

Panel discussion on Stubble burning: Options to manage it

ICAR-National Dairy Research Institute (NDRI), Karnal has organised a panel discussion on 'Stubble burning: Options to manage it' on 31.10.2017 at N.N. Dastur Auditorium. About 120 experts/professionals representing various organisations such as Haryana State Pollution Control Board (HSPCB), development departments including agriculture, animal husbandry, forestry, agricultural and veterinary universities, non-governmental organisations, scientists of NDRI, Karnal, IIWBR, Karnal, CSSRI, Karnal and IARI, New Delhi, Haryana Institute of Rural Development (HIRD), Extension Education Institute (EEI), Nilokheri, Lead Bank Manager, Karnal district and progressive farmers actively participated in the panel discussion. Dr Anjali Agarwal, Principal Scientist and PI, NICRA project welcomed the participants.

The panel discussion was inaugurated by Dr R.R.B. Singh, Director, NDRI. He stated that stubble burning had emerged as an important issue as it was contributing to air pollution and affecting soil health. He emphasised that stubble being a precious fodder for dairy animals, every effort should be undertaken to conserve and use it in an environment friendly manner. He also suggested that economics of different alternatives are more important from the farmers' point of view.



The chief guest of the panel discussion session was Shri S. Narayanan, Member Secretary, Haryana State Pollution Control Board (HSPCB), who highlighted that handling of paddy stubble in an eco-friendly manner will pave the way for the sustainable healthy life and livelihoods for all citizens of India. He also indicated that air quality in the NCR and Punjab and Haryana has deteriorated. Custom

hiring centre needs to be promoted to meet the demands of farmers. He further informed that HSPCB has engaged the Haryana Space Applications Centre (HARSAC) with the collaboration of ISRO to monitor stubble burning. Karnal and Patiala districts are being developed as model districts to tackle stubble burning with the help of different departments, including agriculture, revenue and panchayati raj.

Dr K. Ponnusamy, Principal Scientist while moderating the panel discussion, briefed the importance of the topic of choice and explained the modus operandi of the panel discussion. Later, five panellists expressed their views on the chosen topic.

Shri Pardeep Meel, Deputy Director (Agriculture), Karnal district conveyed the different alternative approaches to stubble burning. He expressed that negative publicity should be avoided. He expressed the satisfaction that awareness among farmers during last two years had tremendously improved. He further elaborated that Happy Seeder, straw management system (SMS), combine harvester, mulcher, reversible plough are being promoted in Karnal district through farm equipment subsidies for individual farmers and also by custom hiring centres.

Dr. Samar Singh, Professor and Head, Regional Research Station (CCSHAU) and KVK, Uchani, Karnal explained the various agronomic practices about stubble management and techniques for increasing the productivity. He informed that for every 1 kg of harvested rice, about 1.5 kg of crop residue is produced. By burning the crop residue, farmers deplete 89 per cent of nitrogen, 5.5 per cent of phosphorus, 19.9 per cent of potassium and 20.5 per cent of sulphur in soil. He clarified that burning of crop residue also contributed to greenhouse gases while burning of rice stubble released 70 per cent of carbon dioxide, 7 per cent of carbon monoxide, 0.66 per cent of methane and 2.1 per cent of nitrous oxide into atmosphere.

Dr. Gursahib Singh, Senior Research Engineer, Dept. of Farm Machinery and Power Engineering (FMPE), PAU, Ludhiana showcased the different machineries, which can be used for stubble management.

Shri S. Narayanan while highlighting the strict implementation of stipulations of National Green Tribunal (NGT) also advised the farming community to adopt various alternative measures to stubble burning. He said that HSPCB needs to implement the guidelines of NGT and agreed that no farmer is culprit.

Shri Gurbaaj Singh, a progressive farmer from Dabri village in Karnal district vividly explained the constraints in adopting various alternative approaches to stubble burning.

The participants in the audience stressed about importance of collective efforts of different organisations and farmer groups as there is a short gap between the paddy harvesting and wheat sowing and covering the larger area with limited machinery is a herculean challenge.

Dr K. Ponnusamy in his concluding remarks stressed that knowledge and skill of farmers should be enhanced on the alternative methods especially their feasibility in field application. The vote of thanks was given by Dr. Ritu Chakravarty, Senior Scientist.