



**Centre of Advanced Agricultural Science &
Technology (CAAST)
on
School of Natural Resource Management**

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Seminar on

Paddy Straw Management Issues

in Intensive Agriculture

March 3-4, 2020



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ABOUT CAAST-SNRM

The project entitled 'Centre of Advanced Agricultural Science & Technology (CAAST) on School of Natural Resource Management' is in progress at Punjab Agricultural University, Ludhiana funded by World Bank sponsored National Agricultural Higher Education Project (NAHEP) of Indian Council of Agricultural Research, New Delhi Government of India.

PREAMBLE

The intensive rice based cropping systems, particularly in North-Western India are characterized by the use of combine harvesters on almost entire area and a narrow window of time for sowing of next crop (generally wheat). The situation predisposes farmers to burning of paddy stubble and loose straw in the combine harvested fields. About 24.5 million tonnes of paddy straw is burnt every year in North-Western India. Apart from environmental pollution, nutrients (N, P, K and S), precious soil organic carbon and microbial diversity are lost. Punjab Agricultural University has carried out extensive research on farm machinery based solutions for paddy straw retention or incorporation in the field. PAU had developed Happy Seeder in the year 2006 for direct sowing of wheat in the combine harvested paddy field while retaining the straw as mulch. Recently, to facilitate the working of other straw management machines, PAU Super Straw Management System, an attachment to the rear of the combine harvester was developed to chop the loose straw coming out of the combine harvesters and spread it evenly in the field. The implementation of paddy straw management technologies have gained great relevance with imposition of ban on the burning of paddy straw by the governments and restrictions imposed by the Courts/National Green Tribunal. The last 2-3 years have required significant scaling up of these technologies. The implementation process has encountered anticipated as well as unforeseen challenges. At this point of time, a reappraisal of technological and dissemination strategies seems relevant. It is in this context that a seminar on 'Paddy Straw Management Issues in Intensive Agriculture' has been conceptualized to come up with recommendations and refinements in research, extension as well as policy matters in order to find a complete solution to this problem.

THEMES

- Farm mechanization based solutions for paddy straw management: Current status.
- Analyzing and anticipating impacts of in-situ paddy straw management on soil health and GHG emissions: short- and long-term perspectives.
- Research and extension strategies for addressing agronomic and plant protection consequences of new paddy residue management regime.
- Socio-economic aspects, policy support and outreach for wide adoption of paddy straw management technologies.
- Scalable potential of ex-situ approaches for utilization of paddy straw in Punjab.

BRIEF PROGRAMME

The seminar will be a two day programme (March 3-4, 2020). Panel discussions on the above themes by experts drawn from academia, administration and industry are planned for the first day. The second day activity comprises a travelling seminar during which farmers' fields managed through various interventions and industrial units related to paddy straw management will be visited.

We seek participation from researchers, administrators and industry partners who have rich experience in this area. A group of progressive farmers will also be invited.

Overall, the seminar aims at finding ways and means to overcome the issues currently confronting the full coverage of rice based cropping systems through various straw management technologies.

The list of key speakers, experts, collaborators and other details regarding seminars will be intimated shortly.