



8th International Seminar on Wheat & Wheat Products: New Ideas & Innovation for Growth

July 17-18, 2016, Goa Marriott Resort & Spa, Goa

RECOMMENDATIONS OF THE SEMINAR

Introduction - Agriculture continues to be backbone of developing economies like India for its vital role in providing food, feed, fuel and livelihood for the world's around 800 million people who suffer from hunger and poverty. In agriculture, wheat is the most important food crop in the world providing food to more than 2.5 billion poor people. Wheat is the world's largest cultivated crop with estimated production of 727 Million MT grown on 219 mha. It is a staple Food in more than 40 countries and second most important winter cereal in India after rice. India is the second largest producer of wheat in the world after China. Wheat Production last year is estimated to be 94 Million MT (Govt.) grown on 29 mha. It is expected to touch 100 Million MT by 2020. To encourage new ideas & innovation for growth in this sector, 8th International Seminar on Wheat & Wheat Products: New Ideas & Innovation for Growth was successfully organized on July 17-18 2016 at Goa Marriott Resort & Spa, Goa. The organisers of the seminar were Wheat Products Promotion Society, Roller Flour Millers Federation of India, Society of Indian Bakers, All India Bread Manufacturers Association, Karnataka Roller Flour Mills Association and Maharashtra Roller Flour Mills Association. The Food Safety and Standards Authority of India (FSSAI) and Borlaug Institute for South Asia (BISA) supported the event as Knowledge Partners. The Assocom India was the coordinator of the Seminar. The specific recommendations that emerged out of the deliberations during the seminar are as follows:-

1. **Farmers' Agricultural Income:** There is need for the government to take initiatives for raising farmers' agricultural income which is a major challenge. Due to over use of inputs, resource services, uneven weather, natural calamities etc., income of farmers has declined drastically. Deteriorating soil health and reduction in ground water levels are affecting productivity, thereby adversely impacting farmer's earnings. Focus should also be on boosting productivity, cutting down costs, adopting value added varieties and fetching better prices than the assured MSP etc. for the farming community. Hybrid and good quality of seeds and one seed village per block should be the top priorities in the agenda of the Government.
2. **State-of-the-Art Technologies:** There has been a paradigm shift in agriculture in recent years at both national and global levels. There is an urgent requirement for the introduction of sustainable and innovative crop production technologies. Besides these, disaster warning system, technology foresight centres, single and reliable source of information are also necessary for safeguarding the crops and ensuring better remuneration to the farmers. Emphasis should be laid by the Government on encouragement and promotion of state of the art technologies for benefit of the industry and the stakeholders.

3. **Policy Framework:** Conducive regulatory environment is imperative for developing and launching innovative products. Whole grains, wheat bran and fiber concentrates which are essential for producing Multi-grain and High fiber bread variants are not allowed for use in bread manufacture. Further, colours and flavours should be allowed in specialty breads, chocolate breads and breads that can be positioned as cake analogues. Frequent changes in labelling rules such as printing of FSSAI logo, License Number, declaration of quantities of Saturated and Trans fats, specifying the type of edible vegetable oil/fat etc. would cause hardship for the manufacturers and wreak havoc in the management of Packaging material inventories. A stable regulatory environment is required for growth of the Industry. Fortifying PDS wheat would achieve the greatest impact on public health. Converting PDS wheat to fortified atta can enable reaching out to a large chunk of the population and significantly enhancing their health status. India can set a fortification model for the rest of the world. Government should advocate and support fortification of industrially milled cereal grains by collaborating with multi-sector partners. The government needs to give importance to the views of private sector leaders during the decision making and conceptualization phase. However, such models can only be successful when there is a clearly identified path to the market.
4. **Introduction of New Systems:** Presently, there is no system existing for cleaning, segregating and channelizing different varieties for PDS & different segments of end user industries. Process of cleaning is mandatory to rid the wheat of chaffe, stone and foreign matter, pesticide residues and to offer protection from moisture ingestion, pests etc. It has been noticed that due to flour quality mismatch end users are generally affected. Hence, there is a need for introducing modern cleaning methods as well as segregating at farm gate, mandis etc. to safeguard the quality of wheat. Eco-friendly pest management and organic farming should also be introduced. Government should implement its policies like Fasal Bima Yojana and other schemes in letter and spirit. There is a need to map & identify various climatic and soil conditions available in the country, mark such identified geographic clusters for growing differentiated wheat varieties for consumption by masses & various industry segments.
5. **Transportation and Storage:** It has been seen that transportation and storage is an important link in the wheat value chain in the country. Every year, it has been witnessed that huge quantities of wheat are lost during storage due to action of pests and microbes. There is a need to adopt scientific storage methods and modern storage systems for handling, storage, aeration, drying and grain quality monitoring. Augmentation of storage capacity needs to be premised on PPP Model. Storage structures should be integrated with modern Bulk handling, Bulk Cleaning and transportation systems. Dedicated wheat carrying trains have to be introduced during the harvesting season to transport Wheat to non-producing areas. It has been observed that even though record wheat production has been achieved and FCI is brimming with stocks, there is an unprecedented and inexplicable increase in the wheat prices. Centre and State Governments should analyze and causes for this price volatility and resolve the same. It has been noticed that fragmented & unreliable conventional storage results in pilferage & damage to stored grains. Uncontrolled humidity and temperature lead to deterioration in product quality and loss of nutritional value. There is a need to adopt modern mechanised scientific storage to enable efficient handling of food grains, thereby minimising post-harvest losses and ensuring food security for our nation. It is suggested that silos may be

adopted as a preferred method for storage even for private wheat trade/millers etc. Modern silos storage system has been prevalent across the world for more than 50 years and it is the only way forward for creation of new storage capacities and achieving food security.

6. **Current Transportation System:** Badly maintained trucks & pilferage during transit lead to transit losses. Non-Availability of racks as per the requirements of FCI is a serious bottle neck. Manual loading & unloading of rakes consume a lot of productive time incurring heavy demurrages. FAO Agriculture Services have highlighted the grain storage techniques after detailed field studies and suggested that under traditional storage systems in tropical countries, losses are typically around 5% over a storage season, depending upon the crop, the ambient conditions, the period of storage & other factors. In economic terms 5% losses amount to Rs. 762/- per ton (at current MSP) which is a net savings to the GOI.
7. **Flour Milling:** Stakeholders have been facing a number of problems like RM availability, procurement and price instability, inappropriate raw material quality and quality of milled products not meeting user industry requirements. In addition to these, shortage of skilled personnel, high energy costs, poor hygiene and sanitation and inadequate infestation control further worsen the situation. Government should take initiatives to resolve these issues.
8. **Bakery and Extruded Products:** This industry offers substantial marketing and export opportunities. There is a need to encourage and make available packaging support to compete in the international market.
9. **Application Centres:** Rapid urbanization, disposable incomes, time constraints led to surge in demand for ready to eat products like bakery products. Youth are looking for Nutrition, Health and Sensorial delight in bakery products. It presents a huge opportunity for developing new innovative bakery products. Due to this pleasant development in the sector, there is requirement of Application Centre for developing hygienic, delicious and nutritious bakery products meeting ethnic taste & flavor requirements (Curry Bread).
10. **Integrated Management Information System for Farmers and Industry:** There is a need to establish a scientific integrated Management Information System to manage seeds, manures, labour, fertilizers, storage & distribution for farmers and industry. It will lead them to interact and reinforce each other, enabling proper use of resources for quality production and distribution of grain. Moreover, crop production enterprises can reduce costs of purchased inputs such as fertilizer, leading to reduction in price of wheat.
11. **Skill Development:** Government has constituted a National Skill Development Corporation (NSDC) to promote skill development by catalyzing creation of large, for-profit vocational institutions which can impart quality training for skill development. There is a severe shortage of skilled manpower across entire wheat value chain which is an enormous challenge for industry. To boost economic growth, fillip required for skill development. Bakery industry, being a major sector in the food processing industry, must have a separate skill development entity to impart domain skills and generate skilled manpower for wheat value chain.

12. **Flour Fortification:** Flour fortification is a proven and effective strategy to meet the nutritional needs of a large number of people across various sections of the society, including the poor and underprivileged. It was recommended that FSSAI should consider bringing out law for food production with special emphasize on flour fortification.

13. **Public Private Partnership (PPP) in Wheat:** There is need to introduce PPP in the following area:

- **Varietal Development & Deployment**
- **Customized Practices for Small and Medium Farmers**

PPP – Varietal Development And Deployment: The focus is largely on productivity, pest and disease resistance as well as developing plethora of varieties. There is a serious lack of complimentary services like extension, mechanization and testing. Going forward emphasis should be placed on nutrition & attribute based varietal development, reinvigoration of traditional varieties, agro – climatic zone specific varietal identification & deployment, localized seed banks and dissemination of best practices in adopted zones.

PPP - Customized Practices for Small and Medium Farmers: There is a need to organize small and medium farmers into specific clusters with customized programs and PPP (Public Private Partnership) Models to adopt specific clusters and synchronization of various schemes & subsidies, attribute focused production for better margins. There is a requirement from Government to take initiative to improve the farm economics, customized infrastructure, thrust on value addition, take initiative to growth in Exports and focus on Food Safety & Hygiene.

14. **Environmental Issues:** Industry has been using polypouches for packaging which adversely affects the environment. It is time to consider shifting to eco-friendly packaging based on Bio-degradable materials such as paper. In this direction, paper plastic combination could be an alternative which developed countries have already started using.

System of Food Grains in Other Countries - There is also a necessity to look into the systems of other countries which have achieved success in handling food grains efficiently.

US Government Food Grains Systems - There is no intervention of US government in any food grains transaction. Farmers directly interact with private players for forward trading of their produce. All the pricings of the food grains are determined by the market forces in both domestic as well as export market levels. USDA is just a regulatory authority for enforcing the quality specs and quantity conflicts

Food Grains Transactions In Canada - Canadian Wheat Board (CWB) has a wide representation of federal govt. staff, politicians, bureaucrats & farmers. Major food grains holdings of CWB are at farm level and grain terminals. CWB declares minimum price for food grains and maintains active interaction with the farmers. No food grains transaction is carried out for domestic and exports without CWB involvement. All quality specs and weight transactions are done as per CWB norms.
