

MEMORANDUM OF AGREEMENT (MoA)

For Implementation of Singua FIS Cluster under MCAD for the FY 2025-26 under Boko- Chaygaon- Chamaria Division, Boko Irrigation.

This **MEMORANDUM OF AGREEMENT** (herein after referred to as the 'MoA') is made on this 18th day of May 2026 for engagement and technical support under the Samridhi Scheme - Pressurized Piped Irrigation Systems (PPIS) under the **Modernization of Command Area Development and Water Management (MCADWM) Programme.**

BETWEEN

Irrigation Department, Assam represented by the **Chief Engineer Minor Irrigation cum State Nodal Officer** (henceforth referred as 'Irrigation Department') as First Party

AND

North Eastern Regional Institute of Water and Land Management (NERIWALM) represented by the **Director, NERIWALM** henceforth referred as 'FRA' as Second Party.

The Irrigation Department, the FRA are hereinafter referred to collectively as the 'parties' and individually as the 'party'.

Whereas the modernization of Command area Development and Water Management (MCADWM) programme is a centrally sponsored scheme implemented by **Ministry of Jal Shakti** in accordance to the Guidelines of the MCAD scheme Operational Guidelines 2025 (hereafter referred to as 'Guidelines') under the MCAD Samridhi Scheme. The MCAD Program envisages Modernization of Command Area development work by providing State of the art infrastructure to facilitate micro irrigation for the entire command as included under MCAD Program.

Whereas for Assam, Implementation of Singua FIS cluster under Boko Chaygaon Division, Irrigation under Kamrup district is included under the MCAD Program Phase-I. It includes Pressurized Pipe Irrigation System (PPIS) to enhance water-use efficiency, agricultural productivity, climate resilience, and sustainability of irrigation systems. The programme emphasizes participatory irrigation management, digital monitoring, climate-smart agriculture, and strengthening of Water User Societies (WUSs).

Whereas, as per MCAD guideline SoP B11 a Farmer Relationship Agency (FRA) is to be appointed with due selection by the Chairman of District Level Implementation Committee (DLIC) as per guideline SoP B2A.

Whereas, as per MCAD guidelines FRA will continue to work under the MCAD programme till the end of O&M period of five years(60 months), an MoA to layout the broad roles and responsibilities of the parties is to be signed. All terminology, definitions and concepts shall be as per the MCAD Guidelines 2025.

NOW EACH PARTY AGREES WITH THE MCAD PRINCIPLE AND HEREBY FURTHER AGREE as follows:

1. PURPOSE OF THE AGREEMENT

The purpose of this MoA is intended to provide structured field-level institutional, social, and technical support for the effective implementation and long-term sustainability of the Pressure Piped Irrigation Systems (PPIS) under the Modernization of Command Area Development (MCAD) programme. The FRA shall facilitate participatory, inclusive, and community-led irrigation management systems to ensure that infrastructure investments result in durable improvements in water-use efficiency, agricultural productivity, climate resilience, and livelihood enhancement.

The FRA shall act as a bridge between Water User Societies (WUSs), farmers, technical agencies, and government departments to strengthen institutional ownership, promote efficient governance of irrigation systems, and support sustainable operation and maintenance through continuous community engagement, capacity building, and convergence with relevant stakeholders.

2. OBJECTIVES

The specific objectives of engaging the Farmer Relationship Agency (FRA) are as follows:

1. To support the strengthening, and operationalisation of inclusive Water User Societies/Associations (WUSs/WUAs) in accordance with MCAD norms and Government guidelines.
2. To strengthen institutional capacities of WUSs in governance, financial management, record keeping, asset protection, operation and maintenance, and statutory compliance.
3. To facilitate Irrigation Management Transfer (IMT) and promote Irrigation as a Service (IaaS) for sustainable and community-managed irrigation systems.
4. To promote participatory, transparent, and data-driven irrigation planning and water management practices at the community level.

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5. To support adoption of climate-smart, water-efficient, and resource-efficient agricultural practices through training, demonstrations, and extension support.
6. To facilitate farmer capacity building through structured training, awareness programmes, demonstrations, orientation, and skill development activities in coordination with KVKs, Assam Agricultural University, Department of Agriculture GoA and other resource agencies.
7. To prepare and implement monthly cluster-wise capacity-building calendars linked with relevant technical and resource institutions for continuous strengthening of WUSs.
8. To support development and use of digital tools, farmer databases, and advisory systems for evidence-based decision-making and efficient irrigation management.
9. To strengthen convergence and coordination among WUSs, Self Help Group(SHG), Farmer training or producing organization if any, financial institutions, and market agencies for enhanced livelihood opportunities and institutional sustainability.
10. To facilitate market linkages, crop diversification, value addition and livelihood diversification for improving farmer income and resilience.
11. To support monitoring, reporting, documentation, and adaptive management processes aligned with MCAD and Ministry of Jal Shakti (MoJS) guidelines.
12. To promote long-term sustainability of PPIS infrastructure through community ownership, institutional strengthening, and enhanced economic viability of WUSs as community-managed entities.

However, the objectives as per the MCAD guidelines 2025 and its subsequent updation will be followed.

3. RESPONSIBILITY OF THE FIRST PARTY (IRRIGATION):

Department of Irrigation shall provide administrative coordination, project approvals, access to command areas, coordination with district authorities and line departments. Also the department will support in monitoring and release of payments linked to approve deliverables, as per the recommendation of District Level Implementation Committee (DLIC).

4. RESPONSIBILITY OF SECOND PARTY (FRA):

The Farmer Relationship Agency (FRA) shall adopt a phased, participatory, and data-driven approach in alignment with MCAD norms, MoJS technical standards, and PPIS operational guidelines to strengthen community-led irrigation management and ensure sustainable operation of PPIS infrastructure. The approach shall focus on community mobilization, institutional strengthening of Water User Societies (WUSs), technical facilitation, digital enablement, climate-resilient agriculture, and convergence among irrigation, agriculture, and livelihood stakeholders for effective and sustainable implementation of the programme.

Phase 1: Inception and Baseline Assessment

The FRA shall commence the assignment through consultations with MCAD, MoJS, Assam Agricultural University, Department of Agriculture GoA, and State/District authorities, followed by assessment of command areas, beneficiaries, irrigation practices, institutional capacities, and digital readiness. The baseline study shall include analysis of the last five years' data on water-use efficiency, water productivity, agricultural productivity, crop yield, farmer income, and energy use for irrigation, with due focus on women, youth, and marginal farmers. Technical support for data collection and analysis shall be provided by Assam Agricultural University, Department of Agriculture GoA, Krishi Vigyan Kendra (KVK). The FRA shall submit a comprehensive baseline assessment report with key indicators and findings.

Phase 2: Community Mobilisation and Participatory Planning

The FRA will employ Pani Krishi Mitra (PKM). The PKM will be individuals engaged at cluster level who will facilitate identifying and mapping of all individual farmer activities in the 50 to 500 Ha area of the given cluster in the command area. The FRA shall conduct village- and command-level awareness programmes on PPIS operations, farmers' roles and responsibilities, and facilitate participatory planning for irrigation scheduling, crop alignment, and seasonal water budgeting. Mechanisms for grievance redressal and conflict resolution shall be supported to build trust and ownership.

Phase 3: Institutional Strengthening of WUSs/WUAs

The FRA will support the registered WUS. This includes facilitation of bye-laws, water distribution rules, O&M protocols, financial systems, and leadership capacity building, with handholding support during initial irrigation cycles. The FRA shall support the WUS to avail applicable financial grants and schemes from the state government and central governments and build the institutional capacities to manage and maintain the funds in compliance with relevant statutes and guidelines. FRA will prepare a monthly calendar of capacity building (training awareness/ demonstration and orientation skills) programs from each cluster and link them with various resource agencies, which can provide that. Capacity building programs will be required for efficient governance of WUS and to function as viable economic entities.

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Phase 4: Financial Sustainability, Asset Stewardship, and IMT

The FRA shall strengthen WUS financial management through bank operations, audit-ready records, user fee structures, and dedicated O&M and contingency funds. Asset protection plans and incident response mechanisms shall be established, alongside preparation and implementation of an Irrigation Management Transfer (IMT) plan defining phased transfer of responsibilities. The FRA will also support for planning for a sustainable business modal of WUS. They will assess the requirements of Agri robots and drones and connect with state team and other resource agencies to identify suitable trainers and experts. Supporting WUS for preparation of DPRs for Bank finance and Govt. of India scheme interest subversion/ subsidy support for acquiring food processing units. Interacting with suppliers for erection and commissioning of processing units and storage infrastructures. One of the key aspects of the FRA facilitation will be strengthening WUS and farmers vigilance over the irrigation assets to ensure their safety and security.

Phase 5: Technical Facilitation and Climate-Smart Agriculture

In coordination with KVKs and Assam Agricultural University and technical support from Department of Agriculture GoA, the FRA shall support climate-smart and resource-efficient agriculture through farmer registries, crop diversification planning, training programmes, and promotion of precision irrigation and conservation practices aligned with local agro-climatic conditions with an aim of enhancing crop productivity, diversification, yield and income. Adapting to climate change and helping farmers to reduce exposure to climate risks will be a key consideration.

Phase 6: Crop Planning

The FRA in association with WUS will undertake crop planning based on crop water requirement, suitability for crop diversification and scheduling of crop cultivation activities as per production timeline on a given dashboard. The crop planning is to be premised on the cluster on the following factors,

- Serving as food supplies to army in boarder areas, wherever required
- Creating a food basket cluster for nearby/ remote villages with requirements to be assessed based on nutrient requirement of the population.
- Suitability of one cluster one produce, which has high value in the market
- Promoting organic farming of high value agriculture commodities.

Phase 7: Digital Enablement and Decision Support

The FRA shall ensure that farmers and WUS members are familiar with decision support tools and are able to make decisions based on the data collected through the PPIS. The FRA will train WUS members on dashboards and data systems, and support systematic collection and use of water-use and agricultural data for evidence-based decision-making at WUS and community levels. In addition the FRA will facilitate adoption of micro irrigation (drip/sprinkler) and installation of IoT devices in all the demarcated farms of the cluster and introduce volumetric measurement regarding use of water to bring in water use efficiency (WUE).

Phase 8: Convergence, Market Linkages, and Livelihoods

The FRA shall strengthen convergence among WUSs, Assam Agricultural University and technical support from Department of Agriculture GoA, SHGs, and line departments; clarify institutional roles, support market linkages, access to government schemes, livelihood diversification, and explore agri-carbon opportunities where feasible.

Phase 9: Monitoring, Adaptive Management, and Exit

The FRA shall implement MoJS-aligned monitoring indicators, submit periodic progress reports, support adaptive management through evidence-based feedback, and implement a structured exit strategy with transfer of responsibilities, sustainability planning, and documentation of good practices.

Guiding Principles

- Participatory and inclusive engagement, institutional ownership and sustainability
- Capacity building of WUS to ensure institutional growth and sustainability
- Promotion of climate resilient agriculture and adaptation methods
- Data-driven decision-making
- Convergence and Collaboration
- Institutional ownership and sustainability
- Alignment with the overall vision, mission and framework of MCAD

However, the responsibilities of FRA will be as per the MCAD guidelines 2025 and its subsequent updation will be followed.

5. ASSIGNMENT ACTIVITIES

Specific activities proposed for the Farmer Relationship Agency (FRA) under this assignment will include, but not limited to:

- Deployment of necessary technical and field level personnel to carry out the activities and fulfill the objectives of the project
- Inception workshop with key stakeholders to outline and finalise the operational framework and methodology of FRA
- Detailed assessment in coordination and collaboration with Department of Irrigation, KVK, Department of Agriculture and Assam Agricultural University leading to baseline indicators on water use efficiency, water productivity, agriculture productivity, yield/income and energy use for irrigation.
- Community mobilization, awareness to registered WUS, governance structure, bye laws and operational modalities for WUS, including bookkeeping, record keeping and compliance.
- Capacity building of WUS members in particular and farmers in general, on governance, data-based decisions, climate resilience and irrigation
- Convergence and coordination with relevant stakeholders in the district, ensuring well-coordinated programming and collective action
- Coordination between WUS, SHGs and other farmer training or farmer producing organizations if any ensuring market linkage, value creation and enhanced income opportunities for farmers
- Promoting improved sustainability practices through climate resilience agriculture – Crop diversification, stress-tolerant varieties, Alternate wetting and drying (AWD), Direct Seeded Rice (DSR) etc.
- Awareness generation and promotion of efficient irrigation best practices including Micro Irrigation (drip irrigation, sprinklers, etc), for increased productivity as well as climate risk management
- The Farmer Relationship Agency (FRA) will coordinate IMT by facilitating dialogue between WUAs and the Department of Irrigation, supporting capacity building, role clarity, and formal transfer of O&M responsibilities.
- Strengthen WUS understanding and capacities to undertake Irrigation as a service (IaaS)

Technical inputs and supports including capacity building and training materials will be provided by Assam Agricultural University, KVK and Department of Agriculture.

However, the assigned activities to FRA will be as per the MCAD guidelines 2025 and its subsequent updation will be followed.

6. Expected Outputs

The collaboration shall result in functional WUSs/WUAs, improved irrigation efficiency, strengthened governance systems, enhanced adoption of climate-smart agriculture, improved market linkages, operational digital decision-support systems, and sustainable community-led irrigation management frameworks.

7. Minimum Team Composition (Essential Positions)

As a minimum, the proposed Farmer Relationship Agency (FRA) shall deploy the following key personnel. The agency may engage additional support staff as required to fulfill the Scope of Work.

Sl. No.	Role	Required Qualifications & Experience	Key Responsibilities
1	Water Governance & PPIS Institutional Expert (1) - Team Leader	Qualifications: Post-Graduation in Water Resources / Irrigation / Soil & Water Engineering, Hydrology, Water Management, Agriculture, Natural Resource Management, or related disciplines from a recognised institute. Experience: Minimum 7 years of experience in participatory irrigation management, pressure-piped irrigation systems, MCAD/CADWM programmes, and institutional governance of WUSs including experience with Government irrigation departments and IMT processes.	Overall leadership and coordination with MCAD, WRD, MoJS, FAO and line departments, Agricultural universities. Guide formation and strengthening of WUSs, governance systems, IMT planning, Irrigation as a Service(IaaS) O&M frameworks, and compliance with MCAD-PPIS norms. Ensure quality assurance, monitoring, and reporting.
2	Climate-Smart Agriculture & Community Extension	Qualifications: Post-Graduation in Agronomy, Soil Science, Agricultural Engineering, Natural Resource Management, or	Support crop diversification and CSA planning, farmer awareness and training, digital advisory dissemination, and convergence between irrigation scheduling

	Expert (1) related disciplines from a recognized institute. Experience: Minimum 5 years of experience in climate-smart agriculture, water-efficient cropping systems, farmer training, and extension services, preferably in irrigated command areas and in collaboration with KVKs or Agricultural Universities.	and agricultural practices. Promote water productivity and climate resilience at field level.
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8. Work Plan

The following work plan is indicative and intended to outline the expected sequencing of activities. The selected bidder shall submit a detailed month-wise work plan for the first year and quarterly work plan for next four years with clear milestones and deliverables.

Payment Principles (for ToR)

- Amount of Fund to FRA (NERIWALM): As per provisions in the MCAD guidelines.
- Payments released only upon due recommendation of deliverables from DLIC by the State Department of Irrigation.
- Phases may overlap, but payments are linked to verifiable outputs, not time elapsed
- Poor performance or delays may lead to withholding, partial release, or restructuring of milestones
- Final payment subject to successful handover and IMT readiness

9 Duration of Work

The assignment shall be implemented over a period of sixty (60) months from the date of signing of the contract. This is a time-bound engagement, and the selected service provider shall be required to strictly adhere to the approved work plan, timelines, and deliverables as outlined in the Terms of Reference. Any deviation from the agreed schedule shall require prior written approval from MCAD of the Ministry of Jal Shakti.


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The overall duration of the project will be in five distinct phases:

Phase 1: Mobilization and community engagement, formation of WUS

Phase 2: Institutional Capacity of WUS, governance and compliance

Phase 3: Participatory Irrigation Management through WUS

Phase 4: Climate Resilience and Adaptive Agriculture and market linkages

Phase 5: Irrigation Management Transfer Systems

10. Report / Deliverable Linked Payment Schedule (Aligned with Phases 1-8 of FRA Methodology)

The Farmer Relationship Agency (FRA) shall submit all reports and deliverables in the in accordance with the approved Scope of Work, phased methodology, and work plan. Payments shall be released upon submission and formal acceptance of deliverables by Samridhi scheme, MCAD, and the Ministry of Jal Shakti (MoJS).

Sl. No	Deliverables (Phase-wise)	Linked Methodology Phases	Key Contents	Payment (%)
1	On signing of the MOA for staffing and initial mobilization	Phase 1	Signing of contract with clear terms and conditions	10%
2	Inception & Baseline Assessment Report	Phase 1	Inception consultations summary; command area mapping; baseline status of irrigation practices, institutional capacity of WUSs/WUAs, digital readiness, and inclusion assessment; detailed implementation plan and risk mitigation framework	
3	Community Mobilisation & Institutional	Phases 2	Documentation of awareness programmes; participatory planning outputs; WUS/WUA	20%

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	Strengthening Progress Report - formation of WUS		formation/registration status; governance systems (bye-laws, O&M norms); leadership and capacity-building activities; initial irrigation cycle handholding	
4	Capacity Building Report of WUS	Phase 3	Training and workshop reports on governance, irrigation management, coordination and convergence, data based decision support systems and market linkages in coordination with FPO and SHGs; documentation of the governance records, first annual report and financial statements	20%
5	Climate Resilience and Adaptation	Phases 4	Financial systems and user fee structures; asset protection and IMT planning; CSA interventions and farmer registry; training and extension activities; digital tools adoption; data collection and decision-support processes	20%
6	Irrigation Management Transfer	Phase 5	Exit plan for the project ensuring community managed sustainability, operation and growth of O&M fund, roles and responsibilities of WUS and relationship with technical service providers and contractors	20%
7	Final Consolidated Report	Phase 5	Final project documentation, handover of data assets, project closure report	10%

However, the payment schedule and phase wise activities given in the MCAD guidelines 2025 and its subsequent updation will be final and followed by both the parties.

11. Dispute Resolution

Any dispute arising out of this MoA shall be resolved amicably through mutual consultation. In case of unresolved disputes, the matter shall be referred to the competent authority under the Ministry of Jal Shakti.

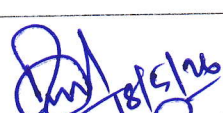
12. Termination

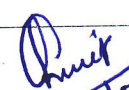
Either party may terminate this MoA by providing ninety (90) days written notice to the other party. Ongoing activities and financial obligations shall be settled prior to termination.

This is draft agreement. In case of any modification/ rectification needed, the agreement will have the scope of revision on mutual agreement of both parties as per CWC norms.

Signed on this 18th day of May 2026 at Guwahati, Assam

For Irrigation Department	For NERIWALM
Signature: 	Signature: 
Name: Sanjib Kumar Sarmah Chief Engineer, Minor Irrigation, Assam, Guwahati-3	Name: Dr. Uzzal Mani Hazarika Director पूर्वोत्तर क्षेत्रीय जल तथा भूमि प्रबंधन संस्थान NERIWALM, Dolabari, Tezpur, Assam North Eastern Regional Institute of Water and Land Management, Tezpur
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