve on the above-mentioned legal ground. Further the Cotton Seed price Control Order (CSPCO), 2015 has been issued by Gol to harmonize the GM Cotton seed price the country.

Given the above, Maharashtra Act cannot stand based on Doctrine of repugnancy, therefore steps for the same need to be taken, to enable the Central Seed Act, 1966 to be implemented across the country for smooth functioning of seed business.

Issue 4.3. Power of Registration of Licence misused in Maharashtra. -

In Seed Act 1966, the seed standards were applicable for notified varieties only. Seeds were not under Essential Commodities Act 1955. Object of Seed (Control) Order 1983 is to bring all kinds varieties of seed notified or un-notified under the purview of Seed Act 1966 for quality regulations and to bring all seeds under Essential Commodities Act and to register the person's name, address, place of doing business and storage of seed with the licencing/Registration authorities. Also, object of this provision applies in case of contravention of quality regulation of the Seed Act 1966. The person could be identified and legal action can be initiated against him. In Seed (Control) Order, registration and Licence both the words are mentioned. The licencing authority of every state is given very limited powers. They have power to regulate the quality of seeds so that seed should meet the minimum seed standards i.e. Minimum threshold of germination, genetic purity and physical purity.

In case of contravention of Seed Act, Seed Inspector can initiate legal action against the person holding the seed licence. The provision of the word "Licence" is mainly misinterpreted or misused by the state authorities. By misinterpreting and misusing the "Word" Licence, the state authorities are making different rules and regulations as they think fit and violating the provisions of Seed (Control) order 1983 in their own whims and fancies. This way, instead of regulating the quality of seed, the licencing authority wants to regulate the whole seed business.

To avoid such misuse of powers, the provision of the word "Licence" should be deleted and only the word "registration" and Registration Authority should be used in the Seed (Control) Order 1983 so that the seed business should not be a monopoly of the big companies, but small & medium scale units should also survive. New entrepreneurs, fresh agricultural graduates and post graduate should also find place for self-employment in seed sector.

On the one side Govt. wants to make ease of doing business topmost priority, but in Maharashtra, authorities are enforcing to cease of doing business in seeds. Thus, the word "Licencing" should be replaced by "Registration" only and registration should not be centralised but it should be at the places of storage and sale points as provided in the Seed (Control) Order 1983.

5. Uniform pattern of seed subsidy for both public and private sector

There is variation in distribution of the subsidies on production and sale of certified seeds in different states. Private sector is kept away from availing it which creates a big problem for small and medium seed companies to sell certified seeds due to price differences. The private sector accounts for about 60-65 % share of such seeds. GOI is requested to instruct State Dept of Agriculture to uniformly distribute subsidies to the companies of both Public and Private Sectors.

Suggestion: Considering the Govt. of India policy for direct benefit transfer to the farmer, it will be appropriate to provide the farmer with the subsidy directly so that he chooses best variety for his fields and the seed company is not subjected to any discrimination. The participation of the private sector in development of superior varieties and supply of quality seeds in Pulses and Oil seeds would improve if the production and distribution subsidies are shared uniformly with both the sectors or totally removed for all sectors.

6. Breeder Seed indent

National Seed Association of India being a Nodal Agency facilitates the Breeder seed indent of more than 48 crops to more than 150 seed producing companies from all over India through seed net portal under the aegis of Govt. We have been involved in the process from past 12 years.

There are some issues/challenges faced by NSAI members in the process of Breeder seed allotment and lifting. These are as follows:

1. In some of the states like Haryana, Orissa etc. the State Agriculture Universities (SAUs) are demanding high amount of money around Rs 20000/- per variety as registration fees over and above the price of breeder seed for lifting the breeder seed allotted by Govt. of India. This is an ad hoc fee and a very unjustified demand on breeders which is putting small and medium seed companies under hardship and hampering their business, as they are multiplying and supplying seeds of public bred varieties to farmers at reasonable price.
2. Allotment of breeder seed to long distance farm/agencies which is not feasible for small and marginal seed company due to involvement of high transportation charges which ultimately increase the seed cost.
3. Size of seed packet also affecting and key factor for increasing the non-lifting of breeder seed by private seed industry.

Suggestion: Keeping the above facts in view, the DACFW should reconsider the price, size of the packet, as well as the location must be provided to the near farm location of the company in order to prevent the non-lifting of the breeder seed as per indent.

7. Marketing of proprietary hybrids / Research hybrids

The research varieties developed by private sector which are similar to certified seeds of notified varieties, have been commercialized after rigorous evaluation and testing for value in cultivation and use and for quality and genetic purity. These varieties have been widely accepted by farmers across geographies, due to their superior yields, tolerance to biotic and abiotic stresses and other advantages which the farmers as ultimate consumers have recognized based on their use and experience. The Seeds Act and the Seeds (Control) Order permit for sale of such research varieties as labelled seed. However, in certain States like Bihar and Jharkhand, State Governments are issuing orders prohibiting use of Research varieties developed by private sector seed companies.

Suggestion: This issue needs to be addressed by the Committee for enabling sale of Research variety seeds without any hassles.



8. Legal Metrology (Packaging Commodities) Rules 2011

Legal metrology Act encompasses all goods of commerce including seeds. From time to time, NSAI has highlighted relevant issues relating to implementation of legal metrology to DACFW and concerned authorities.

Suggestion: NSAI had represented to DACFW to consider use of the term Net.wt instead of Net. Quantity on seed packets.

9. Seed Export promotion

As per World Seed Trade Statistics, India has sixth largest size of domestic seed market in the world, estimated to be at about 1300 million dollars. But currently Indian seed export share is very less. This is due to lack of harmonization to international best practice regulations. This has delayed the development of mutually beneficial ties between national, regional and world seed markets.

Suggestion: To give a boost to seed export, India has decided to participate in OECD Seed Schemes. Financial assistance should be available for exporters under Market Access Initiative scheme for encouraging seed export business. States that show good export growth can get financial assistance to promote export related infrastructure.

10. Bar Coding or QR Coding for Seed Traceability

The MoA proposal for affixing a QR code or Bar code on every seed packet can be called as “Computerization of seed production and distribution records” to enable instant tracing of the production data for effective quality control for the welfare of the farmers. The cost implications in computerizing the production records (now maintained manually and which needs to be continued) for small and medium companies can be prohibitive. The MoA may provide a system of authorized service providers who provides the services to SME seed companies at reasonable and affordable costs. It is important to encourage SME companies as they provide quality seeds to many large and important crops to the farmers at competitive prices.

Suggestion: The traceability must be carried out in a phased manner so that the SMEs may get the sufficient time for preparation. This time extension may be granted to SMEs for 9 – 12 months period.

11. Seed Testing Laboratories

The performance of the seed testing laboratories needs to be audited so that they are able to provide consistent and reliable results. It is better if there is a supervisory body appointed at the Central level to monitor the skills and training of the staff operating a notified seed testing laboratory. There is a need to train them on continuous basis and also fund them to equip the labs with required equipment. Periodic inspections to verify the operations of the laboratories to make them performance better. The International Seed Testing Association (ISTA) methodology of cross verifying the seed samples need to be followed by the Central monitoring agency.

12. Capacity Creation

Capacity creation in seed testing laboratories for testing all quality parameters such as germination, and genetic purity needs to be encouraged by promoting capacity creation by NGOs/Societies managed by technocrats without conflict of interest, which are subject to monitoring by a Central agency. This helps the SME sector and even the farmers for testing the seed easily and thereby enhance the seed quality in the country. The entire program can be subsidized by the Govt. to the required extent. The cost may be minimal compared to the advantages it can offer.

13. Production of breeder seeds by ICAR

Recently ICAR decided to stop producing breeder seeds of varieties notified more than 10 years ago. Several small and medium seed companies across the country obtain breeder seeds from ICAR every year and take up production of foundation seed and certified seeds for distributing to the farmers. Several popular varieties are used by the farmers for 20-25 years also. The varieties like JS 335 Soybean, Pusa Basmati 1121 etc., are very popular even after 10 years. There are no alternate varieties available. Therefore, this policy needs to be reviewed on case to case basis. While less popular varieties can be phased out after 10 years, more popular varieties may be continued up to 20 years.

G. NSAI in News

BusinessLine

Agri Business

'We seek uniformity in regulatory provisions across the country'

KV Karmannath | Hyderabad | Updated on March 21, 2019 | Published on March 20, 2019



The National Seed Association of India (NSAI) represents the top seed companies, particularly cotton seed producers, in the country. The industry is at a crossroads, facing severe challenges in the agrarian

the pioneer

Save Akola farmers

Saturday, 29 June 2019 | Indira Shekhar Singh



We have to be very careful before its mega cotton seed sector crumbles because of pre-GM violation of a few apples. All stakeholders must come together

serious legal and environmental hazard is looming large over India. It is the illegal and hazardous planting of Bt cotton in the fields of Akola, Maharashtra. An alleged Central Government, the Engineering Approval Committee (EAC) and the State Government issued several notifications and permits, a well-funded Non Governmental Organisation (NGO) has been using the farmers as pawns in an unapproved genetic engineering (GE) variety of cotton on India's farms and biodiversity.

THE TIMES OF INDIA



समझौता नहीं, वृद्धी पुरी!

Pro-GM seed movement spreads to 11 districts in Maharashtra, bail of Buldhana farmer rejected



NEW DELHI: A 'pro-GM seed' movement, which had begun from one district of Maharashtra by defying ban on planting

BusinessLine

Agri Business

HT cotton: AP suspends licences of top seed firms

KV Karmannath | Hyderabad | Updated on February 11, 2019 | Published on February 11, 2019



Seed body wants ban on Glyphosate 100% testing of seed samples

The issue of illegal sowing of HT (tolerant) cotton has surfaced as Andhra Pradesh government has suspended licences of 13 other companies. The State government, which has acted against the illegal sowing last year, has triggered

live mint



Bayer, other seed firms face patent order

However, Bayer and other seed firms face patent order



Indian Seed Congress 2019 | NSAI - National Seed Association of India | KV Prabhu



Indian Seed Congress 2019 - Hyderabad | ICRISAT

BKS seeks action against use of illegal Bt seeds

"MNCs, along with their local agents, are pushing illegal seeds through fraudulent means"

By Jayashree Bhasse ET Bureau | Jun 25, 2019, 12:29 AM IST



PUNE: As farmers from Maharashtra have been openly planting illegal seeds of genetically modified (GM) crops, calling it a civil disobedience movement, the Bharatiya Kisan Sangh, an RSS-affiliated body, has said it will oppose any attempt by the government to approve the release of seeds under pressure. Alleging that the seed developers have intentionally released seeds illegally, the Kisan Sangh has demanded that the Genetic Engineering Approval Committee (GEAC) be either suspended or be dissolved. In a letter sent to Union environment minister Prakash Karmacharya, the Kisan Sangh (BKS) said, "MNCs, along with their local agents, are pushing illegal seeds through fraudulent means." The National Seed Association of India (NSAI) has also expressed concern over the use of unapproved Bt seeds. "The

Old is still gold

Monsoon, 28 August 2019 | Indra Shekhar Singh



The Govt's decision to abruptly remove 10-year-old seed varieties from the market may do good. It must phase them out gradually and ease farmers' trust.

The Government is about to make a terrible mistake with its seed policy. The Ministry of Agriculture has decided to withdraw certified/seeded varieties of seeds that are older than 10 years. The Government system, backed by the Indian Council of Agricultural Research (ICAR), has been a source of seed production, who have requested for popular varieties. Between 10-15

Several small and medium seed companies across the country obtain breeder's rights for the production of foundation seeds and certified seeds to distribute to farmers. These seeds, which are still very popular among the farmers, in fact, take between 10 and 15 years, are still very popular among the farmers, in fact, take between 10 and 15 years, too, because of their adaptability, resilience and high-yielding conditions. The sudden disappearance of the seeds from the market will impact crop production negatively.



Business Standard Govt lowers sale price of Bt cotton seeds for a 450-gram packet to Rs 730

The Indian BT seed market is worth over Rs 3,500 crore a year



ALSO READ

SC clears Monsanto for Bt cotton seed, biotech firms want

SC overturns Delhi ruling, grants Bt Co patent to Monsanto

the pioneer Time to seed the world

Friday, 02 August 2019 | Indra Shekhar Singh/RK Trivedi



H. News Links

- <http://www.livemint.com/Politics/sC0s7JtqiHHetfSIQUaWuM/Mahyco-Monsanto-asks-Delhi-HC-to-hear-case-on-price-control.html>
- <http://www.financialexpress.com/market/modi-government-likely-to-reduce-the-trait-value-for-bt-cotton-seeds-year-after-year/540359/>
- <http://www.thehindubusinessline.com/specials/india-file/cotton-bt-suicide-pests/article9509968.ece>
- <http://www.thehindubusinessline.com/economy/agri-business/what-made-burkina-faso-phase-out-bt-cotton/article9549316.ece>
- <http://www.newindianexpress.com/states/telangana/2017/feb/17/genetically-modified-bt-cotton-africas-burkina-faso-sets-an-example-to-follow-1571540.html>
- <http://www.thehindubusinessline.com/specials/india-file/cotton-bt-suicide-pests/article9509968.ece>
- <http://www.livemint.com/Politics/HzEHCScdQjctFAEuhmpJVK/Take-liability-for-failure-of-Bt-cotton-crop-seed-industry.html>
- <http://www.thehindu.com/news/national/punjab-varsity-develops-new-bt-cotton-varieties/article17437275.ece>
- <http://www.tribuneindia.com/news/haryana/farmers-return-to-bt-cotton-after-experiment-with-desi-variety-fails/396518.html>
- <http://timesofindia.indiatimes.com/india/central-regulator-moves-to-more-robust-monitoring-regime-for-bt-cotton/articleshow/58238571.cms>
- <http://indiatoday.intoday.in/story/icar-tasked-with-evaluation-of-genetically-modified-bt-cotton/1/932410.html>
- http://www.business-standard.com/article/companies/monsanto-accused-of-introducing-cancerous-bt-cotton-seeds-in-india-117040701315_1.html
- <http://bangaloremirror.indiatimes.com/news/india/activists-accuse-monsanto-of-contaminating-local-crops-with-illegal-bt-cotton/articleshow/58071095.cms?>
- <http://indiatoday.intoday.in/story/rss-affiliate-swadeshi-jagran-manch-seeks-ban-on-monsanto/1/923497.html>
- <http://www.news18.com/news/india/swadeshi-jagran-manch-appeals-pm-modi-to-act-against-monsanto-1369697.html>
- <https://www.geneticliteracyproject.org/2017/04/26/indian-farmers-return-gm-insect-resistant-bt-cotton-failure-non-gmo-variety/>
- <http://www.fibre2fashion.com/news/textile-news/icar-to-begin-evaluating-genetically-modified-bt-cotton-205337-newsdetails.htm>
- <http://www.livemint.com/Companies/DvBDJEMcG9GXATm9JADOLL/Delhi-HC-stays-restoration-of-Monsantos-sublicence-pact-wi.html>
- <http://www.fibre2fashion.com/news/textile-news/pau-develops-reusable-bt-cotton-seeds-205040-newsdetails.htm>
- <http://indiatoday.intoday.in/story/seed-firm-appeals-against-hc-order-upholding-monsanto-patent/1/939117.html>
- <https://www.geneticliteracyproject.org/2017/04/25/malawi-moves-towards-commercialization-gm-cotton-cowpeas-bananas/>
- <http://www.thehindu.com/news/national/pau-develops-countrys-first-bt-cotton-varieties/article17428499.ece>
- <http://www.livemint.com/Politics/lcCEgSGO3jBeDSXJC7rFnI/Agriculture-ministry-keeps-Bt-cotton-seed-prices-unchanged-f.html>
- <http://economictimes.indiatimes.com/news/science/gm-mustard-has-no-chance-with-revelation-of-more-facts/articleshow/58263898.cms>



- <http://economictimes.indiatimes.com/news/science/gm-mustard-has-no-chance-with-revelation-of-more-facts/articleshow/58263898.cms>
- <http://www.mondaq.com/india/x/585138/Patent/Nuziveedu+Seeds+Wins+Legal+Battle+Against+US+Giant+Monsanto>
- <http://punjabnewsexpress.com/punjab/news/sale-of-fake-cotton-seeds-pesticides-in-punjab-cm-orders-probe--59228.aspx>
- <http://www.tribuneindia.com/news/punjab/community/focus-on-enhancing-farmers-income-capt-tells-agri-dept/386773.html>
- <http://punjabnewsexpress.com/punjab/news/sale-of-fake-cotton-seeds-pesticides-in-punjab-cm-orders-probe--59228.aspx>
- <http://www.news18.com/news/india/swadeshi-jagran-manch-probes-bill-gates-foundations-role-in-health-policy-1369348.html>
- <http://www.financialexpress.com/market/commodities/agriculture-ministry-likely-to-maintain-status-quo-on-bt-cotton-seed-msp/577679/>
- <http://www.financialexpress.com/industry/delhi-high-court-stays-restoration-of-pact-between-monsanto-nuziveedu/623378/>
- <http://timesofindia.indiatimes.com/city/chandigarh/first-in-india-pau-develops-bt-cotton-with-resuable-seeds/articleshow/57881492.cms>
- <https://scroll.in/latest/833125/hyderabad-based-firm-can-continue-to-use-monsantos-bt-cotton-technology-rules-delhi-high-court>
- <http://www.financialexpress.com/market/commodities/government-keeps-bt-cotton-seed-prices-unchanged/590955/>
- <http://www.firstpost.com/india/tamil-nadu-farmers-protest-in-delhi-is-there-a-permanent-solution-to-farmer-debt-and-suicides-3370582.html>
- <http://indiatoday.intoday.in/story/navdanya-to-set-up-community-seed-banks-at-singur-nandigram/1/933079.html>
- <http://www.bhaskar.com/news/UT-CHD-HMU-NES-fake-seeds-of-bt-cotton-from-gujarat-news-hindi-5566424-NOR.html>
- <https://guardian.ng/news/group-seeks-to-nullify-permits-on-genetically-modified-maize-cotton/>
- <http://www.livemint.com/Politics/lqiyCWAQjx06CApgK2MWJM/Govt-to-withdraw-stringent-licensing-rules-for-GM-seeds.html>
- <http://www.livemint.com/Politics/fEbD5m41xKnf9Qqh3NcBjN/Bt-cotton-failure-forces-govt-to-promote-native-seeds.html>
- <http://punjabnewsexpress.com/punjab/news/sale-of-fake-cotton-seeds-pesticides-in-punjab-cm-orders-probe--59228.aspx>
- <http://economictimes.indiatimes.com/news/economy/agriculture/government-snubs-monsanto-caps-price-of-bt-cotton-seeds/articleshow/51336331.cms>
- <http://www.fibre2fashion.com/news/textile-news/sjm-urges-ministry-to-reduce-trait-value-of-bt-cotton-seeds-204742-newsdetails.htm>
- <http://www.sfexaminer.com/planet-needs-evidence-based-policies-not-preconceived-notions/>
- <http://www.thehindubusinessline.com/economy/agri-business/bt-cotton-how-it-flowered-and-is-losing-lustre-now/article8386090.ece>
- <http://www.fibre2fashion.com/news/textile-news/agriculture-ministry-retains-bt-cotton-seeds-msp-204704-newsdetails.htm>
- <http://www.thehindubusinessline.com/economy/agri-business/cotton-acreage-set-to-rebound-in-north-india/article9589703.ece>
- <http://m.economictimes.com/news/economy/policy/niti-aayogs-3-year-agenda-suggests-key-reforms-to-bolster-economy/articleshow/58366554.cms>



- <http://zeenews.india.com/economy/government-has-no-plan-to-impose-any-tax-on-agriculture-income-fm-jaitley-1999580.html>
- <http://www.tribuneindia.com/mobi/news/haryana/farmers-return-to-bt-cotton-after-experiment-with-desi-variety-fails/396518.html>
- http://wap.business-standard.com/article/news-cm/centre-giving-priority-to-agriculture-sector-by-allocating-maximum-funds-for-the-farmers-welfare-agriculture-minister-117042600670_1.html
- <http://www.newindianexpress.com/business/2017/apr/27/government-not-planning-to-tax-agriculture-income-says-jaitley-1598146.html>
- <http://www.financialexpress.com/opinion/taxing-agriculture-critical-dont-dismiss-bibek-debroy/644001/>
- <http://m.economictimes.com/news/economy/indicators/niti-aayog-pegs-gdp-to-grow-8-bats-for-agriculture-tax-reforms/articleshow/58405291.cms>
- <http://www.livemint.com/Politics/W8qZHagCw6huzwW3ukSTcN/Government-planning-one-nation-one-market-in-agriculture.html>
- <https://www.google.co.in/amp/indianexpress.com/article/opinion/columns/12-reasons-why-farm-income-tax-policy-outrage-bjp-bibek-debroy-column-4637877/lite/>
- <http://www.deccanchronicle.com/business/economy/090517/no-plan-to-tax-agriculture-income-rich-farmer-very-rare-arun-jaitley.html>
- <http://m.timesofindia.com/india/indias-biotech-regulator-gives-green-signal-to-gm-mustard-activists-oppose-the-move/articleshow/58631988.cms>
- <http://indianexpress.com/article/india/gm-genetically-modified-mustard-gets-geac-genetic-engineering-appraisal-committee-nod-for-cultivation-4651857/>
- <http://www.financialexpress.com/opinion/monsanto-not-to-introduce-bollgard-3-some-other-gm-crops-in-india-over-regulatory-clouds/663069/>
- <http://www.livemint.com/Politics/EcHrzdppOI9wfPQIbvabTK/What-a-nod-for-GM-mustard-means-for-the-future-of-Indias-ag.html>
- <https://geneticliteracyproject.org/2017/07/07/pink-bollworm-pest-developing-resistance-gmo-bt-corn-india/>
- <http://www.firstpost.com/india/gm-mustard-row-will-take-policy-decision-on-crop-rollout-in-september-centre-tells-supreme-court-3876091.html>
- http://www.business-standard.com/article/current-affairs/farmers-planted-3-5-mn-packets-of-illegal-cotton-seeds-this-kharif-season-117092800408_1.html
- http://www.business-standard.com/article/markets/desi-cotton-replaces-bt-seeds-this-kharif-season-117081801164_1.html
- <http://www.financialexpress.com/industry/pink-bollworm-strikes-cotton-crop-in-gujarat/799854/>
- <http://www.thehindubusinessline.com/economy/agri-business/thanks-to-good-rains-cotton-output-seen-rising-4-to-345-m-bales/article9824324.ece>
- <http://www.thehindu.com/news/national/claims-on-bt-cotton-need-to-be-probed-panel/article19562829.ece>
- <http://www.downtoearth.org.in/news/government-to-take-a-decision-on-gm-mustard-by-september-58376>
- <https://timesofindia.indiatimes.com/city/nagpur/experts-bt-cotton-no-longer-resistant-to-bollworm/articleshow/60292869.cms>
- <https://economictimes.indiatimes.com/news/economy/agriculture/monsanto-exits-cotton-seeds-business-in-india/articleshow/60415874.cms>
- <https://www.dawn.com/news/1351484>
- <http://www.thehindubusinessline.com/economy/agri-business/seed-industry-association-welcomes-eu-body-move-on-patents/article9754135.ece>
- <https://timesofindia.indiatimes.com/city/nagpur/chor-bt-cotton-its-official/articleshow/61125892.cms>



- <http://www.newindianexpress.com/states/telangana/2017/oct/25/uncertain-weather-pests-hit-cotton-yield-in-warangal-farmers-blame-bt-variety-1682219.html>
- <https://timesofindia.indiatimes.com/city/mumbai/denotify-bt-cotton-seed-that-is-no-longer-pest-resistant-state-to-centre/articleshow/61232948.cms>
- <https://timesofindia.indiatimes.com/city/mumbai/in-a-first-2-state-univs-to-start-hybrid-bt-cotton-seed-production/articleshow/61192069.cms>
- <http://thehitavada.com/Encyc/2017/10/13/The-Fatal-Chain--Failure-of-Bt-Cotton,-increased-sprays,-poisoning-deaths.aspx>
- <http://www.financialexpress.com/opinion/monsantos-herbicide-tolerant-bt-cotton-pirated-here-is-why-agri-piracy-will-yield-bitter-crop-in-india/902513/>
- <https://www.lifegate.com/people/lifestyle/vandana-shiva-gm-mustard-bt-cotton-india>
- <https://www.moneycontrol.com/news/trends/current-affairs-trends/maharashtra-govt-asks-centre-to-denotify-poor-pest-resistant-bt-cotton-seeds-2420323.html>
- <https://www.thehindubusinessline.com/economy/agri-business/maharashtra-govt-wants-cbi-to-probe-illegal-genes-in-bt-cotton/article9939959.ece>
- <https://economictimes.indiatimes.com/news/economy/agriculture/gm-cotton-grown-in-8-5-lakh-ha-illegal-market-is-rs-472-crore/articleshow/61128694.cms>
- <http://www.newindianexpress.com/business/2017/nov/23/india-cotton-exports-to-drop-as-pink-bollworms-eat-crop-grow-resistant-to-bt-cotton-seeds-1709101.html>
- <http://www.fibre2fashion.com/news/textile-news/maharashtra-wants-pest-resistant-bt-cotton-de-notified-228775-newsdetails.htm>
- <https://www.firstpost.com/india/allegations-against-monsanto-of-unsafe-bt-products-and-health-risks-are-blatantly-inaccurate-4191341.html>
- <https://cosmosmagazine.com/biology/insects-are-getting-faster-at-developing-resistance-to-gm-crops>
- <https://www.firstpost.com/india/allegations-against-monsanto-of-unsafe-bt-products-and-health-risks-are-blatantly-inaccurate-4191341.html>
- <http://www.thehindu.com/todays-paper/tp-national/tp-mumbai/pink-bollworm-may-eat-up-half-of-states-cotton-crop/article20495765.ece>
- <https://timesofindia.indiatimes.com/city/hyderabad/bt-cotton-eating-into-other-crop-areas-crackdown-on/articleshow/61525291.cms>
- <https://www.hindustantimes.com/mumbai-news/maharashtra-government-seeks-centre-aid-pest-infested-cotton-crop/story-YkF3blcwNVuto8Dhj1YsgP.html>
- <http://www.financialexpress.com/india-news/pink-bollworm-seed-body-comes-out-in-support-of-companies/928341/>
- <https://timesofindia.indiatimes.com/city/mumbai/50-cotton-crop-under-pest-attack-losses-touch-rs-15000cr/articleshow/61938522.cms>
- <http://www.southwestfarmpress.com/cotton/bollworms-survive-some-bt-cotton-kerns-warns-timing-critical>
- <http://www.newindianexpress.com/states/telangana/2017/dec/06/ts-sounds-alarm-over-monsantos-hazardous-illegal-bt-cotton-trait-1719547.html>
- <https://economictimes.indiatimes.com/news/economy/agriculture/the-brakes-are-applied-on-the-bt-cotton-story/articleshow/62583116.cms>
- <http://www.newindianexpress.com/business/2018/jan/18/bt-cotton-seeds-effective-monsanto-to-government-1757850.html>
- <https://www.thehindubusinessline.com/economy/agri-business/threat-to-stop-selling-bt-cotton-seeds-irresponsible-mahyco-monsanto/article10038022.ece>
- <https://timesofindia.indiatimes.com/city/nagpur/seed-cos-threaten-to-stop-making-bt-cotton-seeds/articleshow/62343563.cms>



- <https://economictimes.indiatimes.com/news/economy/agriculture/difficult-to-say-bt-cotton-crop-yield-loss-due-to-pink-bollworm-attack-fsii/articleshow/62526180.cms>
- <http://www.financialexpress.com/market/commodities/maharashtra-bans-co-marketing-of-brands-for-bt-cotton-seeds/1016693/>
- <http://www.fibre2fashion.com/news/textile-news/bt-cotton-seeds-effective-mmbi-writes-to-indian-minister-240235-newsdetails.htm>
- <https://www.livemint.com/Politics/hyxEBMgOeiil3Yepi52KoK/Maharashtra-govt-forms-SIT-to-probe-sale-of-illegal-Bt-cotto.html>
- <https://geneticliteracyproject.org/2018/01/24/following-pest-infestation-will-indian-farmers-turn-wary-gmo-bt-cotton/>
- <https://geneticliteracyproject.org/2018/01/18/burkina-faso-abandons-insect-resistant-gmo-cotton-suffers-lower-yields/>
- <https://www.thehindubusinessline.com/economy/agri-business/refuge-planting-needed-to-slow-pest-resistance-to-bt-cotton/article22681448.ece>
- <https://geneticliteracyproject.org/2018/01/18/burkina-faso-abandons-insect-resistant-gmo-cotton-suffers-lower-yields/>
- <https://www.firstpost.com/india/union-minister-says-cotton-production-nearly-doubled-since-bt-cottons-introduction-in-2002-facts-show-yields-have-stagnated-4378719.html>
- <https://timesofindia.indiatimes.com/home/science/bt-cotton-doubled-production-minimised-harm-by-pest-govt/articleshow/62792163.cms>
- <https://economictimes.indiatimes.com/news/economy/agriculture/remove-royalty-on-bt-cotton-seeds-swadeshi-jagran-manch/articleshow/63107214.cms>
- <http://www.thehansindia.com/posts/index/News-Analysis/2018-02-17/Why-Bt-Cotton-hit-by-pests-more-in-Telangana-AP/359721>
- <http://indianexpress.com/article/india/to-bt-or-not-to-bt-60-lakh-cotton-farmers-or-a-handful-of-vested-interests-5073403/>
- <https://www.hindustantimes.com/mumbai-news/pest-attack-has-killed-crops-and-hopes-of-41-lakh-farmers-in-maharashtra/story-tOjb1CVpXcC1ProjSHIBjP.html>
- <http://thehitavada.com/Encyc/2018/2/8/SIT-to-probe-Monsanto-s-role-in-production,-sale-of-herbicide-tolerant-Bt-Cotton-in-State.aspx>
- <https://www.indiatoday.in/pti-feed/story/monsanto-welcomes-probe-into-illegal-bt-cotton-in-maha-1165968-2018-02-09>
- <https://www.hindustantimes.com/mumbai-news/in-maharashtra-vicious-cycle-of-cotton-farmers-woes-continues/story-DkbE5Yfk0KGc0YcYBVzBuK.html>
- <http://indianexpress.com/article/india/monsantos-bt-cotton-tech-to-be-royalty-free-5055435/>
- <http://www.downtoearth.org.in/news/why-are-pests-developing-resistance-to-bt-cotton-in-telangana-andhra-pradesh--59685>
- <http://www.financialexpress.com/industry/after-pink-bollworm-attack-maharashtra-to-promote-short-duration-varieties-of-cotton/1066557/>
- <https://www.thehindubusinessline.com/economy/agri-business/ap-issues-notice-to-nuziveedu-kaveri-for-bt-cotton-seed-use/article22745264.ece>
- <https://www.thenewsminute.com/article/threat-crops-and-carcinogenic-farmers-welcome-move-restrict-glyphosate-use-76551>
- <https://geneticliteracyproject.org/2018/02/12/will-indias-government-scrap-monsantos-patent-royalties-insect-resistant-gmo-bt-cotton-seeds/>
- <http://www.newindianexpress.com/business/2018/mar/14/government-slashes-bt-cotton-seed-rates-royalties-after-farmers-protests-1786799.html>
- <http://www.financialexpress.com/market/commodities/bt-cotton-seed-price-cut-7-5-trait-value-by-20/1097651/>



- https://www.indiaonline.com/article/news-top-story/centre-slashes-bt-cotton-seed-prices-provides-relief-to-farmers-118031300042_1.html
- <http://www.thehindu.com/news/cities/Hyderabad/bg-ii-cotton-seed-packet-price-cut/article23229790.ece>
- <https://www.livemint.com/Politics/vWC02XjWEZImcfAmRoUfFP/Govt-likely-to-slash-Bt-Cotton-seed-price-to-Rs740-per-packet.html>
- <https://www.standardmedia.co.ke/ktnnews/video/2000151348/-business-today-12th-march-2018-next-frontier-growing-bt-maize-in-kenya>
- <http://www.fibre2fashion.com/news/textile-news/indian-govt-cuts-bt-cotton-seed-price-to-rs-740-per-packet-241186-newsdetails.htm>
- <https://www.thehindubusinessline.com/economy/agri-business/we-look-for-uniformity-in-regulatory-provisions-across-the-country/article26488423.ece>
- <https://www.dailypioneer.com/2019/columnists/save-akola-farmers.html>
- <https://timesofindia.indiatimes.com/india/pro-gm-movement-spreads-to-11-districts-in-maharashtra-bail-of-buldhana-farmer-rejected/articleshow/69932768.cms>
- <https://www.thehindubusinessline.com/economy/agri-business/ht-cotton-ap-suspends-licences-of-top-seed-firms/article26240092.ece>
- <https://www.livemint.com/Politics/3sBSTQLv4wJHeaKcnKO2TO/Bayer-other-seed-MNCs-hail-Supreme-Court-order-on-Monsanto.html>
- <https://economictimes.indiatimes.com/markets/commodities/news/bks-seeks-action-against-use-of-illegal-bt-seeds/articleshow/69937522.cms>
- https://www.business-standard.com/article/companies/govt-lowers-sale-price-of-bt-cotton-seeds-for-a-450-gram-packet-to-rs-730-119031100041_1.html
- <https://www.dailypioneer.com/2019/columnists/old-is-still-gold.html>
- <https://www.dailypioneer.com/2019/columnists/time-to-seed-the-world.html>
- <https://www.thehindu.com/news/cities/Hyderabad/tssoca-chosen-model-seed-certification-authority/article26515415.ece>
- <https://www.thehindu.com/news/cities/Hyderabad/ts-seeks-german-support-in-setting-up-seed-park/article26646531.ece>
- <https://www.thehindu.com/news/cities/Hyderabad/quality-seed-must-for-improving-income-of-farmers/article28159981.ece>
- <https://economictimes.indiatimes.com/news/economy/agriculture/hybrid-seed-makers-to-ramp-up-rd-spend-on-new-hybrids/articleshow/52796275.cms>

Video Links:

- <https://www.youtube.com/watch?v=gkuBAWRxgCE>
- <https://www.youtube.com/watch?v=SMzhyoWP08E>
- <https://www.youtube.com/watch?v=dr05ImLI9vs>
- https://www.youtube.com/watch?v=ycGAFe6_HCE
- <https://www.youtube.com/watch?v=GQOt9eX3HZs>
- <https://www.youtube.com/watch?v=XFZy8j0FJpw>

I. Audit Report

A K GUPTA & ASSOCIATES (Chartered Accountants)

OFFICE: - B 1/ 154, LAJPAT NAGAR - I,
NEW DELHI - 110024

Tel: 011-65650816, Mobile +91 9717143157

E-mail :- ashokgupta1949@yahoo.co.in



AUDITOR'S REPORT

Auditor's Report to the Members of 'NATIONAL SEED ASSOCIATION OF INDIA'

We have audited the attached Balance Sheet of NATIONAL SEED ASSOCIATION OF INDIA, as on 31st March 2019 and also Income & Expenditure Account for the year ended on that date annexed thereto. These financial statements are the responsibility of the Association's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in India. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

Subject to notes to accounts in schedule to financial statements, we further report that:

- (i) We have obtained all the information and explanations, which to best of our knowledge and belief were necessary for the purpose of our audit;
- (ii) In our opinion, proper books of account as required by law have been kept by the Association so far as appears from our examination of those books;
- (iii) The Balance Sheet and Income & Expenditure Account dealt with by this report are in agreement with the books of account;
- (iv) In our opinion, the Balance Sheet and Income & Expenditure Account dealt with by this report comply with the rules & regulations under which the said association has been formed;
- (v) In our opinion and to the best of our information and according to the explanations give to us, the said accounts read with notes thereon give the information required by rules and regulation as required, in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:
 - a) In the case of Balance Sheet, State of affairs of the Association as at 31st March, 2019; and
 - b) In the case of the Income & Expenditure Account, Excess of Expenditure over Income of the association for the year ended on that date.

For A. K. Gupta & Associates
(Chartered Accountants)

Date: - 29-07-2019
Place: - New Delhi

Sd/-
(A K Gupta)
Prop.
Mem. No. 80014
FRN 000776N


NATIONAL SEED ASSOCIATION OF INDIA
Regd. Office :- 909, SURYA KIRAN BUILDING, KASTURBA GANDHI MARG, NEW DELHI-110001.
BALANCE SHEET AS AT 31ST MARCH 2019

	<u>SCH.</u>	<u>CURRENT YEAR</u> <u>(Rs.)</u>	<u>PREVIOUS YEAR</u> <u>(Rs.)</u>
I SOURCES OF FUNDS			
<u>FUND</u>			
Corpus Fund	1	33,512,321	33,461,321
General Fund	2	75,353,861	76,242,930
TOTAL		108,866,182	109,704,251
II APPLICATION OF FUNDS			
<u>Fixed Assets</u>	3		
(a) Gross Block		14,724,977	16,483,480
(Cost Less Accumulated Depreciation)			
(b) Less : Depreciation		1,512,898	1,817,200
(c) Net Block		13,212,079	14,666,280
<u>Investments</u>	3A		
Investment		92,889,338	94,511,267
<u>Current Assets, Loans and Advances</u>	4		
(b) Cash & Bank Balances		2,958,027	295,508
(c) Loans and Advances		1,848,630	1,748,798
		4,806,657	2,044,306
Less :			
<u>Current Liabilities and Provisions</u>	5		
(a) Current Liabilities		2,041,893	641,380
(b) Provisions		-	876,222
		2,041,893	1,517,602
Net Current Assets		2,764,764	526,704
TOTAL		108,866,182	109,704,251
Significant Accounting Policies and Notes Forming Part of Accounts As per our report of even date	10		
For A. K. Gupta & Associates (Chartered Accountants)		For National Seed Association of India	
Sd/- A.K GUPTA (Prop.) Mem . No. 80014 FRN 000776N		Sd/- (Executive Director)	
Place: New Delhi Date :- 29-07-2019	Sd/- (President)	Sd/- (General Secretary)	Sd/- (Treasurer)

NATIONAL SEED ASSOCIATION OF INDIA

Regd. Office :- 909, SURYA KIRAN BUILDING, KASTURBA GANDHI MARG, NEW DELHI-110001.

INCOME & EXPENDITURE FOR THE YEAR ENDED 31ST MARCH 2019

	<u>SCH.</u>	<u>Current Year</u> <u>(Rs.)</u>	<u>Previous Year</u> <u>(Rs.)</u>
<u>INCOME :</u>			
Direct Income	6	27,298,764	22,687,022
Indirect Income	7	461,716	11,596,615
TOTAL		27,760,480	34,283,637
<u>EXPENDITURE :</u>			
Employees Remuneration & Benefits	8	5,826,654	8,166,756
Administrative & Other Expenses	9	21,309,997	15,179,951
Depreciation	3	1,512,898	1,817,200
EXCESS OF INCOME OVER EXPENDITURE CARRIED FORWARD TO GENERAL FUND		(889,069)	9,119,730
TOTAL		27,760,480	34,283,637

Significant Account Policies
and Notes to Accounts
As per our report of even date

10

For A. K. Gupta & Associates
(Chartered Accountants)

Sd/-
A. K. GUPTA
(Prop.)
Mem . No. 80014
FRN 000776N

Sd/-
(Executive Director)

Place: New Delhi
Date :- 29-07-2019

Sd/-
(President)

Sd/-
(General Secretary)

Sd/-
(Treasurer)



NATIONAL SEED ASSOCIATION OF INDIA
Regd. Office :- 909, SURYA KIRAN BUILDING, KASTURBA GANDHI MARG, NEW DELHI-110001.

Schedules forming part of the Balance Sheet as at 31st March, 2019

SCHEDULE 1

CORPUS FUND

Opening Balance	33,461,321		33,461,321
Add :- Entrance Fees received During the year	51,000		117,000
TOTAL	33,512,321		33,461,321

SCHEDULE 2

GENERAL FUND

Opening Balance	76,242,930	67,123,200	
Add : Additions during the year	-	-	
Less :- Deficit during the year	(889,069)	9,119,730	76,242,930
TOTAL	75,353,861		76,242,930



NATIONAL SEED ASSOCIATION OF INDIA
Regd. Office :- 909, SURYA KIRAN BUILDING, KASTURBA GANDHI MARG, NEW DELHI-110001.

Fixed Assets

PARTICULARS OF DEPRECIATION AS PER THE INCOME TAX ACT, 1961 FOR THE YEAR ENDED 31ST MARCH 2019

SCHEDULE 3

Block of Asset	Rate of Dep.	Opening Balance as on 1/4/2018	Additions		Deletions		Total	Depreciation on Opening balance made in first half as reduced by deletions [(3)+(4)-(6)] x (2)	Depreciation on the additions made in the second half	Total Depreciation	Written down Value as on 31/03/2019
			More than 180 days	Less than 180 days							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(9)+(10)	(11)	
	%							(5) x(2) x 50%			(7)-(10)
		Amt Rs	Amt Rs	Amt Rs	Amt Rs	Amt Rs	Amt Rs	Amt Rs	Amt Rs	Amt Rs	Amt Rs
Computers	40	68,622	29,965	-	-	98,587	39,435	-	39,435	59,152	
Furniture & Fix.	10	345,031	-	-	-	345,031	34,503	-	34,503	310,528	
Mobile Phone	15	15,936	-	-	-	15,936	2,390	-	2,390	13,546	
Invertor	15	26,606	-	-	-	26,606	3,991	-	3,991	22,615	
Digital Camera	15	7,105	-	-	-	7,105	1,066	-	1,066	6,039	
Building	10	14,053,893	-	-	-	14,053,893	1,405,389	-	1,405,389	12,648,504	
Room Heaters	15	9,774	-	-	-	9,774	1,466	-	1,466	8,308	
LG Fridge	15	2,981	-	-	-	2,981	447	-	447	2,534	
Biometric & Face Reader	15	-	-	7,316	-	7,316	-	549	549	6,767	
Xerox Machine	15	52,605	-	-	-	52,605	7,891	-	7,891	44,714	
Airconditioner	15	83,727	21,416	-	-	105,143	15,771	-	15,771	89,372	



NATIONAL SEED ASSOCIATION OF INDIA

Regd. Office :- 909, SURYA KIRAN BUILDING, KASTURBA GANDHI MARG, NEW DELHI-110001.

Schedules forming part of the Balance Sheet as at 31st March, 2019

SCHEDULE 3 A

<u>INVESTMENT (As per Net Asset Value)</u>	<u>CURRENT YEAR</u>		<u>PREVIOUS YEAR</u>	
	<u>RUPEES</u>	<u>RUPEES</u>	<u>RUPEES</u>	<u>RUPEES</u>
(a) HDFC Equity Saving Fund	6,779,274		6,113,054	
(b) SBI Equity Hybrid Fund	11,184,597		12,837,135	
(c) SBI Magnum Multicap Fund	15,991,312		16,141,581	
(d) UTI Multi Asset Retail	58,894,155		59,379,497	
(e) Agriculture Skill Council of India	40,000	<u>92,889,338</u>	40,000	<u>94,511,267</u>

NATIONAL SEED ASSOCIATION OF INDIA

Regd. Office :- 909, SURYA KIRAN BUILDING, KASTURBA GANDHI MARG, NEW DELHI-110001.

Schedules forming part of the Balance Sheet as at 31st March, 2019

	<u>CURRENT YEAR</u>		<u>PREVIOUS YEAR</u>	
	<u>(Rs.)</u>		<u>(Rs.)</u>	
<u>SCHEDULE 4</u>				
<u>Current Assets, Loans and Advances</u>				
<u>Cash and Bank Balances :</u>				
- Balance With scheduled Banks	2,819,293		247,805	
Cash in hand	<u>138,734</u>	2,958,027	<u>47,703</u>	295,508
<u>Loans and Advances :</u>				
Deposits	54,230		54,230	
Interest Accrued	9,562		-	
Advance to Staff	-		96,000	
Sundry Debtors	850,427		703,751	
Tax Deducted at Source	<u>934,411</u>	1,848,630	<u>894,817</u>	1,748,798
		<u>4,806,657</u>		<u>2,044,306</u>

	<u>CURRENT YEAR</u>		<u>PREVIOUS YEAR</u>	
	<u>(Rs.)</u>		<u>(Rs.)</u>	
<u>SCHEDULE 5</u>				
<u>Current Liabilities & Provisions</u>				
<u>Current Liabilities</u>				
TDS Payable	581,534		20,839	
P F Payable	13,059			
S. Creditors	<u>1,447,300</u>	2,041,893	<u>620,541</u>	641,380
<u>Provisions</u>				
Payable to Staff	-		378,974	
Expenses Payable	<u>-</u>	-	<u>497,248</u>	876,222
		<u>2,041,893</u>		<u>1,517,602</u>



NATIONAL SEED ASSOCIATION OF INDIA

Regd. Office :- 909, SURYA KIRAN BUILDING, KASTURBA GANDHI MARG, NEW DELHI-110001.

Schedule forming part of the Income & Expenditure Account for the year ended 31st March, 2019

	<u>Current Year</u> <u>(Rs.)</u>	<u>Previous year</u> <u>(Rs.)</u>
<u>SCHEDULE 6</u>		
<u>Direct Income</u>		
Membership Fee Received	9,350,614	12,335,500
Delegate Registration Fee	7,199,000	4,819,272
Contribution for Magazines / Hand Book / Website	501,150	488,250
Exhibition & Trading Table	2,720,000	1,044,000
Processing Fee	340,000	400,000
Sponsorship Fee	7,148,000	3,600,000
Sovenier Advertisements	40,000	-
	<u>27,298,764</u>	<u>22,687,022</u>

SCHEDULE 7

Other Income

Interest on Deposits-Gross (Including Sweep - in A/c)	76,659	342,405
Income From Investment	378,071	11,249,910
Other Income	6,986	4,300
	<u>461,716</u>	<u>11,596,615</u>

NATIONAL SEED ASSOCIATION OF INDIA

Regd. Office :- 909, SURYA KIRAN BUILDING, KASTURBA GANDHI MARG, NEW DELHI-110001.

Schedule forming part of the Income & Expenditure Account for the year ended 31st March, 2019

SCHEDULE 8

Employees Remuneration & Benefits

	<u>Current Year</u> <u>(Rs.)</u>	<u>Previous Year</u> <u>(Rs.)</u>
Salary	5,710,480	8,053,585
Staff Welfare	116,174	113,171
	<u>5,826,654</u>	<u>8,166,756</u>

SCHEDULE 9

Administrative & Other Expenses

	<u>Current Year</u> <u>(Rs.)</u>	<u>Previous year</u> <u>(Rs.)</u>
Payment to Auditors	30,000	30,000
Finance Charges	47,882	26,025
Books & Periodicals	38,025	128,453
Communication	323,116	432,420
Conference Expenses	13,467,260	8,549,325
Computer Maintenance	81,278	45,978
Contribution to Seed Association	-	376,000
Entertainment	12,975	130,701
Event Management Charges	3,060,276	273,378
Event Promotion Charges	-	-
Festival Expenses	202,834	214,451
Legal & Professional Charges	1,678,185	1,453,900
Membership & Subscription	116,055	1,148,397
Misc. Expenses	9,578	17,697
Insurance	23,364	22,951
Office Maintenance	480,260	122,257
Printing & Stationery	380,233	393,236
Property Tax	62,097	62,234
Publications Expenses	259,840	498,477
Income Tax Paid	112,252	-
Travelling & Conveyance Expenses	721,120	851,794
Advertisement Expenses	-	218,258
Website	90,270	78,545
Water & Electricity	113,098	105,473
	<u>21,309,997</u>	<u>15,179,951</u>



NATIONAL SEED ASSOCIATION OF INDIA

Regd. Office: - 909, SURYA KIRAN BUILDING,
KASTURBA GANDHI MARG, NEW DELHI-110001.

SCHEDULE 10: Notes annexed thereto and forming part of the Balance Sheet as at 31st March, 2019 and Income and Expenditure Account for the year ended on that date.

I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

(1) Basis of Accounting:

The Accounts are prepared in accordance with accounting principles generally accepted in India and on the principle of going concern.

All incomes are accounted for on cash basis but expenses are accounted for on mixed basis i.e. some expenses are accounted for on mercantile basis while others are accounted for on cash basis. Accounts of various projects/seminars/conference have been taken into same books of accounts.

(2) Fixed Assets and Depreciation:

Fixed assets have been purchased/acquired during the period. All the fixed assets have been stated at cost of acquisition less accumulated depreciation. Depreciation is provided on written down value methods as per provisions of Income Tax Act, 1961 and rates prescribed under Income Tax Rules, 1961:

(3) Revenue Recognition :

Interest on time deposit is accounted for on accrual basis.

(4) Retirement Benefits:

Provision for Gratuity has not been made, as the Association has no statutory liability to pay the same.

(5) Taxes on Income/Deferred Tax Assets/Liabilities

Current tax is not determined as the amount of tax payable in respect of income for the year does not arise as association is exempt under Income Tax Act. Association is registered under the Societies Registration Act, 1860 w.e.f. 08.05.2007.

(6) Material Events

Material events occurring after the Balance Sheet date are taken into cognizance.

II. NOTES ON ACCOUNTS

- 1) Auditor's Remuneration:

Statutory Audit fees	Rs. 25,000	<i>(Previous year 25,000)</i>
Others	Rs. 5,000	<i>(Previous year 5,000)</i>

	Rs. 30,000	

- 2) Previous year's figures are re-classified/re-grouped wherever necessary to make comparable with the current year's figures.

- 3) In the opinion of the management and to the best of their knowledge and belief, current assets, loan and advances have a value on realization in the ordinary course at least equal to the amount at which they are stated in the Balance Sheet.

- 4) Security Deposits, etc. and other liabilities are subject to confirmation by other parties.

As per our report of even date

For A. K. Gupta & Associates
(Chartered Accountants)

For and behalf of the Association

Sd/-
(A K Gupta)
Prop.
Mem. No. 80014
FRN 000776N

Sd/-
(Executive Director)

Date: - 29-07-2019
Place: - New Delhi

Sd/-
(President)

Sd/-
(General Secretary)

Sd/-
(Treasurer)



UPCOMING EVENT

INDIAN SEED CONGRESS 2020

BLOCK YOUR CALENDAR
ISC 2020, New Delhi
February 2020

What we do



National Seed Association of India

909, Surya Kiran Building,
19, Kasturba Gandhi Marg, New Delhi - 110001 (INDIA)

Ph.: 011-43553241-43; Fax: 011-43533248

E-mail: info@nsai.co.in

Web: www.nsai.co.in