**Terms of Reference (ToR)**

**Assessment and Recommendations for the Development of a National Traceability System for Agricultural Commodities in Jordan**

1. ***Background:***

The Reform Secretariat at the Ministry of Planning and International Cooperation (MoPIC) was established in November 2019 to coordinate, support, and drive the implementation of reforms under the Reform Matrix. Additionally, the Reform Secretariat provides necessary technical assistance and capacity building to government ministries and entities to support and expedite the implementation of reforms.

The Reform Secretariat oversees the implementation of the Reform Matrix; ensures reforms are designed in consultation with stakeholders; reports to the Government of Jordan (GoJ) and development partners on progress; and coordinates between GoJ entities and development partners to ensure implementation and alignment of donor programs with national priorities. Furthermore, the Reform Secretariat is mandated to support the development and implementation of effective stakeholder engagement and outreach, hence, together with government entities, the Reform Secretariat will continue to produce and disseminate information and communication materials to inform all target groups, including the private sector and the public, of the progress of implementation and impact of reforms.

The Reform Matrix consists of twelve pillars:

Pillar 1: Fiscal Policy

Pillar 2: Public Sector Efficiency and Governance

Pillar 3: Business Enabling Environment

Pillar 4: Investment and Trade Promotion

Pillar 5: Access to Finance and Capital Market

Pillar 6: Labor Markets and Skills Development

Pillar 7: Social Safety Nets

Pillar 8: Transportation Sector

Pillar 9: Energy Sector

Pillar 10: Water Sector

Pillar 11: Agriculture Sector

Pillar 12: Tourism Sector.

The Reform Support Fund is lodged at MoPIC and managed by the Reform Secretariat. It will finance just-in-time technical assistance in support of line ministries involved in designing, implementing, and monitoring the Reform Matrix.

Several reforms have been designed focusing on agricultural value chains as well as export capacities of the sector in Jordan. Agricultural traceability, often referred to as 'farm to fork' traceability, is the ability to track and trace the history, distribution, location, and application of products, parts, and materials, to ensure the reliability of sustainability claims, in the areas of human rights, labor (including health and safety), the environment, and anti-corruption. Traceability systems record and preserve the path that agricultural products take from the farm to the consumers, providing comprehensive production and distribution records of products.

The importance of traceability systems for agricultural products primarily lies in two key roles:

* Food safety and quality: Traceability allows for immediate and precise recalls of potentially unsafe products, reducing public health risks and potential impacts on businesses. It provides a means of verifying claims about the product, such as where and how it was grown or processed. This is particularly important in our globalized world, where food products and their ingredients often pass through multiple countries and numerous handlers before reaching consumers. The quality of the products is heavily affected by the handling, delays, and temperatures along the value chains and shipments, therefore is important that the traceability system captures that information, in the form of deviation from Standard Operating Procedures published by the MoA.
* Access export markets: Countries and businesses worldwide are increasingly demanding comprehensive information about the products they purchase and consume, driven by concerns about food safety, quality, and sustainability. The ability to provide traceability information can open up new market opportunities, particularly in premium segments that value transparency and sustainability. The lack of an adequate traceability system can be a significant barrier to market access. Traceability is important across commodities but particularly important for perishable products that have to be packed and transported under temperature-controlled environments (for example fresh fruit and vegetables, fresh meats (both red and white), live animals, and fresh dairy products. These furthermore hold significant export potential in Jordan. For Jordan, the primary target markets are GCC and the EU market, which have increasingly sophisticated traceability requirements.

It is therefore proposed under the Sustainable Agricultural Plan 2022-2025 to develop a National Traceability System for Agri-Food Products (NTSAP). The aim is to operationalize the National Agriculture Strategy to augment and diversify exports of agricultural products. The Sustainable Agricultural Plan endorses the expansion and optimization of global markets for agri-food products, including through the establishment of a national traceability system for such products.

The system would be managed and regulated in accordance with Agricultural Law No. 13 of 2015, as well as pertinent laws and technical regulations from affiliated ministries and authorities, such as the Jordan Food and Drug Administration (JFDA).

The Ministry of Agriculture is tasked with managing, controlling, and enhancing the agricultural production system in Jordan. Concurrently, the Ministry regulates the import of goods and raw materials vital for agricultural production, such as pesticides, fertilizers, seeds, and veterinary medicines. Moreover, it is responsible for organizing and licensing companies related to quality control, packaging, and grading of products, for instance, issuing licenses for implementing the traceability system for agri-food products.

In line with these responsibilities, the Ministry of Agriculture has reformed its administrative structure with the establishment of a new Quality and Traceability Department under the Agricultural Marketing and Quality sector. This department consists of three divisions: Agricultural Products Traceability and National Quality System Division, Geographical Indications Division, and Good Agricultural Practices Division. The department is devoted to establishing the technical regulations (legislative framework) for agricultural product traceability, as outlined in Agriculture Law No. 13 of 2015, and the relevant legislative framework for the ministries and authorities related to food safety. The aim is to develop a traceability system for agricultural products that align with the requirements of new and promising international markets, facilitated by a technical committee from the Ministry of Agriculture.

To foster a robust agricultural database, the Department of Agricultural Product Traceability and National Quality System has proposed to link the traceability system of the ongoing scale-up of the National Farmer Registry for Jordan, leading to the development of a farmer ID. This number will encompass all essential information about the farm and farmer and could be used as the underpinning of the agri-food traceability system. It is critical that the registration process includes appropriate verifications (such as physical inspection) to ensure the integrity of the system. Since this registry is foundational to a traceability system, the information needs to be fully accurate and verified by a government-designated official.

1. ***Objective of the Assignment***

The central objective of this consultancy is to assess, design, and propose a comprehensive implementation plan for a technically robust NTSAP. The system should enhance food safety, fulfill the minimum requirements for exports, and be capable of integrating advanced quality certification systems (for example, to be integrated into blockchain and tokenization for traceability, carbon accounting, and financing). The model of traceability to be implemented will be a "one step forward, one step backward" approach, which aligns with international best practices for ensuring food safety and traceability.

The NTSAP will eventually aim to encompass all agri-food chains within Jordan in its scope. This might be accomplished in a phased approach. The system will mandate participation from all actors within these chains to ensure comprehensive coverage and traceability from farm to fork. Recommendations on the specific value chains to be included in the system and their sequence should be developed as part of the consultancy, considering both domestic and international end-users.

1. ***Scope of Services, Tasks, and Expected Deliverables***
   1. **Inception:**

* Initial desk research and expert interviews.
* Identifying key stakeholders, their roles, and interests
* Draft inception report containing an overview of the proposed approach across activities and deliverables, key stakeholders, data requirements, support needs from the Government of Jordan, and similar issues through initial desk research and expert interviews, Including:

**Stakeholder Engagement Plan:** The plan should define key stakeholders, their roles and interests, and a strategy for engaging them effectively throughout the NTSAP implementation. It should include specific communication methods and frequency, and a plan to manage potential stakeholder-related risks.

**Proposal for a study tour** for engineers (quality and traceability department staff) for (10) working days on traceability to learn about a successful experience in another country, including proposed destination, itinerary, and contact focal points.

* 1. **Initial Gap Analysis:**
* Field visits, interviews, and a workshop with farmers, processors, wholesalers, retailers, and exporters to understand the current agricultural value chain and potential traceability bottlenecks.
* Interviews with ministry officials and legal experts to better understand the regulatory environment.
* Desk research and interviews with experts (minimum of 5) in potential export countries to understand technical requirements for agricultural products.
* Assessing current laboratory testing systems and accreditation mechanisms through field visits, interviews with laboratory personnel, and comparisons with international standards (at least 3 countries).
* Draft report that Identifies specific technical, regulatory, and institutional gaps that need to be addressed to implement the NTSAP. It should cover the current state of agricultural production systems, existing traceability mechanisms, and the effectiveness of current regulatory frameworks. Key elements include:

1. **Value Chain Analysis:** Offer a detailed examination of agricultural product value chains, pinpointing potential bottlenecks and areas of improvement in traceability.
2. **Regulatory Review:** Provide a more in-depth evaluation of existing laws, regulations, and guidelines of relevant ministries and authorities, suggesting changes needed to align them with the NTSAP implementation.
3. **Export Requirements:** Detail the technical conditions and requirements for agricultural products in target international markets, using as an example the existing Standard Operating Procedures published by the MoA.
4. **Food Safety System Capacity Review:** Evaluate the current laboratory testing systems and accreditation mechanisms in Jordan’s agricultural sector, offering recommendations for improvements necessary to successfully implement NTSAP.
   1. **Options for traceability system design for decision:**

* Desk review and expert interviews of available traceability technologies and software systems globally (at least 5), use quantitative methods to estimate approximate costs and benefits as well as qualitative analysis to determine Pros and Cons of different options.
* Organize a study tour to the best comparator country for client decision makers (6 people) to raise their capacity regarding the system in practice.
* Draft report that Summarizes possible options for system development for a political decision. Key elements include:

1. **Technology Evaluation:** Identify, propose, and evaluate the most advanced and applicable traceability technologies and software systems, based on global best practices. Include pros and cons of different options including through basic cost-benefit analysis to compare options as far as possible. The technology evaluation should consider the basic building blocks to allow the farmer registration and product traceability can be used for future added services (for example in tokenization of carbon credits or value chain financing)
2. **Review relevant experiences in other countries to identify best practice options**: Review successful implementation of traceability systems in at least three other countries.
3. **Summary of System Design Options for Decision making:** Propose a set of possible traceability system designs with listed pros and cons, as well as recommendations for decision by the client, this should include 2 basic scenarios: (i) system hosted and operated by GoJ (MOA, Ministry of Digital Economy) or (ii) system hosted and operated by a 3rd party operator.
   1. **Recommendations for system design:**

* Conduct a “Design” workshop to discuss the detailed proposal with stakeholders.
* Consultations with legal experts to develop a comprehensive legislative structure supporting the NTSAP implementation including draft legal texts.
* Estimating the cost of the system based on quotations from potential suppliers and human resources required, along with cost projections.
* Draft report, including recommendations for any follow-on procurements to be launched and a description of the proposed best option for system design in detail. In some instances, this can include recommendations for the next steps and future procurement, including drafting key provisions that should be considered in future terms of reference. Key areas include:

1. **Proposed system design:** Describe the proposed system, roles and responsibilities for different actors, underlying operational processes, etc.
2. **Draft Legislative Framework:** The Draft Legislative Framework should outline a comprehensive legislative structure supporting the NTSAP implementation and governance.
3. **Financial Analysis:** Provide a detailed financial estimate for the development and implementation of an electronic traceability system, covering all necessary hardware, software, and human resources.
4. **Capacity Building Proposal:** Outline a program for enhancing both the technical and administrative capacities of key stakeholders involved in the NTSAP.
5. **Implementation Roadmap:** The Implementation Roadmap should list specific actions, responsibilities, timelines, and resource requirements for each stage of the NTSAP implementation.
   1. **Final Comprehensive Report:**

* Conduct a final stakeholder workshop to present findings and gather feedback for future initiatives and improvements.
* Writing the final report, consolidating all the findings, recommendations, and insights gathered throughout the consultancy. It should also provide guidance for future initiatives and improvements.

1. ***Team Composition & Qualification Requirements for the Key Experts:***

The selected consulting firm should demonstrate extensive experience in the development and implementation of agricultural traceability systems and possess a strong understanding of the agricultural sector, particularly within the context of food safety and quality certification systems.

**The firm** should demonstrate the following qualifications:

1. **Extensive Experience:** Proven experience in successfully designing and implementing agricultural traceability systems in various contexts, preferably with a focus on both plant and animal products. Experience in relevant countries (level of advancement in traceability, will be considered an advantage.
2. **Multidisciplinary Expertise:** The team should comprise experts with diverse backgrounds, including but not limited to agricultural production systems, regulatory framework and governance, food safety and traceability technologies, value chain analysis, and data management.
3. **Technical Proficiency:** Demonstrable technical expertise in the development of traceability systems, including the design and implementation of relevant software solutions. The firm should have a track record of keeping up to date with the latest global trends and technologies in this field.
4. **Legal Expertise:** The firm should have experience in developing legislative frameworks for traceability systems, preferably with a focus on food safety and specifically in Jordan.
5. **Stakeholder Engagement:** The firm should demonstrate a strong capacity for engaging with a wide range of stakeholders, including government agencies, farmers, cooperatives, and export markets.
6. **Capacity Building:** Experience in conducting capacity-building programs related to agricultural traceability systems and food safety will be an advantage.
7. **Communication:** The firm should have excellent communication skills, with fluency in English. A minimum of one member of the project team has to have knowledge of Arabic and be very familiar with the Jordanian context.
8. **Project Management:** The firm should demonstrate a strong track record in project management, including the successful delivery of complex projects within stipulated timelines and budgets.
9. **Education:** The key team members should possess at least a master’s degree in a relevant field.

**The firm team member's educations:**

The key team members should possess

* 1. Technical members: at least a master’s degree in a relevant field, such as Agriculture, Food Safety, or a related field.
  2. Local legal members : PHD in law ,have experience in international trade law as well Jordanian food safety laws and regulations
  3. Logistic members : at least master’s degree in logistic, business administration or related field
  4. IT specialist members: at least master’s degree in IT or related field

**The firm team member's qualifications**

Technical members

* 1. Minimum of 10 years of experience in traceability and food safety context
  2. Strong experience in food chain analysis in Jordan
  3. Strong experience in farmer organizations and cooperative
  4. Knowledge and experience within a relevant administration
  5. Fluency in English, both written and verbal and Knowledge of the Arabic is desired
  6. Technical data management expertise including qualitative and quantitative data analysis.
  7. Advanced skills in Microsoft tools.
  8. Information management techniques and development
  9. Stress management.

Local legal members

* 1. Minimum of 10 years of experience in Jordanian food laws and regulations
  2. Strong experience in drafting new legislative frame related to implement national agri-food traceability in Jordan
  3. Strong experience in farmer organizations and cooperative duties and responsibilities according to their interior laws and regulations
  4. Knowledge and experience within a relevant administration
  5. Fluency in English, both written and verbal and Knowledge of the Arabic is desired
  6. Technical data management expertise including qualitative and quantitative data analysis.
  7. Advanced skills in Microsoft tools.
  8. Stress management.

Logistic members

* 1. Minimum of 10 years of experience in logistic operation context
  2. Strong experience in international food markets requirements and pre-request
  3. Strong experience in food quality management system projects (traceability)
  4. Strong experience in food chain analysis in Jordan
  5. Strong experience in communication with farmer organizations and cooperative
  6. Knowledge and experience within a relevant administration
  7. Fluency in English, both written and verbal and Knowledge of the Arabic is desired
  8. Technical data management expertise including qualitative and quantitative data analysis.
  9. Advanced skills in Microsoft tools.
  10. Information management techniques and development
  11. Stress management.

IT specialist members

* 1. Minimum of 5 years of experience in IT and blockchain
  2. Strong experience in set up software for food quality management system projects (traceability)
  3. Strong experience in creating mobile apps related agri-food traceability
  4. Knowledge and experience within a relevant administration
  5. Fluency in English, both written and verbal and Knowledge of the Arabic is desired
  6. Technical agri-food data management expertise including qualitative and quantitative data analysis.
  7. Stress management.

The firm's proposal should include a proposed team composition, indicating each team member's role and qualifications, and an organizational chart showing the proposed management structure for the project. The firm should be prepared to commit these resources for the duration of the project.

1. ***Reporting Requirements and Time Schedule for Deliverables linked with the payment schedule.***

The selected consulting firm will be responsible for delivering comprehensive and timely progress updates to the Reform Secretariat (RS) at the Ministry of Planning and International Cooperation (MoPIC) and Ministry of Agriculture (MoA) in monthly calls that will be documented, detailing the activities undertaken, key findings, challenges encountered, and the next steps. The firm should also coordinate the workshop arrangements with both the RS and MoA and should establish clear lines of communication with all key stakeholders, ensuring they are kept informed and engaged throughout the project. At the conclusion of the project, the firm will present a final comprehensive report summarizing the project outcomes, learnings, and recommendations for future initiatives. The firm should also be prepared to support communication of the results of the project to wider audiences, including through public presentations and media releases, as required.

All Reports and documents detailed in section 3 should be submitted to the Reform Secretariat and the Ministry of Agriculture, and the payments will be made according to the following table:

|  |  |  |
| --- | --- | --- |
| **Deliverable** | **Timeline** | **Payment** |
| Inception Report | Week 3 | 10% |
| Initial Gap Analysis Report | Week 11 | 15% |
| Options for traceability system design for client decision Report | Week 16 | 30% |
| Recommendations for system design Report | Week 22 | 35% |
| Final Comprehensive Report | Week 24 | 10% |

The place of work will be Jordan, but international experts could be brought in as needed.

1. ***Type of contract and duration***

*The selection method will be Consultant’s Qualifications Based Selection (CQS), The type of the contract is lumpsum for the duration of 6 months from signing.*

1. ***Client’s Input and Counterpart Personnel***

*Professional counterpart personnel to be assigned by the RS and MoA to the Consultant’s team: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [list/specify]*