



Manoj Kumar Ghosal, Ph.D.
Professor,
Department of Farm Machinery and Power

Education

- Ph.D. (Energy Engineering) from Indian Institute of Technology, Delhi, New Delhi, (India)- 2004
- M. Tech. (Agricultural Engineering) in Farm Machinery and Power from Indian Institute of Technology, Kharagpur, West Bengal (India)- 1990
- B.Sc. (Ag. Engg. & Tech.), Orissa University of Agriculture and Technology, Bhubaneswar- 1988

Experience

Working in OUAT Bhubaneswar since 1990 in different capacities in teaching, research and extension and as Professor, Department of Farm Machinery and Power since October, 2012.

Externally Funded Projects/ schemes

- “Development of a mobile vegetable vending unit with an integrated solar photovoltaic powered cooling system” funded from Directorate of Horticulture, Govt. of Odisha under National Horticultural Mission. (Project started from 2014 and now continuing).
- “Development of a portable solar photovoltaic powered sprinkler irrigation system in vegetable cultivation” funded from Directorate of Horticulture, Govt. of Odisha under National Horticultural Mission. (Project started from 2015 and now continuing).

Courses taught

- Renewable Energy (B. Sc. (Ag))
- Farm Power (B. Tech.)
- Forest Machinery and Power (B.Sc. (Forestry))
- Design Analysis of Renewable Energy 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 predicting controlled environment in a greenhouse
- Developed a power operated coconut dehusker.
- Developed a solar photovoltaic powered cool chamber of 100 kg capacity for storage of vegetables
- Developed a mobile vending vegetable cart with an integrated solar photovoltaic powered cool chamber
- Developed a charring drum for preparation of bio-coal from waste green coconut shell.

Present research interests

- Renewable Energy
- Solar Thermal Engineering
- Animal Energy Utilization for Sustainable Farm Power

- Agricultural Mechanization

Peer recognition

- Member, Editorial board of two research journals and referee of many national/ international journals
- Consultant and resource person to different Govt. and non-Government organizations
- Member of several state and national level committees working on renewable energy applications and environmental impacts.

Publications

Authored 4 books with ISBN numbers, 3 books/ course manuals (without ISBN), two book chapters, 95 research papers in peer reviewed journals and more than 40 popular technical articles.

Books

- Renewable Energy Resources: Basic Principles and Applications. G.N.Tiwari and **M.K.Ghosal**. Published by *Narosa Publishing House, New Delhi*. 2005.
- Fundamentals of Renewable Energy Sources. G.N.Tiwari and **M.K.Ghosal**. Published by *Narosa Publishing House, New Delhi* .2007.
- Farm power. **M.K.Ghosal** and D.K.Das. Published by Kalyani Publishers, Daryaganj, New Delhi. July, 2008.

Contact details:

Department of Farm Machinery and Power
College of Agricultural Engineering and Technology
Orissa University of Agriculture and Technology,
Bhubaneswar- 751003, Odisha State, India
Email: mkgghosal1@rediffmail.com
Ph. +91-9556271208; +91-674-2562763 (Res.)