**Job Title: Value Chain Finance Consultant - Agriculture Ecosystem**

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| **Job Title:** | Value Chain Finance Consultant. | **Reports to:** | Head of Ecosystem |
| **Unit:** | Loop DFS Limited | **Department:** | Commercial – LOOP DFS |
| **Grade:** | Contract (6 Months) | **Date:** | April 2025 |
| **Job holder:** | | **Supervisor:** | |
| **Signature:** | | **Signature:** | |

**Job Purpose Statement**

To develop and implement data-driven financial solutions for agricultural value chains, enhancing credit accessibility for farmers while ensuring sustainable business growth through advanced analytics and model development.

The consultant will work closely with key stakeholders including financial institutions, agricultural input providers, buyers, irrigation authorities, and farmer groups to develop sustainable financing solutions.

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**Key Accountabilities (Duties and Responsibilities)**

- Lead the development of agricultural credit risk models using advanced analytics techniques (XGBoost, Logit) to improve lending decisions for farmers
- Design and implement data collection frameworks that integrate internal and external agricultural data sources backed by the experience from ground.
- Create automated processes for credit scoring and approval workflows that align with bank systems.

**Strategic Framework Development**

- Design and implement a comprehensive value chain financing framework that addresses current challenges in the rice sector while ensuring scalability to other agricultural value chains

- Develop standardized processes for stakeholder coordination, including input providers, financial institutions, buyers, and farmer organizations

- Create robust risk management strategies that protect all parties involved in the financing structure

**Process Optimization**

- Review and redesign current operational processes, with particular focus on:

    o Farmer onboarding and KYC procedures

    o Input distribution and verification mechanisms

    o Milestone certification and documentation

    o Payment triggering and disbursement workflows

    o Harvest management and buyer coordination

- Implement block farming models that optimize production efficiency and resource utilization.

**Stakeholder Management**

- Design and facilitate stakeholder workshops to align interests and establish clear roles and responsibilities.

- Develop comprehensive MOUs and contracts that clearly define obligations and benefits for all parties.

- Create communication protocols that ensure transparency and timely information sharing among stakeholders.

**Financial Structure Design**

- Design innovative financing mechanisms that address current challenges in disbursement and recovery.

- Develop warehouse receipt systems integrated with collateral management

- Create milestone-based financing structures that align with agricultural production cycles

- Establish clear metrics for monitoring and evaluating the financing program's success

***Dataset Construction (April 1 to April 15)***
- Dataset construction - internal data
- Append external data
- Analytics- location, disposable income, farmer profiles, value chain selection etc.

***Segmentation & Model Training (April 15 to May 30)***
- Process automation and system integration design approval
- Set up for XGBoost & Logit
- Cohort construction

- Model v1: Q1/2 crop season
- Performance Validation (Hold out/OOT) & Review

### *Finalize Models and Build Pilot (May to June30)*
- Pilot design/region-volume-test cells. NCBA testing infrastructure
- Model Governance review
- Performance data gathering
- Production scoring approach (real time/batch)
- Design credit strategy and process
- Applicant data gathering

### Launch of pilot (1st July)

Post pilot implementation support and iterations (July to September 31)

### Work Products: (need to be shared by consultant after inception meeting with team)

1) Data Map - Detailing dataset format/timeframes for modeling and analytics
2) Data Record Format - Record structure/contents/sourcing

2-3 meetings are scheduled each week for reviews and direction setting. Opportunities for workshops available

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### Job Specifications

### Academic:

- Master's degree in Finance, Agricultural Economics, Statistics, Data Science or related field

### Professional:

- Advanced certification in data analytics, financial modeling, or agricultural finance is desirable
- Knowledge of agricultural value chains and rural finance mechanisms.

### Desired Work Experience:

- Minimum 10 years of experience in financial services, agricultural lending, or data analytics or value chain financing.
- Proven track record in developing and implementing successful agricultural financing programs and credit risk models
- Experience working with farming communities especially small holder farmers and agricultural stakeholders

**Technical Competencies**

- Expert knowledge of financial product development and risk management

- Strong understanding of agricultural production systems and value chains

- Extensive experience with digital financial services, particularly USSD platforms and API integrations

- Demonstrated expertise in data management systems and automated verification processes

- Experience in designing and implementing digital farmer registration systems with real-time validation

- Knowledge of alternative credit scoring models for agricultural financing

- Strong background in process automation and systems integration

- Proficiency in developing monitoring and evaluation frameworks with clear KPIs

- Strong proficiency in statistical analysis and data modeling techniques (For example XGBoost, Logistic Regression)

- Experience with dataset construction and management

- Understanding of credit risk assessment and lending processes

- Knowledge of agricultural value chains and rural finance mechanisms

- Proficiency in automation and system integration design

- Ability to develop and implement pilot programs

**Deliverables**

1. Comprehensive value chain financing framework document including:

    o Digital farmer registration system design with validation checks

    o Automated data exchange protocols between partners

    o Alternative credit scoring models incorporating agricultural metrics

  o Real-time verification and matching systems for invoices and payments

2. Technical specifications for:

  o API integration between stakeholder systems

  o Enhanced USSD platform with improved user experience

  o Automated validation tools and data quality checks

  o Performance monitoring dashboard with real-time KPIs

3. Standardized operational procedures and process maps

4. Template contracts and MOUs for all stakeholder groups

5. Risk management and monitoring framework including data quality controls

6. Training materials for:

  o Farmer digital literacy and USSD usage

  o Field agent data collection and verification

  o Partner system usage and compliance

7. Implementation roadmap with clear milestones and success metrics

8. Framework for replication in other agricultural value chains

**Success Metrics**

- Development of a clear, documented process for value chain financing that addresses current challenges

- Successful implementation of pilot program with measured improvement in:

  o Data accuracy rates (target >98% clean data)

  o Farmer onboarding efficiency (reduced processing time by 50%)

  o System integration success rates (>99% uptime for APIs)

  o USSD platform adoption rates (>90% successful applications)

  o Payment processing times (same-day processing for verified invoices)

  o Stakeholder satisfaction levels (>85% satisfaction rate)

  o Default rates and recovery performance

- Reduction in manual processes and validation requirements by 75%

- Implementation of automated systems with clear audit trails

- Creation of replicable framework that can be adapted for other agricultural value chains

## Location

- Based in Kenya with regular travel to agricultural production areas at own cost preferably based in the area of interest.

- Flexibility to work with remote stakeholders as needed.

## Payment Terms and Conditions

### A. Monthly Payments

Payment of corresponding consultancy fees and reimbursable expenses will be made upon submission of a monthly report highlighting progress made against:

- KPI achievement evidence
- Expense receipts
- Workshop documentation (if applicable)
- Any deviation from workplan
- A report on key project risks and key lessons learnt as well as any mitigation/course correction steps
- Invoices and timesheets to be submitted by 25th of each month
- Payment processed within 10 working days

### B. Milestone Payments

- Separate invoice for each milestone
- Requires:
    - Deliverable documentation
    - Stakeholder sign-off
    - Quality assurance approval
    - Implementation evidence

### C. Performance Evaluation

- Monthly review with Head of Ecosystems
- Quarterly review with Chief Commercial Officer
- Stakeholder feedback incorporation
- Documentation quality assessment

### 3. Contract Terms

### A. Duration

- Initial period: 6 months
- Extension option based on performance
- 30-day notice period for early termination

### B. Budget

- Total contract value not to exceed 6.3M over a period of 6 months
- Contract structured on a drawdown basis

Qualified candidates should submit:

1. **Detailed CV** highlighting relevant experience.
2. **Cover letter** describing the approach to value chain financing.
3. **Two reference projects** demonstrating similar work.

**Proposed methodology** for stakeholder engagement and implementation

**Desired Work Experience:**

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**Technical Competencies**

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**Behavioral Competencies**

- **Leadership:** Ability to motivate and manage field agents effectively.

- **Communication:** Strong interpersonal and negotiation skills to engage with farmers and stakeholders.

- **Customer Focus:** Dedicated to understanding and addressing farmer and stakeholder needs.

- **Planning and Organizing:** Skilled in managing multiple tasks and prioritizing effectively.

- **Adaptability:** Flexibility to respond to changing field dynamics and project needs.

**Reporting Relationships: jobs that report to this position directly and indirectly**

| Direct Reports | 0 |
|---|---|
| Indirect Reports | 0 |

**Stakeholder Management: key stakeholders that the position holder will need to**

| Internal | External |
|---|---|
| ✓ LOOP Business –Payments<br>✓ Marketing<br>✓ Data Science<br>✓ Head of Ecosystem | ✓ Strategic Partners<br>✓ Regulators |

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| **Emotional Intelligence** | Knows own strengths and limits; aware of own emotions and the effect they have on others and has the self-control to keep disruptive emotions and impulses in check. |
| **Social and Cross-cultural** | Interacts with people (colleagues, customers, stakeholders and the public at large) in different social and cultural environments, |
| **Agile** | Able to change plans, methods, opinions or goals in light of new information, with the readiness to act on opportunities. Highly effective in adapting to differing environments.<br><br>Inculcates a digital mind-set in the organization, institutionalizing cross- |
| **Self-Development** | Have a strategic approach to personal and professional development actively seeking feedback from others to which they will respond by establishing self-development goals. |

| Leadership | Value chain Finance consultant must possess a variety of leadership competencies to effectively contribute to their organization's strategic goals and foster a collaborative and innovative work environment. |
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| | Strategic Thinking is essential, allowing the analyst to consider long-term implications and align strategies with company goals and market trends. Understanding and anticipating market dynamics is key to driving innovation and maintaining a competitive edge. |
| | Decision Making should be data-driven, ensuring that choices are based on comprehensive analysis and insights. The consultant must critically evaluate options and manage risks effectively, balancing potential opportunities with mitigating negative impacts. |
| | Communication is vital, with a need for clear and concise articulation of complex data to various stakeholders. The ability to |