EXTERNAL INDEPENDENT EVALUATION REPORT

Project Title:

RE-ESTABLISHING THE FOOD SAFETY AND FOOD PROCESSING INDUSTRY CAPACITY IN IRAQ

A joint project of WHO, FAO and UNIDO

D2-17

Submitted to

THE WORLD HEALTH ORGANIZATION "WHO"
THE FOOD AND AGRICULTURE ORGANIZATION OF THE UN (FAO) AND
THE UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION (UNIDO)

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Glossary of Abbreviations

FAO	Food and Agriculture Organization
FSMS	Food Safety Management System
GAP	Good Agricultural Practices
GDP	Good Distribution Practices
GHP	Good Hygiene Practices
GMP	Good Manufacturing Practices
GOI	Government of Iraq
GPP	Good Production Practices
GTP	Good Training Practices
HACCP	Hazards Analysis at Critical Control Point
ISO	International Standards Organization
NRI	Nutrition Research Institute
UNIDO	United Nations Industrial Development Organization
WHO	World Health Organization

Executive Summary

Programme Name: Re-Establishing the Food Safety and Food Processing Industry Capacity in Iraq (D2-17)
Implementing Organizations: A joint project of WHO, FAO, and UNIDO
Responsible Government of Iraq (GoI): Ministry of Health (MoH), Ministry of Agriculture (MoA), and Ministry of Industry (MoI)
Project Budget: $6,506,112
Timeframe: July 2006 to 30 March 2010 (inclusive of four extensions)

Background on the rationale of the project:

Over the past few decades, Iraq has suffered severe economic and political hardship, resulting from wars and economic sanctions which led to the deterioration of general living conditions, economic structures, and productivity in the agricultural, industrial, and public health sectors. The national capacity for regulatory and legislative enforcement in these sectors has also eroded, as has the general capacity of the human resource pool in technical areas related to trade and the quality control of local and imported goods. Perhaps most critically, the availability of quality foodstuffs—fit for human consumption—has also declined.

This situation was compounded by the 2003 war and its aftermath, with the resulting destruction of facilities and infrastructure, including those related to food safety and processing. The destruction was characterized by looting, demolition, vandalism, and arson, which had a cumulative effect on the environment and public health, as well as on air and water safety.

It is against this background that the Government of Iraq (GoI) addressed an official request to the United Nations Organizations (i.e., World Health Organization (WHO), Food and Agriculture Organization (FAO), United Nations Industrial Development Organization (UNIDO) to assist in restoring and strengthening the government's capacity in the food safety and processing industry.

In response to the GoI request, a series of consultation meetings and workshops were organized, involving the UN and relevant GoI ministries and institutions, to assess needs in the sector, and develop a programme to address those needs, as well as a long term strategic plan for the sustainable development of the food safety and food processing industry, with a focus on the protection of public health through the safety of the food supply chain.

For this reason, a programme entitled "Rebuilding Food Safety and Food Processing Industry Capacity in Iraq", numbered D2-17was jointly developed by WHO, FAO and UNIDO to support the Government of Iraq through support to the Ministry of Health, Ministry of Agriculture and Ministry of Industry and minerals, and was funded through the United Nations Development Group Iraq Trust Fund (UNDG ITF). The programme was developed around the following strategic developmental objectives:

1. Creating a coordination mechanism for a comprehensive national level food safety system including the establishment and operation of national codex committee.
2. Strengthening the capacity of the national institutions and their staff involvement in food control and improving enforcement mechanisms at all levels.
3. Improving the environment for the development of entrepreneurship in the food processing sector.
4. Assuring food safety improvement throughout food continuum.

The project, with a total budget estimated at $6,506,112, was approved with an implementation plan lasting 18 months, from July 2006 to January 2008. However, the project was extended four times for valid reasons related to the difficult security situation inside Iraq. The final extension ran until 30 March 2010, at which time the project closed.

The project included an important component of reconstruction and rehabilitation, focusing on the following facilities:

1. Supplying laboratory equipments and supplies to the Nutrition Research Institute (NRI and the Central Public Health Laboratory (CPHL).
2. Rehabilitation of three Regional Food Control Laboratories (Basra, Mosul, and Erbil)
3. Construction of Quarantine Border Laboratories; Safwan in Basra, and Zirbatiya in Wassit.
4. Rehabilitation of Mosul Dairy Factory.
5. Rehabilitation of the Milk Collection Centre in Babel.
6. Supplying laboratory equipment and supplies to the:
    - State Company for Dairy Production in Baghdad.
    - State Company for Dairy Production in Mosul.
    - State Company for Sugar Industry in Missan.
    - State Company for Vegetable Oils.

The project has also a capacity building component focusing on the protection of the health of the consumer through:

1. Establishing a food safety control system with the assistance of international organizations
2. Developing the capacities of control institutions on national food and increasing the capacity of technical staff through training programme packages in different areas of food safety.
3. Improving the food safety environment
4. Providing technical support to the work of national food control and food manufacturing to ensure that they meet food safety practices and standards.

Summary of main conclusions of the evaluation

- The objectives of the project were achieved in terms of rehabilitating laboratories specialized in the control of locally produced and imported food, as well as in increasing the efficiency of the workers' performance through the various training courses.
- Food control and food production facilities were rehabilitated, their performance was increased, the process of control on its products was strengthened, and newly introduced quality control methods were being implemented.
- Farmers have increased awareness on effective methods of agricultural production as well as negative practices such as the indiscriminate use of pesticides and veterinary medicines.
- Laws, instructions, and standard specifications for the work of health control units were reviewed, and suggestions were made to the GoI to ensure compliance with food safety standards.
- The programme succeeded in emphasizing the importance of Iraq's participation in meetings held by international organizations that are specialized in upgrading food related laws, regulations and food systems.
- The quality of implementation was very good in most of the locations, and at a comparable level to the implementation of similar local programmes.
- Despite the challenging conditions inside Iraq during the implementation period, it is estimated that the objectives of the programme were achieved, albeit over a longer than anticipated timeframe.

The project encountered many challenges related to the unstable security situation in Iraq, particularly during 2006 and 2007. This led to four extensions of the project, with a completion date of March 2010.

The difficult security situation also directly affected the project's training activities. While initial plans made provision for holding training activities for governorate staff in Baghdad and other locations inside the country, challenges related to safe accommodation and transportation during the workshops prompted the need to adapt to the circumstances and to change the location of the training activities from Baghdad to Amman. This created a different challenge, for the Iraqi nationals to obtain Jordanian visas in order to participate in the training. However, most of these difficulties were resolved and the net benefit to all stakeholders was broadly acknowledged.

Recommendations related to the UN organizations (WHO, FAO and UNIDO)

1. Taking into consideration the magnitude of destruction that occurred in the food safety control infrastructure and food control system during the wars, the program required more time and effort by all stakeholders and workers to implement the project-initiated activities in all sectors (i.e. in health, agriculture and industry). The fulfillment of the project's overall aims, requires continued monitoring, support, capacity development, and follow up support to trainees to help them to implement the activities and evaluate their performance as well as the transfer of knowledge to their colleagues. This comment pertains to each of the activities related to surveillance, control, lab tests, sampling and health inspection.
2. The role of constant monitoring is the responsibility of the MOH with the support of WHO, in consultations with MoH departments and focal points in the ministries at each location, as well as its trainees. WHO was also responsible for preparing annual reports on performance and achievements.
3. Ensuring the participation of front-line workers from the targeted locations in specialized training courses organized by the international organizations on health and food safety.
4. Ensuring that there is a regular evaluation of workshop outcomes through periodic reports on the training provided, in order to get a better sense of the degree of transfer of knowledge and how trainees are applying the skills in the field.
5. With respect to the provision of lab equipment, WHO should take into account non procurement related criteria which will ensure the optimal use of the equipment, including: technical know-how within recipient departments and labs, operational capacity, maintenance capacity, spare parts, methods of surveillance, and compatibility between the results of lab tests using new equipment and the results of lab tests using the traditional methods. With respect to this last point on the difference in lab results, guidance should be provided to ensure workers are able to effectively document levels of difference between different sets of test results, and the extent to which these results impact, statistically, the accuracy of the final tests which are adopted by the concerned bodies when examining their alignment with standard specifications of a certain material.
6. Ensuring the standardization of health rules and legislation related to food. Furthermore, UN agencies with WHO in the lead should continue to support the development of unified policies and systems that serve the production sector and food industry with the buy-in of agencies concerned with production, manufacturing, health, and scientific research, in order to benefit from the Codex Alimentarius Commission, in which the MoH participates representing Iraq.
7. Ensuring involvement of other control units outside the MoH, such as the Central Organization for Standardization and Quality Control (MOP), universities and scientific research institutions, in the development of leaflets issued by international organizations concerned with food and new systems to ensure food safety. These additional units constitute important stakeholders whose buy in is important, and furthermore may have important and practical contributions to make.

8. Expanding its activities inside Iraq to reach all governorates and key locations, in order to support food production, and further build the structure of the food safety control system at all steps in the production chain from the farm to the consumer.

Recommendations related to the Ministry of Health (MoH):

1. Where possible, ensure the participation of workers from the actual work locations in the planning of projects and activities that aim to build the structures of the food safety control system, especially direct technicians working on the lab testing and examination equipment. It is important also to include them in training courses and workshops organized outside the country by WHO on the use of laboratory equipment, their operation, maintenance and sustainability in providing accurate test results in comparison with traditional methods.
2. Expand the use of food quality control portable kits to ensure the effectiveness of the food safety system in coming up with quick results, focusing on the accuracy of these kits and its results.
3. It is necessary to expand the establishment of regional food quality control laboratories that conduct lab tests to diagnose food and water borne diseases in a timely manner. These labs should be replicated in all governorates, especially governorates with great food production, great population, and industrial regions.
4. Coordinate with food testing labs in other ministries such as the laboratories of the Ministry of Trade, the Central Organization for Standardization and Quality Control (COSQC) which is part of the Ministry of Planning, as well as the Ministry of Industries and the Ministry of Interior, with the aim of unifying and intensifying the efforts to assure quality, provide healthy living conditions, and fully activate food safety system.
5. It is necessary to coordinate with specialized bodies on the improper use of pesticides, and to conduct awareness-raising campaigns on the environmental dangers related to their indiscriminate use.
6. Sustainability is an important issue that the Ministry of Health has been considering in this project. The MOH, in coordination with other line ministries, should ensure that efforts to consolidate sustainability factors are maintained. This can be also supported through central monitoring and follow-up on the different project activities by relevant bodies in the line ministries, and their respective departments at the targeted locations of the project.

Recommendations related to the Ministry of Industry (MoI):

1. The implemented activities in the locations belonging to the MoI are the most visible and comprehensive, and they should be generalized to all food industry projects throughout the country, among the public and private sectors, as well as to all food industries not yet targeted by the project, such as canning of fruit and vegetables, date production, pickles production, drinking water bottling and other food industries.
2. The allocated funds for this sector should be greater than at present. This would allow for the procurement of new machinery and equipment for the production sector, in order to develop work and production capacities, enhance working environments, and include a greater number of workers in the training courses organized outside Iraq, while ensuring the monitoring of the benefit and experience gained from these trainings.
3. There should be more efforts in organizing workshops and training courses to ensure the participation of workers in production locations in training courses, in addition to monitoring their work through periodic reports, on the condition that the trainee continue working in the location that was included in the training course for at least 3 years and that a substitute is trained and in place prior to the trainee's departure from the post.
4. Project initiatives should be replicated. For instance, it is recommended that other facilities belonging to the MoI such as the Raw Milk Collection Centers in other governorates follow the lead of those targeted by the project. Those should effectively contribute to the development of milk production in their areas as well as include the industrial sectors concerned with rehabilitation and operationalization in rehabilitation projects, upgrading the

production capacities according to drawn plans that aim to resume the work of the suspended projects such as canning factories and the production of tomato pastes, molasses, starch, and liquid sugar.

Recommendations related to the Ministry of Agriculture (MoA):

1. Expand awareness and agricultural orientation activities among agricultural societies, such as the importance of using correct methods in plant and animal agricultural production according to FAO regulations and instructions on Good Agricultural Practices (GAP), which focus on the use of pesticides and other chemicals such as fertilizers, and their impact on public and environmental health.
2. Encourage farmers to focus on breeding and improving milk cows, developing their production in cooperation with MoI, especially in areas close to the centers for collection and cooling of milk, being an essential raw material in the local food industry. FAO rehabilitated diary collection centers, and improved dairy cows (through artificial insemination, breeding and embryo transfer) and set up dairy producer groups in the areas around these collection centers
3. Monitor and report on the reasons for delay in operating the Animal Health Lab in Basra, as procured equipment and supplies by WHO have been stored in the warehouse of the Animal Health Hospital, as well as taking necessary measures to activate the implementation of activities in this lab according to the mandate of the project.

General Introduction

The World Health Organization (WHO), Food and Agriculture Organization (FAO), and United Nations Industrial Development Organization (UNIDO), developed this project to support the reconstruction of the food control mechanisms in Iraq and the rehabilitation of the food processing industry. This was done in collaboration with the GoI through the specialized departments in its ministries, including: the Ministry of Health; alimentation and food industry health control units; central public health laboratories; Iraqi Nutrition Research Institute; departments of the Ministry of Agriculture; veterinary and animal health departments; veterinary laboratories; quarantine departments in the border entry points; and departments of the Iraqi Ministry of Industry concerned with the food industry. Collaborating bodies also included establishments of the ministry, such as the State Company for Dairy Products, State Company for Vegetable Oils, State Company for Sugar Industry in Missan, and the milling and flour industry in the Ministry of Trade. This broad collaboration was important, since most of the health laboratories for food safety had collapsed, and nutritional status of Iraqi citizens had deteriorated due to the lack of health control and laboratory examination during production, as well as the deterioration in the capacities of central regulatory units due to the years of war and sanctions which Iraq endured.

The project concentrated on rehabilitating and expanding the activity of quality control laboratories, as well as public health, and quality control laboratories in industrial establishments. It also focused on conducting training courses for the purpose of upgrading skills of technical staff, according to their areas of expertise in health, industry, agriculture, and trade. This was in addition to the assistance of experts and specialists in the field of food safety, and the application of new methods to control local and imported food hazards, according to the specifications of international organizations such as the Codex Alimentarius Commission and International Standard Organization (ISO). Training was provided with the support of the Ministry of Higher Education and Scientific Research, as well as the Ministry of Science and Technology. The project also provided additional technical assistance in the fields of health and food safety, through experts from the same international organizations.

Furthermore, the project also supported the rebuilding of food production sites in the industrial sector, such as Mosul Dairy Factory and the Raw Milk Collection Centre in Babel. Accordingly, an evaluation was made of the activities of the programme, its efficiency throughout different phases of project implementation, targeting project sites spread throughout Iraq. Evaluation visits were conducted after thoroughly reviewing all available project documentation and periodic progress reports, including documents related to requests for extension.

Project Description

Project background:

The project to re-establish food safety capacity and food processing industry capacity in Iraq was developed at the request of the Government of Iraq, particularly by the ministries of Health (MOH), Agriculture (MOA) and Industry (MOI) seeking UN support to improve food safety programmes and re-habilitate targeted food safety infrastructures and food control systems which were in a very bad state as a result of effects of war, economic sanctions, neglect and lack of maintenance. The overall objective pursued by the Government is to protect the health of consumers and improve food trade.

The project was developed as part of the recommendations of a national workshop on food safety programmes for Iraq held in July 2004 during which a consensus emerged among both the public and private sectors that a national programme for the rehabilitation and upgrading of selected food control facilities and food processing enterprises was a top priority.

As a result of a series of follow-up meetings held between the UN agencies and Iraqi counterparts, including the three line ministries (MOH, MOA and MOI) it was concluded that WHO, FAO and UNIDO should support the Government through a joint programme developed together with these line ministries. To this effect, WHO was requested to lead the joint formulation and the development of a comprehensive programme (project proposal) to be submitted to UNDG ITF for funding.

This tripartite project was developed and executed jointly by WHO, FAO and UNIDO and an inter-agency agreement was signed by the three agencies to guide the implementation process in accordance with the "Memorandum of Understanding between the Participating UN Organizations and the United Nations Development Programme ("UNDP") regarding the Operational Aspects of the UNDG Iraq Trust Fund". The inter-agency agreement stipulated that WHO is the lead agency to coordinate the overall project implementation.

The project started in September 2006 with a planned end date of January 2008, which was extended four times to March 2010. The overall development goal of the project was "to improve food safety and increase the potential of the food trade sector in Iraq".

Project objectives

Protection of the health of the consumer through:

1. Establishing a food safety control system with the assistance of international organizations
2. Developing the capacities of control institutions on national food and increasing the capacity of technical staff through training programme packages in different areas of food safety.
3. Improving the food safety environment
4. Providing technical support to the work of national food control and food manufacturing to ensure that they meet food safety practices and standards.

Timeframe and Budget

A total budget of USD $6,506,112 was allocated to fund the project for the specified timeframe of July 2006 until December 2007, however, the time period was extended four times, and the project was finally completed in March 2010.

WHO	3,015,117 USD
FAO	1,718,393 USD
UNIDO	1,772,602 USD

Project under evaluation activities:

Within the framework of the joint United Nations programming the World Health Organization (WHO), the Food and Agriculture Organization (FAO), and the United Nations Industrial Development Organization (UNIDO), implemented the programme numbered (UNDG-ITF D2-17) under the title "Re-establishing the Food Safety System and Food Processing Industry Capacity in Iraq". , The programme included rehabilitating and rebuilding some of the production projects, central health laboratories, quality control laboratories, laboratory testing centers in border areas, and rehabilitating some of the industrial companies in the dairy sectors, vegetables and fruit industry and milling..

The project was implemented jointly by the above-mentioned agencies, with the following technical specializations:

- The WHO focused on public health food safety related components, with emphasis on food legislation and food borne disease surveillance system, as well as quality assurance through upgrading food control laboratories, capacity building of institutions and human resource development, health education, and public awareness on the importance of food safety.

- FAO concentrated on the agricultural sector, with emphasis on the supply chain and linkages to the Codex Alimentation, and including food control facilities at entry points.
- UNIDO focused on the food industry sector, including an emphasis on capacity development for quality control within the sector.

Under this general framework, the following key activities for the project were envisaged:

1. Review of national control means and data and develop a National Food Safety Profile.
2. Updating food safety laws and regulations, introducing international food standards and quality assurance approaches (WHO in coordination with FAO).
3. Training in Codex for 30 people (10 from MOA, 10 from MOH and 10 from MOI).
4. Establishing food-borne disease surveillance system (WHO in coordination with FAO).
5. Develop and implement a plan for monitoring food borne diseases and zoonotic diseases as well as food control (FAO in coordination with WHO).
6. Facilitate the participation of Iraq in Codex Alimentarius and other food safety forums.
7. Rehabilitation and upgrade of the capacity of three regional food control laboratories, including emergency preparation of food control system (WHO).
8. Provide laboratory equipment, office furniture, computer and communication equipment to the rehabilitated facilities (FAO, UNIDO and WHO).
9. Provide technical and logistic means needed for Food Inspection and Food control at entry points (FAO in coordination with WHO).
10. Conduct health education trainings and campaigns to improve hygiene practices at all levels of food chains from farm to fork. (WHO in collaboration with FAO and other institutions with experience in trainings: Ministry of Higher Education, Ministry of Sciences and Technology).
11. Assess the status of public food safety related industries in order to select those requiring rehabilitation using HACCP principles (UNIDO).
12. Promote Good Hygiene Practices, Good Manufacturing Practices and Hazard Analysis Critical Control Point (HACCP) principles (UNIDO in coordination with FAO) in Food Industry, using models in the sector or dairy, fruits/vegetables and milling.
13. Assess the status and the use of chemicals and pesticides in agriculture and recommend measures to reduce chemical contamination in food chain (FAO).
14. Conduct capacity building and campaigns for safe agriculture (FAO).
15. Conduct campaigns and educate consumers on the risks of unsafe food on health (WHO).
16. Conduct capacity building activities for different categories of actors, including staff, which will contribute to improvement of food safety through food continuum and raise awareness on short and long term use of unsafe food on health (WHO). This will also contribute to the overall reduction of child and maternal mortality due to food safety related diseases.

Evaluation Purpose and Scope

The purpose of the project evaluation was to examine the reality and accuracy of the project's implementation against the project planned and articulated by the international organizations (WHO, FAO, and UNIDO). An additional goal was to evaluate the effect of this project on achieving the main objectives of the programme in an efficient manner in order to enable the food control national authorities to achieve priorities related to food safety, with a focus on the: protection of public health; prevention of the widespread of diseases through unhealthy food; and application of international food safety standards which can also contribute to enhancing commercial exchange.

The specific objectives of the evaluation are as follows:

1. To assess the achieved progress and results against stipulated project objectives and outputs for improved food safety programs in Iraq;

2. To assess the efficiency of the project in terms of quantity, quality, cost and timeliness of UNIDO , WHO , FAO and counterpart inputs and activities;
3. To assess the effectiveness of the interventions included in the project in terms of the outputs produced and outcomes achieved as compared to those planned
4. To assess project relevance with regard to the priorities and policies of the Government of Iraq, the authorities of the regions involved and the participating UN Organizations;
5. To assess the relevance of project components in strengthening the food safety and industrial capacity in Iraq vis-à-vis needs of the target population the catchments area
6. To understand the extent to which this project has contributed to forging partnership with at different levels including the Government of Iraq, Civil Society and UN/donors;
7. To appreciate the management arrangements in place by the GoI and/ or the beneficiary communities towards the sustainability of various project-initiated services and benefits;
8. To generate lessons on good practices based on the assessment of the aforementioned evaluation objectives and to provide recommendations to GoI and UN on how to maximize the results from similar initiatives in comparable situations

As outlined in the evaluation terms of reference, the breadth and structure of the evaluation is provided through addressing the following key questions:

Project identification, relevance and formulation:

- The extent to which a participatory project identification process was applied in selecting problem areas and counterparts requiring technical cooperation support;
- Relevance of the project to development priorities and needs;
- Has the project been responsive to the overall issues of food safety in Iraq and how?
- Clarity and realism of the project's development and immediate objectives, including specification of targets and identification of beneficiaries and prospects for sustainability.
- Realism of the time frame and clarity in the specification of prior obligations and prerequisites (assumptions and risks);
- Realism and clarity of external institutional relationships, and in the managerial and institutional framework for implementation and the work plan;
- Likely cost-effectiveness of the project design.

Project ownership:

- The extent to which the project was formulated with the participation of the national counterpart and/or target beneficiaries;
- The extent to which counterparts have been appropriately involved and have been participating in the identification of their critical problem areas, in the development of technical cooperation strategies and in the implementation of the project approach
- The extent to which counterpart contributions and other inputs have been received from the Government (including Governorates) as compared to the project document work plan, and the extent to which the project's follow-up is integrated into Government budgets and workplans.

Project coordination and management:

- The extent to which the national management and overall field coordination mechanisms of the project have been efficient and effective;
- The extent to which the management, coordination, quality control and input delivery mechanisms have been efficient and effective;

- The extent to which monitoring and self-evaluation have been carried out effectively, based on indicators for outputs, outcomes and objectives and using that information for project steering and adaptive management;
- The extent to which changes in planning documents during implementation have been approved and documented;
- The extent to which coordination envisaged with any other development cooperation programmes in the country has been realized and benefits achieved.
- The extent to which synergy benefits can be found in relation to other UN activities in the country.

Achievements and results:

- How the project components have contributed to the realization of underlying project objectives, as perceived by the beneficiaries?
- Has the project been able to achieve the stipulated project results?
- How the project contributed to strengthening food safety programs at a national level and the high priority governorates?
- What has been the contribution of this project towards national priorities identified in NDS, ICI and MDGs?

Efficiency and effectiveness:

- Efficiency and adequacy of project implementation including: availability of funds as compared with the provisional budget (donor and national contribution); the quality and timeliness of inputs delivered by WHO, FAO and UNIDO (expertise, training, equipment, methodologies, etc.) and the Government as compared to the work plan(s); managerial and work efficiency; implementation difficulties; adequacy of monitoring and reporting; the extent of national support and commitment and the quality and quantity of administrative and technical support by Regional and HQs offices of the three agencies
- Full and systematic assessment of outputs produced to date (quantity and quality as compared with work plan and progress towards achieving the immediate objectives);
- The quality of the outputs produced and how the target beneficiaries use these outputs, with particular attention to gender aspects; the outcomes, which have occurred or which are likely to happen through utilization of outputs. In particular, this includes an analysis of the likely effects of micro-enterprise industry activities as a means of creating employment and raising household incomes.
- Assessment of whether the project approach represented the best use of given resources for achieving the planned objectives.

Partnerships:

- Who are the partners in this project? How they are selected? Has the project forged new partnerships/ strengthened existing partnerships and how?
- What factors hindered or fostered effective partnership development?
- To what extent has the project contributed to capacity development of the involved partners?

Sustainability:

- Prospects to achieve the expected outcomes and impact and prospects for sustaining the project's results by the beneficiaries and the host institutions after the termination of the project, and identification of developmental changes (economic, environmental, social) that are likely to occur as a result of the intervention, and how far they are sustainable.

- What is current status of the project components? Are functions and facilities still maintained? Who is responsible for the management and oversight of project facilities after the project closure?
- What is current status of services provision in the country?
- Has the service provision been affected (negatively or positively) towards the end of the project cycle and why?
- Has the project resulted in knowledge transfer from those who were trained and capacitated in different competencies and how?
- How the project did address the issues of insecurity during the implementation phase? Were there any risk mitigation undertaken? If yes, how?

Other considerations:

- Value-added of the programmes and projects in comparison with alternatives
- UN's partnership strategy and its relation to effectiveness in achieving the outcome
- UN's strategic positioning and its comparative advantage
- Cross-cutting issues applicable to the project/ programme
- Operational effectiveness of the programme/ project and the extent to which underlying strategies, processes and management structures contribute to development effectiveness of each UNDG ITF programme/ project
- Each evaluation question should be substantiated with evidence and disaggregated information by gender, ethnicity, location and/ or other relevant criteria

Lessons learned and good practices:

Based on the above analysis the evaluators will draw specific conclusions and make proposals for any necessary further action by Government, the UN or other donors to ensure sustainable development, including any need for additional assistance and activities of the project prior to its completion. The mission will draw attention to any lessons of general interest. Any proposal for further assistance should include precise specification of objectives and the major suggested outputs and inputs.

- What are the good practices that have resulted from this project? How and why some these practices can be labeled as a 'good practice'? Substantiate with evidence.
- What are the key lessons learned from the project implementation? What recommendations could be replicated in similar projects implemented in comparable situations?
- Are there any specific recommendations to be considered when designing similar projects in the future?

It is understood that the outcomes of the evaluation will be published and accessible to all contributors and participants in the project in order to strengthen the role of the food safety system, upgrade the food industry, and demonstrate the proper use of the allocated funds by these organizations. The project evaluation will also provide donors with a comprehensive assessment of the results and utilization of their investment in these programmatic areas. In addition, the evaluation will support agencies own capacity for programming, project management and accountability towards donors, GOI and the target population. The lessons from the evaluation and the evaluative evidence will also feed into the upcoming UNDG ITF lessons learned process as well as the proposed UNDG ITF project evaluations. Last but not least, the evaluation will also contribute to the next agencies country programming cycle or Iraq that guides the partnership and joint programming between the agencies and GoI.

Evaluation Methodology

The evaluation assessed the respective contributions of the three agencies, while also looking at cross-linkages and synergies of the different interventions implemented by the participating agencies.

The evaluation had been carried out in keeping with agreed evaluation standards and requirements. More specifically it fully respected the principles laid down in the "UN Norms and Standards for Evaluation" and the respective Evaluation Policies of the three participating agencies. The evaluation determined as systematically and objectively as possible the relevance, efficiency, achievements (outputs, prospects for achieving expected outcomes) and sustainability of the project. To this end, the evaluation assessed the achievements of the project against its key objectives and outputs, as set out in the project document, including a review of the relevance of the objectives and of the design. It also identified external factors that had facilitated or impeded the achievement of the objectives. The evaluation took into account changes of the planning basis as documented in the decisions of the Steering Committee and established a clearly documented reference basis against which the project will be evaluated.

A detailed evaluation methodology, approach and programme of work were agreed upon between the three participating agencies and the independent evaluation team before the start of the evaluation. The management arrangements for the evaluation process between the three agencies are described below.

The methodology of the evaluation included but was not limited to the following:

Desk review
The evaluation team reviewed the project documents, progress reports, minutes and decisions of the Steering Committee and other documentary materials generated during project implementation to extract information, identify key trends and issues, develop key questions and criteria for analysis. The team also reviewed relevant national strategies to see the links between the project objectives and national priorities.

Data collection and analysis
In consultation with the participating agencies, the evaluation team identified all stakeholders to be included in the evaluation exercise. The evaluation team devised participatory approaches for collecting first hand information. These approaches included interviews, focus group discussions, observations, end-user feedback survey through questionnaires, etc.

Questionnaires were used to get feedback from beneficiaries of different capacity development activities.

Pre-Evaluation Meetings:
Prior to the start of the evaluation, a two-day workshop took place with the purpose of ensuring the effective coordination between UN Agencies, through WHO as the lead agency, with MoH, MoA, MoI, and Stars Orbit Consulting (SOC). This workshop laid the groundwork for the evaluation of D2-17 project and served to introduce the evaluation team to key staff within the related ministries and WHO. The following is a summary of the meeting's goals and the people in attendance.

This meeting took place in Land Mark Hotel, Amman on 8 & 9 February 2010, this meeting was attended by more than 27 participants from MoH, MoA, MoI, UNDG ITF Steering Committee Support Office, WHO, FAO & UNIDO.

The main objectives of this meeting were:

- Launch the evaluation process.
- Ensure the cooperation and collaboration of the related GoI ministries in support of the evaluation process.
- To orient MoH, MoA, MoI on the Terms of References for the Independent Evaluation including the evaluation purpose, scope, objectives, methodology and management arrangements.
- To allow the evaluation team to update the partners on the methodology and data collecting tools which were to be used during the field evaluation.
- To agree on the implementation timetable.

Annex B shows the attendance of this meeting.

Field visits to facilities benefited under this project:
The evaluation team conducted field visits to selected project sites and hold meetings with targeted partner institutions including the selected food manufactures and food control facilities. To the extent possible, the evaluation team conducted interviews with staff from food processing industries and food control laboratories, officials from the line ministries and beneficiary populations to get their feedback and reflection on project benefits.

More specifically the evaluation team conducted field visits to the following rehabilitated/supported sites listed below:

1. Nutrition Research Institute (NRI)
2. MOH Health Audit Department
3. Regional Food Control laboratories in Basra, Mosul and Erbil
4. Central Public Health Laboratory (CPHL)
5. State owned dairy in Mosul
6. Milk collection centre in Babel
7. Veterinary border check point of Safwan (Basrah governorate)
8. Food laboratories of the following state owned companies
    a. State company for dairy products in Baghdad;
    b. State company for dairy products in Mosul;
    c. State company for sugar in Missan;
    d. State company for vegetable oils in Baghdad;
9. Food safety laboratories of the Ministry of Agriculture (Sheikjh Omar District, Baghdad) also known as Central veterinary laboratories

The team also conducted other site visits and data collection. Visits were made to counterpart ministries at the central level, for instance. In addition, field visits were made to the targeted food control labs and supported food production facilities. At these sites, questionnaire, focus group discussion, interviews and site observations were used to gather the needed information. Questionnaires were also used for providers and beneficiaries of the different capacity building activities (i.e. trainers and trainees);

Limitations:

There were no limitations affecting completion of this evaluation, all beneficiaries interviewed assisted the evaluation team and allowed them to take pictures, overlook official documents and facilitated their visits to all locations.

Evaluation Findings

A. Project Identification, Relevance and Formulation

In general, the project can be viewed as having been well-formulated. The overall goals and planned results of the project were, and continue to be, relevant to the local country context at the level of governance, as well as the daily lives of individual citizens. The project design sufficiently references appropriate, and agreed upon strategic frameworks, including the UN Assistance Strategy for Iraq, as well as the UN Millennium Development Goals, and positions project interventions in relation to these. In addition, the project design supports the positioning of Iraq and its compliance to international standards and food safety governance structures, including but not limited to HACCP principles, and Codex Alimentarius. Details are clearly outlined within the project documentation.

In addition, the project can be said to have been well-formulated in relation to results-based management principles. Despite the complexity of the design, involving multiple ministries and UN partner organizations, the project's logical framework is clear and well articulated, with an appropriate breakdown of responsibilities, and intuitive results chain to support ease of coordination and the aggregation of results from the activity level to the overall project impact. Furthermore, the project's performance measurement framework, including developmental indicators, is well articulated, and basically appropriate for the overall design.

Specific evaluation notes on the project formulation and relevance include the following:

- The project plans fall within objectives that were in line with the national priorities and needs.
- The project, in planning phase, responded to the real basic needs of the food safety system in Iraq, to a large extent and the project results did contribute substantially to the improvement of the food safety system.
- The implemented activities fall within the responsibilities and administration of governmental departments, therefore, technically, no other agency/body can interfere in their affairs. This is to say that all interventions had an appropriate organizational home within the system which limits the number of extraneous variables which could interfere with results achievement and aggregation. As such, the targeted areas for intervention were prudently selected, as they are areas that are largely controllable by the targeted beneficiaries.
- Locations included in the reconstruction and rehabilitation activities were closely linked to the needs and requirements for the realization of the basic objectives of the partners in the project.

In terms of the broad relevance of this project, it should be kept in mind that, indirectly, the beneficiary group of the project interventions includes the entire Iraqi populace, through the assurance of quality and safety of basic food items that are supplied and offered for human consumption, such as the quality of safe drinking water, dairy products, bread, and canned food (fruits and vegetables). As such, the project can be said to have, at macro and micro levels, a high degree of relevance.

B. Project Ownership

Quite simply, this project could not have been implemented at all, without significant participation of the concerned ministries inside Iraq. The positioning of the project in relation to the MDGs as well as the Iraqi National Development Strategy contributed to a suitable technical focus which the GoI and partners naturally supported. Interview data suggests that sufficient participation of local partners went into the project design, and that the concerned offices have been actively involved in the implementation. This involvement and ownership include not only support in principle and in kind, but also budgetary support complementing ITF inputs in a variety of areas, for instance, provision of

technical staff to implement the project, the funding of participants to international Codex meetings, and other contributions in kind.

In terms of actual beneficiary ownership and feelings of responsibility for the results, the field evaluation team has concluded that the level of engagement, understanding, and investment is relatively high, and that local partners generally have a strong sense of ownership for the project processes and results. The design of the project which ensured individual interventions targeted a specific organizational home supported this achievement. For consideration by the implementing organizations, this is, perhaps, one unanticipated benefit of the remote management model for the project—local partners are put into a position of higher involvement and accountability for results, and as such, naturally own the results to a relatively high degree. Such a degree of ownership is harder to obtain when implementing agencies are more directly responsible for achievements.

C. Project Coordination and Management

Overall, the project appears to have been managed at a very high acceptable level, and coordination between partners was sufficient to see the majority of planned activities through to completion. The consequence of this was that most project results were achieved, and in overall the interventions were effective in improving the food safety situation inside Iraq.

The difficult security situation inside Iraq during the implementation period was the key factor that impacted to some extent on the project management. However, despite that, the project management effectively coordinated the project activities and the participation of other regional and international organizations, and that have contributed to the efficiency and effectiveness of the project.

D. Achievements and Results:

Through the implementation of project activities, the overall objectives of the project can be said to have been achieved in terms of building the infrastructures of the targeted sector and review of food control systems and procedures, increasing the capacity of food quality control lab testing for local and imported food items and drinking water, applying standards and specifications, estimating validity periods, addressing imbalances, correcting errors, and estimating the imbalance volume - whether there are major, medium or minor violations, and comparing that to the applications of quality control systems and food safety measures.

Based on the data collected through document review, interviews, and site visits, the evaluation team has made the following general observations about the achievements of the project.

1. Overall, the project generally achieved its target objectives, with varying rates of success, depending on geographic location and technical area. While significant improvements were made in most of the areas targeted under the evaluation, there remains, nonetheless, significant room for continued improvements.
2. In terms of both physical infrastructure and technical capacity, the project contributed to an increased emphasis on-, and overall enhancement of food safety procedures, at each step in the supply chain, through the specialized lab capacities and new methods in testing and examination.
3. The provision of training to scientific and technical staff, and the provision of new equipment, based on the needs and national priorities also helped to increase the relevance and effectiveness of these the enhanced food safety procedures. That is to say, the project has contributed to the overall institutional effectiveness of the food safety system through a combination of training, awareness raising, and provision of required physical resources to implement the required enhancements.

The most appropriate gage of the project's success is to reference developmental results against targets identified in the performance measurement framework. For the purposes of the evaluation, results were identified through project reporting and verified through site visits and interviews with partners. The evaluation team has carried out the evaluation in alignment with the terms of reference and also with the reality of how the project was implemented and documented. The table below provides an analysis of planned results in relation to the performance indicators outlined in the evaluation ToRs.

Analysis of Project Achievements in Relation to Results Based Management (RBM) Performance Targets

Outputs	Measurable Indicators	Analysis
1) National food safety profile: review of all national food control means and data	− Quantitative ways of measuring or qualitative ways of assessing timely production of outputs: − Food safety profile finalized.	- Achieved
2) Laws and legislations on food safety reviewed and adopted.	− Reviewed laws in place in two years.	− The review of existing food related regulations laws was completed in 2007 and led to a WHO/FAO/UNIDO position paper on the steps recommended to the GoI in order to set up an independent food safety authority. − This output was 100% completed as of June 2008.
3) National Codex Committee set up	− National Codex Committee in place.	− Achieved and the Codex Committee is operational − The meetings of the Codex Committee comprising of representatives of all concerned ministries are held on a regular basis.
4) Food monitoring, animal and food borne disease surveillance system enhanced and coordinated.	− Reports on Incidence and prevalence of food borne diseases made available.	− Achieved, the major food borne diseases are now part of the regular reporting of Communicable diseases Center
5) Contributions of Iraq to the work of Codex Alimentarius increased	− Regular attendance in Codex meetings by Iraq representatives	− Achieved as reported above.
6) Regional food control laboratories rehabilitated and Emergency preparedness of food control system increased	− Three operational food control laboratories established with food control Protocols.	− This output has been completed at 100%, including three food control laboratories. A monitoring visit to the food control lab in Erbil was completed by project staff. − The evaluation team confirms that all of the food testing/examination laboratories under MoH in Mosul, Basra and Erbil were found to be fully operational and in good condition.
7) Food inspection and food control systems of imported food improved	− Operational food inspection system established. − All sampled shipments inspected.	− This output has been achieved. − Rabiaa check point was cancelled because location was in a military zone.

8) Food consumed, distributed, marketed or produced are of the highest affordable standards of food safety and hygiene and Food handlers committed to ensure hygiene conditions are maintained in the food processing facilities.	– Inspections of food establishments done at regular intervals. – Better cleanliness and hygiene in model food processing facilities promoted.	– As observed by the evaluation team, and evidenced by both site visits and field interviews, inspections have been improved in both frequency and quality. In addition, substantive improvements have been observed in cleanliness and hygiene, supported by the improved equipment procured under this project.
9) HACCP principles are in place and enforced in selected food industries facilities (diary, milling and fruits/vegetables sectors). These enterprises serve as models for the other enterprises of the sector.	– Three food processing model enterprises have HACCP principles incorporated and quality assurance system in place.	– HACCP principles have been incorporated into project interventions. The evaluation data indicate that HACCP training has been provided to industry staff and that the principles have been incorporated and quality assurance systems are in place in Diwaniya and Mossul Dairy Factories.
10) Selected Food enterprises to be supported in their rehabilitation endeavors.	– Guidelines for GMP and HACCP for the selected sectors developed and implemented in up to 40 industries in private and public sector.	– GMP, GAP, and HACCP principles are repeatedly referenced in project documents, and training has been provided where appropriate. The output has been achieved in spirit through the interventions at the Mosel and Babel dairy facilities.
11) Safe agriculture practiced with less chemicals	– Levels of hazardous chemicals in food products reduced to acceptable levels.	– The evidence from the field evaluation indicates that more rigorous testing is now taking place as a result of the training and equipment provided by the project. During site inspections, records confirmed that levels of hazardous chemicals in food products are generally reduced to acceptable levels, however it is beyond the scope of the evaluation to provide a general confirmation about overall levels across the country.
12) Consumers educated on the risks of unsafe food and its short and long term impact on health	– Gender sensitive training programmes developed.	– The presence of female workers at project sites and in project workshops has been anecdotally noted. Female university graduates have been employed in labs for food testing.
13) Staff involved in food safety programme capacity built taking into	– At least 50% of participants are female.	– The presence of female workers at project sites and in project workshops has been anecdotally noted. Female

consideration specific needs, in particular with regard to gender		university graduates have been employed in labs for food testing.

Project Activities – Select Achievements, Results and Challenges

In terms of the project's activities, and as noted above, a comprehensive and systematic analysis of project achievements and results is rather challenging to construct. Since the different project reports were not based on each of the 16 key activities but rather on overall achievements, it has been a challenge for the evaluation team to report individually on each activity's level of success and completion as this could easily detract from the overall emphasis of the evaluation ToRs as reflected in the evaluation key questions. As such, and in the line of the project's internal reports, this evaluation report does not provide a full accounting for each key activity, but instead it focuses on key areas of intervention, with an emphasis on the contributions of these interventions to the achievement of results.

In the details below, some activities are reported on individually, while others are discussed in aggregate. The emphasis is placed on observable verification of meaningful interventions of the project, and in a small number of cases, on identifying shortcomings of the activities as they were implemented.

In general, the activities included in this project have been implemented with a high degree of efficiency. Field data collection suggests that there was no notable difference in efficiency between the activities implemented in the north and south. It should be noted that the activities implemented with the MoH, MoA and MoI were implemented with relatively high efficiency.

Public Health Food Safety Activities:
The WHO, in collaboration with the Iraqi MoH, through a number of inter-related interventions, has effectively restored the role of the health control units, Nutrition Research Institute (NRI), Central Public Health Laboratories (CPHL), established three regional laboratories for food quality control and has provided technical upgrading through training courses organized inside and outside of the country, which included over 40 training courses and workshops, and seminars. In the Iraqi governorates, great numbers of officials participated in project activities which enhanced their awareness and technical capacity. The officials represented health control units, food quality control laboratories and supervisors within the health control and food safety industry. Capacity building activities included attending meetings held by international organizations, such as Codex Alimentarius Commission (below), reviewing the specifications and health conditions of local and imported food, and sessions on applied Good Hygienic Practices (GHP), Good Manufacturing Practices (GMP), and Hazard Analysis at Critical Control Point system (HACCP).

Arrangements were successfully made for the involvement of Iraq in the Codex Alimentarius Commission and international commissions concerned with food safety, in cooperation with WHO, FAO, MoA, MoH and other concerned units, through attending periodic meetings of the organizations, as presented in the table below:

Codex Meetings and Related Meetings Organized with Project Support

Meeting Dates	Country	Topic	Participating Agency/Institution
March 2007	Amman	Codex training course	FAO/WHO
April 2008	Amman	Codex training course	FAO/WHO
26-29/01/2009	Tunisia	Coordination Meeting	Nutrition Research Institute (NRI)
16-20/03/2009	China	Food Additives	Nutrition Research Institute (NRI)
20-25/05/2009	China	Pesticides Residues	Central Public Health Laboratories (CPHL)
11-15/05/2009	Brazil	Residues of Veterinary Medicines	Central Public Health

			Laboratories (CPHL)
12-16/10/2009	Korea	Antibiotics Residues	Central Public Health Laboratories (CPHL)
2-6/11/2009	Germany	Food for Persons with Special Needs	Nutrition Research Institute (NRI)
16-20/11/2009	USA	Healthy Conditions in Nutrition	Central Public Health Laboratories (CPHL)

Technical capacity development (Workshops):
There was substantial work done under project auspices in terms of building technical awareness and capacity across the entire food safety system. The participation of technicians in technical training courses, organized by the international organizations within the plan for technical upgrading of their qualifications, effectively contributed to expanding the general concepts of food safety and performance enhancement in applying new methods to ensure quality through the application of HACCP and concepts of GAP, GMP, and GHP which are required by the production activities in food industries, especially dairy production. (Please refer to the training courses organized by WHO, FAO and UNIDO in the table below)

With regards to the GHP, GMP, GAP, and HACCP applications, 17 workshops were organized to tackle food safety issues by the MoH departments, under the supervision of WHO and FAO in Baghdad, KRG, and southern governorates. The workshops focused on the topics below:

1. Workshops for workers in border areas in three batches during June – July 2007, whereby more than 100 trainees from all Iraqi governorates participated.
2. GHP, GMP and HACCP applications during the periods 15-19/04/2007, 22-27/04/2007 and 29/04-03/05/2007, whereby more than 100 trainees participated.
3. Workshop for workers in health and agriculture on transmittable food and water borne diseases in three batches for all Iraqi governorates during July 2007, whereby more than 100 trainees participated.
4. Three workshops for workers in health on methods of sampling and health inspection for all Iraqi governorates during May 2007, whereby more than 100 trainees participated.
5. Three workshops on food safety portable kits in all Iraqi governorates during July, August and October 2008, whereby more than 100 trainees participated.
6. Workshop to examine and test drinking water in 2009 targeting two groups, whereby around 50 trainees participated in the central health labs – MoH.

Training on health education, and organization of advocacy campaigns on Good Health Practices (GHP), under the responsibility of MoA and MoH: Effective health programmes and classes were given to involved workers in health control units to ensure food safety under the supervision of WHO.

The following out-of-country courses which FAO (co-)organized:

- Codex training Amman (March 2007)
- Codex training Amman (April 2008)
- Fresh Fruit and Vegetables training Amman (July 2007)
- Food inspection workshop Amman (March 2008)
- Food legislation seminar Amman (August 2007)
- GAP –food of plant origin training course Amman (Sept 2007)
- GAP- food of animal origin training course Amman (Feb. 2008)
- Specialized training course on veterinary drug residues (Vienna, Austria, November 2007)

Organization of a workshop to develop the capacities of health and technical staff working in health labs on the implementation of productive and health capacity building processes in cooperation with FAO and WHO (Babel).

Organization of a workshop to develop the capacities of health staff working in health labs in Erbil and Dohok governorates on the use of lab equipment and the conduct of some lab tests for food. Participants completed a questionnaire following the workshop, which yielded the following recommendations:

a) Additional equipment is needed
b) The training duration of 5 days is not sufficient to fulfill capacity needs.
c) It is recommended that courses be organized outside Iraq and international expertise is brought into Iraq.

Training courses organized by international organizations within the project UNDG-ITF D2-17

Ser.	Course Dates	Implementing Agency	Location	Topic	Participants
1	18-22/03/2007	FAO and WHO	Amman	Codex and Coordination Meeting	MoH Associates
2	1-8/03/2007	WHO	Amman	Use of portable kits in food testing	Nutrition Research Institute (NRI)
3	13-17/07/2007	FAO	Amman	Fresh food verification (FFV)	NRI
4	4-9/09/2007	FAO	Amman	Application of Good Agricultural Practices (GAP)	MoA associates
5	3-12/11/2007	WHO	Ireland	Training on the use of RT-PCR	Central Public Health Labs (CPHL)
6	17-20/02/2008	FAO	Amman	Food of animal sources	MoA associates
7	16-19/03/2008	FAO	Amman	Food inspection methods	NRI
8	1-5/06/2008	UNIDO	Aqaba	Training of trainers (TOT) on Atomic Absorption	NRI
9	20-23/07/2009	WHO	Amman	Training on the use, operation and maintenance of (HPLC)	Central Public Health Labs (CPHL)
10	April 2007	MoH and WHO	Baghdad, Basra and Erbil	Food trading (HACCP, GMP, GHP)	Associates of the Departments of Health in the three governorates
11	May 2007	MoH and WHO	Baghdad, Basra, and Erbil	Sampling methods	Associates of the Departments of Health in the three governorates

The evaluation team interviewed participants from workshops which targeted manufacturing capacities in food industry, ensuring the prevention from transmission of food borne diseases, food contamination, and aseptic drinking water. These included: (a) the workers in health prevention departments and food testing labs who have been trained on Food Safety Management Systems (FSMS); (b) those participating regularly in advanced training, similar to "Continuing Education", which contributes to the refreshment of information, increase in experience, and exposure to latest developments in the food industry; and (c) other individuals interviewed in the project locations. Interview data confirmed that the workshops and training activities were generally successful in terms of providing relevant information and skills in an effective manner. However a comment which came up regularly was that the training, good as it was, was nonetheless insufficient to raise the technical capacity of the participants to a level where they were comfortable and confident in implementing all policies and procedures and utilizing all modern equipment. The interviewees are listed in Annex B.

Civil works:

In terms of the project's civil works activities, the findings are quite positive. All of the civil works projects (involving both building of new facilities and restoration of old ones) were completed as planned under the project. These projects included: outbuildings, power system installations, water systems, sewage systems, sanitary services (toilets), and air conditioning requirements. These activities were completed in full, in all of the targeted locations included in the implementation plan. The quality of these civil works projects, however, was somewhat mixed, as detailed elsewhere in the report. Quality varied depending on the location, the efficiency of the contractor in charge, and the extent of follow up monitoring and supervision.

Food quality control labs:

All of the food testing/examination laboratories related to the MoH in Mosul, Basra and Erbil were found to be fully operational and in good condition. All were fulfilling their duties and responsibilities related to food control and food safety. This aspect of the project was implemented in full, within the determined timeframe. The interventions included both the provision of equipment, and capacity development activities for specialized staff in the testing labs (in the case of Mosul and Erbil). That said, it should be noted that the evaluation team encountered remarks from the staff in a number of sites concerning difficulties with the operations and maintenance of advanced lab equipment such as the HPLC and Atomic Absorption equipment. It appears that perhaps too few individuals had been trained on them, and that follow-up was insufficient to ensure transfer of knowledge within the workplace.

Animal health labs:

All of the veterinary animal health labs in Baghdad, Erbil and Basra had been supplied with the mandated equipment, according to the project implementation plan, based on the needs and requirements of the targeted institutions. Most of the lab equipment in Baghdad and Erbil had been installed and were already operational. However, in Basra, the activity was not fully completed, because a suitable site for the setup of the facility had not been identified. As such, the equipment was being stored in the warehouse of the Veterinary Hospital, and some had been sent to the governorate of Missan upon an official order from the central department in Baghdad. This clearly presents a problem for efficiency and effectiveness as well as compromising the achievement of related results in Basra. A higher level of monitoring and follow up is required, along with more rigorous planning and site selection guidelines, such that funds and equipment are not released prior to high level written agreement on selected sites. Having duly noted this, it reflects positively on the project that all of the labs visited were fulfilling their duties pertaining to veterinary health services, and the supervision of the production of animal meat in slaughterhouses. Relevant and appropriate guidelines were being followed, regarding food safety conditions, the control of animal products, and prohibition on the use of the inconsumable animal products to prevent the spread of contagious diseases. In addition, inspections were being conducted of trucks loaded with imported food items.

Supplying targeted companies (The State Company for Vegetable Oils, State Company for Dairy, State Company for Sugar Industry in Missan, and the State Company for Pharmaceuticals) with labs:.

This cluster of interventions was generally effectively completed. All of the targeted companies have been equipped with specialized labs, and technical staffs have been trained; however, these labs still lack some of the necessary testing equipment. In particular, the labs lack modern equipment used in the detection of bacterial contamination and chemical contamination related to heavy metals. Equipment is also lacking for the testing of water contamination and environmental issues, such as the COD and BOD examination of industrial water, and its connection to the contamination of rivers, earth/closets and canals. Despite these shortcomings, however, good results were achieved in the improvement of examination and testing methods of imported raw material, products and water, and it can be concluded that in relative terms, the interventions have been quite successful.

Enhancements within the dairy supply chain:

Supply chain enhancements were conducted with a high degree of effectiveness in both Babel and Mosul. In Babel, the interventions included: the reconstruction of industrial facilities for the food industry; a campaign to raise the awareness of farmers of the milk collection and cooling centre in Babel; as well as work done to increase the efficiency of the centre, thus enabling an improved supply of milk to the Diwaniya Dairy Plant. The Mosul Dairy Plant also benefited greatly from the reconstruction and rehabilitation, which emphasized the application of environmental and health specifications both in production and on site at the facility, as well as ensuring food safety during the production of dairy from sterilized milk, cream, yoghurt and cheese. More information is provided in the text boxes below.

Assess the status of public food safety related industries in order to select those requiring rehabilitation using HACCP principles:

An assessment was conducted on the state of the food industry and all aspects related to food safety and consumer health. This included an identification of projects requiring rehabilitation through the use of Hazard Analysis of Critical Control Points (HACCP). This process identified the Centre for Milk Collection and Cooling in Babel, which belongs to the Diwanya Dairy Factory, as well as the Mosul Dairy Factory. The facilities were rehabilitated by the MoI in cooperation with UNIDO. As outlined above, this activity was successful in improving and ensuring the collection of raw milk in good quantities and in acceptable quality. This was achieved through an advocacy campaign to educate the farmers working in milk production to ensure good quality of milk, and through the equipping of the Babel centre. Teams of health units in the Raw Milk Collection Centre in Babel, in cooperation with WHO, ran the campaigns in order to raise health awareness of the use of chemicals and pesticides and the importance of food safety in preserving the human health. In addition, support was given for the application of Good Agricultural Practices (GAP), in cooperation with FAO and the workers in agricultural guidance departments of the MoA. The reconstruction of Mosul Dairy Factory to meet acceptable standards served the objectives of the project in targeting the production of food items according to food safety principles and the application of Good Manufacturing Practices (GMP) and Good Health Practices (GHP). This activity consisted of the training of numerous professionals working in the targeted facilities through specialized training courses in food safety, and tackling issues related to the application of the HACCP system.

Milk collection center in Babel

The role of this center is to receive milk from farmers who own cows and buffalos, and then cooling the milk to preserve it from spoilage. Next step is delivering it to dairy factories/plants in Diwaniya, or Baghdad, or Kirbala, in good quality and valid for use in the industry of dairy products, in accordance with the conditions and certain quality specifications, as well as depending on labs examination to ensure food safety and the production of healthy, good quality milk, valid for the use. Also the center guarantees the quality through the application of Good Hygiene Practices at work locations (GHP), such as washing the equipment and milk tools of farmers delivering the milk to the collection centers. The price of milk varies depending on the quality, composition of solid materials, the state of being free of additives such as water and chemical substances. Other factors are the density of milk, fat percentage, and clear of impurities and residue of antibiotics, to be safe of diseases, vaccinations and udder infections. The milk collection and cooling centers contribute to the development of livestock, and the encouragement of farmers to breed cows and provide feed, to facilitate the task of marketing the produced raw milk.

The important role of this center is in the density of milk producing cattle and providing productive dairy factories, which depend on raw milk as a basic raw material to maintain its work and productivity, and recruit the largest number of work force. The process of cooling milk and storing it in clean refrigerators made of stainless steel to ensure the longevity of milk produced in farms. Milk should be cooled within two hours of production, in a 4 centigrade temperature, to preserve it from spoilage.

Achieved activities for the Development of the Centre within the Reconstruction Programme:

1. Maintenance of the surrounding fence, removal of damaged fences and cleaning of the site.
2. Restoration of refrigerated raw milk reservoirs by using the chemical resisting material.
3. Replacement of wall painting with tiles and ceramics.
4. Fixing the ceilings and their painting with oil dyes that prevent the growing rot.
5. Replacement, fixing and dye of metal and aluminum doors.
6. Fixing of windows and replacement of damaged windows and putting glass with wires that prevent flies.
7. Fixing of the laboratory and toilets.
8. Establishment of counters for labs.
9. Fixing and maintenance of rain water and fountain streams.
10. Establishing hot and cold water networks for lab s and toilets with showers and flushes.
11. Water reservoirs (1,000 liters).
12. Sinks
13. New septic tank.
14. Power installation for all locations (electricity) and renewal of old lighting and their mode of operation.
15. Establish ceiling fans, air-conditioning, and insects traps of adequate quantities.

All of the achieved activities comprise periodic maintenance works for establishments, undertaken by concerned departments, though they were neglected in the last years because of exceptional conditions in the country.

Reconstruction of Mosul Dairy Factory – Ninewa governorate

Reconstruction of Mosul Dairy Factory is one of the dairy production projects by the State Company for Dairy Products which belongs to the Ministry of Industry and Minerals. This factory produces sterilized milk in glass containers, in addition to other dairy products. It was established in the 1970s and is still functional to-date, though suffering from the shortage of raw milk necessary for the production of sterilized milk, cheese and cream. It depends on imported raw material in the operations of some of its production lines, such as imported dried milk and imported vegetable oils and animal fats, in addition to ensuring good quality dairy products in the local markets which compete in quality and prices with imported products from abroad. Furthermore, the project contributed to the employment of a great number of technical and scientific work force and professional workers. A group of workers were included in the training courses organized by international organizations. The factory is considered to be one of the great production locations with trained technical staff that is capable of providing similar projects with technical work force and training the associates of similar industrial projects in the region.

Achieved Activities within the Reconstruction Plan:

1. Reconstruction and maintenance of false ceilings in the factory and filling the holes in the ceilings.
2. Replacement of wall and floor ceramics.
3. Painting of false ceilings.
4. Setting up of aluminum doors for the refrigerators.
5. Setting up of metal doors, fixing and dye of windows and doors, replacement of broken glass and repairing windows while replacing the damaged.
6. Replacement, fixing and establishment of electrical networks and plastic tubes for lighting, machinery and equipment with specifications suitable for humid places, with control keys, cabinets, and electrical switchboards.
7. Replacement and fixing of deflation devices and lighting, and equipment with fluorescents and their accessories.
8. Repair of sewage network system in production locations and rain water drainage with necessary fountains.
9. Cleaning of the main water ground tanks.
10. Equipment and replacement of air ducts for conditioning.
11. Rehabilitation and maintenance of water and sanitation facilities and replacement of ground tiles, sinks, toilets and installation of flushes linked with hot and cold water pipe networks.
12. Installation of water reservoirs.
13. Repairing of doors, dye of metal doors and setting up doors.
14. Installation of fluorescents for hung lighting.

The table below summarizes the activities which took place under the rehabilitation and reconstruction component of the project, and analyses results against what was initially planned by the project:

Locations and Activities Included in the Rehabilitation and Reconstruction Project

Location	Activity and Responsible Agency	Proposed Project	Results
1. Raw Milk Collection Centre in Babel.	Collection of raw milk by farmers and delivery to factories – Ministry of Industry and Minerals	Reconstruction of the complex in terms of civil works and rehabilitation of buildings and health services	Project completed in general terms, resulting in quality services to farmers and producers through the provision of raw milk of good quality and relatively good quantities.
2. Mosul Dairy Factory in Ninewa	Manufacturing of dairy products, i.e. sterilized milk, yoghurt, cream and processed cheese.	Reconstruction of the factory (civil works), providing health conditions and training technical staff	Project was limited in scope, focusing only on the rehabilitation of the sanitary rooms. As such, it contributed to but did not fully ensure safer food products.
3. Mosul Dairy Factory in Ninewa	Manufacturing of dairy products, i.e. sterilized milk, yoghurt, cream and processed cheese.	Provision of supplies and lab equipment to increase the efficiency of food safety control, quality control on raw material and products to ensure their alignment with standard specifications, and surveillance of health conditions	Supplies an equipment were provided to support an increase in efficiency of food safety control and alignment generally with standards, resulting in increase in use of quality control applications (GHP, GMP)
4. Baghdad Abu Ghreib Dairy Factory	Manufacturing of dairy products, i.e. sterilized milk, yoghurt, cream and processed cheese.	Provision of supplies and lab equipment to increase the efficiency of food safety control, and quality control on raw material and products to ensure their alignment with standard specifications.	Supplies an equipment were provided to support an increase in efficiency of food safety control and alignment generally with standards, resulting in increase in use of quality control applications (GHP, GMP)
5. Missan Al-Majarr Al-Kabeer Sugar Factory – Building of the State Company for Sugar Industry in Missan	Manufacturing of Sugar – Ministry of Industry and Minerals	Provision of lab equipment for food analyses and ensuring that the quality of products is in line with standard specifications.	Project was completed as planned, providing general support to ensuring Quality Assurance and Food Safety
6. State Company of Vegetable Oils in Baghdad	Manufacturing of vegetable oils – Ministry of Industry and	Provision of lab equipment for food analyses and ensuring that the quality of products and raw materials	Project was completed as planned, providing general support for ensuring the quality of products in the

Location	Activity and Responsible Agency	Proposed Project	Results
	Minerals	is in line with standard specifications.	company and food safety.
7. Nutrition Research Institute – Baghdad	Testing and control labs for quality control of food items throughout Iraq, and monitoring food safety to ensure its alignment with standard specifications	Provision of advanced lab equipment, training of scientific staff members, organization of training courses and technical workshops benefiting all health departments, and quality control in industry, agriculture and health.	Achievement of the project objectives in terms of production surveillance and quality control on product items throughout the country, in addition to conducting accurate analyses within the HACCP system.
8. Health Control Unit in MoH	Quality and health control units on traded, produced and imported food items to ensure food safety - MoH	Provision of supplies and equipment for labs, organization of training courses for unit staff, reconsideration of health conditions and instructions on food items and Codex Alimentarius Commission laws, providing licenses to production projects, and supervision on all work locations, production and marketing.	Achievement of the project objectives in ensuring quality control and surveillance to prevent the spread of diseases among consumers through produced and imported food items.
9. Food Quality control labs in Basra, Mosul and Erbil	MOH Some of the works was done in coordination with the Ministry of Planning and Development Cooperation (MoPDC with regards to food specifications –	Equipment of three labs, rehabilitation of existing labs reconsidering the work systems, rules and regulations to increase work efficiency and develop surveillance and inspection capacities, and organization of training courses to upgrade the skills of workers.	Achievement of the project objectives in increasing the efficiency of quality control units' performance and issuing standard authorizations for each product. Also the project contributed to improving surveillance of imported items at the borders to ensure food safety at the entry points such as in Basra (Safwan Border), Mosul (Rabee'a Border) and Erbil (Zakho Border).
10. Central Public Health Lab in Baghdad	MoH	Provision of advanced lab equipment to increase the efficiency in testing and controlling the specifications of food related items including pharmaceutical and medical items that are related to food	Achievement of the project objectives through ensuring quality of imported food items.

Location	Activity and Responsible Agency	Proposed Project	Results
11. Animal Health Labs in Basra (Safwan) and Wassit (Zirbatiya)	MoA	Provision of health equipment to test transmittable diseases among animals that produce milk, which is related to food and food safety, and prevention of the spread of diseases.	Achievement of the project objectives in preventing diseases and their spread across borders and ensuring quarantine within food safety system and instructions
12. Main veterinary labs – Sheikh Omar Food Safety Labs – Baghdad	MoA	Provision of advanced lab equipment for testing and health remedies and prevention from diseases.	Achievement of the project objectives through ensuring food safety and preventing the transmission of food borne diseases by sick animals.

Provision of Machinery and Equipment

There was a basic need for renewal and development of production equipment and machinery in the targeted factories, as well as for renewal and development of the mechanisms of filling, packing, storage, transportation and marketing, and the measures taken to ensure the quality of products by quality control units, in terms of:

- Sampling and testing processes;
- Procedures for prevention of products contamination;
- Guarantee of product safety biologically, chemically and physically;
- Identification of potential dangers and response mechanisms;
- Identification of necessary tools for testing and examination
- Identification of available lab equipment, and the raw materials needed to ensure accuracy of testing and results as well as the efficiency of the examiners' work.

The modernization and construction of new labs in targeted locations contributed to the increase in the efficiency and effectiveness of the specialized departments in achieving food safety standards, and to the overall achievement of the project objectives. An important element of this was the provision of training for technical staff on the use of the new equipment. The equipments provided are as follows:

1. Portable Kits.
2. Hygiene Monitoring System.
3. Portable Grain Analyzer.
4. Portable Water Activity (Hydro palm).
5. Alcohol Analyzer.
6. Calorimeter Digital.
7. Chlorine Measuring.
8. Consistometer.
9. Hand Held Meter C114.
10. Pocket Dosimeter.

In addition to the above, other significant lab equipment and lab devices were provided to the labs of the MoI companies, such as: heavy metal measuring equipment, fat and oil analysis equipment, environmental pollution measuring equipment, water testing, raw material, and other products. These products have contributed effectively to increasing the efficiency of monitoring and control units' performance and achieving the project objectives.

Food Analyses Laboratory in the State Company for Dairy – Baghdad and Mosul
The project supported the provision of advanced lab analysis equipment and tools for lab tests, such as UV Spectrophotometer, and environment pollution measurement tools (such as BOD testing equipment). These equipments and tools helped to undertake lab tests on imported raw food materials to guarantee its alignment with standard specifications and ensure food safety within the HACCP system as outlined in the commercial invoice no. 272/190/A.

Food Analyses Laboratory in the State Company for Sugar Industry in Missan
The project also provided lab equipments for quality assurance testing purposes in the sugar industry to guarantee that products are obtained in accordance with GMP standard specifications and to ensure that food (sugar) is safe from heavy metallic components and guarantee the level of purity of the final product and its relation to the consumer's health.

Food Analyses Laboratory in the State Company for Vegetable Oils – Baghdad
The project provided lab equipments for the analysis of oils and fats as well as experimental production equipment to enhance the quality of products and ensure food safety in terms of its component of oil, saturated fat acids to polyunsaturated fats and its link to the consumer's health.

Also, lab tests were taken to examine the alignment of products with standard specifications and the stimulation of research and development activities that serve the production process and GMPs in the industry of Vegetable Oils.

In addition to the above activities and facility-related achievements, a number of other specific achievements are also noteworthy which relate more to the institutional capacity of various concerned departments and offices, as well as the overall capacity to effectively manage and monitor the food safety system.

- There was considerable success from the training provided on Good Health Practices (GHP), Good Manufacturing Practices (GMP), Hazard analysis of Critical Control Points (HACCP) through the workshops organized by (UNIDO) in collaboration with the Ministry of Industry (MoI), and with a distinct role played by the representatives of the UNIDO in the MoI.
- A specialized committee in the Health Control Unit reviewed the national methods for monitoring of food safety, as well as basic needs for the health control administration work, in cooperation with WHO, and under the supervision of responsible officials from the Ministry of Health.
- A specialized committee in the Ministry of Health, as well as specialized departments/units, in cooperation with WHO, reviewed and revised the rules, regulations and legislation pertaining to health and quality control of food, in accordance with new requirements and developments.
- Interest and awareness has been increased related to productivity locations and laboratories in providing a group of basic needs items to dairy, oil, sugar and pharmaceutical labs. The Ministry of Trade was also interested in the labs of the State Company for Grain Trading in order to examine and control the quality and consumption validity of the grains.
- Interest was expressed in organizing training workshops for technical staff inside and outside Iraq on new methods in food safety and applications of the Hazard Analysis of Critical Control Point system (ISO22000-2005 certified). This was a positive step towards the realization of the food safety project, as this system determines the safety of food in terms of biological infections, chemical contaminations and physical defects, in a semi-absolute manner if practically applied in the production sector. Accordingly, it issues an official certificate of food safety and quality assurance within the validity period indicated in the international standards for the specific food item, for the benefit of the consumers' health.
- Enhancements to the capacities (technical and material) of regional laboratories in governorates located on the borders of Iraq helped in increasing the effectiveness and capacities of health and control departments that undertake quality control on material and

products, in examining and controlling the specifications of food items, ensuring food safety, and preventing the transmission and spread of diseases and epidemics, in addition to limiting the distribution of food items which could be harmful to the public health, such as chemicals and food additives used as conservatives.

- Thirty professionals from the relevant departments of the three Ministries (MoH, MoA, and MoI) were trained on the Codex Alimentarius Commission's working system, its efficiency, and monitoring of its publications with regard to food regulations and international legislation.
- There was also an important contribution from the project in the establishment of a surveillance and monitoring System of food borne transmissible Diseases, by the the Health Audit Department of the MoH and the Animal Health Units of the MoA, through the development of a commission for monitoring and controlling cases of transmission of animal diseases via food intake. This activity was implemented with the technical support of WHO and FAO.
- The achieved activities comprise of the (a) overall maintenance of basic and necessary project buildings; (b) application of Good Hygienic Practices (GHP); and (c) application of the Food Safety Management System (FSMS), which was set in alignment with the International Standards Organization (ISO 22000-2005).

Efficiency and Effectiveness:

Implementation of planned programmes was fully completed. The delays in implementation compared to the original implementation timetable were noted. The extensions in time were due to valid and documented reasons related to circumstances around the security situation in Iraq during the implementation period, and especially during the first/initial years of the of work (2006-2007). For administrative reasons, there were a few difficulties with some contractors meeting obligations with respect to maintenance in some areas such as Basra, Dohuk and Erbil.

The presence of female workers, and their contributions to the outcome of the project, is noted. Female university graduates have been employed in labs for food testing.

The degree to which utilization of resources was optimal in the targeted work locations depended on the officials directly in charge, and on the benefit they received from the training courses for rehabilitation, which demands time, field practice, and the monitoring of the central departments related to the ministries.

The current situation of the services in the country has reached varying degrees of client satisfaction, ranging from satisfactory to good, depending on the responsible persons of these services and the available capacities.

Participants in project activities included highly qualified and trained personnel within the MoH, MoI and MoA. The efficiency and effectiveness of these institutions increased through the upgrading of skills of trained technical staff, through a number of workshops delivered by the organizations inside and outside Iraq. They contributed to enhancing and ensuring technical and administrative capacities of the system. There is a distinguished role for specialized departments in (a) monitoring and follow-up on the fulfillment of duties and tasks, (b) periodic reporting when visiting the work location included in the monitoring and control activities and (c) applying modern systems, policies and plans in line with achieved development through the project activities.

Partnerships:

This project has a relatively complex design in terms of the partnering of three UN agencies, three Iraqi ministries, and a number of concerned organizational units inside Iraq. Such a design requires a

high degree of cooperation, communication, coordination, and good will. The successes of the project in completing the planned activities and achieving most of the planned results are, perhaps, the best indicator of successful partnerships. A few specific points are warranted, and are presented below:

- The project was formulated in collaboration with partners and beneficiaries. The targeted ministries made contributions to the design and implementation, and felt a degree of ownership for the work done under project auspices.
- Related ministries technical staff and beneficiaries to the project were also included in the planning phase in order to ensure that the activities tackle real problems. During implementation, mutual coordination and participation was carried out through specialized committees.
- While there was no direct financial contribution to the project from the GoI, there were substantial in-kind contributions, such as participation by the ministries' staff in the project implementation, monitoring, and follow-up on the work plan through specialized departments in the line ministries.
- The project was planned and implemented by WHO, FAO and UNIDO in cooperation with the relevant Iraqi Ministries; namely MoH, MoA, and MoI. Other bodies which were also involved in, and contributed to the project, included the Ministry of Higher Education and Scientific Research, Ministry of Science and Technology, and university professors who contributed to the project by:

    - giving lectures,
    - training workers in specialized departments included in the project,
    - providing scientific resources,
    - contributing effectively to the review of rules and regulations of the technical work,
    - preparing standard specifications for material and products, and
    - contributing to the legislation of rules and regulations of work, quality control and new method applications in food safety, through the membership of technical and scientific committees in the government's ministries specialized in producing and manufacturing food items, which reflects positively on governmental departments in terms of quality assurance.

Sustainability:

The project was well designed in terms of sustainability of interventions, in the sense that there was a high degree of complementarity between the various project interventions, and in the sense that the project's interventions were all designed to fit within an organizational framework in the existing Iraqi system. That is to say—owing to the fact that the project worked directly with targeted institutions, through the provision of equipment, training, and support to policy development, the project can be said to have a relatively sound prospect for sustainability at the individual and institutional levels.

A couple of cautions related to sustainability are noteworthy. The responsible persons in the work locations included in the project are concerned with the management activities of the location and the use of equipment and supplies, i.e., making use of the equipment for the benefit of the society, as well as maintaining the existing structures periodically and in accordance with the allocated budget for these locations by the local governments. However, as indicated above, while most equipment procured under the project is in place and operational, a number of concerns were voiced around the technical capacity to make optimal use of the equipment, as well as the capacity (technical and financial) to sufficiently maintain it. There is a need for ongoing GoI commitment, and likely, for continued donor support, in order to ensure that the maximum benefit is reaped from project investments. Furthermore, since security conditions hindered the implementation of all activities to some extent, as well as the ability of individuals to develop and upgrade their skills, many activities

require some continued attention. In particular, the upgrading of skills is an area which needs continued attention in order to ensure the sustainability of the enhanced food security system.

Various units of the MoH are specialized in the surveillance, inspection and insurance of citizens' health and food safety, and the prevention of the spread of diseases by food, water, and agricultural material and products. These units have the responsibility for monitoring, implementing, sustaining and developing related policies, plans and systems established through the implemented project activities. As such, the future work to sustain, replicate and expand the work initiated under the project is spread across these units.

With regard to the MoA departments, their duties include monitoring the implementation of policies and systems through which the project objectives are achieved, in order to ensure the application of GAP, and to guarantee that agricultural products are fit for consumption or manufacturing, in addition to raising awareness on the danger of foods that are not fit for consumption and food borne diseases, and the prevention of the improper use of agricultural drugs and pesticides. Their continued efforts in this area are necessary for the sustainability of the enhanced food security system.

The MoI institutions targeted under this project are the responsible bodies for the sustainability of work initiated under the project's production activities. Investments made in the construction projects have created a proper environment for production in line with the standard specifications. In addition, the new labs provided help to re-orient the mandate of their work towards research and development, and using the new methods in quality control. These are all important elements in sustaining the food safety system, and constitute replicable cases where the GoI could look to make future investments in order expand the scope of quality production.

Other Considerations

The contributions of the project are readily apparent and have resulted in an overall improvement of food safety and food control capacities in the targeted project locations, in comparison with other locations where no activities were implemented. The technical backgrounds of the three UN partner organizations provided a clear value-add for the project. In interviews with partners and other system stakeholders, much appreciation was shown for WHO, FAO and UNIDO.

Lessons Learned and Good Practices:

- The food safety system starts in the farm and extends its activity to all sites of food production and consumption, including factories, restaurants, homes, hospitals etc. The most effective interventions of the project appear to be those which have taken this into consideration the support of various points in the supply chain.

- The project model, in both operational and programmatic terms, appears to be sound. There is always a coordination challenge when working with multiple agencies and multiple ministries; however the management model of the project appears to have been effective. This is validated by the demonstrated development in the skills and qualifications of workers, trainers, trainees, and the development of proposed health, practical and scientific topics for discussion during workshops inside and outside the country, in addition to the new methods adopted in testing and analysis, and the newly procured equipment used in food testing and verification of food safety—especially imported food and its raw material, and the clearance of locally produced crops of pesticides and pharmaceutical residues.

- Some of the good practices related to the training courses provided included: involving experts as trainers who are specialized in bio-related subjects and the use of modern test and examination equipment. Training conducted off site in Jordan and Ireland was seen to be particularly effective. All of these courses assisted in the capacity to control quality of local and imported food substances in terms of chemical and physical testing, in addition to carrying out tests for microbial and biological contamination, which is the most important component in quality control to guarantee food safety. Sound technical knowledge of trainers, as well as an appropriate training environment, are essential to the success of such activities.

- It is important to choose participants based on professional background, and in a transparent manner, taking into account their scientific and practical qualifications, in order to assign them as responsible persons for follow-up and monitoring of project activities. As such, clearly articulated selection criteria which all partners agree to, are an important consideration, as is the vetting of candidates for training against those criteria.

- One area of good practices was the development of the capacities in health surveillance and quality control, and the establishment of specialized laboratories to help establish the food safety system and its applications at each step in the supply chain from producer of raw materials to consumer.

- The establishment of the food safety system helped preventing the spread of food and water borne diseases. One particularly effective mechanism within the system, as determined by the evaluation team, was the use of portable kits to help to diagnose the workers' hygiene in the food sector.

Conclusions:

The project under evaluation contributed to the establishment of a standard structure for a group of practical and effective activities in order to set regulations in the country to ensure the control of food safety and quality throughout the phases of its production, manufacturing and exposure for local and international consumption.

1. The project was based on the establishment of a food safety system, supported by concerned bodies, through the Codex Alimentarius Commission in the MoH, with excellent support by FAO and WHO.

2. The project was successful in enhancing the capacities of national control institutions in charge of food safety, and the development of the capacities of technical staff in these institutions by organizing several workshops specialized in health, health control and inspection, as well as new methods for quality control in MoH and the Central Organization for Standardization and Quality Control, under the supervision of WHO.

3. The project was also successful in establishing work systems, developing rules and instructions, adopting new systematic principles, reviewing standard specifications of products and raw materials, and improving testing and examination methods in cooperation with health control units, central inspection departments, quality control departments, as well as the relevant departments in the MoI and MoA.

4. The project helped to improve working environments, as well as production levels. This was evidenced by the factories of the State Company for Dairy Production in cooperation with MoI and MoA. In order to meet the basic needs of raw milk, the project supported awareness, orientation and education campaigns about the significance of food safety, along with the

development of work and production through the continuity of agricultural production, in addition to enabling the promotion of milk among dairy factories and preventing the use of pesticides and antibiotics in treating animals and plants during harvest, and the isolation of treated animals and non-mixture of milk produced by sick animals with those of treated ones, in addition to the effective processing of the remaining milk quantities, in cooperation with UNIDO and FAO.

5. The increase in the efficiency and effectiveness of food testing labs has contributed to the surveillance of the quality of produced food in food industry projects in the country, quality control of drinking water, as well as the quality of imported meat, fish, poultry, eggs, powder milk and various dairy products. However, the fact that food control check points were not established on the Basra border means that results in this area were not fully achieved—full control over imports is not yet ensured by essential implementers in southern Iraq, which constitute the transit route of about 50% of all food items imported into Iraq.

6. The project did not include production projects for food manufacturing by the private sector, such as private dairy factories throughout the country. The same applies on canning projects in several suspended canning factories, due to exceptional circumstances in the private sector. As such, there remains a significant portion of the market which has not yet benefited from the interventions initiated by the project.

7. The various training courses inside and outside the country have contributed to the upgrading the capacities of technical and scientific staff working in the health sector and in the health and quality control units, as well as in the food production industry. UNIDO and WHO contributed, to this result, which was based on new methods in quality control such as HACCP, GMP and GHP applications.

8. The equipment provided to health labs and production company labs, as well as the provision of scientific resources, has encouraged and motivated the workers in these labs to undertake research and development activities in the field of food safety in their areas of specialization, and in cooperation with neighboring scientific universities and scientific research departments that belong to the Ministry of Science and Technology.

9. Participation in the meetings of Codex Alimentarius Commission by concerned persons in the MoH and the Central Organization for Standardization and Quality Control has contributed effectively to the development of standard specifications for food items and the application of specifications issued by ISO.

11. The introduction of new methods in food testing and analysis (i.e. use of portable kits) has effectively facilitated the process of obtaining faster information on lab results, and has facilitated decision-making in terms of edibility and quality of materials and products. Similarly, quality checks in the system have been greatly facilitated by the new equipment. Examples include: examining the hygiene of workers using the Hygiene Monitoring System; the use of the Portable Grain Analyzer that measures protein; humidity and fats in all types of grains; the Hydro Palm Aw that measures humidity in food; and the Alcohol Analyzer.

12. The introduction of developed testing and examination equipment in the labs of state companies, such as the HPLC and Atomic Absorption, as well as the training of their workers, has contributed meaningfully to the development of the capacities of labs in companies that belong to the MoI under the supervision of UNIDO.

Recommendations

Recommendations related to the UN organizations (WHO, FAO and UNIDO)

1. Taking into consideration the magnitude of destruction that occurred in the food safety control infrastructure and food control system during the wars, the program required more time and effort by all stakeholders and workers to implement the project-initiated activities in all sectors (i.e. in health, agriculture and industry). The fulfillments of the project's overall aims requires continued monitoring, support, capacity development, and follow up support to trainees to help them to implement the activities and evaluate their performance as well as transfer of knowledge to colleagues. This comment pertains to each of the activities related to surveillance, control, lab tests, sampling and health inspection.
2. The major role of constant monitoring is the responsibility of the WHO, through the MoH departments and the organization's focal points in the ministries at each location, as well as its trainees. It is also responsible for preparing annual reports on performance and achievements according while including qualified individuals in advanced courses on the same topics.
3. Ensuring the participation of front-line workers from the targeted locations in specialized training courses organized by the international organizations on health and food safety.
4. Ensuring that there is a regular evaluation of workshop outcomes through periodic reports on the training provided, in order to get a better sense of the degree of transfer of knowledge and how trainees are applying the skills in the field.
5. With respect to the provision of lab equipment, it is recommended that the WHO takes into account non procurement related criteria which will ensure the optimal usage of the equipment, including: technical know-how within recipient departments and labs, operational capacity, maintenance capacity, spare parts, methods of surveillance, and compatibility between the results of lab tests using new equipment and the results of lab tests using the traditional methods. With respect to this last point on differences in lab results, guidance should be provided to ensure workers are able to effectively document levels of difference between different sets of test results, and the extent to which these results impact, statistically, the accuracy of the final tests which are adopted by the concerned bodies when examining their alignment with standard specifications of a certain material.
6. Ensuring the standardization of health rules and legislation related to food. Furthermore, the WHO should support the drawing of unified policies and systems that serve the production sector and food industry with the buy-in of agencies concerned with production, manufacturing, health, and scientific research, in order to benefit from the Codex Alimentarius Commission, in which the MoH participates representing Iraq.
7. Ensuring involvement of other control units outside the MoH, such as the Central Organization for Standardization and Quality Control, scientific universities and scientific research institutions, in the development of leaflets issued by the international organizations concerned with food and new systems to ensure food safety. These additional units constitute important stakeholders whose buy in is important, and furthermore may have important and practical contributions to make.
8. Expand its activities inside Iraq to reach all governorates and key locations, in order to support food production, and further build the structure of the food safety control system at all steps in the production chain from the farm to the consumer.

Recommendations Related to the Ministry of Health (MoH):

1. Where possible, ensure the participation of workers from the actual work locations in the planning of projects and activities that aim to build the structures of the food safety control system, especially direct technicians working on the lab testing and examination equipment.

It is important also to include them in training courses and workshops organized outside the country by WHO on the use of laboratory equipment, their operation, maintenance and sustainability in providing accurate test results in comparison with traditional methods.

2. Expand the use of food quality control portable kits to ensure the effectiveness of the food safety system in coming up with quick results, focusing on the accuracy of these kits and its results.
3. It is necessary to expand the establishment of regional food quality control laboratories that conduct lab tests to diagnose food and water borne diseases in a timely manner. These labs should be replicated in all governorates, especially governorates with great food production, great population, and industrial regions.
4. Coordinate with food testing labs in other ministries such as the laboratories of the Ministry of Trade, the Central Organization for Standardization and Quality Control (COSQC) which is part of the Ministry of Planning, as well as the Ministry of Industries and the Ministry of Interior, with the aim of unifying and intensifying the efforts to assure quality, provide healthy living conditions, and fully activate food safety system.
5. It is necessary to coordinate with specialized bodies on the improper use of pesticides, and to conduct awareness-raising campaigns on the environmental dangers related to their indiscriminate use.
6. Sustainability is an important issue that the Ministry of Health has been considering in this project. The MOH, in coordination with other line ministries, should ensure that efforts to consolidate sustainability factors are maintained. This can be also supported through central monitoring and follow-up on the different project activities by relevant bodies in the line ministries, and their respective departments at the targeted locations of the project.

Recommendations Related to the Ministry of Industry (MoI):

1. The implemented activities in the locations belonging to the MoI are the most visible and comprehensive, and they should be generalized to all food industry projects throughout the country, among the public and private sectors, as well as to all food industries not yet targeted by the project, such as canning of fruit and vegetables, date production, pickles production, drinking water bottling and other food industries.
2. The allocated funds for this sector should be greater than at present. This would allow for the procurement of new machinery and equipment for the production sector, in order to develop work and production capacities, enhance working environments, and include a greater number of workers in the training courses organized outside Iraq, while ensuring the monitoring of the benefit and experience gained from these trainings.
3. There should be more efforts in organizing workshops and training courses to ensure the participation of workers in production locations in training courses, in addition to monitoring their work through periodic reports, on the condition that the trainee continue working in the location that was included in the training course for at least 3 years and that a substitute is trained and in place prior to the trainee's departure from the post.
4. Project initiatives should be replicated. For instance, it is recommended that other facilities belonging to the MoI such as the Raw Milk Collection Centers in other governorates follow the lead of those targeted by the project. Those should effectively contribute to the development of milk production in their areas as well as include the industrial sectors concerned with rehabilitation and operationalization in rehabilitation projects, upgrading the production capacities according to drawn plans that aim to resume the work of the suspended projects such as canning factories and the production of tomato pastes, molasses, starch, and liquid sugar.

Recommendations Related to the Ministry of Agriculture (MoA):

1. Expand awareness and agricultural orientation activities among agricultural societies, such as the importance of using correct methods in plant and animal agricultural production according to FAO regulations and instructions on Good Agricultural Practices (GAP), which focus on

the use of pesticides and other chemicals such as fertilizers, and their impact on public and environmental health.

2. Encourage farmers to focus on breeding and improving milk cows, developing their production in cooperation with MoI, especially in areas close to the centers for collection and cooling of milk, being an essential raw material in the local food industry. FAO rehabilitated diary collection centers, and improved dairy cows (through artificial insemination, breeding and embryo transfer) and set up dairy producer groups in the areas around these collection centers
3. Monitor and report on the reasons for delay in operating the Animal Health Lab in Basra, as procured equipment and supplies by WHO have been stored in the warehouse of the Animal Health Hospital, as well as taking necessary measures to activate the implementation of activities in this lab according to the mandate of the project.

Annexes:

Annexes A: ToR

Background

The project to re-establish food safety capacity and food processing industry capacity in Iraq was developed at the request of the Government of Iraq, particularly by the ministries of Health (MOH), Agriculture (MOA) and Industry (MOI) seeking UN support to improve food safety programmes and re-habilitate targeted food safety infrastructures and food control systems which were in a very bad state as a result of effects of war, economic sanctions, neglect and lack of maintenance. The overall objective pursued by the Government is to protect the health of consumers and improve food trade.

The project was developed as part of the recommendations of a national workshop on food safety programmes for Iraq held in July 2004 during which a consensus emerged among both the public and private sectors that a national programme for the rehabilitation and upgrading of selected food control facilities and food processing enterprises was a top priority.

As a result of a series of follow-up meetings held between the UN agencies and Iraqi counterparts, including the three line ministries (MOH, MOA and MOI) it was concluded that WHO, FAO and UNIDO should support the Government through a joint programme developed together with the line ministries. To this effect, WHO was requested to lead the joint formulation and the development of a comprehensive programme (project proposal) to be submitted to UNDG ITF for funding.

This tripartite project was developed and executed jointly by WHO, FAO and UNIDO and an inter-agency agreement was signed by the three agencies to guide the implementation process in accordance with the "Memorandum of Understanding between the Participating UN Organizations and the United Nations Development Programme ("UNDP") regarding the Operational Aspects of the UNDG Iraq Trust Fund". The inter-agency agreement stipulated that WHO is the lead agency to coordinate the overall project implementation.

The project started in September 2006 with a planned end date of November 2007, which was extended four times to March 2010. The overall development goal of the project was "*to improve food safety and increase the potential of the food trade sector in Iraq".*

The project document mentions the following immediate objectives:

1. Creating a coordination mechanism for a comprehensive national food safety system including the establishment and operation of a National Codex Committee.
2. Strengthening the capacity of the national institutions and their staff in food control and improving enforcement at all levels.
3. Improving the environment for the development of entrepreneurship in the food processing sector.
4. Assuring food safety improvement throughout food continuum

Furthermore, the logical framework in the project document mentions 12 outputs together with the respective performance indicators as shown below.

Objectives	Measurable Indicators
Development Objective:	
To improve food safety and increase the potential of the food trade sector in Iraq.	- Reduction of incidence of food borne disease resulting from consumption of improper food - Reduction of prevalence of food borne disease
Immediate Objectives:	
1) Creating a coordination mechanism for a comprehensive national level food safety system including the establishment and operation of a National Codex Committee.	− Quantitative ways of measuring or qualitative ways of judging timed achievement of purpose: − Food control authority established with adequate legislative and logistical capacities, led by an inter-ministerial committee.
2) Strengthening the capacity of the national institutions and staff active in food control and improving enforcement of laws and standards at all levels.	− Working groups, task forces and/or think tanks on various subject areas established: number of capacity building and training activities in food safety related disciplines to multi-sectoral audiences: national inspection plans developed, Portable Inspection Kits procured and in use.
3) Improving the environment for the development of entrepreneurship in the food processing sector.	− Increased access to protocols and guidelines for production sector; − Increased contribution by production sector in development of guidelines and standards
4) Assuring that food safety improves throughout food continuum.	− Increased awareness of importance of food safety at all level of the food chain.
Outputs:	
1) National food safety profile: review of all national food control means and data	− Quantitative ways of measuring or qualitative ways of judging timed production of outputs: − Food safety profile finalized.
2) Laws and legislations on food safety reviewed and adopted.	− Reviewed laws in place in two years.
3) National Codex Committee set up	− National Codex Committee in place.
4) Food monitoring, animal and food borne disease surveillance system enhanced and coordinated.	− Incidence and prevalence of food borne diseases decreased.
5) Contributions to the work of Codex Alimentarius increased	− Attendance in Codex meetings by Iraq representatives assured.
6) Regional food control laboratories rehabilitated and Emergency preparedness of	− Three operational food control laboratories established with food control Protocols.

food control system increased	
7) Food inspection and food control systems of imported food improved	– Operational food inspection system established. All sampled shipments inspected.
8) Food consumed, distributed, marketed or produced are of the highest affordable standards of food safety and hygiene and Food handlers committed to ensure hygiene conditions are maintained in the food processing facilities.	– Inspections of food establishments done at regular intervals. – Better cleanliness and hygiene in model food processing facilities promoted.
9) HACCP Principals are in place and enforced in selected food industries facilities (diary, milling and fruits/vegetables sectors). These enterprises serve as models for the other enterprises of the sector.	– Three food processing model enterprises have HACCP principles incorporated and quality assurance system in place.
10) Selected Food enterprises to be supported in their rehabilitation endeavors.	– Guidelines for GMP and HACCP for the selected sectors developed and implemented in up to 40 industries in private and public sector.
11) Safe agriculture practiced with less chemicals	– Levels of hazardous chemicals in food products reduced to acceptable levels.
12) Consumers educated on the risks of unsafe food and its short and long term impact on health	– Gender sensitive training programmes developed.
13) Staff involved in food safety programme capacity built taking into consideration specific needs, in particular with regard to gender	– At least 50% of participants are female.

The project document sets out the contributions of the three Organizations as follows:

World Health Organization

WHO will focus on the public health food safety related components, including support to the process of review and update of food safety laws and regulations, strengthening food borne disease surveillance system, improving analytical food quality control capacity through physical operational rehabilitation of three regional food control laboratories, public awareness campaigns on the importance of food safety and capacity building.

Food Agricultural Organization

FAO will concentrate on agricultural sector (pertaining to training in food borne diseases in relation to veterinary aspects, awareness campaigns for safe agriculture practices, post harvest handling, linkages with Codex Alimentation) and physical as well as operational rehabilitation of veterinary food control facilities at 5 existing entry points). FAO will also support in collaboration with WHO the MOA as well as the Ministry of Health to update laws and regulations.

United Nations Industrial Development Organization

UNIDO will focus on the food industry sector, pertaining to training in food industry (60 TOTs and over 200 technicians and operators), rehabilitation of model factories and support to small and micro-industries and their efforts for rehabilitation. An assessment will be carried out by UNIDO in collaboration with the regional and local public and private institutes and professional associations such as chambers of commerce.

Based on the assessment, three model factories (cereals, dairy and fruit & vegetables) from the small and medium scale food processing industries to serve as model/centre of excellence and training facilities will be rehabilitated. The selection of these models will be done in full collaboration with all stakeholders including the chambers of commerce.

Training manual, guidelines for the GMP, hygiene, HACCP and TQM (total quality management) for the model factories will be prepared for use in the rehabilitated model food industries. The work will involve design and local manufacturing or procuring and installation of equipment for selected model food industries.

In the project document the following "key activities" were foreseen[1] :

1. Review of national control means and data and develop a National Food Safety Profile
2. Updating food safety laws and regulations, introducing international food standards and quality assurance approaches (WHO in coordination with FAO).
3. Training in Codex for 30 people (10 from MOA, 10 from MOH and 10 from MOI).
4. Establishing food-borne disease surveillance system (WHO in coordination with FAO).
5. Develop and implement plan for monitoring of food borne diseases and zoonotic diseases as well as food monitoring (FAO in coordination with WHO).
6. Facilitate the participation of Iraq to the Codex Alimentarius and others food safety forums.
7. Rehabilitation and upgrading the capacity of three regional food control laboratories, including emergency preparedness of food control system (WHO).
8. Provide laboratory equipment, office furniture, computer and communication equipment to the rehabilitated facilities (FAO, UNIDO and WHO).
9. Provide technical and logistics means needed for Food Inspection and Food control at the entry points (FAO in coordination with WHO).
10. Conduct health education trainings and campaigns to improve hygiene practices at all levels of food chain from farm to fork. (WHO in collaboration with FAO and other institutions with experience in trainings: Ministry of Higher Education, Ministry of Sciences and Technology).
11. Assess the status of public food safety related industries in order to select those requiring rehabilitation using HACCP principles (UNIDO).
12. Promote Good Hygiene Practices, Good Manufacturing Practices and Hazard Analysis Critical Control Point (HACCP) principles (UNIDO in coordination with FAO) in Food Industry, using models in the sector or dairy, fruits/vegetables and milling.

[1] The respectively responsible agencies are mentioned in brackets (except for activities 1, 3 and 6, for which no responsibilities are mentioned. However, each one of the three UN agencies (WHO, FAO and MOI) contributed to the implementation of these activities.

13. Assess the status and the use of chemicals and pesticides in agriculture and recommend measures to reduce chemical contamination in food chain (FAO).
14. Conduct capacity building and campaign for safe agriculture (FAO).
15. Conduct campaigns and educate consumers on the risks of unsafe food on health (WHO).
16. Conduct capacity building activities for different categories of actors, including staff, which will contribute to improvement of food safety through food continuum and raise awareness on short and long term of unsafe food on health (WHO). This will also contribute to the overall reduction of child and maternal mortality due to food safety related diseases.

It is important to note that some of the initial outputs were adjusted during the implementation period following decisions taken by the Project Steering Committee.

II. PROJECT BUDGET

The overall budget (including support cost) is distributed among the three Agencies as follows:

WHO: 3,015,117 million USD

FAO: 1,718,393 million USD

UNIDO: 1,772,602 million USD

III. EVALUATION PURPOSE AND OBJECTIVES

This independent evaluation is part of the UNDG-ITF project evaluation where specific criteria were applied to select some projects for evaluation purposes. The evaluation comes few months before the end of the implementation cycle of the project and aims to assess the overall contribution of the project towards food safety and control as well as food industrial capacity while distilling lessons and good practices to feed into future programming. The evaluation is expected to provide recommendations to enhance operational and programmatic effectiveness of similar initiatives in comparable situations. In addition, the evaluation will assess the implementation performance of WHO, FAO and UNIDO and whether and how these Agencies have contributed towards an enhanced partnership with GoI in addressing critical issues affecting food safety in Iraq

The evaluation findings will be disseminated to all stakeholders and at different levels including decision makers both within the Government of Iraq and the UN to support future policy development especially in the areas of food safety and capacity.

The project evaluation will also provide donors with a comprehensive assessment of the results and utilization of their investment in these programmatic areas. In addition, the evaluation will support agencies own capacity for programming, project management and accountability towards donors, GOI and the target population. The lessons from the evaluation and the evaluative evidence will also feed into the upcoming UNDG ITF lessons learned process as well as the proposed UNDG ITF project evaluations. Last but not least, the evaluation will also contribute to the next agencies country programming cycle or Iraq that guides the partnership and joint programming between the agencies and GoI

Evaluation Objectives:

The evaluation will address the OECD-DAC evaluation criteria including relevance, effectiveness, efficiency, and sustainability. The evaluation will also look at the contribution of the project towards partnership building within UN, GoI and civil society. Specifically, the evaluation will be guided by the following key objectives:

9. To assess the achieved progress and results against stipulated project objectives and outputs for improved food safety programs in Iraq;
10. To assess the efficiency of the project in terms of quantity, quality, cost and timeliness of UNIDO , WHO , FAO and counterpart inputs and activities;
11. To assess the effectiveness of the interventions included in the project in terms of the outputs produced and outcomes achieved as compared to those planned
12. To assess project relevance with regard to the priorities and policies of the Government of Iraq, the authorities of the regions involved and the participating UN Organizations;
13. To assess the relevance of project components in strengthening the food safety and industrial capacity in Iraq vis-à-vis needs of the target population the catchments area
14. To understand the extent to which this project has contributed to forging partnership with at different levels including the Government of Iraq, Civil Society and UN/donors;
15. To appreciate the management arrangements in place by the GoI and/ or the beneficiary communities towards the sustainability of various project-initiated services and benefits;
16. To generate lessons on good practices based on the assessment of the aforementioned evaluation objectives and to provide recommendations to GoI and UN on how to maximize the results from similar initiatives in comparable situations

IV. METHODOLOGY AND SCOPE OF THE EVALUATION:

The evaluation will cover the respective contributions of the three agencies, while also looking at cross-linkages and synergies of the different interventions implemented by the participating agencies.

The evaluation will be carried out in keeping with agreed evaluation standards and requirements. More specifically it will fully respect the principles laid down in the "UN Norms and Standards for Evaluation" and the respective Evaluation Policies of the three participating agencies. The evaluation shall determine as systematically and objectively as possible the relevance, efficiency, achievements (outputs, prospects for achieving expected outcomes) and sustainability of the project. To this end, the evaluation will assess the achievements of the project against its key objectives and outputs, as set out in the project document and the inception report, including a review of the relevance of the objectives and of the design. It will also identify external factors that may have facilitated or impeded the achievement of the objectives. The evaluation will take into account changes of the planning basis as documented in the decisions of the Steering Committee and establish a clearly documented reference basis against which the project will be evaluated.

A detailed evaluation methodology, approach and programme of work will be agreed upon between the three participating agencies and the independent evaluation team before the start of the evaluation. The management arrangements for the evaluation process between the three agencies are described below. The methodology of the evaluation may include but not be limited to the following:

Desk review

The evaluation team will review the project documents, inter-agency agreement, progress reports, minutes and decisions of the Steering Committee, external reviews and evaluations previously conducted with focus on UNDG ITF and other documentary materials generated during project implementation to extract information, identify key trends and issues, develop key questions and criteria for analysis, and compile relevant data during the preparatory phase of the evaluation. The team will also review relevant national strategies to see the links between the project objectives and national priorities.

Data collection and analysis
In consultation with the participating agencies, the evaluation team will identify all stakeholders to be included in the evaluation exercise. Once stakeholders are identified, the evaluation team will devise participatory approaches for collecting first hand information. These approaches will include interviews, focus group discussions, observations, end-user feedback survey through questionnaires, etc.

Field visits to project sites and to other selected similar programmes/projects in targeted governorates:

The evaluation team will conduct field visits to selected project sites and hold meetings with targeted partner institutions including the selected food manufactures and food control facilities. To the extent possible, the evaluation team will conduct interviews with staff from food processing industries and food control laboratories, officials from the line ministries and beneficiary populations to get their feedback and reflection on project benefits.

More specifically the evaluation team will conduct the following field visits:

- Visits of the counterpart ministries at central level staff, where focus group discussion will be held;
- Field visits to the targeted food control lab and supported food production facilities where questionnaire, focus group discussion, interviews and site observations will be used to gather the needed information;
- Surveys with questionnaires will be used for providers and beneficiaries of the different capacity building activities (i.e. trainers and trainees);
- Field visits to the rehabilitated/supported sites listed below:
    - State owned dairy in Mosul
    - Milk collection centre in Babel
    - Food laboratories of the following state owned companies
        - State company for dairy products in Baghdad;
        - State company for dairy products in Mosul;
        - State company for sugar in Missan;
        - State company for vegetable oils in Baghdad;
    - Nutrition Research Institute (NRI)
    - MOH Health Audit Department
    - Regional Food Control labs in Basra, Mosul and Erbil
    - Central Public Health Laboratory (CPHL)
    - Veterinary border check points of Safwan (Basrah governorate) and Zurbatia (Wassit governorate)
    - Food safety laboratories of the Ministry of Agriculture (Sheikjh Omar District, Baghdad) also known as Central veterinary laboratories

V. KEY EVALUATION QUESTIONS:

While maintaining independence, the evaluation will be carried out based on a participatory approach, which seeks the views and assessments of all parties. It will address the following issues:

Project identification, relevance and formulation:

- The extent to which a participatory project identification process was applied in selecting problem areas and counterparts requiring technical cooperation support;
- Relevance of the project to development priorities and needs;
- Has the project been responsive to the overall issues of food safety in Iraq and how?
- Clarity and realism of the project's development and immediate objectives, including specification of targets and identification of beneficiaries and prospects for sustainability.
- Clarity and logical consistency of the intervention logic and logical framework (see above under paragraph 1);
- Realism of the time frame and clarity in the specification of prior obligations and prerequisites (assumptions and risks);
- Realism and clarity of external institutional relationships, and in the managerial and institutional framework for implementation and the work plan;
- Likely cost-effectiveness of the project design.

Project ownership:

- The extent to which the project was formulated with the participation of the national counterpart and/or target beneficiaries;
- The extent to which counterparts have been appropriately involved and have been participating in the identification of their critical problem areas, in the development of technical cooperation strategies and in the implementation of the project approach
- The extent to which counterpart contributions and other inputs have been received from the Government (including Governorates) as compared to the project document work plan, and the extent to which the project's follow-up is integrated into Government budgets and workplans.

Project coordination and management:

- The extent to which the national management and overall field coordination mechanisms of the project have been efficient and effective;
- The extent to which the management, coordination, quality control and input delivery mechanisms have been efficient and effective;
- The extent to which monitoring and self-evaluation have been carried out effectively, based on indicators for outputs, outcomes and objectives and using that information for project steering and adaptive management;
- The extent to which changes in planning documents during implementation have been approved and documented;
- The extent to which coordination envisaged with any other development cooperation programmes in the country has been realized and benefits achieved.
- The extent to which synergy benefits can be found in relation to other UN activities in the country.

Achievements and results:

- How the project components have contributed to the realization of underlying project objectives, as perceived by the beneficiaries?

- Has the project been able to achieve the stipulated project results?
- How the project contributed to strengthening food safety programs at a national level and the high priority governorates?
- What has been the contribution of this project towards national priorities identified in NDS, ICI and MDGs?

Efficiency and effectiveness:

- Efficiency and adequacy of project implementation including: availability of funds as compared with the provisional budget (donor and national contribution); the quality and timeliness of inputs delivered by WHO, FAO and UNIDO (expertise, training, equipment, methodologies, etc.) and the Government as compared to the work plan(s); managerial and work efficiency; implementation difficulties; adequacy of monitoring and reporting; the extent of national support and commitment and the quality and quantity of administrative and technical support by Regional and HQs offices of the three agencies
- Full and systematic assessment of outputs produced to date (quantity and quality as compared with work plan and progress towards achieving the immediate objectives);
- The quality of the outputs produced and how the target beneficiaries use these outputs, with particular attention to gender aspects; the outcomes, which have occurred or which are likely to happen through utilization of outputs. In particular, this includes an analysis of the likely effects of micro-enterprise industry activities as a means of creating employment and raising household incomes.
- Assessment of whether the project approach represented the best use of given resources for achieving the planned objectives.

Partnerships:

- Who are the partners in this project? How they are selected? Has the project forged new partnerships/ strengthened existing partnerships and how?
- What factors hindered or fostered effective partnership development?
- To what extent has the project contributed to capacity development of the involved partners?

Sustainability:

- Prospects to achieve the expected outcomes and impact and prospects for sustaining the project's results by the beneficiaries and the host institutions after the termination of the project, and identification of developmental changes (economic, environmental, social) that are likely to occur as a result of the intervention, and how far they are sustainable.
- What is current status of the project components? Are functions and facilities still maintained? Who is responsible for the management and oversight of project facilities after the project closure?
- What is current status of services provision in the country?
- Has the service provision been affected (negatively or positively) towards the end of the project cycle and why?
- Has the project resulted in knowledge transfer from those who were trained and capacitated in different competencies and how?
- How the project did address the issues of insecurity during the implementation phase? Were there any risk mitigation undertaken? If yes, how?

Lessons learned and good practices:

Based on the above analysis the evaluators will draw specific conclusions and make proposals for any necessary further action by Government, the UN or other donors to ensure sustainable development, including any need for additional assistance and activities of the project prior to its completion. The mission will draw attention to any lessons of general interest. Any proposal for further assistance should include precise specification of objectives and the major suggested outputs and inputs.

- What are the good practices that have resulted from this project? How and why some these practices can be labeled as a 'good practice'? Substantiate with evidence.
- What are the key lessons learned from the project implementation? What recommendations could be replicated in similar projects implemented in comparable situations?
- Are there any specific recommendations to be considered when designing similar projects in the future?

Other considerations:

- Value-added of the programmes and projects in comparison with alternatives
- UN's partnership strategy and its relation to effectiveness in achieving the outcome
- UN's strategic positioning and its comparative advantage
- Cross-cutting issues applicable to the project/ programme
- Operational effectiveness of the programme/ project and the extent to which underlying strategies, processes and management structures contribute to development effectiveness of each UNDG ITF programme/ project
- Each evaluation question should be substantiated with evidence and disaggregated information by gender, ethnicity, location and/ or other relevant criteria

Please also refer to Annex 1 and Annex 2 of the Terms of References and Guidance from Resident Coordinator Office (RCO), UNAMI which provide recommended questions on development and operational effectiveness respectively. The suggested questions will generate the necessary evaluative evidence and information at programme/ project level to feed into the UNDG ITF Lessons Learned Exercise.

VI. MANAGEMENT ARRANGEMENTS

The lead agency of this independent evaluation will be WHO, in line with the management arrangements that were adopted for the implementation of the project. The evaluation will be undertaken in close consultation with the relevant counterparts in the GoI and efforts will be made to allow the GoI partner/s to participate in the evaluation process in line with UNEG Norms and Standards. To this end, an evaluation task force will be set up. While the evaluation task force will provide conceptual and methodological guidance and coordination to the evaluation, WHO will be responsible for actually contracting the team of independent evaluators. UNIDO and FAO will transfer, from their respective project funds, the necessary evaluation funds to WHO .

The Evaluation Task Force:

Under the leadership of WHO, the three implementing agencies and the GOI will set up an evaluation task force to provide oversight and overall guidance to the evaluation process. The GOI team will include representatives from the MOH, MOA and MOI as well as a coordinator nominated by the GoI to coordinate this evaluation process within Iraq at central, governorate and district levels. The evaluation task force will oversee that the evaluation process is in line with the TORs, UNEG Norms and Standards and implemented in a participatory, neutral and impartial manner.

Role of the UN participating agencies:

- Develop and agree on the TOR for the evaluation
- Select and contract the evaluation team
- Provide project background information and any other relevant data required by the evaluation team
- Ensure that all stakeholders are informed about the evaluation process

- Facilitate the field work for the evaluation team and contact with the MoH/DoH, MOA and MOI and other relevant partners and stakeholders
- Approve the evaluation final report and disseminate evaluation findings
- Provide management response to evaluation findings and recommendations
- The evaluation units from the three agencies will be responsible for the quality control of the evaluation process and report. They will provide inputs regarding findings, lessons learned and recommendations from other evaluations, ensuring that the evaluation report is in compliance with established evaluation norms and standards and useful for organizational learning of all parties.
- The WHO, UNIDO, FAO offices in Amman and Iraq will logistically and administratively support the evaluation team to the extent possible. However, it should be understood that the evaluation team is responsible for its own arrangements for transport, lodging, security etc.

Role of National Counterparts

In line with Paris Declaration, the national counterparts will be encouraged to participate in the evaluation process right from planning to sourcing information to the dissemination of evaluation findings and contribution to management response. This would enhance national ownership of the process and promote the spirit of mutual accountability.

Role of Evaluation Team/ Evaluator/s

The Evaluation Team is responsible for:

- Undertaking the evaluation in consultation with WHO, FAO and UNIDO and in full accordance with the terms of reference;
- Complying with UNEG Norms and Standards as well as UNEG Ethical Guidelines;
- Bringing any critical issues to the attention of the Evaluation Manager (appointed by the lead agency) that could possible jeopardize the independence of the evaluation process or impede the evaluation process;
- Adhering to the work plan, to be mutually agreed with the UN participating agencies , as commissioner for this evaluation; and
- Ensuring that the deliverables are delivered on time, following highest professional standards.

The evaluation team will report to the interagency evaluation taskforce while providing regular progress updates on the overall process to the agencies' Evaluation Groups/Services.

VII. REQUIREMENTS AND QUALIFICATIONS OF THE INDEPENDENT EVALUATORS

The evaluation will require the following functions, competencies and skills:

1. Evaluation team leader with documented experience in:
    a. Designing and managing complex evaluations;
    b. Leading multi-disciplinary and multi-cultural teams of evaluators;
    c. Development projects in Arab speaking countries;
    d. Drafting evaluation reports in line with agreed UN and DAC standards;
    e. Excellent command of English (excellent drafting skills to be demonstrated).
2. Evaluation experts with documented experience in:
    a. Development projects related to food safety, food control and food industries;
    b. Designing and supervising qualitative and quantitative field surveys;
3. National evaluators with documented experience in evaluations

Overall, the evaluation team must have the necessary technical competence and experience to assess the quality of the technical assistance provided under this project in the area of rehabilitation of food industries; upgrading and equipment of food control laboratories and training of relevant staff on Codex Alimentarius work and procedures, food borne diseases surveillance, Good Hygiene Practices, Good Agriculture Practices, and Hazard Analysis Critical Control Point (HACCP).

The execution of the evaluation will require full command and control of the specific situation in Iraq and full respect of the UN security rules for Iraq. The ability to carry out field operations in Iraq is a key requirement and must be demonstrated.

The evaluation team leader will be responsible for elaboration of an evaluation strategy, including the design of field surveys and elaboration of questionnaires; guiding the national evaluators for their field work in Iraq; analysis of survey results; gathering of complementary information from project staff, collaborators and stakeholders through telephone interviews and other means; and preparing a presentation of conclusions and recommendations as well as a final evaluation report.

The Evaluation Team Leader will prepare an inception report outlining the evaluation framework; the exact evaluation methodology including surveys, draft questionnaires, etc; key challenges if any and implementation arrangements including a detailed work plan.

The evaluator(s) will be responsible for carrying out the field surveys (under the guidance of the team

leader). The field surveys will provide the foundation for the evaluation and must therefore be

executed in line with the highest standards of professionalism and impartiality.

The evaluation team is responsible for its own arrangements for transport, lodging, security etc. The WHO, FAO and UNIDO field offices will merely assist and facilitate to the extent possible in making in-country arrangements.

VIII. REPORTING

The evaluation report shall follow the structure given in Annex 1. Reporting language will be English. The executive summary, recommendations and lessons learned shall be an important part of the presentations to be prepared for debriefing sessions in Amman, Geneva, Rome and/or Vienna.

Draft reports submitted to the agencies Evaluation unit are shared with the corresponding Programme or Project Officers of the three UN agencies for initial review and consultation. They may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. The consultation also seeks agreement on the findings and recommendations. The evaluators will take the comments into consideration in preparing the final version of the report.

The evaluation will be subject to quality assessments by Evaluation units in the respective agencies that will apply evaluation quality assessment criteria and provide structured feedback. The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality.

IX. INDICATIVE WORK PLAN

Phase	Key Activities	Time Frame*	Responsibility
Preparatory phase	Set up the evaluation task force	February 2010	WHO
	Agreement on TORs; selection of independent evaluation team; evaluation methodology and work plan	February 2010	Evaluation task force
	Contracting the independent evaluation team	February 2010	WHO
	Initial stakeholder meeting to launch the evaluation process	February 2010	Evaluation task force
	Submission of evaluation inception report	February 2010	Evaluation Team
Field work/Data Collection	Review of documents, reports, supporting materials	ongoing	Evaluation Team
	Meetings with relevant counterparts Baghdad on the field work	March 2010	
	Finalize questionnaires for primary data collections	March 2010	
	Visit project facilities	March 2010	
	Meeting with secondary beneficiaries (community leaders, sheikhs and project beneficiaries)	March 2010	
Data Analysis	Undertake data analysis of the qualitative and quantitative data acquired from the field work and data collection processes	March 2010	Evaluation Team
Reporting preparation	Preparation of the draft evaluation report	March 2010	Evaluation Team
	Presentation on draft findings/ report to WHO, UNIDO and FAO and to the Evaluation	April 2010	Evaluation Team

	Task Force for feedback		Evaluation Task Force
	Finalization of the Report based on feedback from peers, WHO, UNIDO and FAO and the Task Force	April 2010	Evaluation Team
	Submission of Evaluation report to GoI and UNDG-ITF	April 2010	WHO, FAO and UNIDO
Dissemination	Reproduction of the evaluation report and distribution to identified stakeholders/institutions	To be advised	WHO, UNIDO and FAO

* Tentative and to be finalized in discussion with Evaluation Team/ Evaluator(s)

Annex B: Source of Information

Project Documents:

- UNDG-ITF D2-17 project document
- Inter-agency agreement among the World Health Organization (WHO), the United Nations Industrial Development Organization (UNIDO) and the Food and Agriculture Organization of the United Nations (FAO) for the implementation of UNDG ITF D2-17 Project.
- INTERAGENCY AGREEMENT FINAL.
- Cover Letter Re-submission of Food Safety Project04 April06.
- D2-17 – Summary
- Food Safety Project Work Plan29April06
- Food Safety project Submission orm4April06
- FW./email/ D2-17 Rebuilding Food Safety and Food Processing Industry Capacity in Iraq
- INTERAGENCY AGREEMENT TEXT WHO-UNIDO-FAO final draft / 4April06
- Submission of a New Project proposal to SCSO
- UNDG-ITF Budget Food Safety Project / 29, April, 06
- UNDG-ITF Food Safety Proposal / 29, April, 06
- UNDG-ITF-Submission Form-Food Safety / 29, April, 06
- Food Safety Six month progress Report29 Aug07
- Food Safety Six month progress Report / July-Dec 07 / Final
- Progress Report Food Safety / March 07
- UNDG ITF Food Safety Six month progress Report / Jan-June2008
- Fiche-Food Safety D2-17 Project 30 June09
- Fiche-Food Safety D2-17 Project / Dec09
- Fiche-Food Safety D2-17 Project / Sept09

Project Progress Reports

- UNDG-ITF Progress Reports
- Project Quarterly Fiches
- Field reports from line ministries,
- Notes for the record of the Project Steering Committee meetings
- Requests for project extension and approvals

External Review Reports

- Interim report of the external auditor to the sixtieth WHO Health Assembly: Audit of the WHO for financial report 2006-2007.
- 'Stocktaking Review of the International Reconstruction Fund Facility for Iraq' (IRRFI) - January 2009.
- Any relevant documentations from WHO, FAO and UNIDO

Strategic Programme Documents

- UN Assistance Strategy 2008-10

Normative Guidance

- UNEG Norms for Evaluation
- UNEG Standards for Evaluation
- UNEG Ethical Guidelines
- UNDG RBM Harmonized Terminology

Pre evaluation meeting:

Related Ministries	WHO	FAO	UNDG ITF SCSO	SOC
Ministry of Health • Dr. Alaa Shalan – Director of Nutrition Research Institute, • Dr. Hussain Mahdi Al-Baer - Director of Health Audit Department, • Dr. Abdul Elah Mahmoud – Director of CPHL, MOH **Ministry of Industry** • Dr. Hamodi Abbas – Director General of Food and Pharmaceutical industries sector • Mr. Yousif Tahir – DG, General Company for Dairy Products **Ministry of Agriculture** • Dr. Hamoudi Shaker –Animal Production Department • Dr. Basim Al Adhadh – DG of Animal Health Department.	• Dr. Naeema Al-Gasseer-WR • Dr. Ezechiel Bisalinkumi • Dr. Faris Bunni • Dr. Eltayeb Mansour • Dr. Omer Mekki • Eng. Mohammed Hamasha	Dr. Mohammed Hilal Hikmat	Mr. Usman Akram UNAMI/RCO	SOC Evaluation team

In addition to the above; one to one meetings were conducted with the following UN staff to assess the project implementation process:

- Dr. Ezechiel Bisalinkumi, Project Coordinator, WHO Iraq Office
- Dr. Yousif Noori Tahir / UNIDO Representative – Iraq
- Dr. Mohammed Al Waeli / UNIDO Representative – Iraq

In-depth Interviews

Governorates	Location / Job description	Names
Basrah	Quarantine Boarded Lab / Deputy Director	Dr. Kareem Lfta Omran
Basrah	Quarantine Boarded Lab / Doctor of Veterinary	Dr. Haider Niama
Basrah	Veterinary hospital / Deputy Director of Hospital	Dr. Duraid Baqer
Basrah	Veterinary hospital / Drug store	Dr. Abdull Ameer Abood Nasir
Basrah	Veterinary hospital / Medical unit quarries.	Dr. Mahdi Saleh
Basrah	Food Laboratory / director of health	Dr. Nihad
Basrah	Food Laboratory / Director of Food Laboratory	Dr. Majida Abdul hameed
Basrah	Food Laboratory / Staff	
Erbil	Food Laboratory / Deputy Director of Lab	Mr. Fares Aez AlDeen Mohammed
Erbil	Food Laboratory / Nutrition Department / Chemical	Ms. Sondos Kanaan Baker
Erbil	Food Laboratory / Nutrition Department / Biological	Mr. Nikar Mousa
Erbil	Food Laboratory / Nutrition Department / Biological	Mr. Mihtab Noori
Erbil	Food Laboratory / Nutrition Department / Biological	Haja Mukhles
Erbil	Food Laboratory / Nutrition Department / Chemical	Eng. Reboar Abdulkhaleq
Erbil	Food Laboratory /Zanst health centre / Lab Assistance	Ms. Beervan July Seeto
Erbil	Food Laboratory / Lab Assistant	Mr. Jabar Mohammed Haji
Erbil	Food Laboratory / Pathology	Ms. Intisar Salem Hussein
Mosel	Food Laboratory	Dr. Khaled Alaqzaz
Mosel	Food Laboratory / Director of Dairy Factory	Mr. Jalal Aldeen
Mosel	Food Laboratory / Production manager in Alban Factory	Mr. Hikmet Ali Sadeq
Baghdad	Ministry of Health / Director of Nutrition Institute	Dr. Alaa Shalan Hussein
Baghdad	Ministry of Agriculture / Director of Animal Health	Dr. Basem Najem AlAdhadh
Baghdad	Ministry of Industry / Director of Dairy Factory	Mr. Yousif Taher
Baghdad	Ministry of Health / Nutrition Institute	Ms. Ilham Fathi
Baghdad	Ministry of Health / Nutrition Institute	Dr. Mostafa
Babel	Dairy factory / Director	Mr. Abbas Hassan
Babel	Dairy factory / manager	Mr. Nazar

Names and Locations of Work of Interviewees by SOC Evaluation Team

1- Dohok governorate	**Intisar Salem Hussein**	**General Central Lab**	**Biology**
	Jabbar Mohamed Hajji	General Central Lab	Assistant Lab Supervisor
2- Erbil governorate	Fares Izzeddin Mohamed	General Central Lab	Assistant Lab Manager
	Sundus Kanaan Bakr	General Central Lab	Food Manager
	Ribwar Abdul Khaleq	General Central Lab	Agricultural Engineer
3- Mosul	Dr. Khaled Al-Qazzaz	General Central Lab	Lab Manager
	Mohamed Qassem Omar	General Central Lab	Assistant Lab Supervisor
	Mustafa Mohamed Ali	General Central Lab	Assistant Lab Supervisor

4- Basra	Dr. Nihad	Public Health Lab	Lab Manager
	Majida Abdul Hameed	Bacteriology	Lab Manager
	Dr. Dureid Abdul Baqer	Veterinary Hospital	Assistant Hospital Manager
5- Babel	Abdul Zahra Hussein	Milk Collection Factory	Centre Director

Annex C: Field Guidelines & Questionnaires:

General Information

Project Title:

Project Number:

Approved budget:

Original project duration:

Started time:

Completion time:

Additional extensions time (if any):

Names of the Governorate covered by the project:

Number of beneficiaries:

Information on the Person interviewed.

Name:

Position:

Department:

Gender:

Duration at this department and position:

Interview date:

SOC evaluator name:

1. **Introduction:-**

1.1 Please provide any data or statistics available to illustrate the dimensions of the problems that have been addressed by the project activities and to address them or to limit its effects (indicating the information source and date).

1.2 Have there been any previous studies or surveys that related to the problem which was addressed by the project? What were the most important results that were reached by these studies or surveys?

1.3 Please explain the difficulties and challenges that faced the project during the stages of implementation, explained the difficulties with regard to the following issues:

a. The securities.
b. Coordination among stakeholders.
c. Cooperation of the population.
d. Other difficulties.

2. Results and achievements:

2.1 Explain how the project components contributed to the achievement of the project goals and objectives.

2.2 Did the project contributed to the strengthening of programs / facilities aimed at the level of development of the country and the Governorate?

2.3 Has the project meet the national priorities to set forth in the following references, how did the project activities contributed to the national priorities:

a. National development strategy (NDS).
b. The International Compact with Iraq (ICI).
c. Millennium Development Goals (MDG).

2.4 Please provide data supported by statistics, evident and facts on the project activities results and actual achievements in accordance with Annex Table:

2.5 Please provide statistical data on training sessions or missions that have been organized under this project to build the beneficiaries capacity (in administrative and technical issues). It is a must to describe subjects covered by the training, participants' number, and info on participants' position, gender, and geographical coverage.

Expected achievements	*The Actual Results*

3. Effectiveness and Efficiency:

3.1 Was the project cost effective and has good value for money, taking into account the reality of the situation in Iraq?

3.2 Explain how the project results contributed to improving access to services and increased the benefit?

3.3 Did the project results met the basic requirements and needs of the issues targeted by the project? Please Explain.

3.4 Was the project activities designed to meet the Iraqi contexts and current conditions? Explain.

3.5 Was the project strategy in line with national policies and strategic plans? Please explain how.

3.6 What are the mechanisms that were followed by the project to manage and supervise the project activities and performance?

4. Partnership:

4.1 Who are the key partners in the project?

4.2 Explain in detail the role of each of these partners in the preparation stages and implementation of the project:

Stakeholder	Role during planning and preparation stage	Role during implementation

4.3 Did the project led to the formation of new partnerships or to strengthen existing partnerships? Please explain how.

4.4 What are the factors that led to strengthen or weaken these partnerships?

4.5 To what extent the project results contributed to the capacity building and development of partners?

5. Sustainability:

5.1 What is the present status of the project? Have project results and facilities been maintained?

5.2 Who took responsibility for project results (management, supervision, maintenance) after the project ending?

5.3 What is the current status of the services and project results (developed during project implementation)? Do these results and services improved or deteriorated after the project handover? Explain how and why.

5.4 Did the training activities implemented under this project achieve its goal in transferring knowledge to beneficiaries? and from them to other stakeholders and beneficiaries. Explain how.

5.5 What are the measures implemented by the concerned authorities to ensure sustainability and maintain the operational of the project results as well as maintenance of the project results and facilities.

5.6 What was the project measurement to reduce the negative effects of the unstable security situation during the implementation phases? What are the practical measures that have been taken to reduce the risks? Please explain.

6. Lessons learned:

6.1 What are the good practices that resulted from this project? How and why can some of these practices be described as good? Explain by the examples.

6.2 What are the main lessons learned from this project?

6.3 Are there specific recommendations and practices that would assist in the implementation of similar projects in similar circumstances like the current situation in Iraq?

7. <u>Other issues related to development:</u>

7.1 What is the value added of the project compared with other options to solve the problem?

7.2 How did this project contributed in strengthening the role of the UN organizations in the areas of development?

7.3 How did the project supported issues related to human rights, equality between the gender, environment, create jobs and promote public participation?

7.4 To what extent did the project strategies participated in enhancing the credibility of the UN team to Iraq's Development?

Annex D: Pictures from the benefited sites

Food Control Labs

Food Lab Center in Erbil:

Food Lab Center in Basra:

Food Lab Center in Mosel:

Babel Factory

Basra Factory

	

Erbil Factory

	
	

Mosel Factory

	

ANNEX E: SOC Background

SOC background:

Stars Orbit Consultants is an external Monitoring and Evaluation organization; its strength lies in the long experience of the corporate management team and its employees. SOC's mission is to achieve professional Monitoring and Evaluation aiming to evaluate the past, monitor the present and plan for the future.

Between 2004 and 2009, SOC successfully performed Monitoring and Evaluation activities on more than 200 programmes and grants on behalf of donors and international organizations in various parts of Iraq including (Baghdad, Basrah, Missan, Thi Qar, Mothanna, Qadissiya, Najaf, Babil, Karbala, Anbar, Mosel, Salah El Din, Diyala, Kurkuk, Erbil, Sulaymanyia and Dohuk), the Monitoring and Evaluation activities have been carried out by more than 30 qualified, well trained and professional employees stationed in all the 18 governorates.

Since most of the projects implemented in Iraq are now remotely managed from outside Iraq, the need for professional, effective, objective and honest monitoring and evaluation mechanism starts to grow to ensure that the program meets its original objectives, donor perspective and expected outputs.

For more details on SOC and its activities, please visit www.starsorbit.org