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RECONSTRUCTION OF THE PALESTINIAN REFUGEE SETTLEMENTS IN LEBANON:

AN ASSESSMENT

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INTRODUCTION

This report summarizes the findings of a technical assessment mission performed by Frederick C. Cuny, an INTERTECT consultant for the Office of Contingency Planning & Crisis Management, Bureau of Refugee Affairs, Department of State.

Objectives

The objectives of the mission were:

- A. to assist in the assessment of overall progress in providing humanitarian assistance to Palestinian refugees in Lebanon;
- B. to identify specific problems that still face the emergency assistance program;
- C. to identify specific problems that may be encountered during the transition from emergency activities to more long-term programs;
- D. to assist the Refugee Programs Office (RP) in assessing the quality of assistance to the refugees;
- E. to assist in identification of lessons from the Lebanese operations that can help RP to expand emergency preparedness planning for future operations.

Site Visits

During this assessment the following refugee camps were visited:

Rashidiyah (Tyre): 85% destroyed
Burj ash-Shamali (Tyre): 15% destroyed
al-Buss (Tyre): 8% destroyed

Ayn al-Hilwah (Sidon): 95% destroyed
Miyah-Miyah (Sidon): No Damage
Burj al-Barajinah (Beirut): 12% destroyed
Sabra (Beirut): 10% destroyed
Shatila (Beirut): 10% destroyed
Mar Elias (Beirut): 5% destroyed

Period of Performance

The assessment mission was conducted 7-15 December 1982. Due to the short time period involved, on-site verification of claims made or data provided by participating engineers was not entirely possible; thus the observations and analysis herein reflect only a qualitative and not a quantitative evaluation. Figures or statistics quoted are those provided by the agencies and were not developed by the consultant unless otherwise noted.

Disclaimer

The observations in this report are those of the consultant and do not necessarily reflect the views of the Department of State or Office of Refugee Programs.

OVERALL OBSERVATIONS

- A. Number of Refugees: In all camps in Sidon and Tyre, except Rashidiyah*, the number of refugees and refugee families appears to be equal to or slightly more than the numbers developed by UNRWA. In Beirut, the number of refugees is difficult to estimate but, due to the surrounding urban environment and ease of access and egress, the number is probably much greater than officially listed. However, these people are unlikely to be in need of assistance as they are being sheltered by friends and relatives.** Registration of Palestinians by UNRWA has always

*In Rashidiyah, the number of refugees is probably much less than official estimates. This is due to the distance from the city which makes people feel vulnerable and isolated from work. The level of self-help reconstruction is far less than in other camps and it is estimated that many have left the camp to find work in Beirut.

**Many of the 1970 refugees are believed to have "gone to the north", to the Biqua' Valley and Tripoli. While some movement of fighters certainly took place (UNRWA now reports a 25% increase in camp population in the north), most displaced refugees are probably in the Beirut area. There are no reports of major overcrowding in the northern camps and no new camps are reported by volag sources in the area. Thus it should be anticipated that in future programs, the number of Palestinians in the Beirut area will probably increase substantially, especially if permission is obtained for 1970 refugees to remain. If such permission is not officially extended, large numbers will remain outside the UNRWA assistance system and aid programs will have to treat these people as "squatters" or illegal aliens.

been a confusing issue due to UNRWA's continued use of the 1950 registration system wherein families "not in need" were not registered. This has enabled people who both did and did not want to be counted for various purposes to do so. However, un-registered refugees have been included by UNRWA where possible for determining program needs and the figures are probably as accurate as possible under the circumstances.

According to the UNRWA Deputy Director, the agency plans to change registration procedures in the near future. This move should be encouraged, but care must be taken to ensure that the new system is flexible and will permit those displaced and unwilling or unable to register at present to obtain new documents in the future. No re-registration should proceed unless UNRWA has assurances that re-registration will not be used as a means of complicating protection and residency by the Government of Lebanon.

B. Difficulties Due to Politics and/or Security Considerations:

1. Assistance Program Operations. Overall the delivery of assistance to refugees in the camps has not been seriously



Figure 1: Israeli Security Patrol in Ayn al-Hilwah

hampered by security considerations. Individual concerns have arisen, of course, but in comparison to past operations, including those in Lebanon, agencies have not been overly delayed or hindered.

2. Politically-Related Difficulties. Uncertainty over long-term asylum has prompted UNRWA and other agencies to act cautiously regarding various aspects of the assistance program. Most affected is the physical reconstruction of the camps and the shelter program. First, UNRWA was prevented from obtaining or utilizing aerial photos of the camps that would have aided the engineering staff in developing plans or estimates of clearance requirements. While this work could have been done from ground surveys, aerials could have greatly speeded the work and provided a basis for land platting and subdivision. (As will be noted later, platting was not done until early December, and land ownership and resettlement are expected to be a major problem.)

Second, UNRWA has felt it necessary to move cautiously. The agency initially attempted to provide tents as a temporary shelter rather than help the refugees rebuild more permanent housing. (See Housing Section for further comments.)

Another factor that has contributed to slowing the pace of reconstruction is the absence of men. Many are in the north with the PLO or hiding out in other cities. Several thousand are in detention centers of the IDF, and many were evacuated during the disengagement. This has meant that most rebuilding must be carried out by older men and the women in the camps. Thus, the quality of housing construction and repair is even worse than usual and is much slower

in comparison with other operations.*

- C. Funding: The level of funding for the overall relief operation to the Palestinians appears to be adequate for the numbers mentioned. In the housing sector, disbursements for the existing UNRWA program will probably not be as great as anticipated. Unless the level of assistance is to be increased (either the cash or material contribution) or unless other refugees are included in an expanded registration and UNRWA wishes to establish reserves for such an eventuality, housing set-asides are more than sufficient. Additional funds do not need to be allocated for the existing program.
- D. Levels of Expertise: As in any operation there are varying levels of expertise and professionalism demonstrated by the quality and efficiency of the assistance program. The following is an assessment of the level of expertise demonstrated in each sector of activity.
1. Planning and Camp Design. Despite UNRWA's claims to have ample expertise and experience in camp planning, there were few or no demonstrated capabilities in this field. Even at this date, no land survey exists; no land use plan, occupant tenure or ownership data has been developed; and no comprehensive plans for camp reconstruction or development have been formulated.

*Official delays and indecision regarding Palestinian tenure have not delayed actual reconstruction. Self-help reconstruction has proceeded without regard for official or UNRWA actions and is well along despite hardships noted above.

2. Engineering. Despite the lack of planning, basic engineering was good. The engineering staff did a credible job of supervising debris removal, cleaning and re-grading, and terracing of specific areas. Water system installation, basic drainage and surfacing of roads were carried out at a fairly good pace with no undue problems and all should be completed on or about the projected schedule. Constant turnover of the engineering staff (most of whom were contractors selected from a roster of engineers willing to volunteer for short-term assignments in disasters) may have caused some delays and certainly increased the costs. Resident engineers on 6-month contracts should have been retained.

Supervision and inspection of engineering sub-contracts by the UNRWA field engineer appears to have been good. No major cost overruns were encountered, and the higher-than-bid costs on most work are surprisingly low given the rebound of the Lebanese pound and the inflationary environment.

3. Sanitation. Expertise in sanitation is lacking. Basic refugee camp systems were known to the field engineer but state-of-the-art designs/systems were not.
4. Shelter/Housing. No expertise was evident in this area.
5. Medical Programs. Ample expertise and experience was evident in curative health and general medicine, although procedures appear to be cumbersome and may cause unnecessary delays. The proposed screening unit at Sidon could have helped in the emergency, but the need is probably past and the unit should not be funded.

Despite UNRWA claims that preventative measures in support of health programs are being undertaken on a regular basis, there was little evidence of this in the camps. Most lacking was participation of sanitarians and public health engineers.

6. Feeding Programs. The pre-war system of supplementary feeding has been retained. However, no monitoring was evident at the two centers visited (Shatila and Ayn al-Hilwah). Adjustments to this program and establishment of a local statistical analysis capability that could help the medical team to establish a better picture of the health status of the camp should be encouraged.
7. Social Services. Not observed.

E. Observations on the Role of UNRWA:

1. Assistance. Throughout the emergency, UNRWA has insisted that it should be the focal point for all assistance to Palestinians in the camps. In essence, this makes them responsible for coordination of relief efforts, the quality of aid, the standard of relief, and the overseeing of equitable distribution. Following are observations on these intangible aspects of the relief effort:
 - a. Standard of Assistance: The relief operations for Palestinians are somewhat unique in that they are for refugees already living in refugee settlements. Much of the operation is a reconstruction effort coupled with reinstatement of existing services. Thus, UNRWA's delivery of services and materials may be compared with both the pre-war levels of service and the standard of services delivered to refugees in other

operations. Overall, the standard of the aid and services delivered is higher than comparable relief operations. The UNRWA staff is familiar with basic feeding, medical and health programs. Thus, much of the effort has been devoted to restarting and expanding existing programs. In the medical, health and feeding programs, UNRWA may have been slow to respond to some needs but the basic standard of service was high (even if incredibly bureaucratic) and UNRWA has strived to return to pre-war levels.

In the environmental sector UNRWA's emergency response was quite poor. Planning was virtually non-existent; engineering was uncoordinated in the early stages; site services and housing reconstruction planning was never fully integrated; and contingency planning was non-existent. It is a credit to the engineering staff that they were able to accomplish so much and to proceed without more back-up; yet so much more could have been done with a more balanced staff. At a minimum, a site planner, a structural engineer and a sanitation engineer should have been added to the team from the very beginning.

- b. Diversity of Assistance: Good emergency programs are characterized by the diversity of services offered. Overall, most sectors of concern in the emergency received some degree of attention. Notable exceptions are epidemiological monitoring and environmental sanitation control.
- c. Degree of Sophistication: UNRWA's objectives in the relief operations were to restore previous levels of service. Few of the programs seem to have made allow-

ances for variations in the standards required by emergency needs. For example, supplementary feeding programs are generally viewed as the prime health monitoring and assessment vehicle in emergency operations. Supplementary feeding centers become the focal points for collecting and assessing health, epidemiological and social welfare data, and close coordination is maintained among not only nutrition and health staff but also with engineering, sanitation and vector control personnel. This was not the case in this operation. Services were provided independently and with only informal cooperation between sectors (this usually at the Beirut level). In essence, services can be characterized as "firefighting" and sector-focused, rather than as a sophisticated and integrated attack on problems.

d. Equity of Distribution: A major task in any relief operation is to ensure that all aid recipients receive assistance on an equitable basis. In the delivery of relief supplies, medical and nutritional services, UNRWA appears to have done exceedingly well. Only in the housing sector have there been major problems (due to slow replatting and assignment of available land).

2. Protection. UNRWA has maintained that protection of refugees under the terms of international law is not their mandate. Such a position may be legally correct but operationally every humanitarian organization has a responsibility in this effort. While direct protection may not be possible, indirect protection is achievable. Establishing a large expatriate presence in the camps to serve as de facto observers in order to deter incidents against the refugees, providing expatriates to serve as links between

refugees and occupation authorities, and providing foreign staff who can stand up to economic exploitation of the refugees by local contractors, are all roles that UNRWA can play. Such indirect protective and advocacy roles have largely been ignored by the agency. Had a large-scale foreign presence been in the Beirut camps, the massacres might have been avoided.

Even in minor cases, UNRWA has been lacking. In Ayn al-Hilwah a local contractor boldly entered the camp with heavy equipment, claimed a portion of the land belonged to him, and began to excavate a large pit in the very middle of the camp. UNRWA failed to challenge his right to the land and not until a week after a 7-meter-deep, 20m x 35m hole had been dug did they realize that UNRWA owned the site.

3. Preparedness to Handle the Emergency. Despite affirmations to the contrary, UNRWA was unprepared to handle the emergency operations. Most important, a trained and experienced cadre of field officers and staff was not available. In the past, most field work was handled by the PLO, the Palestinian Red Crescent, or Palestinian staff. Under the conditions imposed by the emergency, a new modus operandi was required. UNRWA should have had contingency plans for such an event, a small expatriate staff of technicians to plan and execute emergency operations, and pre-determined agreements with voluntary agency partners to supply emergency services or materials. In this emergency UNRWA may be likened to an army of officers without sergeants and corporals to carry out the orders. With the frequency of such events, UNRWA should have created a small emergency unit and corps of reserve or on-call specialists that could handle field operations.

4. Leadership and Control. Two qualities that an agency serving as a focal point for assistance must exhibit are leadership and command. In leadership, UNRWA receives fair marks, although it constantly had to be prodded by other agencies in certain sectors. In terms of command of the situation, UNRWA receives mixed marks. In camp development and reconstruction, it is obvious that no degree of control has been established. Unfortunately, UNRWA administrators failed to anticipate the need for swift and comprehensive land use and tenure mapping or the need to quickly develop camp plans. Thus, land disputes are already starting to occur.

5. Coordination: As lead agency, UNRWA automatically becomes the coordinator for humanitarian assistance to refugees. In the broad sense, UNRWA performed this service both as host of meetings for coordinators at various levels and as a de facto central clearinghouse for information. Coordination is more than information-sharing, however, and in an operational sense UNRWA failed to integrate activities at the field level. Most important, UNRWA failed to provide a basis for coordination by conducting a detailed analysis of needs and matching them with services. As noted earlier, most aid was piecemeal, in response to needs as they arose.

F. Operational Problems of the Relief Operation in General:

1. Lack of Preparedness. As usual, few agencies were prepared to handle the emergency. Few have sent experienced staff and many lessons have been relearned.
2. Competition Among Agencies. Competition among agencies was not as extensive as in past operations but rivalries

and failure to share resources and information did hamper assistance to a limited extent. More harmful was UNRWA's attitude in public that they had the situation in control and could do everything. This was clearly not the case.

3. Overemphasis on Medical Aid. Emergency medical aid and curative medicine is normally a short-lived need, yet most agencies have continued to provide these services far beyond the normal time. Preventive medicine and public health measures have not received the emphasis required either by UNRWA or the volags. Rehabilitation therapy and crisis counseling have also received less attention. In general, the clear emphasis has been on medical aid to the detriment of a balanced relief program.

4. Welfare Mentality. It has been the policy of the relief agencies to provide all services completely free of charge. A small percentage of refugees have been employed by relief agencies but most are recipients of continuous gifts. Even before the war, a kind of Palestinian welfare state existed and it appears that a return to the old system is being encouraged. While it is recognized that many of the services normally provided are similar to those provided in many European countries, it could be argued that the extent of these services is extravagant beyond certain points. For example, current plans are to continue supplementary feeding programs for all children under five indefinitely. Feeding may be required for selected cases but, as long as basic rations are sufficient, certainly not universal supplemental feeding.

Another concern in this regard is the lack of sophistication in distributing supplies and services. Agencies simply give everything away. This means there is no incen-

tive for people to do things collectively in the camps. While some items should be donated, work programs should be established in conjunction with distribution of major items and services.

5. Monitoring and Assessment. Initial assessments of damage and needs were relatively superficial and did not provide program planners with data upon which to plan projects. While the general data provided was helpful to indicate general sectors of need, numerous agencies reported that it was necessary to conduct their own assessments in order to develop the data for their planning needs.

Data collection for monitoring the program has recently been reestablished, although statistical analysis in health and nutrition is conducted in Vienna and is reportedly not returned to Beirut.

6. Communications. The Government of Lebanon has prevented establishment of an electronic communications (radio) network. This has caused numerous delays and problems in coordination. (An interagency courier service could have been established, however).

SPECIFIC PROBLEMS IN THE CAMPS

Land allocation is the most critical issue in the big southern camps at this time. Due to lack of planning and control, it is estimated that between 10%-15% of the people currently in the heavily devastated camps will not receive land when it is reapportioned. Added to this is the fact that, in Sidon, 30% of the land used by Palestinians before the war was illegally occupied and is currently being reclaimed by the Lebanese (with assistance from the Israelis). Furthermore, there are reports that some people from Tyre are moving to Ayn al-Hilwah. If others return as expected, the problem will become even more critical.

A. Site Planning and Land Allocation: Comprehensive site planning is required whenever land is to be reapportioned or when clearance activities are of such an extent as to erase normal boundary markers. In three camps (Ayn al-Hilwah, Rashidiyah and Burj ash-Shamali) extensive grading took place, and in two (Ayn al-Hilwah and Burj ash-Shamali) the basic land contours were changed in various parts of the camp. In these areas, land was replatted and is being reapportioned. Yet until December no site planning was carried out.

1. Land Surveys. The engineering staff complained that land ownership data was not provided until late in the program. This information in the form of both legal descriptions and maps should have been the first data provided to the engineers.* Aerial photos of the post-disaster sites would also have been useful but for political reasons these could not be obtained in IDF-controlled areas. In this case,

*Engineers noted that the maps that were provided were inaccurate.

ground surveys should have been carried out as the first step and periodically revised as changes were made. These would have served as a basis for reapportioning land and developing estimates of space available for housing and other facilities.

2. Cadastral Surveys. When dealing with land issues, it is important to know land use, land tenure patterns, ownership boundaries, and location of buildings before and after the damage. This data is usually developed and presented in the form of a map. It is from this map and the topographic data that any changes in the camp design, land use or tenure patterns are made.
3. Camp Designs/Redesign. In most camps redesign was simply not possible nor desirable. The best approach was to treat the situation as a reconstruction program, and this is what UNRWA did. In two cases (Ayn al-Hilwah and Burj ash-Shamali) grading and filling necessitated some reapportionment of the land and did require some replatting. In Rashidiyah, large-scale clearance also required replatting. In all these cases, there was an opportunity to do some innovative design work, but UNRWA elected to do simple "straight line" layouts and not to alter the basic layout of the camps. In retrospect, while not innovative, the decisions in each case cannot be faulted.
4. Replatting. In the graded areas, it was necessary to replat the land so that it could be reapportioned. The major concern was to ensure equitable distribution of the remaining land area. The cleared land was divided into parcels

approximately 100m²*. The staff did not seem to consider prior land uses in the replatting, nor were allowances made for assignment or development of sites in prime locations. For example, sites at intersections of major roads would be ideal for small stores and service centers. Yet these are often the smallest land areas and are noted on the map with the same classification as the other sites.

5. Reassignment of the Land. The task of reapportioning the land was given to a committee of school teachers who re-



Figure 2: Teacher Redistributing Land in Ayn al-Hilwah

*An UNRWA standard agreed upon in the 1969 Cairo Agreement. In this Agreement, responsibility for assisting all Palestinians in camps was turned over to the PLO. Under the terms of the agreement, UNRWA was to continue to serve as the U.N. and international coordinator for donors but to turn operational responsibility and control of assistance over to Palestinians.

ceived no instructions other than to do it as fairly as possible and to see that large families received the largest plots. Most have tried to put people back where they were before the war; however, the recontouring, grading and replatting have made this difficult. Realization that land boundaries were no longer recognizable led many refugees to amplify their chosen site as soon as it was cleared and before reappportioning commenced. In Ayn al-Hilwah over half of the land was taken before UNRWA could begin reappportionment. In practical terms, this means that a few families control the larger and best sites and the rest will have to accept smaller plots on the remaining land. In operational terms, this means UNRWA has lost control of the site's development. This will cause problems in the future and could have been anticipated. It is the most important reason for UNRWA to have had camp planners working with the engineering team from the beginning. Land disputes can be expected to be a major problem. It should be remembered that most reappportionment is taking place in the absence of large numbers of heads-of-household. When these men return, land disputes may become even more serious.

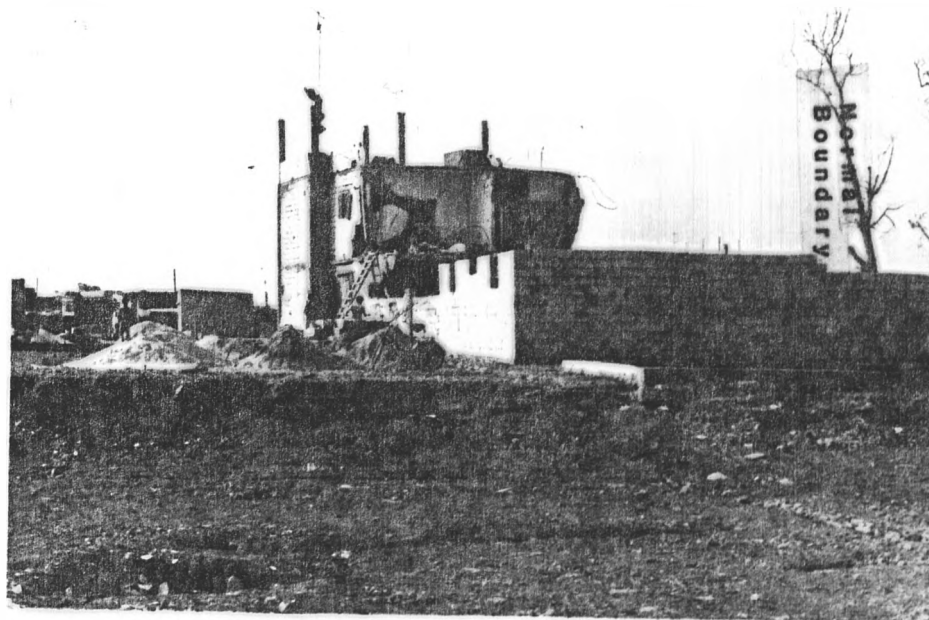


Figure 3: Example of Uncontrolled Expansion of a Site

6. Land Apportionment Standard. In the reassignment of land, UNRWA has attempted to give each family approximately 100m² of land. In normal times, this standard would be quite reasonable; however, given the need to find room for more people on less land, the standard could have been reduced without too much hardship on the Palestinians and more space would have been available. For example, in Ayn al-Hilwah a reduction of the standard by 20% (from 100m² to 80m²) would probably have enabled UNRWA to accommodate most of the people whom the present distribution will not cover. Again, had this been done from the outset, land would not be as critical an issue as it will be.

B. Site Clearance:

1. Status. Almost all site clearance activities in the camps have been completed and regrading has virtually ended. No problems other than those mentioned in earlier reports were encountered. Demolition and filling of



Figure 4: Family Holding Land on a Regraded Site in Ayn al-Hilwah

damaged air raid shelters proceeded much faster than originally expected. UNRWA engineers should be cited for bringing this activity to a close as quickly as they did and far under budget.

2. Other Comments. UNRWA engineers noted that clearance was facilitated by assignment of John Pedigo, Brown & Root, who helped develop methodology and selected contractors for clearance.

C. Water Supply:

1. Status. UNRWA engineers have reconnected or reinstalled most of the water mains and laterals. In the more heavily damaged camps in the south, new systems had to be installed in large areas of the camps.
2. Problems. The people in the camps had direct supply to their houses before the war. The new systems in the southern camps supply water to scattered water points. There has been some vandalism of water points and washstands due to (a) resentment that water is not being piped to each house site; (b) the fact that water points were placed on land previously occupied and owners want the land back; and (c) some neighboring families want water points moved away from their houses to reduce mud and runoff that gets onto their land, and to reduce noise and trespassing. These problems are minor and will sort themselves out; however, better design of the facilities and better siting would have reduced the problems. NOTE: The system cannot be expanded at a later date to add direct supply to houses due to low capacity and head in 3/4" pipes. For service to

houses, new lines will have to be installed.



Figure 5: A Water Point in Use

D. Sanitation:

1. Status. There are currently no plans to provide latrines or sanitation units. In normal times each family dug its own pit latrine. The soils in most areas do not allow for much filtration and, when the pits fill with liquids, the overflow drains outside the house and into the storm drains, most of which are open box culverts in the center of pathways or in the streets. When solids fill the pit, it has to be pumped, dug out, or closed. In many areas, sewage has penetrated outside the latrines causing unsanitary conditions. In camp areas that have been filled and where soils have not been compacted, this problem may be

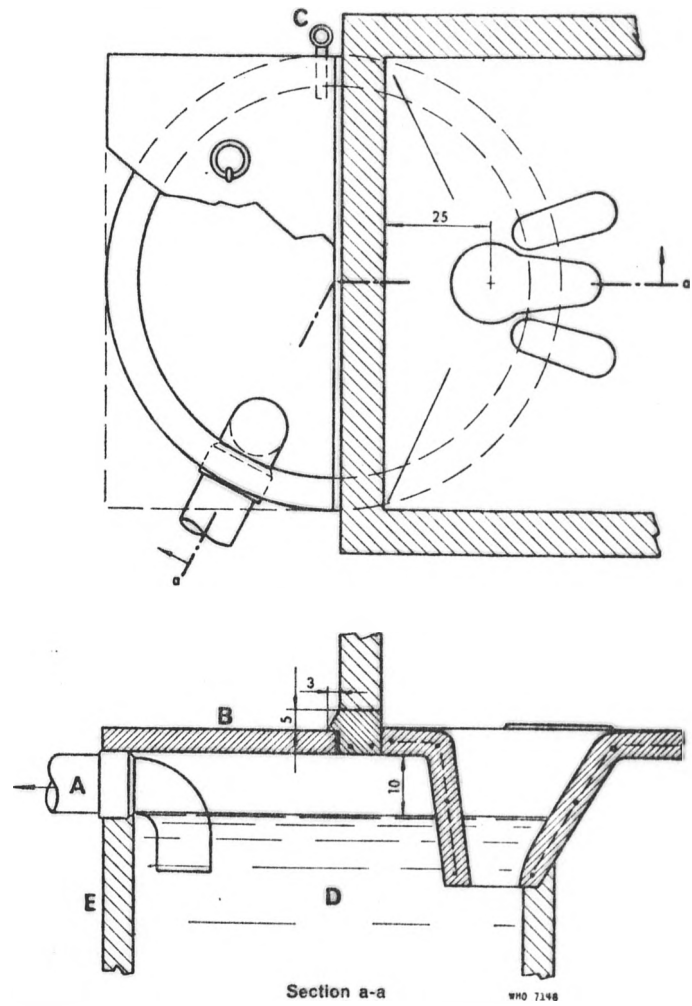
expected to increase.



Figure 6: Latrine Drainpipe Emptying into Storm Drain

2. Recommendations. A simple system that would be compatible with the usual method adopted by the refugees is the "aqua privy". These are large, round concrete or fiberglass containers that are placed in the ground. Each has one or two squatting plates on top which drain into a pipe that extends down into the middle of the tank. Two additional pipes are installed at the top of the tank. One bleeds methane gas out the top and the other serves as an overflow. The overflow collects liquid waste from a relatively safe area of the tank and drains it outside. On a temporary basis, this liquid can be drained into the storm drain without too much danger; but later small pipes can be installed to collect and drain the outfall and carry it to a safe disposal or treatment area. The solids in the aqua privy will eventually have to be removed. Frequency of desludging depends on the size of the units, but some can

FAMILY-TYPE AQUA PRIVY USING 90-CM- OR 120-CM- (3-FT- OR 4-FT-) DIAMETER
CONCRETE SEWER PIPE FOR THE TANK



Measurements shown are in centimetres.

- A = Outlet to soakage trench or soakage pit
- B = Removable, reinforced concrete cover slab
- C = 2.5-cm- (1-in.-) diameter pipe ventilation
- D = Tank capacity varies with diameter and length of sewer pipe used
- E = 90-cm- or 120-cm- (3-ft- or 4-ft-) diameter concrete sewer pipe, 90 cm (3 ft) long or more, sealed with concrete at lower end

Figure 7: Aqua Privy

(Source: E.G. Wagner and J.N. Lanoix, Excreta Disposal for Rural Areas and Small Communities, World Health Organization, Geneva, 1958, p. 83.)

safely be used for a year or more if the size is large enough. It is highly recommended that such a system be considered.

E. Waste Collection and Disposal:

1. Status and Usual Method. Refuse collection is a minor problem that could pose a health hazard as more people return to the camps. At present rubbish is simply dumped in the streets and collected by a team with shovels and wheelbarrows. This is the way it is done in normal times as well. The engineering staff has proposed placing garbage barrels at key locations throughout the camps, but previous experience indicates that they will be taken by the refugees.
2. Recomendation. In other situations, use of garbage barrels has also proven unworkable. A better system, and one that coincides with existing practice, is to issue plastic garbage bags to refugees. The system will work as usual, but at least the garbage will not be scattered. The bags are not expensive and, if they are issued free of cost for six months, it should encourage people to use the method and, when they have their own incomes back, they should continue this system at their own expense.

F. Housing and Shelter:

1. Status of the Refugees. All refugees have shelter. Many are living in schools, with relatives, in partially damaged buildings, or in newly-built temporary shelters or reconstructed houses. No one is in the open. (See shelter photos on following page.)

Figure 8:
School Used as a
Shelter (Ayn al-
Hilwah)

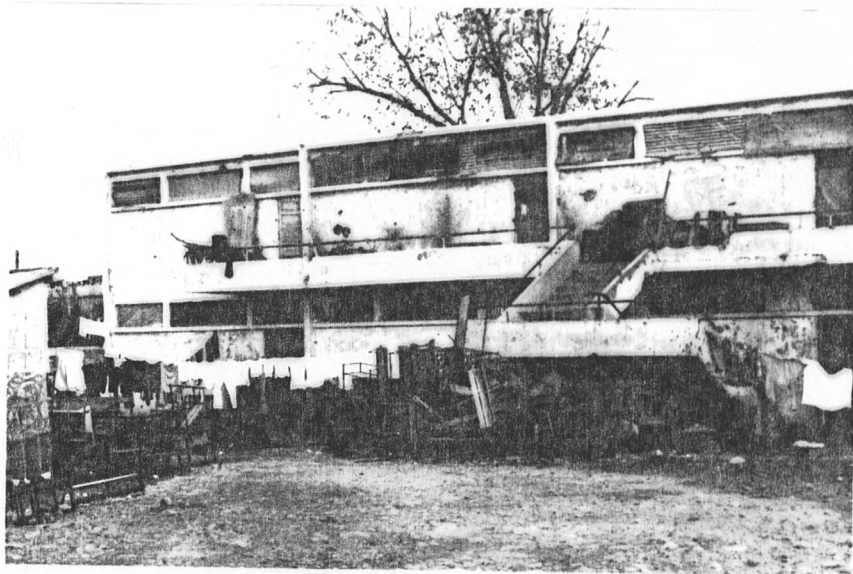
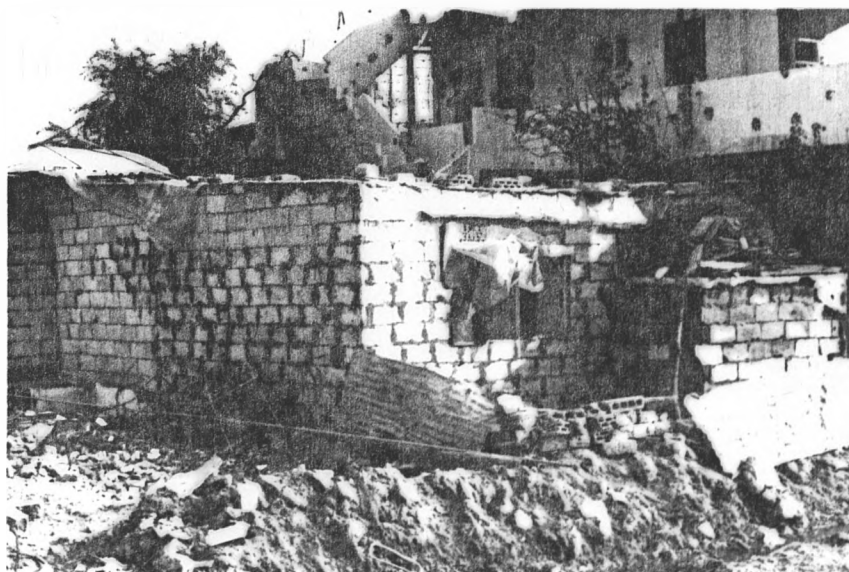


Figure 9:
Shelter Built by
Refugees without
UNRWA Assistance

Figure 10:
New and Repaired
Houses (Ayn al-
Hilwah)



Self-help reconstruction efforts by the refugees are outpacing the efforts of UNRWA. Some reconstruction is already complete, aided in part by contributions from family and friends overseas. Reports that the PLO is channelling large amounts directly to the people are exaggerated, but there is no doubt that some people have received support indirectly from PLO supporters.

The level and pace of reconstruction seems to have surprised UNRWA but in fact, if more men were present, most of the camps would probably have been rebuilt by now. In the consultant's opinion, UNRWA has shown little initiative or leadership on this issue. In part this is due to political reasons, especially the question of whether or not the Palestinians would be allowed to remain and, if so, which ones -- the original refugees and dependents from 1948 only or those from 1967 and 1970 also. Not wanting to antagonize the Government of Lebanon, UNRWA has maintained a fiction that they are only providing temporary shelter (tents). Rather than advocating a more realistic policy or examining closely other shelter methods which could have contributed to permanent reconstruction when permission was given, UNRWA has opted for a costly ruse of providing tents (imported from Pakistan), bases of tiles to set them on, and a block wall approximately 60cm. high to provide "protection". UNRWA argued that, if long-term permission to remain was given, the partial structures could be converted to permanent buildings. The problems are:

--- the people did not want tents;

--- block walls require foundations.

Thus the few tents erected were quickly torn down by the

refugees .



Figure 11: Abandoned, Destroyed Tent Bases (Ayn al-Hilwah)

2. Current Housing & Shelter Program of UNRWA. The current plan is to provide a combination of materials and cash to each family for rebuilding, plus one tent, according to the following allocation and schedule:

Phase I: Phase I is designed to provide funds and materials to people whose houses were damaged beyond repair and who are totally without a house of their own now. There are two parts. Part A is for refugees living in the camps* now and generally is for those who were considered resi-

*The term "in camps" used here refers to people living on land legally dedicated to UNRWA by the Government of Lebanon.

dents of the camp before the war. In the south (Sidon and Tyre) people will receive a cash allotment based on the size of their family according to the following formula:

1-6 people: 2000££ (3000££ proposed by UNRWA/Vienna)
7-12 people: 4000££ (6000££ proposed by UNRWA/Vienna)
13+ people: 6000££ (9000££ proposed by UNRWA/Vienna)

In addition, people who are reassigned land must agree to accept a tent.

In Beirut, building materials will be provided in lieu of cash. People will be interviewed to determine their needs and will be eligible for up to 1000 cement blocks, 26 zinc-laminated roofing sheets, 20 wooden roof beams, and 20 bags of cement, depending on family size and other factors. (There is no tent requirement in Beirut.) Both the amount of materials and the equivalent value of the materials were determined by estimating the amount of materials required to build a small two-room cement block house with 28m² floor space. The hypothetical structure or "design" would have a roof made of corrugated metal sheets laminated with zinc. The price does not include windows, doors, or window/door frames.

Eligibility for Part A will be determined on the basis of a survey conducted immediately after the war. Notices were posted around the camps instructing the refugees to go to a central place in each camp and register their losses with the school teachers. People were asked to describe their housing losses as "totally destroyed", "partially destroyed", or "minor damage". There was no verification except that the school teachers, being residents of the camps

themselves, often knew the people and could detect exaggerated claims. However, in the south many people appear to have actually underestimated their damages, while in Beirut damages were usually overestimated.*

UNRWA estimates that 3,900 families will require Phase I-A assistance in the south. This number was derived by estimate based on the following: In a survey conducted in July and August, 55,000 people were listed as homeless in the south (36,000 in Tyre and 19,000 in Sidon). This number was divided by an average family size of 5.7 to get an estimated 10,000 families. From experience, UNRWA estimated the ratio of camp residents to those living outside camps to be 50/50% (or 5000/5000). For planning purposes, an estimate of in-camp families who lost homes and would be eligible for Phase I assistance was placed at 65% of in-camp residents, thus making approximately 3,900 families in the south. After two weeks of cash disbursements, the average grant was 2900££ per family. For planning purposes, UNRWA raised this to 3000££.

Thus UNRWA now projects a total cost of US\$2,960,000 for Phase I-A grants in the south. In Beirut UNRWA estimates that 365 families will be eligible for Phase I-A materials and that the program will cost US\$280,000. The total cost of Phase I-A is estimated to be US\$3,240,000.

Part A has already commenced and over half the people eligible to be served in the south have been served.

*Source: Camp service officers

Part B of Phase I is a proposed program to provide assistance to people living outside the camps. At the present time, the Lebanese Government is opposed to the provision of assistance to people outside the camps since often they occupy land illegally. However, large numbers of people outside the camps are now homeless and have lost substantial investments in their structures and belongings. Thus UNRWA proposes to provide these people a cash grant of 2000££ to replace belongings lost in the war. It is privately recognized that much of this money would be used to replace or repair damaged buildings.

If the program were to be approved, UNRWA would disburse the cash on the basis of individual surveys. (Not all of these people were included in the teachers' survey conducted after the war.)

UNRWA estimates that approximately 3,500 families would be eligible for Phase I-B funds, for an estimated 1.8 million US dollars.

Phase II: To help families with damaged houses, UNRWA proposes to give grants of 2000££ to each family living in camps that claimed a damaged house in the teachers' survey. In the south, an estimated 2,340 will be eligible; in Beirut, surveys have determined approximately 775 people will be eligible. UNRWA estimates a total Phase II budget of approximately 2.3 million US dollars (1.19 million for the south; approximately \$400,000 for Beirut). In the south, cash will be by grant. In Beirut, disbursements will be by individual survey and adjusted accordingly to a maximum of 2000££.

Phase III: To help families who have already rebuilt their houses without waiting for assistance, UNRWA proposes to provide a cash grant of 1250££ to people living in camps. The total of estimated recipients in the south is 260 families, for an estimated cost of US\$132,000. Estimates of those eligible in Beirut were not available at the time of this report.

3. Additional Assistance to Refugees in Need of Housing. A few additional offers of financial and material assistance have been made. The Islamic Foundation has offered to provide matching funds to refugees in Sidon. For each family eligible for the 6000££ cash grant from UNRWA, the Foundation will provide 2500££; families eligible for 4000££ will receive 2000££; and those eligible for 2000££ will receive 1500££.

UNRWA has also stated that Save the Children (UK) and World Vision have offered to assist. SCF will provide doors and windows for houses in Burj al-Barajinah, and World Vision will provide the same for new houses in Sabra/Shatila.

4. Observations on UNRWA Shelter Assistance Package. The basic idea of providing cash and/or building materials cannot be faulted. The idea is sound and, since most families have experience with building, it is the most convenient way to support reconstruction. However, it would have made more sense to start with what UNRWA is calling Phase II. Since this is overall a reconstruction program, money to stimulate repair should have gone out first (or at least at the same time as money for new construction). This would have helped get people re-established, promoted activity in the camps, and increased the available shelter in the camps.

Second, UNRWA took a long time to adopt and develop this approach. Surely this could have been part of a general preparedness or contingency plan.

Third, it appears that no effort is being made to help people maximize their purchasing power. UNRWA simply disburses the funds. The result will be that individual families will have to buy in an inflationary market. By either purchasing in bulk and re-selling at cost, or by assisting as an intermediary, the costs could be brought down. (The system used in Beirut of giving out materials in lieu of cash will serve this same purpose, although the system used in the south is preferable as it allows the refugees more flexibility.)

Fourth, UNRWA is providing no technical or engineering assistance directly to the refugees. Most repair and reconstruction to date is of a very poor standard. Some constructions are unsafe. UNRWA should provide a team of architects, engineers and construction journeymen to advise builders on low-cost methods to improve buildings and to demonstrate safe ways to cut costs.

Finally, the fact that people that have already rebuilt are receiving the smallest allotment seems to be penalizing those with initiative.

5. Structural Problems Likely to be Encountered.

- a. Differential Settling: Since many houses are built on uncompacted fill, some degree of differential settling can be expected. This will have only minor effect on single-story buildings, but two- and three-story structures may experience more critical structural

problems.



Figure 12: Clearing an Entrance to a Repaired House (Ayn al-Hilwah). Note the height of the road and regraded land adjacent to the house.

- b. Foundations: Few newly-reconstructed buildings have deep foundations due to the people's reluctance to dig down into the ground for fear of finding unexploded bombs. Lack of good foundations may have an effect on the safety of new multiple-story buildings because the foundation may not be strong enough to hold them. As the filled areas settle, buildings may rock and be damaged.

6. Summary of Useful Figures from Housing Program (from UNRWA).

- a. Number of people in need of shelter: 94,796 (Source: survey).
- b. Number of families in need of shelter: 17,000 (based on dividing total number of people by 5.7, the average size of a Palestinian family).
- c. Number of families currently in camps in Beirut and south: 14,161
- d. Number of families currently outside of camps: 15,000
- e. Number of families estimated to participate in:
 - Phase I-A.4,265
 - Phase I-B.3,500
 - Phase II3,115
 - Phase III. 325 (estimate by consultant)
- f. Estimated average grant per family for:
 - Phase I-A.2900££
 - Phase I-B.2000££
 - Phase II2000££
 - Phase III.1250££
- g. Estimated number of blocks to build a 28m² house: 1,000
- h. Average size of lot apportioned by UNRWA: +87m²

G. Drainage:

1. Status. Most storm drains, culverts and gutters were replaced or rebuilt in the regrading of the camps. There are no major problems at present, although settling of roads in the next few months may necessitate repairs next spring.
2. Recommendation. Set aside funds for minor repairs.

- H. Schools: Most schools that are still standing are being used for shelter or other purposes. When they are vacated, some rehabilitation work will be required.

UNRWA engineers have done their best to try to save existing facilities, repairing some structures that in other situations would have been written off. They should be cited for their insistence on repair for it will save the program millions of dollars. UNRWA may want to consider having the repairs checked by a structural engineer since this is an earthquake zone and the buildings are frequently occupied to capacity.

- I. Clinics, Hospitals, Supplementary Feeding Centers: Most medical facilities received repairable damage. To date, UNRWA has attempted to repair as many facilities in the camps as possible. In Ayn al-Hilwah the main clinic was heavily damaged and lost one wing, but the remainder has been successfully repaired.

The hospital on the eastern border of Ayn al-Hilwah has been the subject of some debate. UNICEF has proposed building a new hospital, while others suggest repairing the existing facility. The damage is only to non-load-bearing walls on the exterior. The frame and columns appear intact, the foundation is sound,

and most interior walls only need to have smoke marks washed off. Even extensive interior redesign would be economically feasible.



Figure 13: Hospital in Sidon Adjacent to Ayn al-Hilwah

J. Circulation Systems:

1. Status. All roads have been regraded where necessary and many have been resurfaced with rock and gravel.
2. Future Plans. After the rainy season there are plans to resurface all roads with asphalt. There is some criticism of this as being too extravagant, but it will help keep the camps clean, keep drainage from undermining the buildings, and reduce settling problems. If no action is taken on installing sanitation systems, then hard-surfaced streets and

paths will be absolutely necessary to keep waste water moving out of the camp. (Earth or gravel roads and paths will encourage water to pond, and drains will be constantly clogged with debris and rocks.)

K. Light and Power:

1. Status. Electrical systems in most southern camps will have to be replaced entirely. In some camps, especially in Beirut, electricity should be available soon, but there are unconfirmed reports that the municipality will not reconnect the system.

2. Recommendation. For security purposes, it is important to provide as much light as possible to the camps. The Government of Lebanon should be asked to restore electricity as soon as possible. As an interim solution, Coleman-style lanterns should be donated to each household.

SUMMARY OF MAJOR OBSERVATIONS

Major Issues in the Camps

- A. Land: Due to mismanagement and lack of planning, there will be a shortage of land in several camps. In Ayn al-Hilwah, 10% - 15% of the people there now will not have land assigned to them. If other families return, the situation will become critical.

- B. Security: UNRWA is gradually withdrawing its foreign staff in the camps. The lack of a substantial foreign presence to serve as observers unsettles the refugees and could lead to increased exploitation by outsiders, especially in camps "protected" by DFF (Haddad). Lack of security will necessarily lead people to seek reinstatement of PLO or PLO-like organizations for security. A large expatriate presence may also inhibit the PLO from making an overt early return to camps.

- C. Housing: Most refugees believe the UNRWA housing program is too little and very late. People whose houses were totally destroyed and who lived on land that was cleared and replatted resent having to relocate even if only by a few feet. They feel they have been doubly hurt -- once by the bombing, and once by UNRWA.

Future Political Issues

- A. Equity Between Palestinians and Lebanese: The Lebanese public and government are becoming resentful of the high level of attention given to the needs of the Palestinians. The high standard of service to Palestinians before the war was much resented then and this feeling is not likely to decrease. The U.S. should encourage a general reduction in some of the services and

As a result of this experience, UNRWA should be encouraged to conduct a detailed evaluation and use the findings to develop organizational changes to help better prepare for emergency operations. An Emergencies Unit should be established and emergency procedures prepared. The unit should be made up of operational field people, and standing arrangements for working with operational partners should be made.