

The West Bank Rural P.H.C. Survey

Interim Report 2:

The Tulkarm Area

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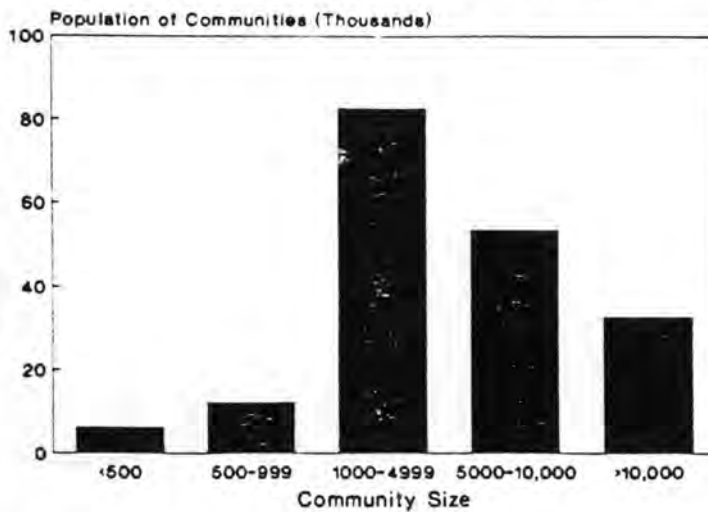
4.3 Population

The total population of the 90 communities was estimated at 187,850. 13% of the population were registered refugees. Of the total population, 95,945 (51%) lived in the Tulkarm subdistrict, 45,270 (24%) in the Qalqiliya subdistrict and 46,635 (25%) in the Salfit subdistrict. The table below shows the population distribution by community size.

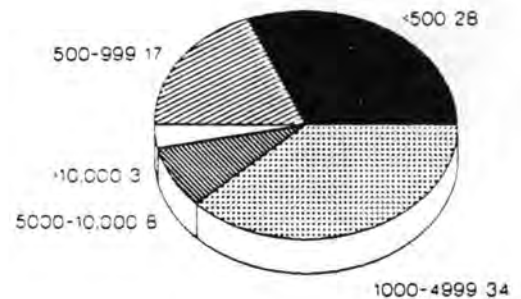
Population Distribution

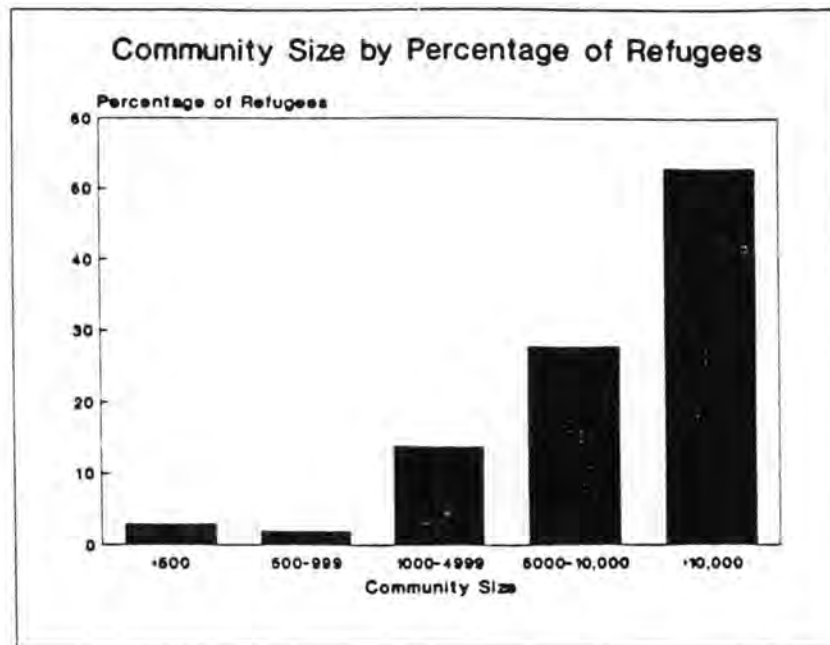
Community Size	Number of Communities	% Communities	Population	% Pop.
<500	28	31	6,275	3
500-999	17	19	12,275	7
1,000-4,999	34	38	82,820	44
5,000-10,000	8	9	53,700	29
>10,000	3	3	32,780	17
Totals	90		187,850	

Community Size by Population



Community Size by Frequency





81% of the registered refugees lived in communities with populations of more than 5,000.

Community Size vs. Presence of Registered Refugees

Community Size	Number of Refugees	% Refugees.
<500	633	3
500-999	542	2
1,000-4,999	3,519	14
5,000-10,000	7,085	28
>10,000	13,100	53

4.4 Spatial Distribution of the Population

It was not the intention of this survey to formulate criteria for planning the P.H.C. provision mechanism in the area. However, when planning for P.H.C. provision and the spatial distribution of services in the area, one aspect is believed to be of particular importance to planners. The area studied in this report, and indeed the whole of the West Bank was characterized by the presence of numerous small hamlets and villages which had irregular and expensive public transport facilities, posing problems of geographical accessibility² of P.H.C. services to their populations.

It has been previously suggested³ that P.H.C. facilities be established in communities on the sole basis of population size of the communities, with the intention of providing services to the largest possible population. The data which was collected during the field survey, however, pointed out other considerations than population size to be taken into account. These

considerations included the availability of easy and relatively inexpensive public transportation facilities, road conditions, and the direction of movement of the population, i.e., where people go for education, health care, trading, etc.

Based on these considerations, the Tulkarm district was subdivided into 10 subregions, each with a central community. Note, however, that more or less than 10 communities may be chosen depending on the type of services which would be established. This subdivision of the district should then be considered provisional, pending a more thorough analysis.

In this report, some preliminary statistics have been performed which take the issue of geographical accessibility into consideration. The statistics were performed on the selected ten subregions.

The selected central communities were:

1. 'Anabta
2. 'Attil
3. 'Azzun
4. Baqa A-Sharqiyya
5. Bidiya
6. Kufr A-Dik
7. Kufr Jammal
8. Qalqiliya
9. Salfit
10. Tulkarm

The table below shows the distribution of the population in and around the central communities which had maximum accessibility (see map on page 58).

Population vs. Distance From Central Communities

Central village	Avg distance of travel To Central Village@	Population in Region	%pop.with Good Road#
Baqa A-Sharqiyya	1.9	17500	95
'Attil	2.3	30830	92
Kufr A-Dik*	2.5	10230	69
Bidiya	2.6	20500	96
Kufr Jammal	2.7	4850	100
Tulkarm	3.0	27195**	98
'Anabta	4.3	16720	99
'Azzun	4.9	23490	100
Salfit	5.4	24905	100
Qalqiliya	6.2	11630***	90

@ From surrounding communities.

The population with good roads are those who lived in communities which had access to a central community through a road which was paved and in good condition.

* Kufr A-Dik was a special case (see map)

** Excluding the population of Tulkarm town.

*** Excluding the population of Qalqiliya.

Note that two of the central communities in the area were Tulkarm town and Qalqiliya, both considered as towns rather than villages.

4.5 Water and sanitation

32 communities (36%) had piped water networks which served 58% of the population. The Israeli water company 'Mekorot' controlled 14 of the networks. 13 networks were fed from local spring water and five networks were controlled by the municipal councils of Tulkarm and 'Azzun.

Year Piped Water Supply Installed

Year	Number of Communities
<1967	5
1967-1976	8
1977-1986	14
1987-1990	5

* In 42 communities (47%), rain-fed cisterns were the only source of water for domestic use.

* Four communities utilized non-piped spring water.

* 11 communities had networks which carried spring water into household cisterns.

* One community had no water source; animals were used to carry water from other communities.

* None of the communities had a system for chlorination of cisterns or examination of spring water for pollutants or pathogens.

The table below shows the distribution patterns of piped water supply in the district. Note that larger communities were more likely to have piped water supply than smaller ones.

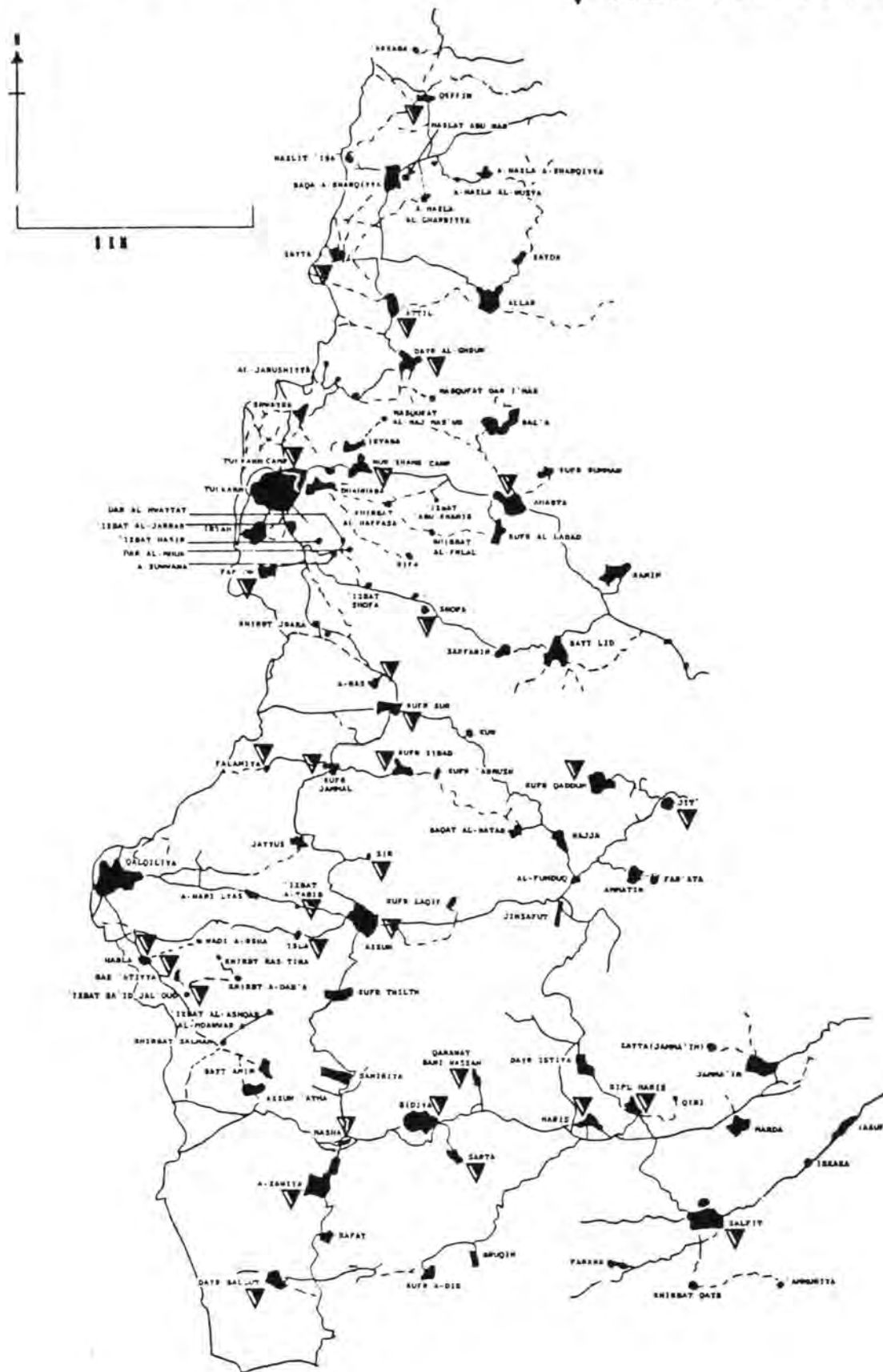
Piped Water Supply vs. Community Size

Community Size	Number of Piped Networks	% Population With Piped Supply
<500	6	21
500-999	4	24
1,000-4999	13	38
5,000-10,000	6	75
>10,000	3	100
Totals	32	58

13% of the registered refugees had no access to piped water. All of them did not live in any of the two refugee camps.

Communities With Piped Water Supply

▼ Communities With Piped supply



Piped Sewerage Systems

None of the communities had a piped sewerage system. Waste water was disposed of by using soakage pits or collection vaults.

Garbage Disposal

17 communities had garbage disposal services. 9 of the systems were in communities which had population sizes of 5,000 people or more. On average, the monthly fee charged for the garbage disposal service was NIS 2.2 per household. Garbage collection fees ranged from NIS 1.5 to 5.0. The table below shows the patterns of refuse disposal systems in the communities. Note that larger communities were more likely to have collective garbage disposal systems.

Community Size	Number of Communities With Garbage Disposal	% Population With Garbage Disposal
<500	0	0
500-999	2	11
1000-4999	6	18
5000-9999	6	73
>10,000	3	100
Totals	17	47

64% of the refugees lived in communities which had collective garbage disposal services.

In the communities which had garbage disposal services, garbage was regularly collected from households or from containers in streets and dumped or burned on specific sites.

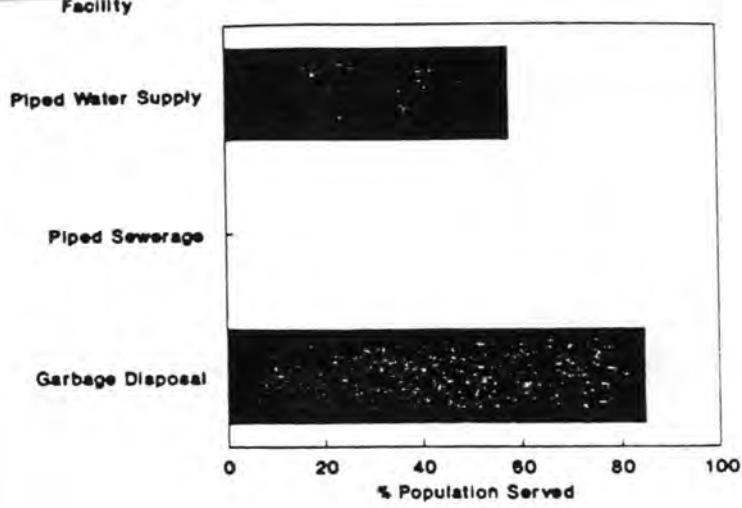
4.6 Electricity Supply

119,718 people (64% of the population) lived in 38 communities which had 24-hour electricity supply.

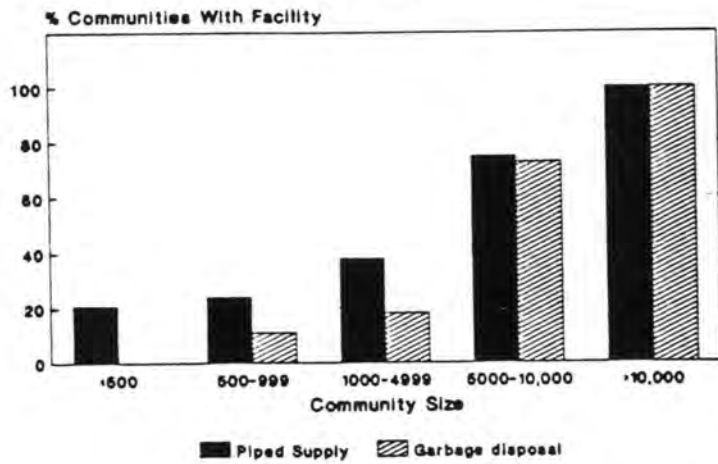
42% of the rural communities had 24-hour electricity supplies. As with other services, larger communities were more likely to have 24-hour electricity.

Community Size vs. 24-hour Electricity Supply

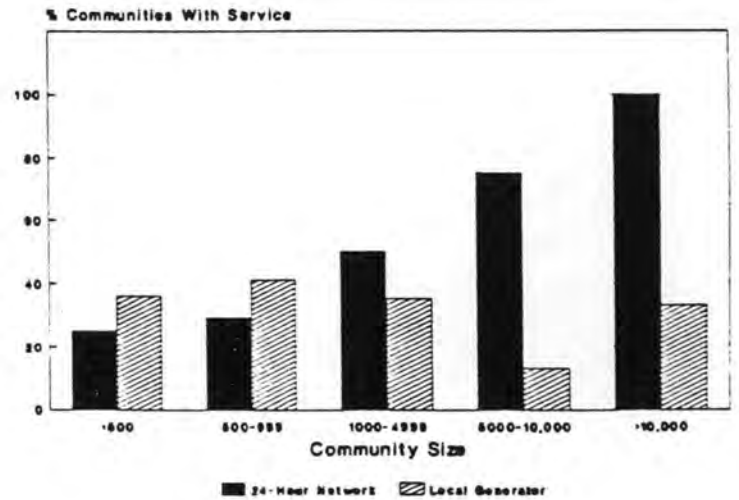
Community Size	Number of Communities With 24-hour Electricity	%Communities With 24-hour Electricity	%Population With 24-hour Electricity
<500	7	25	29
500-999	5	29	30
1,000-4,999	17	50	48
5,000-10,000	6	75	75
>10,000	3	100	100
Totals	38	42	64



Water Supply and Garbage disposal vs Community Size



Electricity Supply vs Community Size



-----, State Institute of Statistics, Statistical Pocketbook of Turkey - 1990 (State Institute of Statistics Printing Division, Ankara: January 1991), pp. 318.

-----, Statistical Yearbook of Turkey - 1989 (SIS Printing Division, Ankara: 1990), pp. 447.

Turkey Today, "Major Energy Contract for Turkey," Number 134 (July/August 1992), p. 5.

Wachtel, Boas, Abstract plus assorted papers, "The Peace Canal Project on the Golan - A Possible Long Term Solution to the Water Crisis and a Catalyst for Peace in the Middle East," presented to the First Israeli/Palestinian International Academic Conference on Water (Jerusalem: Oct. 20-23, 1992), pp. 14.