



SEMINAR ON SANITATION PROBLEMS
OF RAPID URBANIZATION

Lahore, 7-14 October 1971

EM/SEM.SAN.PROB.URB./9

25 June 1971

ENGLISH ONLY

WASTE COLLECTION AND DISPOSAL

O U T L I N E

by

Mr Francis A. Jacocks*
WHO Consultant

- I The Problem
 - a. Need for removal
 - b. Responsibility for collection and disposal
 - c. Effect of disposal methods
 - d. Seasonal variations
 - e. Methods of collection and disposal
 - f. Equipment
 - g. Planning operations
 - h. Special Problems
 - i. Financing
 - j. Organization
 - k. Personnel
 - l. Management techniques
- II Waste Materials
 - a. Types of wastes
 - 1. Residential
 - 2. Commercial
 - 3. Industrial

* Special Assistant to the Director, Bureau of Community Environmental Management, Department of Health, Education and Welfare, Public Health Service, Rockville, Maryland, USA

b. Quantities

1. Normal
2. Increases through population increases
3. Increases through new material uses
4. Seasonal variations

III Cost Factors

- a. Type of service rendered
- b. Effect of disposal methods
- c. Physical conditions

IV Waste Collection Methods

- a. Methodology
- b. Point of collection
- c. Work crews
- d. Special services

V Waste Disposal Methods

- a. Conventional methods
- b. New methodology

VI Collection and Disposal Equipment

- a. Conventional types
- b. Special use demands
- c. New types

VII Planning Systems

- a. Proper approach
- b. Fixed elements and factors for determination
- c. Policies
- d. Local conditions
- e. Using past experience

VIII Financing

- a. Determining costs
- b. Method of securing funds

IX Organization

- a. Assignment within table of organization
- b. Responsibility and authority
- c. Internal organization
 - 1. Activities
 - 2. Personnel

X Personnel

- a. Classification
- b. Numbers
- c. Salary and benefits

XI Reporting, Cost Accounting and Budgeting

XII Public Relations