

Jagadish Chandra Paul, Ph.D.
Professor,
Department of Soil & Water Conservation Engineering



Education

- Ph.D. (Agril. Engg.) in Agricultural Engineering, 2003
- M. Sc. (Ag. Engg. & Tech) in Soil & Water Conservation Engineering, 1989
- B.Sc. (Ag. Engg. & Tech.), 1987

Experience

Working in OUAT Bhubaneswar since 1990 in different capacities in teaching, research and extension, as Associate Professor, Department of Soil & Water Conservation Engg. since Jan, 2003 and Professor, Department of Soil & Water Conservation Engg. Since Jan., 2010

Externally Funded Projects/ schemes

- Principal Investigator, Evaluation & Improvement of Hydraulic Structures and System Operation in Mahanadi Delta Irrigation Command (Indian Council of Research funded Project Grant of Rs 9.22 lakhs) (Project period 2001-2004)

ICAR summer/winter school conducted

Course Director, ICAR short course on "Recent Advances in Pressurised Irrigation System for Enhancing Water Use Efficiency" 30th October to 8th November, 2018

Other important assignments

- Advisor, Students' Union, College of Agricultural Engineering & Technology, OUAT, Bhubaneswar

Courses taught

- Fluid Mechanics (B. Tech.)
- Minor Irrigation & Command Area Development (B. Tech.)
- Soil & Water Conservation Engineering (B. Tech)
- Fundamentals of Soil & Water Conservation Engineering (B. Sc Ag)
- Groundwater Hydrology (M. Tech.)
- Soil & Water Conservation Engineering (M. Tech.)

(Please give the courses taught in last 10 years)

Students guided

Guided one student for Ph.D. and 12 students for M. Tech.

Significant research contributions

Application of performace indicators to a canal system in Mahanadi delta command and subsequent improvement of a minor in this command have been done, which indicate the usefulness of these indicators in system evaluation. These applications will help to enhance the productivity, water-use-efficiency and decrease the water logging and salinity problem in the canal command areas of Odisha.

- Ground water investigation, land and water management plans were prepared using remote sensing and GIS technique of different watersheds of the state of Odisha. Land use, Land cover,

hydrogeomorphological, slope and drainage thematic maps were prepared from satellite imageries and Survey of India toposheets. Prioritisation of watershed, prospective zones for groundwater exploitation and integrated land and water management plans were prepared. This will help in planning and execution of watershed management, its' prioritization and environment impact assessment of the watersheds in the state of Odisha.

- Developed an auto start siphon tube.
- Demonstrated on Farm water Management in Burda minor (Attabira tail Distributory) of Hirakud Command to increase the Water–Use-Efficiency.
- An Optimal resources planning for the command areas of Phiriphira Distributory of Mahanadi delta irrigation project of Odisha was made using system engineering techniques. Canal operation strategies were worked out for conjunctive use of water resources. The recommended plan increases food production, income and employment, besides meeting the food and nutritional requirement of the population of the area. Plans have been developed to utilize the water logged area of the project. Based on the optimal cropping system, a weekly irrigation release schedule and canal operation schedule is prepared. This will help the planner for execution of canal operation schedule and irrigation scheduling in major canal commands of Odisha.
- Developed a Slit-Orifice meter for pump discharge measurement.
- Development of Micro-drainage system in Mahanadi Delta Command

Present research interests

- Water Management
- Watershed Management
- Micro-Irrigation

Honours and Awards

- Received 3rd Prize in Civil Engineering Division for Technical Paper presentation by Odisha Engineering Congress, Bhubaneswar during its 43rd Annual session held on 6-4-1998
- Received 3rd Prize in Civil Engineering Division for Technical Paper presentation by Odisha Engineering Congress, Bhubaneswar during its 44th Annual session held on 18-1-1999
- Received Institution Prize for Technical Paper presentation by The Institution of Engineers (India), Odisha state centre, Bhubaneswar during its 41st Annual Technical session held on 16-1-2000
- Received Er. K.C.Das Memorial Award for Technical Paper presentation by The Institution of Engineers (India), Odisha state centre, Bhubaneswar during its 42nd Annual Technical session held on 21-1-2001
- Received 1st Prize in Electrical and Electronics Engineering Division for Technical Paper presentation by Odisha Engineering Congress, Bhubaneswar during its 47th Annual session held on 28-1-2002
- Received 2nd Prize in Agricultural, Mechanical and Other Engineering Division for Technical Paper presentation by Odisha Engineering Congress, Bhubaneswar during its 47th Annual session held on 28-1-2002
- Received Er. Sadananda Memorial Award for Technical Paper presentation by The Institution of Engineers (India), Odisha state centre, Bhubaneswar during its 44th Annual Technical session held on 19-1-2003
- Received J. N. Panda Memorial Award for the paper 'Combustible Gas Production from Sewage sludge with a Gasifier – Solving twin problem of Energy and Environment' by The Institution of Engineers (India), Odisha state centre, Bhubaneswar during its 50th Annual Technical session held on 8-2-2009.
- Received 3rd Prize in Agricultural, Mechanical and Environmental Engineering Division for the paper 'Energy Requirement in Greenhouse for Vegetable Production in coastal Odisha' by Odisha Engineering Congress Bhubaneswar during its 54th Annual session held on 9-2-2009.

- Received 3rd Prize in Agricultural, Mechanical and Environmental Engineering Division for the paper 'Solar Aided Greenhouse for off-season cultivation of vegetable in Odisha' by Odisha Engineering Congress, Bhubaneswar during its 56th Annual session held on 26-2-2011.
- Received Er Arta Bandhu Jena Memorial Award for the Paper 'Surface Drainage Design for Reclamation of Waterlogged Rice areas in Mahanadi delta command' by The Institution of Engineers (India), Odisha state centre, Bhubaneswar during its 53rd Annual Technical session held on 5-2-2012.
- Received Er K.C. Das Memorial Award for the Paper 'Effect of drip irrigation on growth, yield, water-use-efficiency and economics of capsicum grown under greenhouse' by The Institution of Engineers (India), Odisha state centre, Bhubaneswar during its 54th Annual Technical session held on 10-2-2013.
- Received Banabihari Mohanty Memorial Award for the Paper 'Remote Sensing and GIS Aided Land and Water Management Plan Preparation of Watershed – a case study' by The Institution of Engineers (India), Odisha state centre, Bhubaneswar during its 57th Annual Technical session held on 14-2-2016.
- Received JAE Best Paper award (2016) in Soil & Water Engineering for the paper 'An Interactive Multi-Objective Linear Programming Approach for Watershed Planning-A Case Study' by the Indian Society of Agricultural Engineers, New Delhi on 3-2-2017
- Received Er R. C. Patra Memorial Award for the Paper 'Remote Sensing and GIS Aided Groundwater Plan Preparation of Kichna nala Watershed of Odisha' by The Institution of Engineers (India), Odisha state centre, Bhubaneswar during its 59th Annual Technical session held on 21-1-2018.
- Received AET Best Paper award (2018) for the paper 'Study of seepage control and strength characteristics of fly ash in earthen embankments' by the Indian Society of Agricultural Engineers, New Delhi on 28-2-2019
- Received Damodar Sahoo Memorial Award for the Paper 'Geospatial Techniques Aided Sustainable Water Resources Planning of Aunlajore Watershed of Odisha by The Institution of Engineers (India), Odisha state centre, Bhubaneswar during its 60th Annual Technical session held on 30-3-2019.

Peer recognition

- Referee of many national/ international journals
- Expert member in many CAU, SAUs, MHRD and OPSC

Publications

Authored 80 research papers in peer reviewed journals and more than 50 popular technical articles.

Selected publications

- Paul, J. C., Panigrahi, B., Behera, B.P. and Patnaik, P.K. 2014. Design of Surface Drainage System for Managing Water Congestion in Mahanadi Delta: A Case Study, *Journal of Agricultural Engineering, ISAE*. Vol. 51(1): 44-50.
- Naik, B. S., Paul, J. C., Panigrahi, B. and Sahoo, B. 2015. Soil Erosion Assessment from Farming lands of Eastern Ghat Regions of Odisha, *Indian Journal of Soil Conservation*. Vol. 43(1): 33-37.
- Paul, J. C., Panigrahi, B. and Sahu, R. K. 2016. An Interactive Multi-Objective Linear Programming Approach for Watershed Planning-A Case Study, *Journal of Agricultural Engineering, ISAE*. Vol. 53 (4): 34-41.
- Paul, J. C. and Panigrahi, B. 2018. Performance evaluation of water delivery system of Mahanadi delta irrigation project, Odisha, *Journal of Soil & Water Conservation*. Vol. 17(1): 46-52.
- Paul, J. C. and Panigrahi, B. 2018. Study of seepage control and strength characteristics of fly ash in earthen embankments, *Agricultural Engineering Today*. ISAE, Vol. 42(4): 65-71.

Contact details:

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