## **Rama Chandra Dash**, Ph.D. Professor, Department of Farm Machinery and Power



## Education

- Ph.D. (Agril. Engg.) in Farm Machinery and Power, Indian Agricultural Research Institute, New Delhi, (India)- 2000
- M. Tech(Agril. Engg.) in Farm Machinery and Power, Indian Institute of Technology, Kharagpur-1988
- B.Tech. (Ag. Engg. & Tech.), Orissa University of Agriculture and Technology, Bhubaneswar-1986

#### Experience

Working in OUAT Bhubaneswar since 1989 in different capacities in teaching, research and extension and as Professor, Department of Farm Machinery and Power since Jan, 2009; Head of the Department of Mechanical and Electrical Engineering since 2011.

## Other important assignments

• Founder Training and Placement Officer of the college from 2005-2012

## Courses taught

- Farm Machinery (B. Tech.)
- Farm Power (B. Tech.)
- Farm Tractor (B. Tech.)
- Theory of Machines (B. Tech.)
- Machine Design (B. Tech.)
- Workshop Technology (B. Tech.)
- Farm Power and Machinery Management (B.Tech)
- Soil Dynamics in Tillage and Traction (M. Tech.)
- Design of Tractor Systems (M. Tech.)

#### Students guided

Guided one student for Ph.D. and 5 students for M. Tech.

#### Significant research contributions

- Developed a computer program for optimum selection of farm machinery and power
- Developed a seed drill for sowing of small seeds.
- Developed an air assisted brush applicator for applying pesticide.
- Developed a bullock drawn oblique spike tooth harrow

#### Present research interests

• Management of farm machinery and power

- Design and development of farm machinery for small farms.
- Use of IT in agriculture

#### Honours and Awards

- Commendation medal, 2012 of the Indian Society of Agricultural Engineers for outstanding contribution in the field of farm machinery and power.
- Best Teacher Award, 2009-10 and 1997-98, Orissa University of Agriculture and Technology
- Distinguished Service Certificate, 2008-09, Indian Society of Agricultural Engineers for overall contribution in the field of Agricultural Engineering.
- **Gobind Gupta Memorial Award 2012** of Institution of Engineers(I), Odisha State Centre for Outstanding contribution for R&D activity in the state of Odisha
- Gold Medal, 2000, Agricultural Engineering Division, Institution of Engineers (India), Kolkata for best research paper
- K.C.Das Memorial Award, 2011 of Institution of Engineers(I), Odisha State Centre for best research paper
- First Prize and Gold Medal,2004, Agricultural, Mechanical, Environmental, and Other Engineering Division of Orissa Engineering Congress.
- Institution Prize, 2003 of Institution of Engineers (I), Odisha State Centre.
- Madhusudan Memorial Award, 2007, Institution of Engineers(I), Odisha State Centre
- First Prize and Gold Medal,2003, Electrical Engineering, Electronics and Computer Science Division Orissa Engineering Congress
- First Prize and Gold Medal, 2003, Mechanical Engineering, Environmental, Engineering, Agro-Engineering and Other Engineering Division, Odisha Engineering Congress
- *First Prize* and *Gold Medal, 2002, Mechanical Engineering, Environmental, Engineering, Agro-Engineering and Other Engineering Division, Odisha Engineering Congress*

#### Peer recognition

- Member of Editorial Board and Referee of many national/ international journals
- Expert member in many SAUs and ICAR institutes and OPSC
- Consultant and resource person to different Govt. and non-Government organizations
- Member of several state and national level committees on farm mechanization

#### **Publications**

Authored one book with ISBN number, 7 books/ course manuals (without ISBN), 35 research papers in peer reviewed journals and more than 20 popular technical articles.

#### Selected publications

 Naik, R.K., Dash, R.C. and Goel, A. K. 2013. Mechanical Properties of sisal (A. sisalana) relevant to harvesting and fibre extraction. *International Journal of Agricultural Engineering*, 6(2): 423-426.

- Dash, R.C. and Sirohi, N.P.S. 2008. A computer model to select optimum size of farm power and machinery for paddy-wheat crop rotation in northern India. Agricultural Engineering International: the CIGR E journal, Manuscript PM 08 012, Vol.X. November, 2008.
- Naik, R.K., Dash, R.C. and Pradhan, S.C. 2013. Sisal Fibre Extraction: Methods and Machine Development. *Agricultural Engineering Today*, 37(4): 27-30.
- Naik, R.K., Dash, R.C. and Goel, A. K. 2013. Biological Properties of Sisal (Agave sisalana) relevant to fibre extraction. *Research Journal of Agricultural Sciences*, 4(4): 560-561.
- Naik, R.K., Dash, R.C., Goel, A.K., Behera, D. and Pradhan, S.C. 2011. Studies on leaf manipulation in mechanical extraction of fibre from sisal (A. Sisalana). Journal of Research Orissa Univ. Agric. Tech., 29(1&2):50-52.
- **Dash, R.C**. 2011. Design and field evaluation of a bullock drawn oblique spike tooth harrow for small farmers of Odisha. Journal of Research Orissa Univ. Agric. Tech., Golden jubilee special issue, 1(1):231-238.
- Naik, R.K., Dash, R.C., Pradhan, S.C. and Goel, A.K. 2010. Energy requirement for production and extraction of fibre from sisal (Agave Sisalana). Journal of Research Orissa Univ. Agric. Tech., 28(1&2):131-136.
- Dash, R.C., Behera, D. and Goel, A.K.2008. Performance evaluation of eight rows manually operated pre-germinated paddy seeder. Journal of Research, 26(1): 105-111.
- Goel, A.K., Behera, D., Dash, R.C., Behera, B.K. 2008. Feasibility study of different modes of paddy harvesting in Orissa. Journal of Research, 26(2): 110-114.

# Books

- Dash, R.C. and Sirohi, N.P.S. 2012. Machinery and Power Selection Models for Paddy Wheat Farms. LAP LAMBERT Academic Publishing GmbH & Co.KG, Germany, p:184.
- Edited the book on "Promoting Livelihood Through Arhar Cultivation" published by NR Management Consultants India Pvt. Ltd., New Delhi.

#### Contact details:

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