## **Post-Project Quality Control & Quality Assurance (QC/QA) Plan**

### **Krishi Mausam Salaha Pranali (KMSP) – Agro-Advisory System for Farmers**

1. **Background**

Krishi Mausam Salah Pranali (KMSP) is a mobile and web platform that empowers farmers in Nepal with timely weather updates, crop advisory, and pest control guidance. This QC/QA plan provides a comprehensive roadmap to ensure sustained performance, data accuracy, and relevance of advisory services. Key focuses include regular content validation, seasonal app performance audits.

1. **Purpose & Objective**

* Purpose – Ensure that the KMSP platform continues to provide accurate, timely, and user-friendly agricultural information to farmers and officials post-deployment.
* Primary Objectives:  
  + Maintain reliable delivery of agro-weather forecasts.
  + Validate pest/disease info and crop calendar updates.
  + Monitor admin inputs and regional language accuracy.

1. **Lead Institution & Stakeholders**

| Role | Responsibility |
| --- | --- |
| Lead Institution | AITC-MOALD |
| Technical Partner | RIMES |
| Forecast Provider | DHM, ECMWF |
| Agriculture Experts | AITC, MOALD |
| App Admins | Submit local observations- log in for observation data input |
| Farmer Users | Receive information on crop,livestock and pest control |

1. **Mobile App Evaluation & Monitoring Framework**

| **Criteria** | **Metric / Activity** | **Frequency / Target** |
| --- | --- | --- |
| **Functionality** | All modules display correct advisory content | 100% content load success rate |
|  | Seasonal crop and pest content sync | Monthly updates |
| **Performance** | App load time and screen transitions | < 3 seconds |
|  | Forecast and advisory sync time | < 10 seconds |
| **Compatibility** | Android version support | Android 8+ |
|  | Multi-screen layout check | Responsive across common devices |
| **Security** | Secure content delivery via HTTPS | 100% secured |
|  | No personal data stored | Confirmed |
| **Usability** | Observations task completion | ≤ 2 taps |
|  | Bilingual UI legibility | Verified by AITC team |
| **Accessibility** | Font readability and color contrast | Meets WCAG minimum |
| **Maintainability** | Codebase structure and update cycle | Monthly content refresh |
|  | System update via GitHub / CI-CD | Integrated |
| **Compliance** | Google Play and Apple app store policies and app guideline | 100% compliant |
|  | Privacy policy and consent notice | Clearly visible in both languages |
| **Audit & Review** | Daily app crash monitoring | Firebase integrated |
|  | Monthly content validation audits | By AITC |

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### **Mobile App Support Requirements**

### Minimum Android Version: Android 6.0 (Marshmallow)

### Minimum iOS Version: iOS 12.0

### Device Compatibility: Tested across low-end and high-end devices with varying screen sizes

### Language Support: English and Nepali

### Ongoing Support Plan:

### Monthly compatibility testing with new OS versions

### Regular updates to support latest Android/iOS changes

### Responsive technical support channel for reported issues

### Annual review of minimum device requirements to ensure backward compatibility

1. **Core Modules Under QC/QA**

* Weather Forecast Integration
* Crop Advisory with Stage-wise Instructions
* Pest and Disease Alert Module
* Observation Submission (by Officials)
* Local Language Interface (Nepali)

1. **QC/QA Strategy & Principles**

* Farmer-Centric Design – Prioritize usability and clarity for rural users.
* Data Trustworthiness – Validate all crop/pest content with experts.
* Automation Focus – Implement auto-testing for forecast and form flows.
* Localization Compliance – Ensure accuracy in translations and UI for all regions.
* Improvement Cycle – Adopt PDCA cycle for evolving user needs.

1. **Three-years Roadmap**

|  | **Time Frame** | **Key activities** |
| --- | --- | --- |
| **Short** | 0–3 months | Daily forecast validation, initial bug fixes, content proofreading, first admin refresher |
| **Medium** | 3–12 months | Monthly crop/pest review, mid-season forecast testing |
| **Long** | 12–36 months | Annual content audit, feature upgrades (e.g., voice support), forecast improvements, full transition to ministry Agriculture |

1. **Verification & Review Schedule**

* Daily: Forecast availability check, app uptime, admin data sync
* Weekly: Pest alert verification, Observation submission test, Advice verification
* Monthly: Crop calendar update review, multi-device compatibility testing
* Quarterly: Admin dashboard audit, language review, stakeholder consultation
* Annually: System performance audit, user survey, backend capacity planning

1. **Feedback Integration**

* Admin Calls & Reports: Collect feedback from agri-officers on data flow and field response
* Social Listening (if integrated): Monitor feedback via Viber groups, community radio inputs
* Update Pipeline: Incorporate validated feedback in quarterly builds

1. **Documentation & Handover**

* Source Code Access: Hosted on version-controlled Github
* Training Manuals: user manuals with screenshots
* Technical Docs: Structure of forecasts, advisories, and translations
* Change Logs & SOPs: For technical and non-technical handover
* Annual Training Plan: For new agricultural officers and support staff
* Ownership Transition: AITC-MOALD

**10. Conclusion**

This plan ensures the Krishi Mausam Salah Pranali system continues to serve farmers and stakeholders with accurate, easy-to-use agricultural advisories. With built-in review timelines and structured content oversight, KMSP remains agile and reliable throughout seasonal cycles. Strong institutional coordination and transparent QC/QA practices will support its long-term impact in transforming agri-based livelihoods in Nepal.