

Profile of Scientist



1. **Name of the Scientist:**

Dr. Akhilesh Kumar Singh

2. **Personal biodata:**

a) **Designation:**

Senior Scientist

b) **Joining date in ICAR:**

21- 01- 1992

c) **Discipline and specialization:**

Farm Machinery and Power

d) **Training / advance exposure in the area of work:**

P. D. in Agril. Engg. with major area of work in Farm Power and Equipment and minor in Agril.Statistics and Computer Applications

e) **Contribution to the scientific advancement:**

Designed and developed the following agril. machinery

- Tractor operated sugarcane cutter planter for planting of sugarcane
- Tractor operated paired row sugarcane cutter planter for planting of sugarcane in a wide furrow at 30 cm row spacing
- Tractor operated front mounted sugarcane harvester for cutting and windrowing of two rows of cane
- Power operated sugarcane detrapper for removal of trash from harvested whole cane stalks
- Jaggery drier for drying of fresh jaggery
- Tractor operated inter culturing equipment for sugarcane.

3. **Future Planning of research:**

- Design and development of sugarcane planter for companion cropping.
- Design and development of sugarcane planter for new agronomical technique / geometry.
- Conducting PFT (Prototype feasibility testing) and FLD (front line demonstration) of farm implements and machinery at farmers field for its popularization.

4. Publications:

1. **Singh, A.K.** and Mani, I. 2006. Computer simulation of mechanical harvesting and transportation of sugarcane. *Journal of Agricultural Engineering* 43(3): 87-92.
2. **Singh, A.K.**, Baboo, B. and Singh, R.D. 2008. Performance evaluation of two pan furnace with forced draft combustion for jaggery making. *Journal of Agricultural Engineering* 45(2): 29-32.
3. **Singh, A.K.**, Sharma, M.P., Srivastava, A.C. and Singh Jaswant. 2007. Mechanization of seed cane planting. *Indian Journal of Sugarcane Technology* 22(1-2): 55.
4. **Singh, A.K.** and Singhal, O.P. 2001. Performance evaluation of a sugarcane combine chopper harvester. *Journal of Sugarcane Technology* 16(1): 100-103.
5. Singh, P.K., **Singh, A.K.**, Kumar, S. and Singh, J. 2010. Seed-cane marketing – multi-million industry in the offing. *Current Science*, 99(7): 883-887

5. Other relevant activities of Scientist:

- Acting as P. I. (Principal Investigator) of AICRP on Farm Implements and Machining of IISR Lucknow Center.
- Acting as Incharge, Workshop of Agril. Engg. Division of the Institute (IISR Lucknow)
- Acting as Member, Purchase Advisory Committee of the institute. Working as Chairman of Local Purchase Committee for purchase of miscellaneous items for guest house, civil, electrical, instrumentation, refrigeration, vehicle, tractor, farm implements maintenance and workshop materials.