



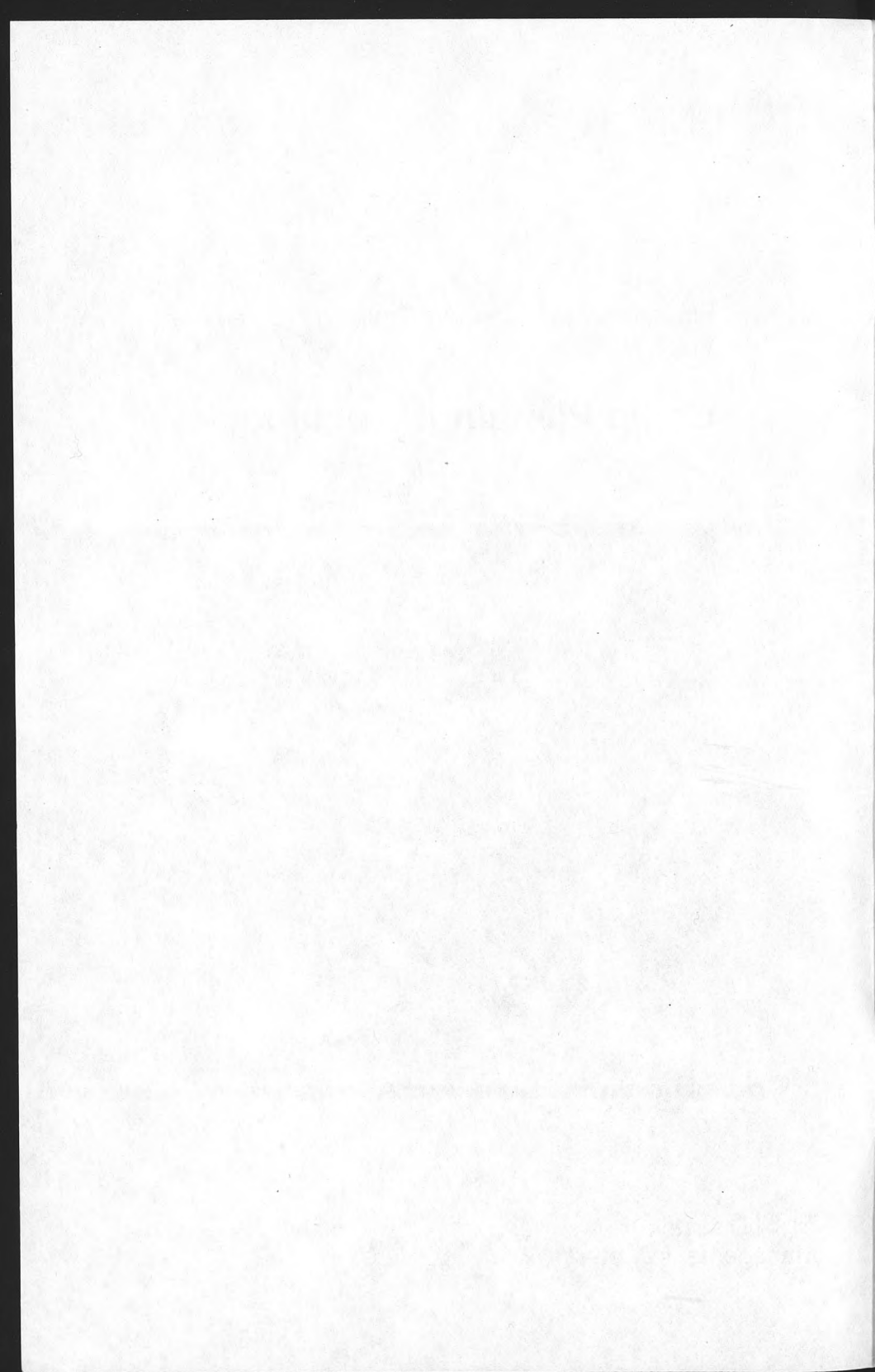
UNHCR

Emergency Management Training Programme
Video Number 13

Camp Planning: Techniques



Disaster
Management Center



FOREWORD

This booklet is a companion guide to the video in this package. The video is from a series of presentations made at one of the UNHCR Emergency Management Training Programmes. The presentations were made before a classroom audience and edited into this format.

Each video is an introduction to the key issues of the topic. They are designed to be useful in the field as a quick source of information during emergencies, as a supplement to training programmes and as a review of the topic for experienced professionals.

Each video represents only a small part of the information that a refugee relief manager needs in emergencies. The viewer will benefit from using several of the videos from this series.

This booklet supplements the video and functions as a Viewer's Guide. Most Guides are in two parts. The first part gives an outline of the key words and phrases in the presentations, many of which frequently appear on screen. This material assists the viewer to follow the presentation and to make quick reviews during the video. The second part of most study guides is a "Presentation Summary". This is intended to be useful as a review of the material and a reference to the topic.



CAMP PLANNING: TECHNIQUES

By

FREDERICK C. CUNY

INTERTECT

CAMP PLANNING PROCESS

Programming

Camp Construction

Design Occupancy

Site Selection

Topography

Safe Location

Water

Land Rights

Social, Economic And Administrative Objectives

Building Block Approach

ESTIMATED SPACE REQUIREMENTS

Shelter

3.5 square meters/person

Service Areas

7.5 square meters/person

Overall Space Requirements

30 - 40 square meters/person

CAMP DESIGN CONSIDERATIONS

Water

Flooding

Circulation System

- roads, paths, drainage

Living Areas

- shelter, sanitation, water distribution, open space

Health Facilities

Administrative Facilities

Cemetery

Waste Disposal System

Electrical System

Cultural Facilities

PRINCIPLES OF CAMP PLANNING

Maintain Social Structure

Consider The Settlement As A City

Design Around Sanitation

Use Building Block Approach

Encourage Social Bonding

Use Natural Features Of The Land

Avoid Difficult Layouts

Include Community Activities Area

Design For Security

CAMP DESIGN MUST INCLUDE:

Balanced Planning Approach

Appropriate Site Selection

Logical Site Planning

Camp Improvement Programming



The main body of the page contains extremely faint and illegible text, likely bleed-through from the reverse side of the paper. The text is arranged in several paragraphs, but the characters are too light to be read.

CAMP PLANNING: TECHNIQUES

By

**FREDERICK C. CUNY
INTERTECT**

INTRODUCTION

Many considerations must be addressed when planning and designing a refugee camp. The most important fall into two main categories: 1) site selection requirements; and, 2) physical camp requirements. These two categories are intertwined, and the many factors and issues involved should be coordinated through a series of camp design principles.

SITE SELECTION

The first and most important decision is the selection of a site for the camp. When selecting a site, emphasis must first be directed toward:

1. The availability of sufficient water for drinking and personal hygiene; and
2. The procurement of a site with physical characteristics that allow for adequate drainage.

Adequate water supplies and drainage must always be your primary considerations.

Minimum water needs will vary with each situation and will increase markedly with air temperature and physical exercise. For general planning purposes, 15-20 liters of water per refugee

per day are required. Of this, 2-6 liters of water per refugee per day are required for drinking. Health centers should allow 40-60 liters of water per patient per day. Feeding centers should allow 20-30 liters per recipient per day. Other water needs to consider include those for livestock, sanitation facilities, community service activities and irrigation.

If at all possible, avoid trucking water in from outside sources. If it is foreseen that trucking water is required for 3-4 months out of the year, it is generally cheaper and more convenient to bring in pumps and lay out piping to bring water into the camp. The water, of course, must be available year-round.

A refugee camp must have adequate drainage. This can generally be achieved by avoiding low-lying or flat areas and selecting areas with gentle slopes. It is imperative that no administrative facilities or shelters be placed in areas that have a potential for flooding.

The importance of the soils of the camp site cannot be over-emphasized. Soils will affect the construction techniques for setting up the sanitation, road building and drainage infrastructure. If possible, select sites that have sandy soils or fine, gravelly soils. Avoid black cotton or fine clay soils which are highly expansive and impossible to drive on when wet.

Ensure that roads and paths to the major facilities inside the camp are designed in such a way as to take advantage of the drainage characteristics of the land. For example, you do not wish to build a road or path that will cross a natural drainage area without providing a drainage mechanism, such as a bridge or culvert. Drainage is the most important factor to consider when laying out the road and path network within the camp.

Other site selection considerations include:

- Land rights. This issue can create enormous friction with the local population. Determine the traditional seasonal use of the land and ensure that the site has been approved by not only the national and local governments, but also by the local population. If it is fairly obvious that no one has been on the land or uses the land for anything, then it is advisable to find out why the land is not being used. Perhaps you will discover that there is a good reason why the land is not being used and that it is an unacceptable site for a refugee camp. For example, a piece of land may be a traditional burial site or be prone to flooding each year.

- Health hazards. Try to determine whether the site will bring on unnecessary health hazards. Determine whether there are low-lying areas or swamps nearby that provide breeding grounds for mosquitoes, for example, creating a malarial health hazard.

- Sanitation. A refugee camp must be built around a proper sanitation program. Provision of adequate sanitation services is the single most expensive part of the camp. It represents over 50% of the annual operating costs. After water, sanitation is the most important health factor. Good sanitation programs are achieved on sites with sandy or gravelly soils in areas that are not flood-prone and do not have a high water table.

CAMP REQUIREMENTS

After selecting the site and ensuring that proper water and drainage characteristics are present, other basic requirements must be met. These can be categorized as: 1) overall space requirements; and 2) installation and/or facilities requirements.

For planning purposes, 30-40 square meters per refugee should be allotted for total camp space. Of this total, approximately 3.5 square meters per refugee is required for shelter. This is the minimum space needed for covered shelter for each refugee.

Approximately 7.5 square meters per refugee should be allotted for service facilities such as: administrative facilities; hospitals; feeding centers; storage facilities for food, fuel and other camp supplies; power supply facilities; water storage and distribution facilities; and waste disposal.

The remaining area represents public space and is defined here to include the space required for: roads and paths; firebreaks; drainage; latrines; personal/family space around the refugee shelters (including cooking areas, gardens, etc.); community recreation and meeting areas; burial grounds; and a "buffer" space in reserve to be used as the needs dictate.

Space requirements will vary according to the physical condition and cultural makeup of the refugees, the topography of the site, and the selection of layout and camp systems. If large-scale agricultural activities are planned, for example, the overall space requirement must be increased accordingly.

In summary, space must be planned for installations and facilities including:

- proper road and path systems which are interrelated and coordinated with a well-planned drainage system;
- adequate and appropriate shelter, sanitation and water facilities;
- adequate and appropriate health facilities, which may include hospitals, out-patient dispensaries, intensive feeding centers, medical supply stores and warehouses;

- administrative facilities, and adequate and appropriate warehouses for food, fuel and chemicals;
- an area demarcated as a burial place or cemetery;
- a waste disposal area or facility, especially to dispose of medical supply wastes;
- a power supply facility. This should be provided for key facilities (e.g., health and administrative);
- facilities where refugees can participate in cultural, social and religious activities.

CAMP DESIGN PRINCIPLES

A number of basic design criteria must be considered when establishing a refugee camp. By addressing these basic issues, you are able to design a camp that will best fit the needs of the refugees. These principles are given below:

1. Strive to keep the social structures intact. Give close attention to the traditional way of life. Know who the refugees are, where they come from and the type of life-style to which they are accustomed. Make arrangements for grouping refugees from the same community in the same area of the camp.
2. Design the refugee community to encourage bonding and self-reliance among the refugees. This can be done by incorporating the community unit approach and tailoring it to the needs of each group or type of refugee.
3. Provide work and social opportunities for the refugees.

4. Design the camp with a sound sanitation plan and program.
5. Utilize the natural features of the site to provide adequate drainage and to facilitate logistics.
6. Avoid fancy layouts; keep the camp layout simple.
7. Allow sufficient space for shelter, community and social activities, and for camp facilities.
8. Lay out the camp in such a way as to facilitate adequate security for the refugees.
9. Design each camp as if it were to be a permanent settlement and/or town and provide the same services that you would to a typical town.
10. Plan the camp to facilitate possible changes. For example, initial feeding centers could eventually evolve into schools or food distribution points later in the life of the camp.
11. Use a "building block" approach, designing camps with administrative and service facilities to provide for refugees in groups of 5,000. Camps should not have more than 4 groups of 5,000 each, so that each camp should not be larger than 20,000 people. If more refugees enter the camp, surpassing the 20,000 refugee limit, then another refugee camp should be established with separate administrative and service facilities.

Videos and Viewers' Guides produced by:
Disaster Management Center
University of Wisconsin
432 North Lake Street
Madison, WI, 53706, U.S.A.

