

National Innovation Foundation

SD1- Document

Title of the Innovation: Tractor operated Sugarcane Stubble shaver
Innovation Ref No: 3131E0138

Innovator Profile:

A	Name	S. Ganesamurthy Asari
B	Postal address	Reddiyar Street, Kilkavara pattu, Panrutti TK. Cuddalore District, Tamilnadu. Ph.No: 04142-277294 (Res), 09865566689 (PP)
C	Profession	Manufacturer- farm Implements
D	Educational Status	6th Std
E	Gender and Age	Male, 47 Years
	Biography/Background	The innovator is belongs to the farming community, he has studied up to sixth standard, later helped with his father's in bullock cart repair shop. He learnt some of the basic techniques in cart making from his father and further by self-learning he started developing a number of farm equipments without any supports

Scout: RIN, Chennai- Tamilnadu

Brief summary of the Innovation:

Since his village is well known for sugarcane cultivation he could observe lot of lack of farm equipments for mechanized sugarcane cultivation. He found stubble shaving in sugarcane cultivation is tedious and highly manpower consuming one. Moreover the stubble shaving has to carried out immediately after harvesting once the stubble get dried it is not very easy by manually. Hence he developed a vertical axis disc type shaver for uniform height of cutting.

Innovator's claims:

It is a single row stubble shaving with the field capacity 0.26 ha /h. It consumes 3.5 liters diesel per acre. It helps in better ratoon emergency in sugarcane.

Photograph:



Innovation Details

1	Category	Agricultural Machinery
2	Detailed Description	It is tractor PTO operated sugarcane stubble shaver. It can be attached to any type of tractor with 35 hp powers. The disc blade is coupled with vertical shaft. The vertical shaft is provided with bevel gear arrangement, which is powered by 540-rpm tractor PTO. The whole unit can be easily attached through tractor three-point linkage.
3	Keywords	Trash grinder, chipper shredder, leaf crusher, shredder

Evaluation of Entry

1	Novelty of the innovation, feature or subsystem	The novelty lies in the unique design rotary disc single row shaver for sugarcane mechanization
2	Comparison with currently available conventional alternatives – a) In functioning, b) In cost, and c) Elimination/Minimizing of drudgery	 The innovation can cut single row in a pass whereas the swinging blade type shavers can cut two rows in a pass but it will give the superficial cut. The cost of the attachment is about Rs. 15,000/-. NIL
3	Encouragement needed: a) Current limitations or demerits b) Areas requiring further value addition.	 NIL Optimization of blade strength
4	Commercialization – a) Status of Commercialization. (Manufactured/sold/ Used locally?) b) Potential for diffusion	 The Innovator gives the union custom hiring basis. It has potential in sugarcane-mechanized farming.

5	Current and future application areas (multiplicity of utility)	It is used for stubble shaving only
6	Social /environmental impact	It can do better service for sugarcane farming community
7	Significance to women, handicapped and other marginalized sections	NIL
8	IPR considerations	