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Final Report

on

# Workshop On Productivity in Industrial Establishments

Rabat, Morocco 6-17/12/1993

Projet N° US/RAB/90/092

## INTRODUCTION

In accordance with the Joint Communique on UNIDO/AIDO Cooperation signed on 18 February 1968 where upon it was agreed to jointly organize a regional workshop for the purpose of focussing on the problems of industrial productivity through UNIDO technical assistance projects and AIDM training programs, the Regional Workshop on Productivity in Industrial Establishments was jointly organized by AIDMO, UNIDO, Islamic Development Bank (ISDB) and the Ministry of Commerce and Industry in Morocco . The host institute was Mohammadia School of Engineers in Rabat where the workshop was held during the period December 6-17, 1993.

At the opening session statements were given by assistant secretary genral OPC AIDMO, ISDB representative and the Director of Mohammadia School of Engineers. The workshop was carried out in the form of lectures and discussions supported by case studies, audio-visual aids and plant visits.

## **DBJECTIVE**

The rejective of the workship was to enhance awareness on productivity improvement and to improve skills on utilization of appropriate methods and technology for the contineous increase of industrial productivity.

# <u>PARTICIPANTS</u>

A total of 23 participants attended the workshop, 9 of them came from Morocco and the rest came from 13 other Arab countries. All of the participants are university graduates, 14 of them are engineers and the rest have degrees in economics and applied sciences. Several of them work in plants such as cement, iron and steel, rubber, paper and tires plants as general manager, technical director and production manager. Other participants work in ministries of industry in studies and research departments. The list of participants is enclosed.

# Contents of the Workshop

The contents of the workshop consist of lectures, case studies, visual aids and plant visits. A breif account of each is given below.

#### Lectures

Lectures were delivered by international and local consultants. The main topics of the lectures were the following:

- 1. The industrial Establishment
  - Structure and organization
- 2. Productivity
  - Basic concepts and definition
  - Factors affecting productivity
- Fraductivity Measurment
  - Helhods and problems of measurement
- 4. Productivity and industrial Development
  - Role of productivity in Industrial and economic development
  - Policies and National programs for productivity improvement.
- 5. Programs for improving productivity in industrial establishments.
- 6. Productivity improvement through management and manpower upgrading techniques.
- 7. Productivity improvement through production activities techniques.
  - Work study
  - Quality control
  - Group technology
  - Research and development.
- 8. Productivity improvement in manufacturing industry the experience of Morocco.

9. Productivity and maintenance in the mechanical industry sector— the experience of Morocco.

## Case studies

Actual case studies on productivity measurment and analysis and work study in Industrial establishments were presented. Data and information for these cases were taken from existing establishments.

## Visual aids

Visual aids in the form of colour slides with english narration tapes and video cassette were presented. These visual aids showed methods of productivity measurement, quality control circles , method study and work improvement and the seven tools of solving productivity problems.

## Plant visits

- One duty visit to presente industrial complex at Jorf Al Asfer plant when the production from Pahat was conducted. The production manager who arranged ajoint meeting for the key personnel of the plant. At this meeting the participants received thorough information on plant organization and processes. Productivity activities of the plant were discussed. A tour of the plant was then conducted, and the participants received quick look at the plant facilities. The participants were accompanied by a local consultant.
- Another visit was arranged for the participants to the Mohammadia School of Engineers.

#### The Consultants

The workshop was conducted by the floilowing consultants:

- 1. Mr ABDUL KARIM HILMI (IRAQI-POST, 11-52).
- 2. Mr MAZIN BAKER ADEL (IRAQI -11-52).
- 3. Mr MOHAMMED ALI TAWOOD (MOROCCAN-POST . 17-01).
- 4. Mr AHMED ALZABACH (MOROCCAN POST. 17-02).
- 5. Mr EDRIS BU AMI (MOROCCAN-POST. 17-03).
- 6. Mr. ALTIGANI BUNHMADI (MOROCCAN POST, 17-04).

## Workshop Evaluation

Participation in the workshop was considered good as 14 Arab countries were represented at the workshop, these were Morocco, Algeria, Tunisia, Lebanon, Syria, Iraq, Kuwait, Qatar, Yemen, Moritania, Saudi Arabia, Egypt, Sudan, and United Arab Emirates.

Most of the participants were engineers—engaged in plant and production management and process control in cement, iron and steel, paper and rubber—tires plants. Other participants were economists and graduates of applied sciences working in the ministries of industry in tableacon and planty departments. Their comments and questions during their backet their interest and comprrehension. They expressed their high capacitation to the information and knowledge they received during the workshop and hoped—they could apply them in their establishments.

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Thus it was considered that the workshop was successful in acheiving its objectives.

## Recommendations

The following measures are recommended for the improvement of productivity in the industrial establishments in the Arab countries:

 Special man power training should be directed toward productivity increase and improvement of performance.

- 2. Productivity activities Should be assigned to specific personnel trained on method of productivity measurement and analysis.
- known methods Should be adopted for measurement and analysis of productivity.
- 4. Contineous records on productivity rates are requierd for comparison purposes.
- 5. Anual productivity plans including aims and measures for implementation are to be formulated.
- Incentive programmes based on productivity and not production are to be formulated and incentives are to be distributed according to an agreed formula.
- 7. More emphasis should be given to human aspects, health, education, security workplace and other social aspects.
- 8. Productivity improvement and quality assurance should receive more attention in research and development work.
- 9. Co-operation with universities and other specialized organization in the various aspects of productivity improvement should be stressed.

## Closing session

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The closing session was held at the Mohammadia School of Engineers on December 17, 1993 where the secretary general of AIDMO gave a closing statement and distributed certificates of attendance to the participants. The participants expressed their thanks and appreciation to: AIDMO, UNIDO, ISDB and the Mohammadia School of Engineers for the benefits they abtained from this workshop.