



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

23381



The Final Report

*Training and Teaching Methods Course
for Iraqi Trainers*

*Held by Vocational Training Corporation
- VTC*

*in Amman during
15/01/2007-14/02/2007*

[Signature]

Contents

Subject	Page
I. Introduction	2
II. Course Activities	2
III. Entertaining Trips	6
IV. Results and Findings	6
V. Evaluation	6
VI. Certification Delivery	6
VII. Conclusions	6

SA

I. Introduction

This is the final report for training of trainers course as conducted by the Vocational Training Corporation- VTC in Jordan in accordance with the contract number 16001282 ML/C7 signed with UNIDO on Dec. 20th 2006 for implementing training courses related to the aforementioned contract. This report covers detailed training activities during the period from (15/01/2007-14/02/2007).

II. Course Activities:

Training courses held for the trainers:

1. Trainers' training course, (Training Skills).

A training course of eight days was conducted during the period from (15/01/2007 to 24/01/2007) in the Training Development Institute (TDI). The programme contains the following items:

- Trainer's role in training (concept, types, regulations of training).
- Form training objectives (concept, characteristics, and components).
- Training needs specification (concept & types).
- Curriculum & training programs (concept and components), training requirements & occupation competencies.
- Choose teaching aids concept & types, training methods.
- Plan for the training process, prepare theoretical & practical) lesson plans.
- Teaching & training methods, administering training.
- Trainees' evaluation (types & methods), theoretical tests preparation.
- Practical tests preparation.

The following table shows the names of the trainers who participated in the above mentioned training course.

No.	Name of Trainers
1.	Muhammed Mawlud Ali Mawlud
2.	Suran Abdelfattah Abdeljabar Abdel majeed
3.	Tareq Taher Rasheed Abdullah
4.	Muwafaq "Hamad Taher" Qader Qasab
5.	Safa'a Sadr Aldeen Omar Al-Jalabe
6.	Serwan Hussein Abdelqader Hamed
7.	Bishro "Faqi Hussein" Fattah Marouf
8.	Sarkut Fariq Ahmad Fathallah
9.	Mriwan Ali Ameen Rasul

2. Agriculture Mechanics:

A training course of (16) days was conducted during the period from (25/01/2007 to 14/02/2007) in the Quesmeh Training Center. The programme for agriculture mechanics contains the following items:

1. Engine maintenance
 - a) Engine cycles
 - Fuel system
 - Charging system
 - Starting system
 - Lubricants system
 - Cooling system

- b) Engine adjustment and calibrations:
2. Hydraulic systems
 3. Brake repair and check and adjustment
 4. Gearbox and find drive common faults and repairetc

The following table shows the names of the trainers who participated in the above mentioned training course.

No.	Name of Trainers
1.	Muhammed Mawlud Ali Mawlud
2.	Suran Abdelfattah Abdeljabar Abdel majeed

3. Engineering Machine Tools:

A training course of (16) days was conducted during the period from (25/01/2007 to 14/02/2007) in the Specialized Training Institute for Metal Industries (STIMI). The programme for engineering machine tools contains the following items:

- Automatic drills, set up, operation & service
- Automatic alternating saw, set up, operation & service
- Parallel lathe machine, set up, operation & service
- Milling machine, set up, operation & service
- Butt planning machine set up, operation & service
- Plane grinding machine set up, operation & service

The following table shows the names of the trainers who participated in the above mentioned training course.

No.	Name of Trainers
1.	Tareq Taher Rasheed Abdullah
2.	Safa'a Sadr Aldeen Omar Al-Jalabe

4. Auto-mechanics:

A training course of (16) days was conducted during the period from (25/01/2007 to 14/02/2007) in Quesmeh Training center. The programme for Auto-mechanics contains the following items:

Normal condition schedule

Normal / check and / or adjust as necessary

- inspect and correct or replace as necessary
- lubricate – replace or change
- tighten to specified torque

Basic Engine Components:

1. Timing belt (diesel engine) – replace every (10.000) km or (60.000) miles.
2. Valve clearance (20.000) check
3. Drive belts (20.000) check
 - Gasoline engine (20.000) inspect
 - Diesel engine
4. Engine oil / change every (5000) km (3000) miles or three months.
 - Gasoline engine
 - Diesel engine

6. Cooling and heater system hoses and connections
7. Engine coolant with ethylene – glycol antifreeze with anticorrosive
8. Vacuum pump oil hoses (diesel engine)
9. Exhaust pipes and mountings

Ignition System

10. Spark plugs (gasoline engine)
11. Ignition timing
12. Battery

Fuel and Emission Control Systems:

13. Fuel filter
 - Gasoline engine
 - Diesel engine
14. Water sedimentary (diesel engine)
15. Air cleaner filter
 - None washable type- inspect every (10.000) km
 - Washable type – replace every (10.000) km
16. Chock system (gasoline engine)
17. Idle speed, fast idle speed and idle mixture (gasoline engine)
18. Idle speed (diesel engine)
19. Throttle positional system
20. Diesel smoke (diesel engine)
21. Fuel tank cap, fuel lines and connections
22. Positive crank case ventilation valve ventilation hoses and connections (gasoline engine)
23. Charcoal canister (gasoline engine if found)

Chassis and Body:

24. Clutch pedal
25. Break pedal and parking brake:
 - with disc brakes – initial inspection at first (1000) km afterwards inspect every (5000) km
 - without disc brakes
26. Brake linings and drums
27. Brake pads and discs
28. Brake fluid
29. Brake line pipes and hoses
30. Power steering fluid
31. Steering wheel, linkage and gear box
 - Two – wheel drive models
 - Four – wheel drive models
32. Front wheel alignment (side slip)
33. Steering drag link
 - [four- wheel drive models with rigid axle front suspension]
34. Ball joints
 - [four – wheel drive models with independent axle front suspension]
35. Steering knuckles
 - [four – wheel drive models with rigid axle front suspension]
36. Front suspension arm bushings (two – wheel drive models)
37. Propeller shafts (four – wheel drive models)

38. Drive shaft boots (four-wheel drive models with independent axle front suspension)
 39. Ball joints and dust covers
 40. Manual transmission oil
 41. Automatic transmission oil
 - change filter
 - change oil
 42. Differential oil
 43. Wheel bearing grease
 44. Front drive shaft thrust bushing grease
 45. Front and rear suspensions
 46. Bolts and nuts on chassis and body
 47. Tires and inflation pressure
 48. All-lights-starting -alternator- battery-etc
 49. Road test
- Air-conditions cooler / Refrigerant

Notes:

- Every (10.000) km check and /or adjust as necessary
- Every (20.000) km inspect and correct or replace as necessary
- Every (5000) km change engine oil check all fluids level and filters
- Every (40.000) km change automatic transmission oil and filter
- Every (60.000) km change timing belt and fan belt – ACetc
- Every (80.000) km change / replace manual transmission and differential oil

The following table shows the names of the trainers who participated in the above mentioned training course.

No.	Name of Trainers
1.	Muwafaq "Hamad Taher" Qader Qasab
2.	Mriwan Ali Ameen Rassul
3.	Bishro "Faqi Hussein" Fattah Marouf

5. Welding / Fabrication:

A training course of (16) days was conducted during the period from (25/01/2007 to 14/02/2007) in the Specialized Training Institute for Metal Industries (STIMI). The programme for Welding / Fabrication contains the following items:

- Arc welding
- Gas welding
- Spot welding
- Mag welding
- Tig welding
- Mode of using manual & manual electric shears
- Mode of using power shears
- Mode of using a press break machine
- Manufacture a fireplace

The following table shows the names of the trainers who participated in the above mentioned training course.

The following table shows the names of the trainers who participated in the above mentioned training course.

No.	Name of Trainers
1.	Serwan Hussein Abdelqader Hamed
2.	Sarkut Fariq Ahmad Fathallah

III. Entertaining Trips:

Six entertaining trips were conducted by VTC to the participants. The trips included visiting the following sites: Jerash, Ajloun, Petra, Aqaba, the Dead Sea and the Jordanian reserve. We would like to draw your attention to the fact that this item was not included in the agreement signed between VTC and UNIDO.

IV. Results and Findings:

By completing the above mentioned training courses, all participants are now fully aware of the training skills and are well-trained on using the correct methods and techniques. They are also ready and capable of transferring knowledge and skills to their trainees in Iraq.

V. Evaluation:

The participants evaluated the training courses as follows:

Positive points	Recommendations
1. The training course objectives were very clear.	1. Longer duration for two courses the Agriculture Mechanics and the Auto-mechanics.
2. Training facilities were available.	2. Using modern training equipments.
3. Topics and activities discussed were very approachable.	3. Providing tests at the end of each training course.
4. Methods and techniques followed were very appropriate.	
5. VTC trainers are professionals.	

VI. Certification delivery:

All participants were given a certificate attendance upon their participation in these training courses. They were also given the modular training units for each training course.

VII. Conclusion:

It can be concluded from this final report that the training was fully successful and achieved its preset goal. Indicators for training success are as follows:

- All training main activities were fully implemented in accordance with the preset plan.
- Participants involved in the workshops (agriculture, welding, etc...) are fully aware and appreciate the advantages regarding the learned theoretical and practical skills.
- Training on operation using and maintaining of equipment in each training course for the participants is now part of their knowledge.

So, from the above mentioned indicators, it is obvious that in addition to the successful achievements of the project's preset objectives, sustainability of projects activities beyond its planned duration can be observed through continuous transfer of the learned theoretical and practical skills to other new trainees in Iraq.

The End