NWAMBO: BUILDING A REFUGEE CAMP

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DR. CHRISTINA MEHRIARY

THE SITUATION
WHERE TO START?

- First steps include:
  - Alerting authorities and assigning roles
  - Population registration
  - Site selection (including layout and forms of shelter)
  - Survival needs
  - Resource distribution
  - Safety

- Overarching themes:
  - Replicating prior living conditions
  - Refugee participation, ownership, empowerment
  - Coordination amongst aid agencies

PART 1: INITIAL PLANNING

1. How will you assess the number of refugees that will be coming to the camp?
2. How will you document and register the refugees?
3. What information do you want to collect from the refugees?
4. What considerations need to be taken into account when selecting a site for the refugee camp?
5. How large of an area do you need to build the camp?
POPULATION ESTIMATE AND REGISTRATION

- Possible methods to count population?
- Individual Registration
  - **Stage 1**: Staff training, Pilot registration program, and information campaign
  - **Stage 2**: Data collection, Issue registration cards in exchange for temporary wristbands
  - **Stage 3**: Computerization of data
  - **Stage 4**: Verification and updating of data
- Information to collect
  - Name, Sex, Age/DOB, Marital Status
  - Place of origin, date of arrival, family size, ration card number, **camp location, health issues**
  - **Skills/previous occupations**

SITE SELECTION

- Distance from border
- Water source: river, rainfall, etc.
- Environmental issues – i.e. drainage, frequency of flooding, landslides, tidal waves
- Size
  - Recommendation: 45 m² (500 square feet) per person
  - Minimum: 30 m² per person

- During the population estimate, you count 300,000 refugees, and therefore decide on a location that should be 13.5 km² and located near a major road, but sufficiently far from the border.
PART 2: ACTUAL SETUP

1. What are several possible layouts for the camp and which do you think is best?
2. Why is the layout of the refugee camp important?
3. What types of services will be available to refugees and how will they be provided?
4. What considerations need to be made when selecting a type of shelter?

CAMP LAYOUT

- Importance
  - Social cohesion – create neighborhoods and hierarchical structure
  - Prevent violence
  - Combat spread of disease
  - Distinguish areas for separate activities (sleeping, playing, eating, bathing)

- Concerns
  - Create smaller units for communal services within hierarchical structure
  - Effective layout for family and community unit within cultural context
CAMP LAYOUT CONT’D.

- Grid with parallel streets
  - Typically recommended: simple, quick, high pop density
- Horseshoe/cul-de-sac
- H-shaped clusters
- Circular
  - Promote social integration

- 10-20 shelters/families per cluster
- Communities with ~20 clusters
- Community = 2000 people

SERVICE PROVISION

- Centralized: registration, health screening, feeding center, marketplace, community center
- Water – no more than 100m away from refugees settlements

<table>
<thead>
<tr>
<th>Service</th>
<th>Per 1 Community</th>
<th>Per 1 Site</th>
<th>Per 1 Site</th>
<th>Per 1 Site</th>
<th>Per 1 Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 water tap</td>
<td>(80 – 100 persons)</td>
<td>(20,000 persons)</td>
<td>(200,000 persons)</td>
<td>(20,000 persons)</td>
<td>(20,000 persons)</td>
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<tr>
<td>1 latrine</td>
<td>(6 – 10 persons)</td>
<td>(20,000 persons)</td>
<td>(200,000 persons)</td>
<td>(20,000 persons)</td>
<td>(20,000 persons)</td>
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<tr>
<td>1 health centre</td>
<td>(20,000 persons)</td>
<td>(200,000 persons)</td>
<td>(20,000 persons)</td>
<td>(20,000 persons)</td>
<td>(20,000 persons)</td>
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<tr>
<td>1 referral hospital</td>
<td>(20,000 persons)</td>
<td>(200,000 persons)</td>
<td>(20,000 persons)</td>
<td>(20,000 persons)</td>
<td>(20,000 persons)</td>
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<tr>
<td>1 school block</td>
<td>(5,000 persons)</td>
<td>(20,000 persons)</td>
<td>(200,000 persons)</td>
<td>(20,000 persons)</td>
<td>(20,000 persons)</td>
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<tr>
<td>4 distribution points</td>
<td>(20,000 persons)</td>
<td>(200,000 persons)</td>
<td>(20,000 persons)</td>
<td>(20,000 persons)</td>
<td>(20,000 persons)</td>
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<tr>
<td>1 market</td>
<td>(20,000 persons)</td>
<td>(200,000 persons)</td>
<td>(20,000 persons)</td>
<td>(20,000 persons)</td>
<td>(20,000 persons)</td>
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<tr>
<td>1 feeding centre</td>
<td>(20,000 persons)</td>
<td>(200,000 persons)</td>
<td>(20,000 persons)</td>
<td>(20,000 persons)</td>
<td>(20,000 persons)</td>
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<tr>
<td>2 refuse drums</td>
<td>(80 – 100 persons)</td>
<td>(20,000 persons)</td>
<td>(200,000 persons)</td>
<td>(20,000 persons)</td>
<td>(20,000 persons)</td>
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SHELTER

- UNHCR: “wherever possible, refugees should build their own shelter, with the necessary organizational and material support”
- Local materials
- If not available → Shelter Box
- Provision of blankets, mats, plastic sheeting

MORE TRADITIONAL HOUSES
PART 3: SURVIVAL NEEDS, DISTRIBUTION, AND ROLES

1. How will you meet the urgent survival needs of food, water, sanitation, and health?
2. How much food and water will be allocated per person?
3. What do you need to consider in preventing the spread of disease?
4. What considerations will be taken into account when figuring out how to distribute commodities to the refugees?
5. What are the types of security threats the camp will face, and how will you prevent them?
URGENT SURVIVAL NEEDS

○ Water
  • 15 L/person/day
  • Sources:
    o *Groundwater – naturally filtered; raise with windlass, or well
    o Public standpipes
    o River
    o Rain

○ Food
  • 2100 calories/person/day
  • Utensils, stove, cooking fuel, grinding facilities
  • Selective and Therapeutic Feeding Programs for malnourishment
SURVIVAL NEEDS CONT’D.

- Sanitation
  - Excreta disposal
  - Waste-water
  - Garbage disposal and construction of landfill
    - 3m³ of waste/200 people/week
  - Disposal of dead bodies
  - Insect and rodent control
  - Site drainage
  - Latrines: 1/family increases likelihood of cleaning and use
  - Waste disposal: community level

- Health
  - Primary Health Care Model...PREVENTION!
    - Water, sanitation, bed nets, food
    - Immunization
    - Community Health Workers
    - Skilled Birth Attendants
  - Health record cards
  - Health monitoring and warning system
  - Know when an emergency occurs by establishing baseline
**COMMODITY DISTRIBUTION**
- Incorporate community members, especially women
- Timely dissemination of accurate information
  - Via leaders or notice boards
- Regular and predictable cycle of distributions

<table>
<thead>
<tr>
<th>Through group leaders</th>
<th>Through groups of heads of family</th>
<th>Through individual heads of family</th>
</tr>
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<tbody>
<tr>
<td>System Description</td>
<td>lCommodities are given in bulk to a representative of a large group of beneficiaries who further divides it among the group. lAll the commodities for the group of families are handed over to a representative of the group. The group usually consists of about 10 heads of family. The commodities are then proportionately redistributed to the individual family heads by the representatives. lCommodities are handed over directly to each family head.</td>
<td></td>
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<table>
<thead>
<tr>
<th>Types of situations in which these systems have been used:</th>
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<tbody>
<tr>
<td>Early days of an emergency:</td>
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<tr>
<td>- Mass influx of refugees.</td>
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<td>- No formal registration.</td>
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<tr>
<td>- Large populations.</td>
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<tr>
<td>When the population is comparatively stable, and/or have ration cards.</td>
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<tr>
<td>- Where the beneficiaries are living in camps.</td>
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<tr>
<td>- Where the population is comparatively homogeneous.</td>
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<tr>
<td>=&gt; =&gt; =&gt; =&gt; Amount of resources needed increases =&gt; =&gt; =&gt; =&gt;</td>
<td></td>
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<tr>
<td>Degree of self-reliance by refugees increases =&gt; =&gt; =&gt; =&gt;</td>
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SECURITY

1. External military attacks/raids
   - Prevent combatants within the camp
   - Protection of camp’s resources

2. Violence from within/surrounding camp
   - Guard stations and policing force made of refugees
   - Armed backup trained in specific threats and legal matters of refugee situations

3. Breakdown of law and order within camp, leading to crime
   - Enforcement of punishment within camp

Sexual and gender-based violence
- Give women a voice, especially in distribution services
- Lighting, curfews
- Keep young men busy
PART IV: HEALTHCARE SYSTEM

1. What will the structure of the healthcare system be?
2. What factors need to be taken into account when considering the healthcare system?
3. What will be some of the most common diseases/conditions?
4. What will be some of the most frequent services provided?

HEALTHCARE SYSTEM

- Decentralized and based on primary healthcare
  - 1 CHW per 500-1000 people
    - Health promotion, education, reproductive health, checkups, referrals
  - 1 SBA per 2000 people
    - Strong referral system to prevent maternal mortality
- 1 centralized hospital: surgeon, obstetrician, psychiatry, blood transfusions, laboratory?

Considerations
- Sustainability of staff and funding
- Privacy
- Transportation to hospital
- Training
HEALTH SERVICES PROVIDED

- Supplemental feeding programs
- Oral rehydration therapy (ORT)
- Main causes of death:
  - Measles
  - Diarrhea
  - Acute Respiratory Infections
  - Malnutrition
  - Malaria
  - Reproductive health problems
- Other important health considerations:
  - Maternal mortality
  - Tuberculosis

ESSENTIAL MEDICATIONS LISTS

- Based on UNHCR’s EML adapted to national standards
- Select most cost-effective medications, quantify needs, select suppliers
- Inventory, storage, protection
- Anesthetics, pain and palliative care, antiallergics, antidotes, anti-infective medicines (including anti-TB and ARVs), antimigrains, immunosuppressives, antiparkinsonism, affecting blood, blood products, cardiovascular medicines, topical, disinfectants and antiseptics, GI, hormones, endocrine, and contraceptives, immunologicals, vaccines, muscle relaxants, ophthalmological, peritoneal dialysis, resp tract, neonatal, joints

http://apps.who.int/iris/bitstream/10665/93142/1/EML_18_eng.pdf
SETTING UP A FIELD HOSPITAL

CHRISTINA MEHRIARY, MD

PLANNING

• PURPOSE
• DESIGN
• LOCATION
• PERSONNEL
• SUPPLIES
• FUNDING
• PARTNERING
PURPOSE

• OVERARCHING GOALS/PURPOSE OF THE CLINIC
• TRIAGE/TRANSFER TO HIGHER ESCHELON OF CARE
• PROVIDE IMMEDIATE AID (MEDICAL AND DENTAL)
• ONGOING MEDICAL CARE (Peds, Adults, OB)
• DISEASE SURVEILLANCE (COMMUNICABLE DISEASE)
• PREVENTIVE MEDICINE (IMMUNIZATIONS, WATER PURIFICATION, FOOD/MEAT INSPECTION, FERAL ANIMAL CONTROL)
• HEALTH PROMOTION (ANTENATAL CARE, PREVENTION AND TREATMENT OF STD'S)

MEETING A VARIETY OF NEEDS
DESIGN

• TEMPORARY STRUCTURE
  – TENTS
  – EXISTING COMMUNITY STRUCTURES
  – TARPOLINS/OPEN AIR
• SEMI-PERMANENT
  – LOCAL MATERIALS
    • WOOD, THATCH, MUD
• PERMANENT STRUCTURE
  – CONTAINERS/QUAD GONS
  – TRAILERS
  – CONCRETE SLAB WITH STONE, BRICK, BLOCK, OR WOOD STRUCTURE

LOCATION

PRIME LOCATION
  Political boundaries
  Safety considerations
  Catchment areas
ADEQUATE SPACE
  Plan for the future (accommodating additions)
READY ACCESS TO WATER
AWAY FROM LIVESTOCK/LATRINES
ACCESS TO ROADWAYS
STRATEGIC FOR MEDICAL EVACUATION.
PERSONNEL

• VOLUNTEERS:
  – LOCALS AND TEAM MEMBERS
• MILITARY PERSONNEL
• NGO EMPLOYEES AND VOLUNTEERS
• PAID WORKERS

SUPPLIES/EQUIPMENT

PHARMACEUTICALS
DRESSINGS
FOOD/STAPLES
CANDIES/TOYS
CLOTHING
CRUTCHES, SLINGS, ORTHO SUPPLIES
SURGICAL SUPPLIES
THERMOMETERS, MISC MED.
IV FLUIDS, SUPPLIES
REHYDRATION PACKETS
IMMUNIZATIONS
MED LIST

- ANTIBIOTICS: AMOX, AUGMENTIN, AZITHROMYCIN, SULFAMETHOXAZOLE, ETC.
- ANTIVIRALS
- IMMUNIZATIONS
- ANTIFUNGALS
- TOPICAL STEROIDS
- ANTHELMINTICS/ANTIPARASITICS
- WATER PURIFICATION TABS
- IV FLUIDS
- TOPICAL ANTIBIOTICS
- SUTURE SUPPLIES
- REHYDRATION PACKETS
- PRENATAL VITAMINS/REG VITAMINS
- IRON
- ANTHYPERTENSIVES
- ANTIMALARIALS
- ANTIHISTAMINES
- NSAIDS/ASPIRIN
- ACETAMINOPHEN
- INJECTIBLES: ROCEPHIN, B12
- ANTACIDS
- ANTIARRHEALS
- STEROIDS
- BRONCHODILATORS

FUNDING

- FORM COOPERATIVE RELATIONSHIP WITH EXISTING NGO’S/MISSION ORGANIZATIONS
- RAISE FUNDS THROUGH PROJECTS
- MILITARY ORGANIZATIONS/LEARN HOW TO DRAFT OFFICIAL REQUESTS/DOCUMENTS
- APPLY FOR GRANTS

MedPACt 5K Run for Global Health
PARTNERING

• PARTNERING with local authorities for a sustainable operation
  – To obtain proper permission/permits
  – To provide for future staff and supplies, enduring operation
  – To provide security for the current operation and for ongoing operations

CULTURAL CONSIDERATION
BE PREPARED TO TRAVEL

- TRAVEL CLINIC
- CDC GUIDELINES:
  - IMMUNIZATIONS
  - THREAT CONDITION/CRIME/SANITATION
- PASSPORT
- TICKETS
- TRAVEL CHECKS/CASH/MONEY CHANGING
- GUIDES/SECURITY
- CLOTHING/SUPPLIES FOR TRAVEL
- SUPPLIES IN COUNTRY/TRAVEL