



**REHABILITATION OF THE DATE PALM SECTOR IN IRAQ  
FINAL PROGRAMME NARRATIVE REPORT**

**Programme Title & Project Number**

- Programme Title: Rehabilitation of the date palm sector in Iraq
- Programme Number (if applicable): **A5-19 (OSRO/IRQ/501/UDG)**

**Country, Locality(s), Thematic Area(s)<sup>1</sup>**

*Mid and southern governorates of Iraq*

*Agriculture and Food Security*

**Participating Organization(s)**

FAO - UNIDO

**Implementing Partners**

- Ministry of Agriculture , Ministry of Industry

**Programme/Project Cost (US\$)**

FAO: USD 4,886,663  
UNIDO: USD 3,124, 454

**TOTAL: USD 8,011,117**

**Programme Duration (months)**

Start date: 10 May 2007  
End date: 10 Nov 2008  
1st Extension: 10 May 2009  
2nd Extension: 31 December 2009  
3rd Extension: 30 June 2010  
4th Extension: 31 December 2010  
5th Extension: 28 February 2011

**Final Programme/ Project Evaluation**

Evaluation Completed

Yes  No Date: Soon

Evaluation Report - Attached

Yes  No

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<sup>1</sup> Priority Area for the Peacebuilding Fund; Sector for the UNDG ITF.

## **FINAL PROGRAMME REPORT**

### **I. PURPOSE**

The development goal of this project was to create productive employment and improve food security through increased agricultural production and productivity. The immediate outcomes were:

- rehabilitation and modernization of the date production system;
- introduction of Integrated Pest Management (IPM) aiming to control the main date palm pests and diseases in respect of local eco-systems;
- improvement of the date value chain from harvest to market in order to meet the local demand and international requirements. This will result in better access to markets and higher farm income; and
- strengthened capacities and capabilities of support institutions to create a date palm research and training centre (DPRTC) focusing on post harvest activities.

The expected outputs were:

- Assessments made and site selected;
- Date palm tissue culture laboratory set up;
- modern date plantations established;
- IPM programme identified and developed;
- Training material (brochures, leaflets etc.) developed for local trainees and trainers with assistance of international experts.
- IPM training programme suitable for the Iraqi conditions designed .
- TOT for IPM/FFS potential facilitators (25 local staff of the Plant protection and extension dept.) carried out.
- Pilot IPM/FFS programme to disseminate IPM tactics to farmers designed
- Capability of entrepreneurs and staff in the date processing sector enhanced;
- selected date storage, packaging and processing facilities improved and enabled to act as models for the specific region;
- products of selected pilot enterprises meet international requirements;
- new forms of cooperation along the value chain started;
- Date marketing organization supported in promoting Iraq dates in international markets; and
- Date Palm Research Institute upgraded and equipped according to the new tasks.

The project was designed within the framework of the Joint UN Iraq Assistance Strategy 2006-2007. Specifically, this project was housed within Cluster A of the framework, Agriculture, Food Security, Environment and Natural Resource Management, with special focus on the following goals: (i) support economic and human development and sustainable management of natural resources; and (ii) assist in the provision of basic services and promotion of community development participation.

Furthermore, the project contributed towards the attainment of the Millennium Development Goals (MDGs), in particular those related to poverty reduction, through job creation, community building and development in rural areas as a result of the financial gains generated along the date value chain and its related businesses.

## II. ASSESSMENT OF PROGRAMME/ PROJECT RESULTS

The planned development goal of this project was to create productive employment, and improve food security through increased agricultural production and productivity by improving on farm and post harvest practices and building capacity of research and development institutes and entrepreneurs. To achieve the above, suitable training program was conducted and Good Agricultural Practices (GAP) prepared. Equipment for production and, harvest and post harvest management was procured and delivered to increase date production in Iraq. The tissue culture laboratory was constructed which helped fast rehabilitation of the date orchards with new high value and more productive date varieties.

Key outputs achieved during project lifetime including the number and nature of the activities (inputs).

### 1. Assessment made and site selected (output 1.1)

The assessment surveys were finalized in March 2008. The content of these reports is too technical and fragmented to be used without additional analysis. Although the sites to be used for this project were chosen by GBDP and not through the surveys, there was a need to compile information available into a more comprehensive report to assist policy makers when making future investments in this sector, given that this was additional activity not planned in the original project document. Three demonstration sites to demonstrate good agricultural practices and five IPM sites were selected for project interventions.

### 2. Date palm tissue culture laboratory set up (output 1.2)

In January 2008 at the second PSC meeting held at FAO's premises in Amman, GBDP requested that the funds available under this project should be primarily used to build a new tissue culture laboratory as GBDP where it could conduct research or undertake mass propagation of date palms. The construction of such a laboratory was not envisaged in the original project document, the designated budget or in the time framework. However, it was agreed by all parties that without a functioning laboratory to perform mass propagation of date palms, purchasing and hardening of tissue culture derived from date palms (as included in the original project document) and other scheduled activities, was one of the methods which would facilitate fastest replacement of trees that were depleted in high volumes during the past two decades in Iraq. However, this type of propagation, highly sensitive to external infection, requires suitable laboratories and the use of modern technology. Therefore, the revised proposal to use funds under this project to construct such a facility with necessary utilities for immediate functioning was supported by all the PSC members. Finally, it was agreed that the building would have production capacity of 50 000 plants per year tailored to the country needs.

In addition to the above, the purchase of a glasshouse, five greenhouses and a number of shade houses was also agreed upon, considering that the propagation process itself necessitates such facilities.

Based on the guidance of FAO's technical division, a design for the building was prepared and endorsed by GBDP in March 2008. A tender was issued for preparation of BoQ and necessary drawings. A national company, working under supervision of GBDP, was selected to prepare the necessary documentation which became available only in September 2008. FAO's technical divisions reviewed carefully draft BoQ and detailed drawings submitted and provided a number of recommendations for their modifications in view of ensuring appropriate international architectural standards. Based on these recommendations the document was modified accordingly during December 2008 and a tender for civil work contract was issued in January 2009. The selection of offers received at the end of February, 2009 was conducted and the recommendations for the selection of winning the bidder became available in March 2009. Before issuing a contract for civil works supporting documentation has been made available to the GBDP for their review.

During the third PSC meeting held early April 2009, the case of the issuance of the contract for

construction of tissue culture laboratory was reviewed together with financial situation and budgetary constraints in this project. It was decided that the tissue culture laboratory should be built as a priority. This necessarily meant that cuts to funds designated for other project activities had to be made and budget moved between originally designated budget lines. During the PSC meeting it was decided to cut down a number of trainings originally planned for each component, to change shade houses to multi span in attempt to reduce the cost, and limit procurement of the glasshouse and the multi span to USD 300 000 maximum. This decision had to be taken since offers received against the tender for construction works for the tissue culture laboratory were very high and above any expectations.

Subsequent to the PSC meeting and at the time that the contract for civil works was about to be issued, FAO was contacted by the Deputy Minister of the MoA and asked to prepare a short review on the status of the project implementation and advise on alternatives for using funds available under the project. The letter was sent to the Deputy Minister mid June 2009. One of the suggested options was to omit the construction of the tissue culture laboratory and focus more on human capacity building under this project. However, a reply authorizing FAO to proceed with initial plan to use the resources to build a tissue culture laboratory was received from the MoA mid July 2009. In line with this decision, FAO completed issuance of the contractual agreement in October 2009. The MoA handed over the site to the contractor in late November and the civil works were completed.

The three planned international trainings under this component were conducted. First training was on DNA markers technology for genetic diversity and date palm improvement, the second was on propagation of date palm with tissue culture techniques, and the third was on use of DNA sequencing equipment.

The equipment for the tissue culture laboratory jointly identified by GBDP and an FAO recruited international tissue culture specialist was procured and delivered to Al Rabea date palm station where construction of the tissue culture laboratory was done. The equipment was purchased and installed by the GBDP.

The training for tissue culture laboratory experts in UAE was successfully conducted, in order to update knowledge of participants in recent advances in building up date palm research and development program.

Procurement of Glassware's and chemicals was completed.

### 3. Modern date plantations established (output 1.3)

Delivery of the equipment procured by FAO for the selected demonstration farms was completed. The equipment included small and big tractors, date palm pollinators, cooling room for conservation of date fruit, power generators, forklifts, trailer and ridgers, vehicles and small laboratory field equipment. This equipment was used for national trainings on Good Agricultural Practices that were held by the GBDP for extension workers and date growers.

A manual covering the Good Agricultural Practices (GAP) for date palm production was prepared by a group of experts from the date palm institute in Iraq. Final technical review, including external consultancy to review and edit the manual, was completed. The final outcome was discussed at the last third PSC meeting but could not be agreed upon due to differences in opinion of the PSC members on certain aspects of the GAP manual. The manual was reviewed, finalized by representatives from MoA and FAO and printed by FAO.

Five extension workers and managers of date palm stations belonging to GBDP received training on GAP at the Arab Centre for Studies on Arid Zones and Dry Land (ACSAD) in Syria from 9 to 20 May 2008. The training, organized by FAO was aimed at the application of good agricultural practices such as pest control, irrigation, fertilization, harvesting etc., in date palm cultivation.

Two GBDP staff members received training on database management aiming to increase their competence in modern and validated methods of technology transfer programs on database design and management systems adoptable for the use in the agricultural sector.

Twenty seven extension workers from date palm stations belonging to the GBDP received training in June 2009 on modern tissue culture techniques at the University of Al-Nehran in Baghdad. The training was aimed at building capacity of the GBDP/MoA extension staff in date palm tissue culture technology and developing their skills in *in-vitro* mass propagation which would enable replacement of date palm trees that have been depleted in high volumes during the past two decades in Iraq.

Twenty nine extension workers from date palm stations belonging to the GBDP received training in July 2009 on good agricultural practices for date palm management in Baghdad.

During the third PSC meeting in April 2009 it was agreed to reduce the originally planned five trainings to two, subject to savings on procurement of multi span and glasshouse.

FAO, together with the GBDP and UNIDO, executed additional training for 350 farmers at seven locations on GAP practices and post-harvest handling. During the training, 50 of the trained farmers who were interested to supply dates to Date Company directly received dedicated UNIDO training on date processing that were held in the date company in Baghdad. These training were carried out in April, May and June 2010.

Fifteen manuals on Good Agricultural Practices (GAP) for date palm production were finalized, printed and delivered.

#### 4. Integrated Pest Management (IPM) programme (outputs 2.1 - 2.5)

A study tour for Iraqi decision makers on IPM was organized by FAO from 20 to 22 April 2008 in Jordan. Iraqi officials from MoA and Ministry of Higher Education attended this meeting. Several issues were discussed including the ongoing FAO regional IPM programme in the Near-East and potential collaboration with the current date palm project. In particular, the farmer field schools (FFS) concept as methodology in IPM was explained through various presentations given by the Chief Technical Officer of the FAO regional programme. The possibility of applying such methodology in Iraq, given the persistent security situation, was also discussed during the workshop. Given that the safe movement of facilitators and farmers, necessary for the effective implementation of this methodology, is hindered by the difficult security situation in most areas of Iraq, it was agreed that the cooperation between GBDP and FAO Regional Programme should be explored further. Iraqi experts should have the opportunity to avail themselves of existing training facilities in the region. This meeting was an important step in the development of the IPM/FFS strategy in date palm production in Iraq.

Study tour for government official on FFS for IPM took place in Jordan in June 2008 while two-week training for Iraqi extension workers was held by FAO's Regional IPM Programme for Near East at NCARE facilities in Amman from 17 to 27 August 2008.

The location of laboratories for rearing of biological control agents were selected at Basra University for rearing microbial agents and the MoA laboratory in Abu Ghraib for rearing parasitoids. These laboratories had previous good experience in IPM technology and are working in close collaboration with the GBDP. Procurement of the requested equipment for these laboratories was completed and equipment delivered to Al Rabea date palm station in Baghdad. The GBDP was responsible for forwarding of equipment to respective IPM labs. Bio-control agents for the two laboratories for rearing of microbial agents were procured.

In addition to these laboratories, the GBDP also selected five field stations for IPM field trials and demonstration. Equipment for these field stations was received by the GBDP.

A consultant recruited in 2008, prepared a draft programme on IPM technology to be implemented

under this project, including the international training, the national training and field experimentation. Out of a number of planned trainings, the following were completed till compilation of this report:

IPM/ entomopathogens training at ICARDA in Syria, 17 to 27 August 2008 for five trainees. The objective of this training was to learn about the use of insects – eating fungi - for the management of pests. The trainees were involved in the implementation of project activities in Iraq as well as in extension services.

IPM/parasite and predator training at Biological Control Laboratories, the MoA in Syria, 25 October to 4 November 2008 for six trainees. The objective of this training was to learn about biological control of date palm pests by using promising parasitoids and predatory species. The trainees were involved in the implementation of project activities in Iraq as well as in extension services.

Additional training on FFS for IPM specific to date palm cultivations was planned to be conducted at already existing date farms in Iran. However, at the third PSC meeting in April 2009 it has been decided to conduct this training if additional funding was approved by UNDG ITF. This training was cancelled since there was no approval for additional funding. The PSC cancelled the training of researchers planned in Egypt on the rearing of predator nematodes due to shortage of funds and difficulty in obtaining visas for Iraqi participants.

Some activities under this project such as field trainings on IPM (some plant diseases) were heavily affected by the seasonality of some activities, since it is only possible during the spring/summer season. In addition, having to reach farmers in specific seasons and periods of time is further complicated by difficult security situation in parts of Iraq. IPM/FFS methodology is proving almost impossible to disseminate in Iraq.

In addition to above, thirty eight extension workers from date palm stations belonging to the GBDP received training in August 2009 on basic IPM in Baghdad.

National trainings on propagation of date palm through tissue culture, good agricultural practices, and IPM were completed. Through these three national trainings 94 GBDP extension workers have been trained

##### 5. Capability of entrepreneurs and staff in the date processing sector enhanced (output 3.1)

Three members of the Date Palm Processing and Marketing Company and Ministry of Trade participated in an international fair in Turkey for the promotion of the Iraq date products and for engaging business negotiations with entrepreneurs from all over the world, organized by UNIDO. Furthermore, international and national consultants were recruited to prepare an intensive training in food safety and quality management from the farm to the fork. Manuals are prepared to train twenty trainers from different industries as well as the representatives from MoA and MoT, all of whom are engaged in date processing and marketing. A two-week theory and practical training has been conducted in Amman in August 2009.

##### 6. Selected date storage, packaging and processing facilities improved and enabled to act as models for the specific region (output 3.2)

A date palm processing and marketing company in Baghdad (Shalchia) was identified /selected for rehabilitation after independent assessment (by international consulting company) by UNIDO and the government counterparts. The date processing company agreed with UNIDO to take over the cost of the factory rehabilitation, of the building, installation of the cold stores and provision and installation of the fumigation chambers as in kind contribution to the project funding. On the other hand, the allocated budget for the rehabilitation was used to buy important extra equipments for the factory. The rehabilitation tasks at the Shalchia factory were partially completed, including installation of water and power supplies and reconstruction of the factory building.

The procurement, installation and commissioning of the main date processing equipment was completed. Operational tests for the processing equipment were also completed and will be fully operational in the next production season.

The construction and installation of the cold stores, installation of the fumigation chambers will be finalized by the DPMC in the last quarter of the year.

#### 7. Products of selected pilot enterprises meet international requirements (output 3.3)

This activity was completed. The project has trained 16 key personnel on the basic food safety, hygiene, good manufacturing practices and HACCP as trainers. These trainers have in turn trained more than 40 staff of the DPMC.

Hygienic conditions at the Shalchia factory have been maintained to present the factory as a model in the area for the date industry in Iraq. Key personnel of the factory and officials from MoT were trained on various aspects of phyto sanitary principles specific to date processing.

In the second round training of trainers, 17 staff members from the DPMC and the MOT were trained in advanced HACPP and GCC (Global net certification Committee) approved ISO-22000 internal auditor training. From the 17 trainers, 9 of them have been successfully certified as ISO-22000-2005 internal auditors (the first kind of certification in the country in sector).

#### 8. New forms of cooperation along the value chain started (output 3.4)

The vertical integration of the date's value chain was completed. Two joint trainings and study tours on agricultural production processing and marketing organized for experts were completed.

A training and demonstration pilot plant was established at the MoA research centre to train farmers in better post harvest practices. The construction of the pilot training centre was completed and the equipment has been delivered to MOA by UNIDO. The building for pilot plant was also completed by UNIDO and handed-over to MOA in June 2009. After the installation of the equipment, MOA used the new facility to train the date palm growers (farmers) in post harvest handling of the date palm products.

#### 9. Strengthening the date marketing organization (output 3.5)

This component was cancelled during the second PSC meeting held in Amman in January 2008 due to the abolishment of the date marketing organization by the Government. Instead, it was agreed during the meeting, to build capacity of the MoT's marketing unit by providing assistance such as participation in international exhibitions, reported under the capacity building above.

- Explain, if relevant, delays in programme implementation, the nature of the constraints, actions taken to mitigate future delays and lessons learned in the process.
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The construction of the tissue culture laboratory was not included in the original project document. As explained above, the objectives of the project were adjusted to include new activity on civil works which required additional time and re- allocation of funds. Consequently, the closure of the project was delayed for a year.

- List the key partnerships and collaborations, and explain how such relationships impact on the achievement of results

The main collaboration was between FAO and UNIDO in joint implementation of this project. Complementary technical expertise between the two agencies is parallel with their commitment to improve administrative efficiency and lower operational costs of project implementation. This in turn, ensures that the highest quality of project outputs is achieved.

The following partners/institutions collaborated/ provided their facilities for the study tours, trainings and workshops conducted under this project: National Centre for Agricultural Research and

Technology Transfer (NCARTT - Jordan); Arab Center for Studies on Arid Zones and Dry Lands (ACSAD -Syria); International Centre for Agricultural Research in Dry Area (ICARDA - Syria); Biological Control Laboratories / MoA / Syria; and Al-Nehran University in Baghdad.

- Other highlights and cross-cutting issues pertinent to the results being reported on.

The production of date palm trees through the tissue culture technique will support the rehabilitation of state plantations and will provide job opportunities in those areas.

The control of diseases through IPM technology and GAP limited the use of pesticides in date palm production which improved the local environment.

### **III. EVALUATION & LESSONS LEARNED**

The development goal of this project was to create productive employment and improve food security through increased agricultural production and productivity. This was to be achieved by improving on-farm and post-harvest practices and building the capacity of research and development institutes and entrepreneurs.

Rehabilitation and modernization of the date production system were the main outputs of this project. This included the introduction of Integrated Pest Management (IPM) aiming to control the main date palm pests and diseases in respect of local eco-systems. Another achievement was the improvement of the date value chain from harvest to market in order to meet local demand and international requirements. This resulted in better access to markets and higher farm income. Also, the capacities and capabilities of support institutions to create a date palm research and training centre (DPRTC) focusing on post harvest activities were strengthened.

The project had a sustainable impact in the date palm sector in job creation and economic development. Capacities of the counterpart ministerial staff in date palm production, IPM, post harvest handling, date processing, packaging, marketing, and hygienic practices were enhanced through international and national trainings, workshops and study tours.

#### IV. INDICATOR BASED PERFORMANCE ASSESSMENT

	<b>Performance Indicators</b>	<b>Indicator Baselines</b>	<b>Planned Indicator Targets</b>	<b>Achieved Indicator Targets</b>	<b>Reasons for Variance (if any)</b>	<b>Source of Verification</b>	<b>Comments (if any)</b>
<b>Outcome 1</b>							
Rehabilitation and modernisation of the date production system							
<b>Output 1.1 Assessments made and site selected</b>	Indicator 1.1.1	To assist the Iraqi Government to collect latest information on date palm sector to be used for priority planning for rehabilitation of date palm sector.	To cover various date sector areas such as production, processing, marketing, etc.	To make available a comprehensive report on the current state of the date sector in Iraq and main requirements for its rehabilitation.	Three assessment reports produced covering various areas of this sector. 100%	Assessment Reports	Three assessment reports completed. Comprehensive report to be used by MoA when planning future rehabilitation activities in this sector.
<b>Output 1.2 Date palm tissue culture laboratory set up</b>	Indicator 1.2.1	To assist General Board for Date Palm (GBDP) to speed up mass propagation of date trees needed to	Building capacities of GBDP to undertake research and provide assistance to farmers through extension	To construct a modern tissue culture laboratory, equipped with needed equipment and complimentary facilities (greenhouses,	Identified equipment has been purchased and delivered 100%.	Fully equipped tissue culture laboratory and side facilities (greenhouse and shade houses)	This objective has changed from rehabilitation of an existing lab to construction of a new laboratory which is completed

		increase current rates of date production.	services.	shade houses).			
<b>Output 1.3 Modern date plantations established</b>	Indicator 1.3.1	Three state owned date plantations selected for this project by the GBDP.	To provide basic equipment and machinery.	100%		The list and adequacy of equipment delivered to the sites.	More national trainings to be conducted in 2010. GAP Manuals are completed.
			To conduct national and international trainings.	100%		Training schedules, attendance lists.	
			GBDP to develop adequate training material for agricultural practices.	100%		Number of manuals printed and distributed.	
<b>Outcome 2 Introducing an Integrated Pest Management (IPM) aiming at controlling the main date palm pests and diseases in respect of local eco-systems</b>							
<b>Output 2.1 IPM programme identified and developed</b>	Indicator 2.1.1 Assist the MoA to develop IPM program suitable for Iraqi	Current government practices and capacities of extension services.	To assess and agree on strategy to implement IPM program in Iraq.	100%		Minutes of the meetings and workshops.	

	conditions.						
<b>Output 2.2 Training material developed for local trainees and trainers with assistance of int. experts</b>	Indicator 2.2.1 Providing technical assistance to the MoA for human capacity building.	Current trainings provided by GBDP.	To develop training material to be used during the field exercises.	100%		A number of training materials distributed.	Provided technical assistance to the MoA for human capacity building.
<b>IP Output 2.3 IPM program suitable for Iraqi conditions designed.</b>	Same as above						
<b>IP Output 2.4 TOT for IPM/FFS potential facilitators carried out</b>	Capacity building of extension workers to promote IPM/FFS.	Extension services.	To provide training on dissemination tactics of the IPM/FFS.	100%		International and national trainings, number of participants and relevance of training programs.	
<b>Output 2.5 Pilot IPM/FFS programme to disseminate IPM tactics to farmers designed</b>	Assist GBDP to incorporate FFS concept into IPM program.	Extension works activities in date sector.		100%	A number of Pilot Programmes carried out in the field.	Equipment needed to carry out field activities has been delivered.	Assist GBDP to incorporate FFS concept into IPM program.
<b>Outcome 3 Improving the date value chain from harvest to market in order to meet local demand and international requirements thus enhancing the access to markets and resulting in higher farm income</b>							

<b>IP Output 3.1 Capability of entrepreneurs and staff in the date processing sector enhanced</b>	Technical and managerial staff of the selected date palm processing and marketing companies trained to improve the performance of the dates industry	No qualified staff in dates processing, QC and HACCP and GMP	All the staff in Model industry and others trained in hygiene GMP, HACCP and certified	20 Trainers trained to train the technical staff in the factories s 100%		Training reports Report of the quality of the products	The second round of training of trainers was completed.
<b>IP Output 3.2 Selected date storage, packaging and processing facilities improved and enabled to act as models for the specific region</b>	Model industry with the highest technology and quality standard established	Very old, industry with low quality products	Model industry with quality, packaging and safe product	Building rehab underway, modern equipment procured 100%		Reports from industries	DPMC is contributed in the construction of the building while UNIDO had procured extra equipment.
<b>IP Output 3.3 Products of selected pilot enterprises meet international standards</b>	The technology and manpower to produce high quality dates products are made available	No quality assurance system	Products that meet the national quality standards produced I model industries	The technology and training for high quality products being provided 100%		Reports from industries	
<b>IP Output 3.5 Strengthening</b>	The MOT staff	Very little international	DPMC and MOT	The DPMC and MOT		Report of exhibitions	The marketing board for dates

<b>the date marketing organisation</b>	participate in international dates trade fair	contact for the date marketing specially the packed dates	establish international marketing channels through participation in trade fairs	participated in two international exhibitions on dates and established international marketing channels		participation and the increase in international value trade of the dates from Iraq	has been abolished. Instead, the support was provided to DPMC and MOT
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## **VII. Abbreviations and Acronyms**

BoQ Bill of Quantities

DPRTC Date Palm Research and Training Centre

GAP Good Agricultural Practices

FAO Food and Agriculture Organization of the United Nations

HACCP Hazard Analysis & Critical Control Points

IPM Integrated Pest Management

MDGs Millennium Development Goals

MoA Ministry of Agriculture

MoT Ministry of Trade

PSC Project Steering Committee

NPC National Project Coordinators

UNIDO United Nations Industrial Development Organization

DPMC Date Palm Processing and Marketing Corporation

GBDP General Board for Date Palm

PMU Project Management Unit

PTF Project Task Force

ACSAD Arab Centre for Studies on Arid Zones and Dry Land

FFS Farmer Field Schools

GCC Global Net Certification Committee

NCARTT National Centre for Agricultural Research and Technology Transfer