

MOBLIE Labs

High-Level Feasibility Study

Submitted to:

The Ministry of Digital Economy and Entrepreneurship

Disclaimer:

The Ministry of Digital Economy and Entrepreneurship (MoDEE) and Istidama Consulting have prepared this report using information supplied by its advisors as well as information available in the public domain.

The report's contents have not been verified and its analysis does not purport to be all-inclusive. MoDEE and Istidama Consulting expressly disclaim any and all liability for any representation, warranty, or undertaking, or omission expressed or implied, which is or will be given in relation to the truth, accuracy, or completeness of this report, and no representation or liability is or will be accepted by MoDEE or Istidama Consulting as to the achievement or reasonableness of future projections or the assumptions underlying them, management targets, valuators, opinions, prospects or returns if any.

Founders and investors considering this project are advised to conduct further analysis on projected adoption rates, development costs, and ongoing operational expenses. This additional scrutiny will help mitigate potential risks related to technology challenges, changes in regulations, market penetration, and competitive pressures.

The report does not constitute any form of commitment or recommendation on the part of MoDEE or Istidama Consulting.

A National Entrepreneurship Policy Project





Funded by the European Union



Prepared by:

Table of Contents

Tabl	e of	Contents	1						
Tabl	e of	Tables	1						
Tabl	e of	Figures	2						
Exec	utiv	e Summary	3						
١.	Intr	oduction	3						
2.	Mar	rket Analysis	4						
١.	I.I Economic Analysis								
Ι.	2	Market Analysis							
3.	Bus	siness Model	5						
4.	Tec	chnical Analysis	7						
5.	Fina	ancial Analysis							
2.	1	Financial Study Assumptions							
2.	2	Financial Study:							
	2.2.	I Projected Working Capital							
	2.2.	2 Project Initial Cost							
	2.2.	.3 Projected Income Statement							
	2.2.	4 Projected Free Cash Flow Statement	13						
2.	3	Sensitivity Analysis							
6.	Inte	egration with Other Sectors							
7.	Ent	repreneur Persona	15						
8.	Stal	Stakeholders15							
9.	Risl	k Assessment	16						
10.	С	Conclusion and Recommendations16							

Table of Tables

Table 1: Revenue Projection Image: Comparison of the second	.5
Table 2: Cost of Goods Sold – Five Year Projection	.8
Table 3: Manpower recruitment plan – five-year projection:	.8
Table 4: Manpower total cost – five-year projection	.9
Table 5: Operational Expenditures – five-year projection	.9
Table 6: Capital Expenditures Cost – five-year projection	.9

Table 7: Working capital projection (JOD)	11
Table 8: Initial Cost Summary (JOD)	11
Table 9: Projected Income Statement (IOD)	11
Table 10: Free Cash Flow (FCF) Projection (JOD)	13
Table 11: Free Cash Flow (FCF) Projection (JOD)	14

Table of Figures

Figure 1: Product Mix by Quantity	6
Figure 2: Product Mix by Revenue	6
Figure 3: Gross vs Net Profit Margin	12
Figure 4: Gross vs Net Profit Margin	13

Executive Summary

Mobile Soil Testing Labs, named MOBILE Labs, aims to transform Jordanian agriculture by offering on-site soil testing services that address critical challenges such as soil fertility depletion and water inefficiency. The innovative approach of MOBILE Labs involves deploying advanced mobile units equipped with state-of-the-art soil analysis tools to provide immediate, precise, and actionable data to farmers directly in their fields. This service overcomes the limitations of traditional soil testing, which often requires transporting samples to distant laboratories, causing delays and logistical hurdles. By delivering real-time insights on soil conditions, including nutrient content and pH levels, MOBILE Labs empowers farmers to make informed decisions that enhance crop health and yield. The business model is designed for scalability, allowing for easy expansion across various regions with minimal infrastructure, which is crucial for reaching both urban and rural agricultural communities. Furthermore, the integration of mobile technology ensures efficient service delivery and accessibility, fostering sustainable farming practices and contributing to the broader goal of optimizing resource use in agriculture. MOBILE Labs is poised to play a pivotal role in improving soil management and agricultural productivity in Jordan, aligning with the country's strategic vision for sustainable development and climate-resilient agriculture.

I. Introduction

Mobile Soil Testing Labs aim to revolutionise agricultural practices by providing on-site soil testing services for farmers. The primary focus is on analyzing nutrient content and pH levels, which are critical for optimizing soil conditions and enhancing crop health and yield. Traditional soil testing services require farmers to send samples to fixed-location labs, which can be time-consuming and inconvenient. In contrast, Mobile Soil Testing Labs offer the convenience of on-site testing, delivering rapid and accurate results directly to the farmers.

The innovation in this business lies in its mobility and use of advanced technology. Equipped with the latest soil analysis tools, the mobile labs can cover a broad geographic area, reaching farmers in both urban and rural settings. This mobility allows for real-time testing and immediate feedback, enabling farmers to make informed decisions quickly. By providing tailored advice based on soil test results, Mobile Soil Testing Labs help farmers implement precise soil management practices, ultimately improving crop productivity and sustainability.

Scalability is a significant advantage of this business model. The service nature of the business allows for easy expansion across different regions with minimal physical infrastructure. The key to scalability will involve leveraging technology to streamline testing processes and managing logistics efficiently to cover a wide service area. As the business grows, additional mobile units can be deployed to meet increasing demand, ensuring that more farmers can benefit from on-site soil testing services.

2. Market Analysis

I.I Economic Analysis

Jordan's agricultural sector plays a critical role in its economy, contributing approximately 4% to the national GDP. The country faces challenges such as water scarcity, soil degradation, and the need for sustainable farming practices. The government's Vision 2025 strategy emphasizes improving agricultural productivity and sustainability through technological innovation and efficient resource management. The growing awareness of sustainable agriculture and the need for precision farming techniques provide a conducive environment for Mobile Soil Testing Labs¹².

I.2 Market Analysis

Target Audience:

Small to Large-Scale Farmers: Farmers who need accurate and timely soil analysis to improve crop yields and manage soil health effectively.

Agricultural Schools: Institutions that require practical tools and real-time data for educational purposes.

Agricultural Co-ops: Cooperative groups that support farmers in adopting sustainable and effective farming practices.

Market Size:

Jordan has approximately 2.6 million hectares of agricultural land. If only 10% of this land is serviced annually, the market size is significant.

The global soil testing market was valued at USD 3.3 billion in 2020 and is projected to grow at a CAGR of 10.4% from 2021 to 2028. This growth reflects the increasing demand for precision agriculture and sustainable farming practices³⁴.

Global Success Stories

United States: Soil Health Institute has developed mobile soil labs that provide on-site testing services, significantly improving soil health management and crop productivity⁵.

India: Krishi Rasayan has successfully implemented mobile soil testing units, helping farmers optimize their soil management practices and enhance crop yields⁶.

¹ World Bank. (2022). "Jordan Agriculture Sector Review"

² Jordan Ministry of Planning and International Cooperation. (2015). "Jordan 2025: A National Vision and Strategy"

³ FAO. (2021). "Jordan at a glance: Agriculture"

⁴ Grand View Research. (2021). "Soil Testing Market Size, Share & Trends Analysis Report"

⁵ Soil Health Institute. (2021). "Advancing Soil Health"

⁶ Krishi Rasayan. (2020). "Mobile Soil Testing Services"

3. Business Model

At Mobile Soil Testing Labs, the startup is dedicated to enhancing the agricultural practices of farmers by providing a range of tailored soil testing services designed to meet their diverse needs. The offerings are crafted to deliver actionable insights into soil health, thus enabling farmers to optimize their crop management and ensure sustainable farming practices. We understand that effective soil management is the foundation of productive agriculture, and our services are structured to provide comprehensive and accessible solutions for all types of farmers and farming operations. Whether through basic nutrient analysis or detailed soil composition assessments, our goal is to empower farmers with the knowledge they need to make informed, data-driven decisions.

Services/Products:

- Basic Soil Testing: This includes pH and nutrient content analysis, which is essential for understanding soil health and fertility. These tests help farmers make informed decisions about fertilizer application and crop management.
- Advanced Soil Testing: More comprehensive tests that include micronutrient analysis, soil texture classification, and organic matter content. These advanced tests provide deeper insights into soil properties and are valuable for precision agriculture.
- Subscription Services: Regular soil testing services provided on a subscription basis, ensuring continuous soil monitoring and timely interventions. Subscriptions can include periodic soil tests, data analysis, and tailored agronomic advice.

Description / Year		2	3	4	5
Basic Soil Testing	3,500	3,750	4,000	4,250	4,500
Price / Unit I	25	25	25	30	30
Sub-total I	87,500	93,750	100,000	127,500	135,000
Advanced Soil Testing	100	100	150	150	200
Price / Unit 2	35	35	35	35	35
Sub-total 2	3,500	3,500	5,250	5,250	7,000
Subscription Services	100	120	150	170	200
Price / Unit 3	100	100	100	100	100
Sub-total 3	10,000	12,000	15,000	17,000	20,000
Total Revenues	101,000	109,250	120,250	149,750	162,000

Table I: Revenue Projection

- Service Charges: Direct charges for on-site soil testing services. Basic soil tests are priced to be affordable and accessible, while advanced tests are offered at a premium.
- Subscription Fees: Revenue from subscription-based soil testing services. Subscriptions ensure a steady revenue stream and build customer loyalty through continuous monitoring and support.

• Consultancy Services: Fees for personalized agronomic consulting based on soil test results. These services help farmers implement the recommendations provided in the soil health reports.



Figure 1: Product Mix by Quantity



Figure 2: Product Mix by Revenue

- In Year I, the primary revenue is expected from basic soil testing services, totalling JOD 87,500.
- By Year 5, revenue from all services combined is projected to reach JOD 162,000, driven by an increase in both basic and advanced soil tests and the growth of subscription services.

4. Technical Analysis

Mobile Soil Testing Labs:

Technology and Equipment:

- Soil Testing Tools: Equipped with advanced soil testing tools, including pH meters, nutrient analyzers, and soil moisture sensors. These tools provide accurate measurements of soil properties, which are crucial for determining soil health and fertility.
- Mobile Lab Units: Customized vehicles (e.g., vans or pickup trucks) outfitted with all necessary equipment and technology to perform on-site soil tests. These mobile units are designed to operate efficiently in various terrains and climatic conditions.

Process:

- 1. Scheduling and Travel: Farmers schedule an appointment, and the mobile lab travels to the farm location.
- 2. On-Site Testing: Technicians conduct comprehensive soil tests, including pH level, nutrient content (NPK nitrogen, phosphorus, potassium), soil texture, and moisture levels.
- 3. Data Analysis: Immediate analysis of soil samples using state-of-the-art equipment. Results are processed and interpreted on-site.
- 4. Report Generation: A detailed soil health report is generated, providing insights into soil conditions and recommendations for improvement.
- 5. Consultation: Technicians provide personalized advice based on the test results, helping farmers implement appropriate soil management practices.

Scalability:

- Regional Expansion: The business model allows for easy replication in different regions. Additional mobile units can be deployed as demand grows, ensuring coverage of a wider geographic area.
- Technological Integration: Leveraging digital platforms to manage appointments, data collection, and reporting. This integration ensures efficiency and scalability in operations.
- Partnerships: Collaborating with agricultural cooperatives, government agencies, and educational institutions to extend reach and impact.
- Sell to farmers:

Sustainability:

- Environmental Impact: By optimizing soil health, the service helps reduce the need for chemical fertilizers and pesticides, promoting sustainable farming practices.
- Resource Management: Efficient use of resources by targeting specific soil deficiencies, leading to better crop yields and reduced wastage.

Investment in R&D:

- Continuous research and development to improve soil testing methodologies and incorporate the latest technological advancements.
- Developing proprietary software for data analysis and reporting to enhance the accuracy and usability of test results.

Description / Year	1	2	3	4	5
Projected Demand (Quantity) Basic Soil Testing	3,500	3,750	4,000	4,250	4,500
COGS / Unit Basic Soil Testing	5	5	4	4	4
Sub-total Basic Soil Testing	17,500	18,750	16,000	17,000	18,000
Projected Demand (Quantity) Advanced Soil					
Testing	100	100	150	150	200
COGS / Unit Advanced Soil Testing	9	9	9	8	8
Sub-total Advanced Soil Testing	900	900	1,350	I,200	I,600
Projected Demand (Quantity) Subscription					
Services	100	120	150	170	200
COGS / Unit Subscription Services	30	30	30	30	30
Sub-total Subscription Services	3,000	3,600	4,500	5,100	6,000
Total COGS	21,400	23,250	21,850	23,300	25,600

Table 2: Cost of Goods Sold - Five Year Projection

- COGS includes the expenses associated with conducting soil tests, such as the cost of testing kits, equipment maintenance, and technician salaries.
- As the business scales, COGS per unit decreases due to economies of scale, with Year I COGS at JOD 21,400 and Year 5 at JOD 25,600, reflecting increased service volume and efficiency improvements.

Human Resources:

Table	3:	Manbower	recruitment	blan —	five-vea	r broiection:
i abic	٠.	i i anpon ci	recruitmente	piùn	1110 100	i projection.

Title / Year	I	2	3	4	5
Founder/CEO	I	I	I	I	I
Agricultural Scientist	I	I	2	2	2
Mobile Lab Technician	I	I	I	I	I
Sales & Marketing Specialist	I	I	I	2	2

- The team comprises a Founder/CEO who oversees operations and strategic direction, an Agricultural Scientist responsible for soil analysis and research, a Mobile Lab Technician for field testing and equipment handling, and a Sales & Marketing Specialist to drive market outreach and customer relations.
- As the business grows, additional agricultural scientists and sales & marketing specialists will be hired to support increased demand and expansion.

Title / Year	I I	2	3	4	5
Founder/CEO	14,000	14,700	15,435	16,207	17,017
Agricultural Scientist	8,400	8,820	18,522	19,448	20,421
Mobile Lab Technician	8,400	8,820	9,261	9,724	10,210
Sales & Marketing Specialist	8,400	8,820	9,261	19,448	20,421
Total HR Salaries	39,200	41,160	52,479	64,827	68,068
Social Security Cost	5,586	5,865	7,478	9,238	9,700
Health Insurance Cost	1,200	1,200	1,500	1,800	1,800
Total HR Cost	45,986	48,225	61,457	75,865	79,568

Table 4: Manpower total cost - five-year projection

Operational Expenditures

Description / Year	I	2	3	4	5
Electricity	300	300	300	300	300
Water	30	30	30	30	30
Rent	0	0	0	0	0
Fuel	30	30	30	30	30
Maintenance	100	100	100	100	100
Telecommunication	100	100	100	100	100
Website Charges	10	10	10	10	10
Advertising	100	200	300	300	300
Cleaning Material & Consumables	50	50	50	50	50
R&D	1,000	١,000	1,500	١,500	2,000
Legal & Accounting Fees	600	600	800	800	1,000
Sub-total OpEx	48,306	50,645	64,677	79,085	83,488
Other Costs	4,831	5,065	6,468	7,908	8,349
Total OpEx	53,137	55,710	71,145	86,993	91,837

Table	5.0	Oberational	Expenditures	- five-	vear	broiectior
I UDIC	J. 1	operational	LAPENGIUIES	- ////-	yeur	projection

 Table 6: Capital Expenditures Cost – five-year projection

Description / Year	0	I	2	3	4	5
Lab Preparation	10,000	10,000	0	0	5,000	5,000
Car/Pickup Truck	10,000			10,000		

Website design	٥٥٥, ا					
Lab Equipment	2,000	1,000	1,000	1,000	1,000	1,000
Total CapEx	23,000	11,000	1,000	11,000	6,000	6,000

- Initial investments include JOD 10,000 for lab preparation, JOD 10,000 for a vehicle (car/pickup truck), and JOD 1,000 for website design.
- Ongoing annual investments are planned for lab equipment and research facilities to ensure the business remains at the cutting edge of soil testing technology and maintains high service standards.

5. Financial Analysis

2.1 Financial Study Assumptions

The feasibility study is based on the following key assumptions:

Discount Rate: The study employs a conservative discount rate of 14%, reflecting a cautious approach to valuation.

Financing Structure: The project is entirely financed by equity. This conservative approach avoids the financial leverage and thus underestimates project value, given the lower cost of debt compared to equity.

Terminal Value: The project assumes a zero-terminal value at the end of year five, aligning with the study's conservative outlook.

Cash Flow Projection: Cash flows beyond year five are excluded from the analysis, focusing on the initial project phase.

Tax Rate: The assumed tax rate of 0% complies with Jordan's income tax law.

Depreciation Rate: Capital expenditure (CapEx) is depreciated at an annual rate of 20%. Any deviation from this rate may impact projected profitability but not project feasibility, as depreciation is a non-cash expense.

Working Capital Assumptions

Operational liquidity requirements are guided by the following assumptions:

- **Cash Reserves:** The project will maintain cash equivalent to 30 days of projected annual operational expenses, ensuring robust liquidity management.
- Accounts Receivable (A/R) Collection Period: The average collection period for receivables is 45 days, reflecting expected credit sales conversion into cash.
- Accounts Payable (A/P) Payment Period: The average payment period for payables is 0 days, indicating the timeframe for settling supplier obligations.

• **Inventory Management:** Inventory levels will be maintained to cover an average of two months of sales quantity, ensuring optimal stock levels to meet demand efficiently.

Capital expenditures expected to be incurred in the first year were included as part of the initial costs of the project.

Provisions were made within the initial cost to cover any potential negative net free cash flow that may arise during the first five years of operation, if needed.

The annual salary structure comprises 14 payments per year instead of the conventional 12 payments.

2.2 Financial Study:

2.2.1 Projected Working Capital

Description / year		2	3	4	5
Cash	4,428	4,642	5,929	7,249	7,653
Accounts Receivable A/R	12,625	13,656	15,031	18,719	20,250
Inventory	3,567	3,875	3,642	3,883	4,267
Accounts Payable A/P	-	-	-	-	-
Net Working Capital	20,620	22,174	24,602	29,852	32,170
Changing in Working Capital		1,554	2,428	5,250	2,318

Table 7: Working capital projection (JOD)

This table shows that the net working capital needed for the project for the first year of operation is JOD 20,620, which has to increase steadily year over year to reach JOD 32,170 in the fifth year of operation. The steady increase in the working capital comes to cover the rapid increase in the project operations and mainly the increase in the projected revenues.

2.2.2 Project Initial Cost

Table 8: Initial Cost Summary (JOD)

Description / year	JOD
СарЕх	34,000
Net Working Capital	20,620
Total Initial Cost	54,620

The project's initial cost is projected to be JOD 54,620, comprising JOD 34,000 as CapEx, and JOD 20,620 as net working capital.

2.2.3 Projected Income Statement

Table 9: Projected Income Statement (JOD)

Description / Year	I.	2	3	4	5
Total Revenues	101,000	109,250	120,250	149,750	162,000

II | AT-002 High-Level Feasibility Study

COGS	21,400	23,250	21,850	23,300	25,600
Gross Profit (JOD)	79,600	86,000	98,400	126,450	136,400
ОрЕх	53,137	55,710	71,145	86,993	91,837
Net Profit Before Tax and Depreciation (JOD)	26,463	30,290	27,255	39,457	44,563
Depreciation	6,800	7,000	9,200	10,400	11,600
Net Profit Before Tax (JOD)	19,663	23,290	18,055	29,057	32,963
Tax Expense	-	-	-	-	-
Net Profit (JOD)	19,663	23,290	18,055	29,057	32,963

The projected income statement shows the project will generate a profit of JOD 19,663 in the first year of operation. Moreover, the net profit is expected to grow to reach JOD 32,963 in the fifth year.



Figure 3: Gross vs Net Profit Margin

The project is expected to generate a positive net profit margin in the first year of operation of 19.5%. Moreover, the net profit margin will continue to be positive over the course of the study. In the fifth year of operation, the net profit margin is expected to be 20.3%.

Furthermore, the study also shows that the return on investment will always be positive. In the first year of operation, it is expected the ROI to be 36.0%, and in the fifth year to hit 41.90%.



Figure 4: Gross vs Net Profit Margin

2.2.4 Projected Free Cash Flow Statement

The table below demonstrates that the project will generate a positive free cash flow for the first year of operation, JOD 26,463. Moreover, due to the projected expansion in business operations, the project is expected to generate a steady positive net free cash flow growth in the following years. By the end of your five, the projected free cash flow will reach JOD 36,245.

Description / Year	0		2	3	4	5			
Cash-in Flow	Cash-in Flow								
Net Profit		19,663	23,290	18,055	29,057	32,963			
Depreciation		6,800	7,000	9,200	10,400	11,600			
Injected Capital	54,620								
Total Cash-in Flow (JOD)	54,620	26,463	30,290	27,255	39,457	44,563			
Cash-out Flow									
Initial Cost	54,620		1,000	11,000	6,000	6,000			
Changes in Working Capital			1,554	2,428	5,250	2,318			
Total Cash-out Flow (JOD)	54,620	-	2,554	13,428	11,250	8,318			
Free Cash Flow (JOD)	-	26,463	27,736	13,827	28,207	36,245			

Table 10: Free Cash Flow (FCF) Projection (JOD)

Based on these results, the project's feasibility indicators demonstrate its viability, with a net present value of JOD 34,793.9 and a profitability index of 1.64. Moreover, the project's internal rate of return (IRR) is expected to be 37.38%.

Feasibility Indicators	Value
Net Present Value (NPV)	34,794
Profitability Index (PI)	1.64
Internal Rate of Return (IRR)	37.4%

2.3 Sensitivity Analysis

To assess the project's sensitivity to market conditions, a sensitivity analysis was conducted involving six unfavourable scenarios:

- Decrease projected revenues by 5% while keeping other variables constant.
- Decrease projected revenues by 10% while keeping other variables constant.
- Increase operational expenditure by 5% while keeping other variables constant.
- Increase operational expenditure by 10% while keeping other variables constant.
- Increase initial costs by 5% while keeping other variables constant.
- Increase initial costs by 10% while keeping other variables constant.

Sensitivity Scenario	Net Present Value (NPV)	Profitability Index (PI)	Internal Rate of Return (IRR)
Original case	34,794	1.64	37.38%
Drop in revenues by 5%	13,463	1.25	23.65%
Drop in revenues by 10%	(7,869)	0.86	7.82%
Increase in OpEx by 5%	22,636	1.41	29.74%
Increase in OpEx by 10%	10,478	1.19	21.59%
Increase in initial cost by 5%	32,063	1.56	34.68%
Increase in initial cost by 10%	29,332	1.49	32.20%

Tabla	11.	Eroo	Cach	Elou		Drojection	
<i>i</i> uble	11.	Fiee	Cush	FIOW	(FCF)	FIOJECUOII	(UUD)

The sensitivity analysis generally shows that the project is feasible and not sensitive to unfavourable market conditions. Apart from the 10% revenue drop scenario, all the other scenarios exhibit feasible indicators. The drop in revenues has a more dramatic impact on the project viability than the increase in the OpEx or initial cost by the same magnitude. It is recommended that investors check and further study the market to ensure that the projected revenues are achievable within the thresholds of the proposed initial cost and operational expenditures.

6. Integration with Other Sectors

Mobile Soil Testing Labs can significantly impact and integrate with various sectors:

Government and Policy Making: The data collected from soil tests can inform agricultural policies and initiatives aimed at improving soil health and sustainability. Collaboration with government agencies can help expand services to underserved areas and support national agricultural goals.

Environmental Management: Accurate soil testing helps in reducing the overuse of fertilizers and pesticides, contributing to environmental conservation efforts. Environmental agencies can use this data to monitor soil health and promote sustainable farming practices. Agricultural Education: Agricultural schools and universities can benefit from on-site soil testing for educational purposes, providing students with hands-on experience and real-time data for their studies.

Technology Development: Partnerships with tech companies can enhance the efficiency and accuracy of soil testing through innovative tools and software solutions, leading to better data management and analysis.

These integrations highlight the multifaceted applications of mobile soil testing, promoting sustainable agriculture and environmental stewardship.

7. Entrepreneur Persona

The ideal entrepreneur to lead Mobile Soil Testing Labs should have a robust background in agricultural sciences, with expertise in soil science and crop management. This individual should also possess strong business acumen and experience in managing mobile operations. Key skills include logistics management, customer service, and a deep understanding of agricultural needs and practices.

An entrepreneurial spirit combined with technological savvy is crucial for driving innovation and ensuring the efficiency of mobile soil testing operations. The leader should be capable of fostering partnerships with government agencies, educational institutions, and tech companies to enhance service offerings and expand market reach. Effective communication skills are essential for educating farmers about the benefits of soil testing and building trust within the agricultural community.

A passion for sustainable agriculture and a commitment to improving farming practices through precise soil management will be the driving force behind the success of Mobile Soil Testing Labs

8. Stakeholders

Engaging a diverse group of stakeholders is crucial for the success of Mobile Soil Testing Labs:

- 1. Farmers and Agricultural Cooperatives: The primary users of the soil testing service(s), benefiting from improved crop yields and soil health. Their feedback and adoption are essential for refining the services and ensuring customer satisfaction.
- 2. Government Agencies: Collaborating with agricultural and environmental departments to align with national goals for sustainable farming and soil conservation. Support from these bodies can facilitate wider adoption and regulatory compliance.
- 3. Educational Institutions: Agricultural schools and universities can utilize the mobile labs for practical training and research, helping to educate the next generation of farmers and agronomists.

- 4. Technology Partners: Tech companies providing soil analysis tools and software can enhance the accuracy and efficiency of the mobile testing services, fostering continuous innovation.
- 5. Environmental Organizations: Advocates for sustainable agriculture and soil health, these groups can help promote the benefits of mobile soil testing and support environmental conservation efforts.

9. Risk Assessment

Successfully deploying Mobile Soil Testing Labs in Jordan entails navigating several key risks:

Risk	Impact	Likelihood	Risk Mitigation Technique
Logistical Challenges	High	Moderate	Develop an efficient routing and scheduling system to optimize travel and service delivery. Invest in GPS and route optimization software.
Market Acceptance	Moderate	Moderate	Conduct awareness campaigns and demonstrations to educate farmers on the benefits of soil testing. Offer trial services to build trust and demonstrate value.
Competition from Fixed Labs and DIY Kits	Moderate	High	Highlight the convenience, accuracy, and personalized advice offered by mobile services. Develop unique value propositions and competitive pricing strategies.
Equipment Maintenance and Reliability	High	Low	Regularly service and maintain testing equipment to ensure reliability. Keep spare equipment on hand to minimize downtime.

Addressing these risks proactively with strategic planning and contingency measures will be vital for the smooth operation and long-term sustainability of Mobile Soil Testing Labs.

I0. Conclusion and Recommendations

Mobile Soil Testing Labs presents a robust business opportunity in Jordan's agricultural sector, offering convenient and accurate on-site soil testing services. This innovative solution

addresses critical needs for optimizing soil health and enhancing crop yields, supporting sustainable agricultural practices. The business model's scalability and minimal infrastructure requirements make it well-suited for expansion across various regions. By leveraging advanced soil analysis technology and efficient logistics management, Mobile Soil Testing Labs can significantly impact farming practices in Jordan and beyond.

Recommendations:

- 1. Engage with Stakeholders:
 - Build strong relationships with farmers, agricultural cooperatives, government agencies, educational institutions, and environmental organizations. Their support and collaboration will be crucial for market acceptance and business growth.
- 2. Pilot Projects:
 - Initiate pilot projects to demonstrate the benefits and reliability of mobile soil testing services. These projects will provide valuable data, build trust with potential customers, and refine service offerings.
- 3. Marketing and Education Campaigns:
 - Develop comprehensive marketing and education campaigns to raise awareness about the importance of soil testing. Highlight the convenience, accuracy, and personalized advice offered by Mobile Soil Testing Labs.
- 4. Continuous Innovation and R&D:
 - Invest in ongoing research and development to incorporate the latest technological advancements in soil analysis. Regularly update testing equipment and methodologies to ensure high-quality service and maintain a competitive edge.
- 5. Scalability and Expansion:
 - Plan for gradual expansion by deploying additional mobile units in highdemand areas. Ensure efficient logistics and service delivery to cover a wide geographic area and consider partnerships with local agricultural bodies to facilitate entry into new regions.

In conclusion, the project demonstrates promising feasibility indicators and is not sensitive to extreme market conditions. Investors are advised to conduct additional analysis on projected demand, initial costs, and operational expenses to mitigate potential risks associated with adverse market conditions that could jeopardize its viability.

Disclaimer

The Ministry of Digital Economy and Entrepreneurship (MoDEE) and Istidama Consulting have prepared this report using information supplied by its advisors as well as information available in the public domain.

The report's contents have not been verified and its analysis does not purport to be all-inclusive. MoDEE and Istidama Consulting expressly disclaim any and all liability for any representation, warranty, or undertaking, or omission expressed or implied, which is or will be given in relation to the truth, accuracy, or completeness of

this report, and no representation or liability is or will be accepted by MoDEE or Istidama Consulting as to the achievement or reasonableness of future projections or the assumptions underlying them, management targets, valuators, opinions, prospects or returns if any.

Founders and investors considering this project are advised to conduct further analysis on projected adoption rates, development costs, and ongoing operational expenses. This additional scrutiny will help mitigate potential risks related to technology challenges, changes in regulations, market penetration, and competitive pressures.

The report does not constitute any form of commitment or recommendation on the part of MoDEE or Istidama Consulting.