Traceability of Agro-Industrial Products for the European Market

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Published: 09/22/2008 - 21:21

Focus Themes:
Supply/value chains, market access and linkages
Compliance with standards and conformity assessment
Innovative forms of finance

To which sector/s of agribusiness does the solution apply?

Horticulture  
Processing  
logistics:  
Cold Chain  
Warehousing  

Please describe the solution/project.

Joint program between Italian Egyptian Debt Swap for Development Program and National Government represented by the Ministry of Trade and Industry with implementation guidance of UNIDO.  
Strengthening the Egyptian food value chain by providing technical and financial assistance to ensure that, in terms of quality, safety and traceability. In addition, Egyptian food products have to comply with international standards and regulations, including the European food law 178/2002, in order to overcome possible barriers to trade. The actions to be taken aim at improving the conditions for workers and businesses, and in generating and equitably distributing export generated income along the food value chain, thus achieving safer jobs and safer products.

What problem or market opportunity did it address?

The key problem was identified in the design and implementation of food traceability systems to comply with market pressure in destination markets induced by the adoption of the EU food law (178/2002). The Law specifically requires that all food and feeds circulating in the EU must be traceable. Even taking into consideration that EU traceability requirements do not formally have an extra-territorial impact. In fact, market requirements, i.e. importers in the EU, are demanding exporters to implement traceability systems to control safety and improve supply-chains management.

How was the solution developed?

UNIDO/Etrace project provides technical and financial assistance to farms, exporters, dealers, traders and public operators in the agro-industrial sector in their efforts to align their systems with the requirements set by the importing countries to avoid the existence of trade barriers. Financial assistance was provided within a cost-sharing scheme for the supply of necessary technology (software and hardware for traceability implementation). Traceability implementation includes approaches to simplify, harmonize and implement standards and procedures within SMEs and the exporters complying with the European regulations. The design of the solution is based on economic evaluation of supply chains’ quality systems using Food Traceability Reference Models.

What were the implementing stages of the solution?

• Survey existing packinghouses as potential beneficiaries and conduct needs assessments  
• Design of financial assistance scheme on a cost-sharing basis  
• Development of national traceability manuals and other technical tools and instruments  
• Provide technical assistance and upgrading the existing systems at beneficiary organizations  
• Building capacity on all technical topics relevant to traceability
What challenges had to be overcome?:

- Initial lack of awareness towards traceability and means of implementation
- Socio-economic (habits and behavior, educational background of operators, low interest in investing in technology, lack of IT knowledge, language barriers)
- Technical Infrastructure (telecommunication and phone connections, internet)
- Lack of cooperation between public and private stakeholders

What are the main outputs / outcomes of the solution?:

- Trained Operators (more than 1700 trainees from 155 private and public entities)
- National traceability manuals (3 versions for fresh produce and 1 for food processing)
- More than 100 private sector operators assisted in implementing and improving existing traceability systems
- 82 automated traceability systems implemented (79 pack houses, 1 for perishable terminal of Cairo Airport, 1 for sterilization terminal for herbs, 1 National traceability system at the General Organization for Export and Import Control)
- Awareness raised at the food processing sector through trainings - implementation of traceability systems at 10 companies as a pilot program
- More than 60 companies trained and assisted on the qualification for different quality and food safety management certifications
- A web-based national pesticide database and 50 access accounts on international pesticide database, with special focusing on the Maximum Residue Limits (MRLs) for the agricultural produce for exporting to the EU
- Training program designed for newly hired plant quarantine officers
- E-learning portal established with one pilot e-course on traceability to be expanded to include different relevant subjects
- Technology and know-how transfer to different countries in the region through study tours to Egypt and technical missions to beneficiary destinations
- Advanced and innovative capacity building in traceability for improving agribusiness in the country status of research and training

What are the lessons learned in implementing the solution? What factors were critical for its success?:

In summary the factors that led to success are:-

- Government Interest and focus on raising Egyptian products quality to meet international standards and demands.
- Baseline surveys and gap analysis of existing situation.
- Selection of a group of priority horticulture export commodities based on tonnage of exports/revenue generated or export potential. The selection took place in consultation with major producers and exporters in addition to the agricultural export council and trade associations.
- Integrated concept including service provision to all supply chain players.
- Pioneering project in the region targeting traceability of agricultural products.
- Widening the original technical scope to include different technical activities with the aim to increase its developmental impact and assure the realization of the overall project objective.
- Providing financial assistance combined with the technical assistance to ensure that enterprises can access, on a cost-sharing basis, needed technology and know-how.
- Technical and financial services covering public and private beneficiaries, also serving small producers through the national traceability system features implemented at the General Organization for Export and Import Control.
- Consolidating relationships between Egyptian and European authorities and businesses through various methods including study tours, joint ventures, and joint programs and by connecting the project with other national and international quality-development programs.
- Continuously updating promotional and technical material to assure the delivery of the right and updated information on the project scope and activities to all stakeholders.
- Implementation by a national team of experts to retain the knowledge base in the country as an alternative to long-term international experts to increase the cost-efficiency in addition to the strong adaptability of the project interventions to the local context. The local team is supported by international experts who provide remote
management support based on best practices.

If there are other solutions to a similar problem what makes this one different?:

• Adaptability of existing advanced technologies to local parameters
• Integrated concept of providing complementary services on food safety, quality management systems, crop quality standards, post harvest treatments, etc.

How long was the duration of the project / how long was required for the solution?:

Four years

Which institutions / organizations are supporting the implementation of the solution?:

Local / national government agencies
International organizations
Please name:

Ministry of Trade and Industry & UNIDO as implementing agency and Italian Cooperation

What are the key areas of impact?:

Social
Capacity building/ Training
Trade
Productivity
Employment
Quality
Safety
How is the impact evaluated?:

Operators feed back through systemized surveys and informal information.

What was/is the budget allocated to design/implement your solution?:

17,948,999.68 USD

How was the solution financed?:

Donors
Local/national government

How can the sustainability of the solution be ensured?:

• Awareness has been raised among stakeholders
• Technical capacity at operators level developed
• operators are willing to invest in the future in traceability systems and expand existing ones
• Governmental bodies such as General Organization of Export and Import Control take over responsibilities for traceability implementation at the national level

Is there a cost recovery scheme in place?:

Return on Investment is obvious looking at increased output and exports at operators level.

Are beneficiaries able / willing to pay for services?:

3 / 5
The financial component of the solution is based on a cost-sharing scheme. Operators are willing to invest in expanding the systems and to pay for technical assistance in the future.

**What are the future plans for the implementing institution?:**

Implementing institution has plans to form a legal entity as a regional service center.

**How will the implementing institution continue to provide services to beneficiaries?:**

- Implementing institution is opting for providing services on a cost recovery scheme
- Trained human resources are able to provide technical assistance
- Established local service providers are available for providing further services
- Existing of a network of stakeholders and partners will facilitate the service provision

**Are there expansion plans for new services – new potential beneficiaries?:**

**New Services:-**
- Implementation of Integrated Quality and Food Safety Management Systems
- Provision of other complementary services supporting the agribusiness supply chain
- Provision of E-learning programs

**New potential beneficiaries:-**
- Expanding the beneficiary base of food processors
- Providing technical assistance to beneficiaries in other countries in the region

**Can the solution be replicated/scaled up to cover other areas/regions/countries/groups/products? :**

Yes it can, the proposed solution could be applied in other countries, given that public or private funds are available.

**In which way can this be achieved and what resources would be needed in order to replicate/scale up the solution? :**

- Organizing technical missions to other beneficiary countries (training/workshops/technical assistance
- Organizing study tour to UNIDO/Etrace center and to its beneficiary base and service providers
- Financial resources are required for technical exchange and for replication
- Representative organizations at destination countries to take the lead and initiative

**What should be considered in the implementation?:**

- Government Support
- Linkages between public and private sector stakeholders
- Information on existing situation (infrastructure, in-depth analysis on market and horticultural export commodities)
- Focus on primary areas
- Considering important stakeholders and supply chain players
- Flexible and wide technical scope
- Availability of alternative financial resources and funding options
- Cooperation and coordination with other initiatives in the sector
- Strong promotional and outreach strategy
- Proper adaptability to local parameters
- Considering economic factors and returns on investments

**Is a business plan or project document available?**

*Project Document*

Please Upload Documents:
Does the solution model offer opportunities for South-South cooperation?:
Yes

Is there cooperation already ongoing with initiatives or projects in other places?:
Yes

What are the tools and elements needed for South-South cooperation?:

- Regional Network to boost the activities and facilitate and follow-up exchange
- Availability of funds
- E-learning tools

How could South-South cooperation be implemented?:

- Technical assistance and training missions
- Organization of study tours
- Dissemination of manuals and technical material
- E-learning tools
- Fund should be made available to activate south-south cooperation
- Close cooperation between local experts is necessary to ensure effectiveness of exchange
- Governmental support is needed to facilitate the required targets
- A holistic concept has to be developed in order to ensure success among the whole supply chain

Reports, brochures, newspaper clippings etc. (PDF format preferred):

- SUMMARY REPORT OCTOBER 2007.pdf
- Egypt-ETRAC.pdf

Youtube Videos:

- http://www.youtube.com/watch?v=3y8ESoDwE5U