

JOB DESCRIPTION

Name:	Designation: Irrigation Engineer
Location: Technical Services, Simunye	Immediate Supervisor: Head: Extension & Technical Services
Main Purpose of the job To provide technical advice and support to the sugar industry on all aspects of irrigation, including water resources, conduct irrigation research to address industry needs, and manage information technology systems and databases within Technical Services.	
Job Requirements i) A Master of Science (MSc) degree in Irrigation or Agricultural Engineering. ii) Good ICT skills and knowledge of computer applications relevant to irrigation. iii) Senior Certificate in Sugarcane Production will be an added advantage	
Minimum experience required: Five years' experience on the following: i) Conducting irrigation and water management research, data analysis, and technical reporting ii) Water resource assessment, field water management, and irrigation scheduling. iii) Planning, design, implementation and rehabilitation of irrigation infrastructure. iv) Operation, maintenance and performance evaluation of irrigation systems. v) Preparation of technical designs, drawings, and project documentation. vi) Supervising field staff and collaborating with growers, suppliers and researchers.	
1. Irrigation Advisory and Technical Support i. Provides technical advice on irrigation systems, their management, performance evaluation, and the planning and design of new systems. ii. Monitors the progress and effectiveness of irrigation advice provided to members of the industry. iii. Assists growers with water measurement systems and methods to evaluate and improve water supply efficiency. iv. Advises industry members on water-related issues, weather forecasts, and yield forecasts, and facilitates technical support for weather stations and meteorological instrumentation.	
2. Irrigation Research and Innovation i. Identify irrigation and drainage research needs, design and manage irrigation trials to address irrigation and water-use challenges. ii. Investigates and evaluates alternative technologies, including digital solutions, green energy systems, and irrigation and drainage practices, for adoption by local growers.	

3. Irrigation System Design and Development

- i. Assess irrigation and drainage designs submitted by industry growers through private designers to ensure compliance with industry standards and oversee the commissioning of completed projects.
- ii. Develop, review, and update industry guidelines and procedures for the design, installation, commissioning, and management of irrigation and drainage systems.

4. Water Resources and Irrigation Management

- i. Assist growers with field water management and the adoption of irrigation scheduling technologies to improve water-use efficiency.
- ii. Conduct irrigation system performance evaluations, recommend improvements, and advise on appropriate evaluation equipment and methods.
- iii. Conduct periodic irrigation, drainage, and water management audits for industry growers and recommend corrective actions to improve compliance and performance.
- iv. Evaluate climate impacts on irrigation and water resources, review industry best practices, and develop climate adaptation strategies and plans.

5. Data Management, Analysis, and Reporting

- i. Oversee the Industry Database (IDB) system and coordinate the administrative aspects of IT within the Extension and Technical Services Department.
- ii. Analyse harvesting data, monitor harvesting progress, and provide timely reports, updates, and recommendations to industry stakeholders, including the preparation of annual season reports and crop production statistics.

6. Communication and Knowledge Dissemination

- i. Communicates irrigation and drainage information through reports, presentations, technical papers, newsletters and other appropriate communication platforms.

7. Planning and Resource Management

- i. Prepare the annual programme of work (PoW) for the irrigation section and implement approved activities.
- ii. Prepare the annual budget for the irrigation section and manages its implementation.

8. Stakeholder Engagement and Representation

- i. Engage with government ministries, regulatory bodies, and industry stakeholders, and represent the industry at national and regional forums on energy, water, climate change, and environmental matters.
- ii. Attend and contribute to industry meetings on water and energy matters affecting the sugar industry.
- iii. Coordinate and prepare growers' quota applications for consideration by the Industry Quota Board.

9. Staff Performance Management

- i. Monitor subordinates' performance against the Programme of Work (PoW) and facilitate the identification and implementation of training and development needs.

ADDITIONAL TASKS:

1. To perform any other duties as reasonably assigned from time to time by the immediate supervisor.

REVIEWED BY:

ACCEPTED BY:

SIGNATURE:

SIGNATURE:

DATE:

DATE: