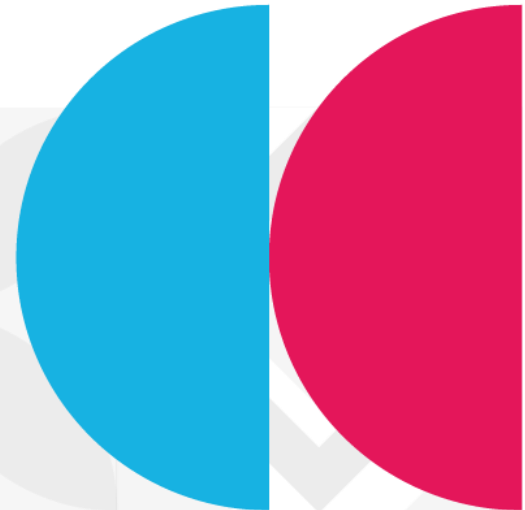


Technical Consultancy for Agricultural Application Development



TERMS OF REFERENCE

Agricultural Mobile Application Development – BASATINE Program

Project name:	BASATINE
Organization:	Berytech Foundation
Position:	Technical Consultant for the supervision of the development of an agricultural application
Assignment:	To monitor and ensure the successful development of an Android and iOS application designed to connect farmers and food producers with buyers directly
Duty location	Sin El Fil - Lebanon
Start date:	August 20, 2024

CONTEXT & BACKGROUND

Berytech is a leading organization in the Entrepreneurial Eco-system in Lebanon, that aims to provide a conducive environment for the creation and development of startups, through incubation, business support, counseling, funding, networking, and company hosting, hence taking part in the economic revival of the country, participating in wealth and job creation, and retaining graduates and high-level skills in Lebanon.

Bolstering Agriculture Systems' Ability to Invest, Nourish, and Employ (**BASATINE**) is a four-year project that aims to support farmers and other value chain and associated sector actors in areas of Beqaa and Akkar focused on the production of wheat and vegetables, seeking a territorial approach, and promoting linkages with other value chains. Through complementary interventions designed in alignment with the humanitarian-development-peace nexus, the project will immediately address food insecurity and provide needed income and technical support to farmers to survive this tumultuous time, as well improve the capacity of food systems to maintain employment and growth in the longer term via stronger domestic production and system linkages. This will ultimately contribute to greater economic stability – particularly for women, improved rural development, and more positive social cohesion between host/refugee communities at a local level.

Selected Organization

The selected mobile application started in January 2020 as an initiative to support farmers in Lebanon, especially following the financial crisis. The organization behind the selected application aims to develop sustainable living through building, farming, education, and



industry using proven methods and a rational scientific approach. their team, composed of agricultural engineers, is dedicated to helping people achieve food independence and promoting various forms of agriculture to boost the sector with commitment to applying and sharing the best agricultural practices to produce healthy crops using the most effective and eco-friendly methods. their goals include supporting existing farmers with technical and scientific expertise with a specific focus on research and development for innovative agricultural best practices, providing easy access to quality information for farmers, and supporting developmental projects that benefit Lebanon's agriculture sector.

Through a partnership, Berytech is supporting the selected organization to improve and further develop their Mobile Application as part of the Activity (Agriculture Sector Actors Access Improved to Market Information) under the BASATINE Project. The purpose of this partnership is to integrate a user-friendly and live price monitoring function, technical functions, and other useful features for farmers, food processors and other stakeholders identified by Berytech.

Within the frame of this partnership, Under this partnership, the selected organization is contracting a digital innovation and technology development agency as a third party to manage all aspects of app development, from the initial design to piloting with the identified stakeholders.

Below are the development phases and detailed deliverables expected from the selected organization:

Phase	Deliverables
Phase 1	1- Project Kick off (Allocation of roles and responsibilities)
	2- Application development requirements' determination
	3- APP UI/UX design
	4- Prototype Development
	5- API Design
	6-Development (Phase 1) - Core features implementation
	7- API Development Kick off
	8- Conduct testing and Bug fixes
	9- Complete API endpoints
	10- API testing and Validation
	11- AWS infrastructure requirements
	12- Setup process plan completion
Phase 2	1- Market Place Integration Prototyping
	2- Marketplace Integration Development (Phase 1)
	3- Market Place API Development
	4- Marketplace Integration testing and validation
	5- Marketplace UI/UX alignment
	6- Localization and Language support for Marketplace



	7- Backend automation for Marketplace processes
Phase 3	1- API development
	2- Database Implementation (MSSQL)
	3- Unit and Integration - Testing performed
	4- API documentation using SWAGGER
	5- AWS resources (EBS, AWS services) provision
	6- CI/CD pipelines configuration
	7 Automated builds and deployments
	8- CI/CD pipelines test
	9- end-to-end testing performance
Phase 4	1- App development finalization
	2- User Feedback Implementation
	3- Preparation of application for submission to Google play store
	4- API security measures finalization
	5- App comprehensive testing
	6- Marketing & Communication (Marcom)
	7- Instructional content development
Phase 5	1- App submission to google play store
	2- App submission to App store
	3- Marcom deployment

SCOPE OF WORK

Berytech is seeking to recruit a consultant who will be assigned the following responsibilities:

The Technical Consultant will be responsible for overseeing and monitoring the development process of the application with the selected organization from a technical perspective, ensuring timely delivery of all project milestones, and facilitating effective communication between the development team from one side and the selected organization/Berytech (BASATINE) teams.

As part of the partnership between Berytech and the selected organization to enhance their Mobile Application under the BASATINE Project, the Technical Consultant will be responsible for overseeing and monitoring the development process of the application. This role involves ensuring the timely delivery of all project milestones and facilitating effective communication between the development team and the selected organization /Berytech (BASATINE) teams. The Technical Consultant will work closely with selected organization and Berytech teams.



Key Responsibilities:

Project Monitoring and Coordination:

- 1- Regularly track the progress of the development team against the project timeline and deliverables .
- 2- Conduct Monthly reviews and assessments to ensure the project is on track and meets the established goals.
- 3- Identify potential risks and issues in the project development and report them to the program team along with proposed mitigation strategies.

Quality Assurance:

- 1- Ensure the application development meets the specified requirements and quality standards.
- 2- Oversee testing processes to verify the functionality, performance, and security of the app on both Android and iOS platforms.
- 3- Review and provide feedback on technical documentation, code quality, and user interface designs to the program team

Stakeholder Communication:

- 1- Organize and lead bi-weekly/monthly meetings to discuss progress, address concerns, and ensure alignment on project objectives.
- 2- Prepare and deliver monthly progress reports to the program team, highlighting achievements, challenges, and upcoming milestones.

Compliance and Documentation:

- 1- Ensure the development process complies with relevant regulations, standards, and best practices.
- 2- Maintain comprehensive documentation of the project, including meeting minutes, progress reports, and technical specifications.
- 3- Ensure the development and delivery of fully functional and documented APIs for the CMS, Admin Tool, Dashboard, and front-end mobile applications.

QUALIFICATIONS

Project Management Experience:

- 1- Proven experience in overseeing and monitoring application development projects, ensuring timely delivery of milestones and deliverables.



2- Strong ability to track project progress, conduct periodic reviews, and assess project goals and timelines.

Technical Expertise:

- 1- In-depth understanding of application development processes and methodologies.
- 2- Proficiency in overseeing testing processes to ensure functionality, performance, and security on both Android and iOS platforms.
- 3- Ability to review and provide feedback on technical documentation, code quality, and user interface designs.

Risk Management Skills:

- 1- Strong skills in identifying potential risks and issues in project development and proposing effective mitigation strategies.

Stakeholder Communication:

- 1- Excellent communication and interpersonal skills to facilitate effective communication between development teams and program stakeholders.
- 2- Experience in organizing and leading meetings to discuss project progress, address concerns, and align on objectives.
- 3- Ability to prepare and deliver comprehensive progress reports highlighting achievements, challenges, and upcoming milestones.

Compliance and Documentation:

- 1- Knowledge of relevant regulations, standards, and best practices in application development.
- 2- Proven ability to maintain comprehensive project documentation, including meeting minutes, progress reports, and technical specifications.
- 3- Experience ensuring the development and delivery of fully functional and documented APIs for CMS, Admin Tools, Dashboards, and front-end mobile applications.

Educational Background:

- 1- A bachelor's degree in computer science, Information Technology, Engineering, or a related field. Advanced degrees or relevant certifications are a plus.

DELIVERABLES

Over the 7 months of this consultancy, The selected consultant is expected to:

- 1- Lead and facilitate 14 bi-weekly technical meetings with the selected organization and Berytech teams, and when needed with the development agency and prepare meeting minutes following every meeting – **Expected LOE is 7 days**



2- Validate the deliverables of the selected organization as detailed in the table above – 2 days for validation of the deliverables of each phase – **Expected LOE is 10 days**

3- Submit a monthly technical progress report to the program team at Berytech – a total of 6 progress reports + 1 final report - **Expected LOE is 4 days**

HOW TO APPLY

Intervention Modality

Upon selection, the implementation timeline is expected to fall between August 20, 2024 and March 31, 2025 - **7 months assignment.**

For technical clarifications on the scope of work, deliverables, work timeline, or for any relevant questions please contact Mr. Slayman Fawaz (Program Manager) at slayman.fawaz@berytch.org or Mr. Sevag Babikian (Accelerator CTO/Digital Transformation Manager) at sevag.babikian@berytch.org

Timeline and Application

The selected consultant is expected to start his/her activities the soonest after selection; an exact timeline and effective working days are to be set based on both the company's and the consultant/consultant firm' availability. The proposed schedule for consultancy services spans from August 20 2024 till March 31, 2025.

For an application to be complete, candidates should submit the following documents:

1. **Technical proposal (maximum two pages)** describing the methodology to conduct the work based on the content suggested in section: "Scope of Work", elaborating it further.
2. **Profile and project references (maximum three pages):** A brief explanation of the consultant background should be submitted (CVs shall be included as annex) along with project references on the topic.
3. **Financial Proposal** describing the expected remuneration

Documents and proposals must be sent to procurement@berytch.org by August 11, 2024, at 5:00 pm the latest, with the subject: (BASATINE – Consultant – Agricultural Application Development).

Due to the high volume of applications received, only selected consultant will be contacted.

Incomplete applications will be disqualified.

