



**Sangram Keshari Swain, Ph.D.**  
**Research Engineer & OIC,**  
**AICRP on Utilization of Animal Energy(UAE)**  
**Department of Farm Machinery & Power**

### ***Education***

- Ph.D. in Agricultural Engineering, Faculty of Agricultural Engineering, BCKV, Mohanpur, West Bengal- 2005
- M.Sc. (Ag.Engg & Tech) FMP, Orissa University of Agriculture and Technology, Bhubaneswar-1998
- B.Sc. (Ag.Engg & Tech), Orissa University of Agriculture and Technology, Bhubaneswar- 1985

### ***Experience***

*Working in OUAT Bhubaneswar since 1985 in different capacities in teaching, research and extension. Programme Coordinator, KVK, Mayurbhanj from 2005-2010, as Research Engineer & OIC, AICRP on UAE, Department of Farm Machinery & Power since November,2012 .*

### ***Externally Funded Projects/ schemes***

- Presently working in All India Coordinated Research Project on Utilisation of Animal Energy with Enhanced System Efficiency since 2012.

### ***Courses taught***

- Field operation & maintenance of tractors & farm machinery – I & II
- Farm machinery equipment – I

### ***Students guided***

Guided two students for M. Tech. research

### ***Significant research contributions***

**Patent: Cashew Nut Sheller from Indian patent Organization (No 227275)**

1. Bullock drawn eight row drum seeder
2. Dynamo operated lighting system for steel bullock cart
3. Bullock drawn rotary operated potato peeler and slicer

4. Bullock drawn single row multi crop seed-cum-fertilizer drill
5. Power weeder for groundnut
6. Manually operated cashew nut sheller
7. Pedal operated cashew nut sheller
8. Semi-automatic Power operated cashew nut sheller
9. Urea super granule Applicator for point placement
10. Two row Urea super granule Applicator
11. USG Dispenser cum Transplanting Guide
12. Transplanting guide
13. Hold on type power operated paddy thresher-cum-winnower
14. Manually operated weeder for maize crop
15. Manually operated low land paddy weeder
16. Bullock drawn red soil plough
17. Bullock drawn improved mb plough
18. Marker for Onion Planting

#### ***Present research interests***

- Bullock drawn implements for land preparation and sowing
- Post harvest gadgets for bullock operated rotary system
- Light weight bullock cart & bullock drawn engine operated rotavator

#### ***Honours and Awards***

- **Best Krishi Vigyan Kendra** for the Year 2008-09 in Orissa by OUAT
- Awarded **K.C.Das Memorial GOLD MEDAL** for the year 1999 for the paper “Field performance evaluation of Kamco reaper” published in Technical Annual, Institution of Engineers (India), Orissa State centre.
- **Best Scientist Field Worker Award** by College of Agriculture & College of Horticulture, Chiplima (OUAT) for the year 2011.
- **Best Poster presentation in International Seminar**, BCKV, February, 2011.
- **Best Stall Award for OUAT** in the National Level Exhibition held at Samastipur, Bihar on the occasion of Swadesh Prem Jagriti Sangosthi(Late Amit Singh) during May 2009
- **Best poster presentation** in International Seminar, Crop and Weed Science Society, BCKV, West Bengal during 2014
- **Second Prize for OUAT Stall** at Regional Farmers' Fair at Balasore, Oct.'2014

#### ***Member Professional Societies***

- Life Member, Indian Society of Agricultural Engineers.
- Life Member, CAET Alumni Association.

#### ***Peer recognition***

- External examiner to Central Agricultural University.
- Referee of national/ international journals.

- Resource person to Govt. and non-Government organizations.

**Publications**

- i. Research Papers : 30
- ii. Popular Technical Articles (Oriya) : 10
- iii. Leaflet/Bulletin : 10

**Selected publications**

- Swain, S.K., A. K. Dash, A. K. Mohapatra, D. Behera and B. K. Behera.2015. Utilization of animal energy for post harvest operations in rotary mode. Journal of Crop and Weed, *11(1)*: 75-79.
- Swain, S.K., A.K. Mohapatra, A.K. Dash and R.R. Patnaik. 2015. Development and evaluation of a pneumatic wheel small bullock cart for small and marginal farmers of Odisha. Journal of Extension Education, vol. 20(1): 107-110.
- Swain, S.K., B.R. Nayak, A.K. Mohapatra, and A.K. Dash. 2015. On-farm trial on different weeding methods for low land paddy in farmers' field. Journal of Extension Education, vol. 20(2): 118-121.

**Contact details:**

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