LABOUR MIGRATION FROM PAKISTAN TO THE MIDDLE
EAST AND ITS IMPACT ON THE DOMESTIC ECONOMY;
PART III (Sample Design & Field-Work)

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SAMPLE DESIGN

PART I

DESIGN FOR SAMPLE SURVEY

Our search for a satisfactory basis of selection of the household
sample finally led to the conclusion that in the present instance there
was no choice. Given the urgent need for strong elements of objectivity
in the selection process, it was found necessary to go to the airports
and establish a profile of currently departing persons on which to
structure the sample.

As it turned out, the obtaining of details for more than 10,000
departing passengers at various dates in September, October and November
1979 did provide a 'large' sample from which nearly all sub-selections
for the 'small' sample were taken (the well-known double sampling),
although none of the processes of sampling was sufficiently refined to
be strictly called probability sampling. However, the extensive data on
the cases of departing passengers did establish the structure for the
sample of families of the migrant workers, controlling the choice of the
minor-sub-divisions of the country where interviewing was to be done and
the proportions of migrant families within each, as well as the
sub-selection of the actual families within the chosen sub-divisions
(principally, tehsils).

Background - Details of Design Considerations

Since the study was to concentrate heavily on the use of remit-
tances, it had been decided at an early stage that the principal sample
should consist of families of migrants who are currently working in Middle
East countries. This concept of the desired frame for sampling purposes was

appropriate since large proportions of Pakistani workers in the Middle
East countries were known to have extended their contracts abroad once
they had established themselves there. The plan was also to have a small
supplementary sample of migrant workers who had returned to Pakistan
after working in the Middle East countries and intended to live perma-
nently in this country.

Conceptually, then, the frame for a sample of migrant workers might
consist of those workers who had departed for the Middle East countries
during the past two years. This concept was sound since the great
majority of those Pakistanis now there would have been on vacation in
Pakistan at least once during the two years and would therefore have
been included among departing passengers during this period of time.

Such a frame would by no means be perfect because it would suffer
from omissions of those migrant workers who had not been back to Pakistan
during the past two years and it would contain duplications of those
individuals who had been on home vacations more than once during the two
years. Nevertheless, there are ways of coping moderately well with some
of these difficulties and the frame is of the type which would often be
the best available in studies of actively changing populations.

The frame defined above was the one which, it seemed at one stage
could be used. It was soon learnt that home addresses of departing
passengers were often lacking in the airport records of past departures
and for this reason it could not be used as such. It is helpful, however,
to discuss the sample design in terms of this frame since the practical

aspects of the sampling question may be clarified thereby. Moreover it will be seen to what extent the design adopted and described below has similarities with the frame mentioned above and can be treated in more or less scientific terms.

One of the most essential considerations in the design of household samples is that of control of costs through the defining of clusters of living places as units of sampling. The term cluster as used in the present context implies that the households included within it shall be located sufficiently close to each other to enable an interviewer to travel from one household to another as he proceeds in his work without undue cost. It is exactly for the purpose of forming these clusters that the double sampling was desirable and the method that has been used did then involve the forming of clusters from the addresses of migrants' families obtained from the initial airport surveys. It is proper and virtually inevitable that the clusters will vary in size, that is, in the numbers of households contained within each of them, but normally the size of cluster is set in advance. For the present sample, the size of cluster was set at 25 households.

In the present instance the scientific requirement for probability sampling was already violated at the beginning since there was no possibility at all of including, in the sample of passengers, persons who were departing from Pakistan on dates other than the particular dates of the airport interviewing (Fall of 1979). However, when the return of migrant workers on vacation, followed by new departures, is viewed as a continuous process it begins to appear that the particular day in the year when any individual worker is departing may be largely a chance event, and to

the extent that this is true the profile of persons obtained from the air-port interviewing is seen to be well-based. Similarly the sample which was structured on these cases seemed to be an acceptable one and in any event it was the best that could possibly be achieved.

Selection of the Sample in Two Phases: Second Phase, Part 1

The execution of the airport surveys, the first phase of the sampling p rocess, is described in Appendix B. For the second phase a sub-sample had to be selected from among the cases of the airport surveys.

Although reference is made repeatedly to the selection of one sample, there were in fact three samples. However, description of the sampling for the main sample provides most of the relevant information since selec-tion for the other two samples (non-migrant families and returned migrant families) were always made at fixed proportions within the same tehsils and locations as for households of migrants currently working in the Middle East countries. The proportions were about 25, 11, and 6 for migrant worker families, non-migrant (control) families, and returned migrant families, respectively.

In order to be certain to avoid problems of inclement weather in northern areas, a selection of seven sample points was made on October 1979 even though the interviewing of departures from Karachi had not been accomplished at that time. These sample points were confined to the Northwest Frontier Province and Azad Kashmir.

For this purpose, a consolidated list of the cases of departing passengers from Rawalpindi-Islamabad was used, consisting merely of the

names of the districts and other civil divisions and the numbers of
families which had been reported by departing migrants as living in each
of them. A selection was then made systematically, using sampling inter-
vals such that the desired number of selections was made, six for the NWFP
and one for Azad Kashmir. The next step was to choose at random one
household within each chosen district or sub-division, the location of
which would determine the sample point. These selections were made easily
since cards had been prepared for each of the migrant home addresses and
it was merely required to choose one card at random within the set of
cards corresponding to each of the seven selected districts or sub-divi-
sions as the case might be.

The plan at that stage was to go to the field and find the village
or tribal agency within which the chosen household was located and then,
through local inquiry, determine the names and addresses of 24 more house-
holds of migrants' families in the same general locality as the one chosen
at random. In this way, the clusters of size 25 would be built up for
each of the seven selections. As mentioned before, households for the
other two samples were also to have been selected. Further details on them
are given below.

Selection of the Sample: Second Phase, Parts 2 and 3

Subsequently, airport interviewing was conducted at Karachi during
a ten-day period (in November) and cards were likewise prepared for the
migrant households for a total of 8,160 cases. The numbers previously
obtained for Rawalpindi-Islamabad, for a 21-day period, had been 2,862 for
Lahore for a still longer period (since at Lahore the cases could be taken

off from past records), another 1,494 departures. The relevant information was transferred to the computer and by this means the data were at hand for a profile of migrant workers to the Middle East countries.

Following the completion of the airport interviewing in Karachi in November, about 35 additional sampling points were chosen but these points were within a set of sub-divisions (tehsils, principally) which had been identified with particular reference to the ones from which large numbers of migrants had departed. Again, within the chosen tehsils, sample points were chosen at random by choosing one household from the cases on record for that tehsil.

The method which had been first considered for devising clusters of households, as described for the first set of sample points, was thought to leave much freedom of choice to interviewers and was discarded. Instead, the method decided upon was to use as many of known cases, already on file within the tehsil as necessary, and as close as possible to the sample points, and in this way build the cluster for the sample of migrants' families. A modification was also introduced which affected the number of tehsils in the sample in that in case of anticipated difficulty in finding a sufficient number of cases within a chosen tehsil, the first sample point was taken as a half sample-point, to include half the needed interviews, and a second half sample was then chosen within an additional tehsil.

While the interviewing was actively under way (in early February 1980), the resulting geographic distribution of the sample as then being implemented was seen to leave approximately 27% to 28% of migrants' families in the Punjab totally unrepresented, the tehsils containing them having

been excluded from consideration up to that time. Accordingly, a further
selection of tehsils was undertaken within the Punjab (Part 3 of the
second phase) with the result that during the final weeks, interviewing
was undertaken in two more tehsils which were previously unrepresented.

Selection of Non-migrant Families and Returned Migrant Families

It was desired that the non-migrant sample should consist of non-
migrant families which would reflect the same occupational and educational
distributions, as for as possible, as the migrant's families including the
migrants themselves. This type of control sample was the best which
could be devised taking account of costs, even though it was known that
interviewers identifying acceptable non-migrant families would inevitably
inject a degree of personal bias into their choices. The goal was to
have four non-migrant (control) families for every ten cases of migrants'
families, the occupational distribution for the latter having been
known from the information collected through the airport surveys. For the
returned migrant families, on the other hand, the need was to locate
cases of households containing one or more returned migrant in the same
sample localities and to find the desired number of cases for interview-
ing at each sample point. The desired ratio of the cases of returned mig-
rant families to migrants' families was kept small, as mentioned previously,
in order to control costs.

The Decision on Weighting of the Survey Data

During the process of sampling for the household surveys, data were
accumulated on the distribution of home addresses of departing migrants
by province and sub-division, and also by rural/urban location. The goal

at the beginning was to have the sample of migrants' families distributed geographically in proportions similar to these original distributions. For many reasons, the proportions of the interviews finally completed in different areas of the country did not agree quite exactly with those of home addresses on file for departing migrants. A question then naturally arises as to whether a system of weighting should be used to make the overall data from the sample survey more representative of the population. At the same time, it was noted that a moderately good geographic distribution of interviews had in fact been obtained in the field operations of the surveys.

In connection with this decision, it was relevant to take account of information supplied by the interviewers, as summarized in Appendix B, which showed that some of the intended interviews could not be taken since interviewers found that the addresses at hand for the intended families were not correct. In these cases other families of migrants had to be substituted in place of the intended households and there were also other reasons for non-response, for which further substitutions were necessary.

Under the circumstances, our faith in the data from the survey is based on the objective attempts regularly made to include a proper sample for the study. However, there are several areas in which improvement would be possible in a future endeavour of this kind. The experience of this pioneering study should, therefore, be fully utilized in subsequent studies.

Principally due to the constraints of time, the data in this Report have not been weighted. However, it is being considered that a subsequent volume of this study should provide weighted figures in order to correct the rural-urban bias in the IMP sample. The IMP sample is approximately 34% rural and 66% urban, while the rural-urban distribution provided by the PIPO nation-wide survey is almost its reverse, namely, 66% rural and 34% urban. It has been discussed in Chapter 1 of Part I of this Report, that the PIPO data come closest to giving a representative picture of the total number of migrant workers in the country and their geographic distribution. The IMP survey, on the other hand, was not designed to capture these dimensions and therefore does not reflect an accurate picture of geographic distribution of migrants.

The Report shows that the behaviour of rural migrants is significantly different from that of the urban migrants on several issues including income, saving and remittance. Consequently the correction by appropriate rural-urban weights can cause significant differences in the results.

Since there was some difference of opinion on the value of weights, we have decided to postpone this matter for subsequent analysis.

Part II

A SYSTEM OF WEIGHTING FOR THE DATA

The airport surveys of outgoing workers were conducted at three major

airports, viz. Karachi, Lahore and Islamabad. The survey was conducted on

the following dates and all flights going to and touching the Middle East

countries were covered.

Airport	Dates of Surveys & No. of Days	No. of Flights Covered	Total Outgoing Pakistani Workers
Karachi	13 November to 22 November, 1979 (10 days)	137	8160
Lahore	12 September to 2 October, 1979 (25 days)	21	1494
Rawalpindi/ Islamabad	13 September to 6 October, 1979 (21 days)	35	2862

The following tables give for each of the three major airports break-

downs, by provinces/areas of origin, of all the outgoing Pakistani workers

covered in the above-mentioned airport surveys.

Province/Area of Origin	Karachi Airport
Punjab (including Federal Area)	3542
Sind	2581
N-WFP	1412
Baluchistan (130) & AJK* (350)	480
Total	8160

*AJK stands for the State of Azad Jammu and Kashmir.

Province/Area of Origin	Lahore Airport
Punjab	1400
Sind	23
N-WFP	45
Baluchistan (1) & AJK (9)	<u>10</u>
Total	1494

	Rawalplndi/Islamabad Airport
Punjab (including Federal Area)	981
Sind	94
N-WFP ' ' '	1317
Baluchistan (6) & AJK. (203)	<u>209</u>
Total	*2862*

	Data For the Three Airports Combined
Punjab (including Federal Area)	5923
Sind	2698
N-WFP	**2774**
Baluchistan & AJK	<u>**699**</u>
Total	12516

The data collected from these airports served as the frame for the selection of a sample for a detailed household survey.

Since interviews at the three airports were conducted for unequal number of days, it was necessary to properly weight the statistics of each airport in order to avoid any likely bias arising out of different periods of coverage.

Assuming an equal base of 10 days for the three airports, the formula for the calculation of weighted aggregates from the statistics of the three airports is:

$$S \quad = \quad K + \frac{k}{r} R + \frac{k}{l} L$$

$$= \quad K + \frac{10}{21} R \frac{10}{25} L$$

where S = Aggregated Statistics

K = Total number of respondents from Karachi Airport

k = Total number of interview days at Karachi Airport.

R = Total number of respondent from Rawalpindi Airport

r = Total number of interview days at Rawalpindi Airport

L = Total number of respondent from Lahore Airport

l = Total number of interview days at Lahore Airport.

After application of the formula, the adjusted numbers of interviews for the various provinces come out as below:

Punjab

The numbers of the outgoing Punjabi workers interviewed at three airports were as follows:

Karachi	Lahore	Rawalpindi	Total
3542	1400	981	5923

Feeding the above figures into the adjustment formula, $K = \frac{k}{l} L + \frac{k}{r} R$, as under

$$= \quad 3542 + \frac{10}{25}(1400) + (\frac{10}{21}) \; 981$$

$$= \quad 4569.142 \quad = 4569,$$

we get the adjusted number of interviews for the Punjab as 4569.

Sind

The numbers of outgoing workers of Sind origin interviewed at the three airports were:

Karachi	Lahore	Rawalpindi	Total
2581	23	94	2698

When the adjustment formula is applied to these figures, as under,

$$2581 + \frac{10}{25} (23) + \frac{10}{21} (94)$$

$$= 2634.96 = 2635$$

The adjusted number of interviews comes to 2635 for Sind.

N-WFP

Of the outgoing workers interviewed at the three airports, those of the N-WFP origin counted at the airports were as follows:

Karachi	Lahore	Rawalpindi	Total
1421	45	1317	2783

Subjecting these numbers to the adjustment formula, as under,

$$1421 + 45 \left(\frac{10}{25}\right) + 1317\left(\frac{10}{21}\right)$$

$$= 2057.143 = 2057,$$

we get the figure of 2657 for the adjusted number of interviews for the North-West Frontier Province.

Baluchistan and AJK

The outgoing workers of Baluchistan and AJK interviewed and counted at the three airports were as tabled below:

Karachi	Lahore	Rawalpindi	Total
480	10	209	699

The application of the adjustment formula to these figures as under,

$$480 + 10(\frac{10}{25}) + 209 \ (\frac{10}{21})$$

$$= 583.524 = 583$$

yields the total adjusted number of interview for Baluchistan and Azad

Kashmir together as 583.

The relative importance of each province in the interviewing is given

in the following table.

Province/Country	Total Number of Respondent	Proportion of Respondents
Punjab	4569	0.464
Sind	2635	0.268
N-WFP	2057	0.209
Baluchistan & AJK	583	0.59
Total	9844	1.000

CALCULATIONS OF WEIGHTS FOR THE SAMPLE OF HOUSEHOLDS

The principal sample consisted of families of migrants who are

currently working in the Middle East countries. The plan was also to have

a small supplementary sample of migrant workers who had returned to

P akistan for good after working in the Middle East countries.

In the selection of one sample point there were in fact three samples.

However, the description of the sampling for the main sample provides all

the relevant information since selections for the other two samples

(returned migrant workers and non-migrant families) were always made in

fixed proportions within the same villages and localities as for households

of migrants currently working in the Middle East countries. The proportions

were about 25, 6 and 12 for migrant worker families, returned worker

families and 'control' (non-migrant) families, respectively.

The total numbers of sample points for the whole country and for each province are given below:

Province/Country	Number of Sample Points
Punjab	21½
Sind	10½
N-WFP	10
Baluchistan & AJK	4
Total	46

If all the points were given an equal chance of selection), the importance or weight for each point would have been as follows:

Province/ Country	Weight for the province (w)	No. of Points in each province (n)	Weight for each point $(w_i = \frac{w}{n})$
Punjab	552	21½	25.6744186
Sind	251	10½	23.9047619
N-WFP	250	10	25.0
Baluchistan & AJK	100	4	25.0
Total	1153	46	

Due to some administrative and cost problems, some sample points in the Punjab could not be given proper representation which they otherwise deserved on the basis of their importance manifest from the airport surveys.

Based on the adjusted number of migrant cases from the airport, the following measures of importance have been calculated for the Punjab. (For detailed calculation, see Annexure 1.)

The calculation of the W_{hi} values must always take, account of the number of households which were interviewed in the main household sample at the particular sample point. The process of determining the weights requires, first, the allocation of the measure of 'importance' to each sample point and, then, dividing this measure by n_{hi}, the number of households at a particular sample point.

Measures of Importance for the Punjab

District code	Tehsil Code	No. of Points	No. of House-holds n_{hi}	Importance of the point W_{hi}	Importance of the household $w_{hi} = \dfrac{W_{hi}}{n_{hi}}$
23	2	½	13	9.64	0.741538461
27	2	½	13	5.06	0.389230769
14	1	½	13	11.24	0.864615384
11a	2	1	26	5.95	0.228846153
11b	3	1	25	8.99	0.3596
25	1	2	51	56.50	1.107843137
	4	1	27	16.05	0.594444444
29	1	3	77	66.37	0.861948051
17a	2	1	26	5.94	0.997692307
17b	5	1	26	29.58	1.13762307
21	1	4	101	163.29	1.616732673
15	3	2	52	31.05	0.597115384
16	2	2	53	29.82	0.562641509
28	1	¼	11	9.60	0.872727272
19	2	½	13	41.5	3.192307692
30	1	1	25	41.5	1.66
TOTAL		21½	552	552.00	

The criteria of importance for Sind and the N-WFP remains simple as in their cases no such selection problems as were faced for the Punjab. The importance of each point is calculated by dividing the importance of province by the total number of sample points in that province. The measure of importance for each point in the N-WFP, Sind and Baluchistan & AJK is given below:

District Code	Tehsil Code	No.of House-hold n_{hi}	Importance of the Point W_{hi}	Importance of the Household $w_{hi} = \dfrac{W_{hi}}{n_{hi}}$
			N-WFP	
61	1	27	25.0	0.925925925
62	5	17	25.0	1.470588235
63	2	52	50.0	0.961538461
	3	51	50.0	0.980392156
64	1	26	25.0	0.961538461
66	1	25	25.0	1.0
67	2	26	25.0	0.961538461
95		26	25.0	0.961538461
		250	250.0	
			SIND	
45	1			
Federal B. Area		46	47.8	1.039130434
Korangi		12	11.95	0.995833333
Liaquatabad		24	23.90	0.995833333
PECHS		24	23.90	0.995833333
Malir		12	11.95	0.995833333
Landhi		11	11.95	1.086363636
Drigh Colony		12	11.95	0.995833333
Nazimabad		36	35.85	0.995833333
North Nazizamabad		24	23.90	0.995833333
46	3	25	23.90	0.956
42	1	25	23.90	0.956
		251	251	
			BALUCHISTAN & AJK	
82	1	13	12.5	0.961538461
84	2	13	12.5	0.961538461
73	1	25	25.0	1.0
75	1	25	25.0	1.0
77	1	24	25.0	1.041666666

ANNEXURE I

CALCULATION OF MEASURES OF IMPORTANCE
FOR THE SAMPLE POINTS IN THE PUNJAB

There are two groups of points in the selected sample for the Punjab. The first group is the one which was selected initially. The second group consists of those points which were included later on. These points belong to those districts which were initially ignored due to various problems. The weights of the selected points in the first group, based on the adjusted data from airports, are shown in Table 1.

The total of the weights of these points comes out to be 3105.5. The total of the weight for each point excluded from the sample for the corresponding districts comes out to be 779 (Table 4). Thus the total weight of this first group of the Punjab sample in a sample of 1153 should be $\frac{3105.5 + 779}{4569} \times 552 = 469$.

The group of districts that were ignored therefore should be represented with a weight equal to $552 - 469 = 83$.

Two additional sample points were drawn later on from the districts initially ignored. The weights to the points in this second group of sample were divided equally $\frac{83}{2} = 41.5$. Equal weights were given because the two points were chosen by probability sampling and each of the two could be considered representative of the same total number of migrant families.

Table 1

Sample Selected Initially From Three Airports

| District Code | Tehsil Code | Persons Leaving From | | | Adjusted Total | Index of Importance (W_{hi})* |
		Karachi Airport	Rawalpindi Airport	Lahore Airport		
23	2	63	0	2	63.8	9.64
27	2	26	4	14	33.5	5.06
14	1	68	0	16	74.4	11.24
11	2	28	24	0	39.43	5.95
	3	50	20	0	59.52	8.99
25	1	276	200	7	374.04	56.50
	4	71	74	0	106.24	16.05
29	1	345	26	205	439.38	66.37
17	2	116	96	25	171.71	25.94
17	5	164	40	32	195.84	29.58
21	1	794	45	654	1081.03	163.29
15	3	186	10	37	205.56	31.05
16	2	163	11	73	197.44	29.82
28	1	56	5	13	63.58	9.60
Total						3105.50

*W_{hi} = (Adjusted Total/3105) x 469

Table 2

Sample Points Included Subsequently

| District Code | Tehsil Code | Persons Leaving From | | | Adjusted Total | Index of Importance |
		Karachi Airport	Rawalpindi Airport	Lahore Airport		
30	1	28	1	15	34.47	35.0
19	2	53	29	1	67.21	35.0

The adjusted number of migrants in Tehsils not included in the sample for all the districts in the Punjab are given in Table 3. A comparison with Table 1 will show that the Tehsils chosen were the ones having the maximum number of migrants in that district.

Table 3

Adjusted Number of Migrants in Various Districts

| District Code | Tehsil Code | Persons Leaving From | | | Adjusted Total |
		Karachi Airport	Rawalpindi Airport	Lahore Airport	
26	1	21	2	0	21.952
	2	5	4	0	6.905
	3	3	0	0	
	4	4	3	0	5.428
13	1	6	0	1	6.4
	2	15	0	0	15
	3	4	0	0	4
23	1	16	4	1	18.304
	3	8	2	0	8.952
	4	21	1	0	21.476
	5	2	0	0	2
24	1	15	1	2	16.276
	2	9	0	1	9.4
	3	2	0	1	2
31	1	8	0	0	8
	2	4	0	0	4
12	1	3	1	2	4.428
	2	8	0	2	8.952
	3	1	0	0	1
	4	2	0	0	2
	5	1	0	0	1
27	1	7	0	2	7.952
	3	22	0	4	23.6
	4	10	0	5	12
	5	0	0	1	4
14	3	8	0	0	3
	3	1	0	0	1
22	1	4	1	2	5.276
	2	5	0	1	5.4
	3	4	0	0	2
	4	2	0	0	2
11	1	8	7	0	11.333
	4	7	5	0	9.381
	5	6	7	0	9.333
	6	7	1	0	7.476
19	1	38	13	3	45.390
	3	100	59	3	129.295
	4	9	12	2	15.514

District Code	Tehsil Code	Persons Leaving From			Adjusted Total
		Karachi Airport	Rawalpindi Airport	Lahore Airport	
25	2	37	25	0	48.905
	3	36	55	0	62.19
29	2	58	4	16	66.305
	3	30	4	22	40.705
	4	14	2	0	14.952
	5	4	0	2	4.8
18	1	15	1	2	16.276
	2	4	0	0	4
	3	4	0	0	4
17	1	29	13	15	41.19
	3	13	6	2	16.657
	4	17	4	3	20.105
	6	4	0	1	4.4
	7	42	13	5	50.19
20	1	9	1	8	12.676
	2	5	2	0	5.952
15	1	37	1	14	43.076
	2	33	3	12	39.228
	4	50	4	5	53.904
30	2	7	1	3	88.7
	3	6	3	2	8.228
16	1	14	1	18	25.3
	3	55	3	15	62.428
	4	1	0	10	5
	5	2	1	0	2.5
28	2	14	4	2	16.705
	3	16	7	3	20.53
	4	4	0	0	4
Total					1046.106

APPENDIX B

DETAILS OF FIELD-WORK

The International Migration Project was designed to fulfil two primary objectives: firstly, to generate an extensive data base on the various dimensions of Pakistani emigration to the Middle East, and, secondly, to analyze the costs and benefits of emigration within frameworks of cost-benefit analysis.

The work was organised in two phases. The first phase consisted in preparing an inventory of the existing data and other work available on the subject of Pakistani emigration to the Middle East. The second phase consisted in collecting and analyzing the information which appeared to be missing in the existing literature.

Early in the first phase we discovered that the existing data were extremely minimal. Information on the total number of emigrants was not available with any government department, and wherever it was, the information was incomplete. Quite understandably, then, information on aspects like regional distribution of migrating labour and its skill composition, income and educational background, the length of stay abroad, the conditions and terms of work abroad, the volume of remittances sent home, its pattern of consumption and similar other details crucial for a cost-benefit analysis of migration were also not available.

In the light of this situation the project team undertook to conduct several major surveys in the second phase of its works. Five major surveys were conducted.

The *First Survey*, termed the large sample, consisted of 12000 interviews conducted with departing passengers at the Karachi, Islamabad and Lahore International airports. The brief questionnaire prepared by the

project staff included questions on the occupation, age, place of residence, country of destination, and length of stay abroad. The survey provided not only the basic demographic information, but also the names and addresses of the outgoing workers and their households which became the base for selecting the statistical sample for more extensive interviews of 1200 households from where someone had migrated for work abroad.

The sample for the *Second Survey* was carefully designed on the basis of the addresses obtained in the large sample. It was conducted in approximately 250 villages and 50 towns and cities all over the country.

The *Third Survey* was conducted with a control group of families from where no one had migrated abroad. A control group survey was conducted in the places where the migrants households were located. It provided a base for comparison with the migrant household characteristics, attitudes and behaviour.

The *Fourth Survey* involved 277 interviews with migrant workers who had returned to Pakistan permanently. A survey with the migrants who had permanently returned was designed to get from first-hand experience of work abroad information on possible acquisition of skills during their work abroad, the change in their attitudes and the various avenues open to them on their return.

In order to obtain first-hand information from migrant workers currently working abroad, a *Fifth Survey* was conducted at the Karachi and Islamabad airports in the International departure lounge. This survey consisted of a sample of 800 migrant workers who were returning to their work place after a temporary visit home. This survey provided information

on their travelling behaviour, frequency of travel, mode of transportation, length of stay during holidays, the extent to which service agreements are honoured, etc. On a selected number of questions which were common to both this survey of the returning migrants and the survey of migrant households we were able to compare the responses from the household with those from the migrant family.

The essential features of these surveys are summarized in the following table:

Survey	Sample size	Dates
1. Airport Survey	12000	September 20, 1979 - November 10, 1979
2. Migrant Household Survey	1153	February 11, 1980 - April 15, 1980
3. Non-Migrant Household Survey	557	February 11, 1980 - April 15, 1980
4. Permanently Returned Migrants Survey	277	February 11, 1980 - April 15, 1980
5. Department Lounge Survey	800	March 6, 1980 - April 15, 1980

Organization of Fieldwork
for Various Surveys

Introduction

The various surveys, in particular the household survey, were a most rewarding, though painstaking and difficult, experience. From our study of the literature on international migration, we discovered that ours were the first major nation-wide surveys in any labour - exporting country, which had focussed exclusively on the migration question. Our experience in fieldwork should, therefore, be of benefit to many other labour-exporting countries.

Altogether, we conducted approximately 15000 interviews at the three international airports of Karachi, Lahore and Islamabad and in approximately 250 villages and 50 towns across the country. Interviews were conducted in the remotest areas of mountains, plains and deserts of this rather vast country.

The most important survey was of migrant households. For this we interviewed approximately 1200 statistically selected migrant families. The most difficult task was to track families whose names were provided to us in our Large sample collected in the airport survey. We instructed our interviewers to restrict their interviews to the households whose lists and addresses had been provided by us. The address searching process proved to be very difficult but it ensured that the interviewer's bias did not play any role in the selection of the respondent

A list of the approximately 300 villages and towns where the interviews were conducted is given at the end.

The field-work was divided into three stages:

(i) Organization of field team; (ii) Training and material distribution; and (iii) Interviewing.

Mr. Ghulam Mohammad Arif, who was incharge of the field-work, toured the country extensively to select and organize the field team. Seven centres of coordination were visited for this purpose: Karachi, Sukkur, Multan, Lahore, Rawalpindi, Peshawar and Quetta. A field-coordinator was appointed at each place. Where necessary he also visited district towns to ensure that the arrangements were sound.

The Training Camps were attended by Dr. Ijaz Gilani, the late Mr. Naeem Butt and Mr. Ghulam Mohammad Arif. Two - to three-day training camps were held at the seven coordination centres. The training programme included brief introduction of the project including its main themes, research techniques and policy relevance for the country. The project introduction was followed by a brief lecture on survey research as a technique. After the theoretical points were understood, the questionnaires were read and explained in the group. Questions and clarifications from the interviewers were also entertained.

As part of the training, each interviewer was given a test questionnaire which he conducted in his local area. The completed questionnaire was discussed in individual meetings with Dr. Gilani and the late Mr. Butt, who pointed out the various problems encountered in the test interviewing. A careful and thorough evaluation of the performance of the test interviewers led to the final selection of the interviewers.

During the interviewing period, field coordinators visited various interviewers at short intervals of a few days to ensure that the problems arising in the field were resolved. Since interviews were conducted over

fairly large areas, involving long distances, field supervision required extensive travelling by the coordinators.

The entire completed material was delivered to Islamabad by a systematic and secure procedure ensuring safety against loss, misplacement or mis-organization.

An organization system was developed at the PIDE office which ensured that the retrieval of completed questionnaires was orderly and that the questionnaires were immediately available to the data processing section.

Results of Tracking Sheets for the
Survey of the Migrant Households

Area	Number of Households visited	Completed interviews	Wrong addresses	Refused because no male member was at home	Refused to give interview	Shifted somewhere else	Returned home from abroad	Visit Visa	Student	out of list interviews
Punjab	609	451	332	73	38	43	21	5	-	20
NWFP	300	171	87	31	9	1	-	-	-	38
Baluchistan	142	73	58	2	7	2	-	-	-	60
Kashmir	29	25	4	-	-	-	-	-	-	-
Karachi	428	166	161	42	16	30	5	2	3	7
Sind	78	43	31	1	3	-	-	-	-	9
(Larkana) (Hyderabad)										
Total	1946	929	673	149	73	76	26	7	3	134

Note: These results were compiled from the tracking sheets provided
to every interviewer. Since some interviewers failed to return
the tracking sheets, the completed interviews shown here do
not add up to the actual figure, which is 1153.

LIST OF CITIES AND VILLAGES[*]
WHERE INTERVIEWS WERE CONDUCTED

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[*] The list of villages and urban areas here does not corres-
pond exactly with the rural-urban composition of the sample,
because of slight definitional difference. The total diffe-
rence is, however, minor.

(A)   List of Cities

<u>Provin</u>ce   <u>City Name</u>

Sind   Karachi
                                                                           Hyderabad
                                                                           Larkana
                                                                           Wara
                                                                           Qambar Ali
                                                                           Rato Dero

Punjab   D. G. Khan
                                                                           Multan
                                                                           Chicha Watni
                                                                           Lahore
                                                                           Faisalabad
                                                                           Sheikhupura
                                                                           Sargodha
                                                                           Pasroor
                                                                           Gujranwala
                                                                           Sialkot
                                                                           Attock
                                                                           Hazro
                                                                           Pindi Gheb
                                                                           Gujar Khan
                                                                           Rawalpindi
                                                                           Chakwal
                                                                           Gujrat
                                                                           Fateh Jhang
                                                                           Texila

N-WFP   Peshawar
                                                                           Hongu
                                                                           D. I. Khan
                                                                           Saido Sharif
                                                                           Taank
                                                                           Abbotabad
                                                                           Haripur
                                                                           Bannu
                                                                           Wana

Baluchistan   Quetta
                                                                           Zhob
                                                                           Turbat

Azad Jammu '& Kashmir   Mirpur
                                                                           Rawalakot

(B) List of Villages

District	Tehsil	Villages	No. of Interviews

1. SIND

District	Tehsil	Villages	No. of Interviews
Larkana	Miro Khan	Bhand	1
		Bhatti	1
	Shahdad Kot	Saifra	2
	Wara	Sahib Khan Chatta	2
		Tani Band	1
		Ismail	1
		Abad	1
		Haistam Khan	1
		Gaisi	1
		Raza Abad	1
		Mohammad Hashim	1
		Anwar Abad	1
		Ali Ashah	2
	Qanber Ali	Mastoori	2

2. PUNJAB

District	Tehsil	Villages	No. of Interviews
D. G. Khan	D. G. Khan	Mauza Batil	8
		Kot Chatta	2
		Chah Nai Wala	1
Sahiwal	Sahiwal	Chak No. 66	1
		90	
		3/I.RA	1
		177/9-L	1
		52/5-L	1
		142/9-L	1
		108/7-R	1
		78/12-L	1
		84/12-L	1
		39/12-L	1
		114/12-L	1
		Chichawatni	2
Sheikhupura	Sheikhupura	Chak 12 Rati Bai	7
		Maili Burji	1
		Chak No. 13	
Sialkot	Pasroor	Shahzad	1
		Qazi Pumbazing	1
		Thatti Bajwa	1
		Kalanwala	4
		Suken Wand	1
		Chunda	2

District	Tehsil	Villages	No. of Interviews
Sialkot (contd.)	Pasroor	Massowel	3
		Nangalion	1
		Chand	3
		Bin Bajwa	1
		Basi wala	1
Gujrat	Gujrat	Daulat Nagar	1
		Gajgran	2
		Lalamusa	7
		Saida	1
		Jatookal	1
		Jalalpur Jattan	1
		Narwali	1
		Phularwan	1
		Looran	1
		Goldanwala	1
		Randhawa	1
		Madina	2
		Nagrianwala	2
		Jamalpur	1
		Shadiwal	1
	Kharian	Shadwal Chiban	2
		Sarai Alamgir	3
		Chak Ali	1
		Samrala	1
		Votam	2
		Chak Pirana	1
		Bhangial	1
		Dilo	1
		Dhani	1
		Saboor	1
		Bianial	1
		Dhorian	2
		Kariala	1
		Dhama	1
		Bhad Ghait Pura	2
		Bhago	1
Attock	Attock	Khagwani	1
		Sarwana	1
		Malik Mala	2
		Jalalia	2
		Barazai	2
		Hamid	2
		Nullan Mansoor	2
		Painda	2
		Mahloo	1
		Kamilpur Musa	1
		Haji Shah	1
		Tajak	1
		Haider	1

District	Tehsil	Village	No. of Interviews
	Pindi Gheb	Ferozewali	2
		Ahmadal	7
		Khor	2
		Ball	1
		Thatta	1
		Kot Fateh Khan	1
		Chaib	1
Rawalpindi	Rawalpindi	Gora Saidan	1
		Dhamial	1
		Jhamat	1
		Soora	1
		Rajwal	1
		Tamber Raital	1
		Toop Mankiala	1
		Sagri	1
		Toop Kalial	1
		Kalyan Khel	1
		Tarhala Bakiwal	1
		Chahrah Gaoon	2
		Kasli	1
		Alipur Jhang Saidan	2
		Bara Kahu	5
		Sahala	1
		Nailoor	1
		Tarlai Kalan Alipur	1
	Gujar Khan	Sal Dhairi	1
		Barki Badhal	1
		Kalyan Awan	3
		Chak Daulat	1
		Changriela	1
		Miani Dhairi	2
		Dhokwa	1
		Dhok Rajputana	1
		Chura	1
		Jand Tajar	2
		Dhok Kasi	1
		Bhatta	2
		Chakri Wakilan	1
		Bangali Gujar	4
Jhelum	Chakwal	Mastawal	1
		Khai	1
		Sadowal	1
		Maidangon	1
		Oud Narwal	1
		Jaisarpur	1
		Narang	1

District	Tehsil	Villages	No. of Interview
		3. N-W.F.P.	
Peshawar	Peshawar	Gul Bela	1
		Mohammadan	1
Mardan	Swabi	Zaida	2
		Bain Khel	6
		Charbagh	5
		Mannai	9
		Kota	4
Swat	Saido Sharif	Nawa Kala	1
		Mangora	4
	Babbo Zai	Adigram	2
		Baidra	1
		Braikot	1
		Bartrai	1
		Rahimabad	1
		Ahmedkhel	1
		Charbagh	1
	Khazakhela	Lakhar	2
		Barkat	2
		Fatehpur	1
Bannu	Bannu	Sikandarkhel Pala	1
		Karam Ghari	1
		Kotha Feroz	1
		Yak Ismail Khel	1
		Fazal Haq Malwana	6
		Pabal Bazar	1
		Pabak Sharza Khan	1
		Kotla Daulat Khan	1
		Pabak Sharabat Khan	1
		Musa Khel	1
		Doomal	2
		Dawood Shah	3
		Shahbaz Azmat Khel	4
Kohat	Hongu	Bazu Kot	1
		Haji Maldin	1
		Tall	5
		Yousaf Khel	1
		Kalandar Khan	1
		Malik Juma Khan	1
		Hamzani	2
		Dar Summor	1
		Zandar Khel Amir Shah	1
		Buland Khel	1
		Haji Faqir Gul	1

District	Tehsil	Villages	No. of Interviews
	Hongu(contd.)	Darband	4
		Balimin	2
		Tangh	3
		Zargari	2
		Ghaunday Kalay	2
		Panjuray	2
		Kohi Bagh	1
		Kharoo Ghashi	2
S. W. Agency	Wana	Kangram	1
		Jandela	1
		Dabkot	4
		Karikot	4
		Azam Warsak	3
		Tanai	3
		Taray	1
		Kot Kai	2
		Shakie	1
		Shawal	1
		Sheim Warsak	1
D. I. Khan	Taank	Kot Nawaz	3
		Mulla Zai	1
		Jandala	1
		Mirtaqi Kakar	1
Abbotabad	Abbotabad	Mirpur	2
		Saji Kot	1
		Jhangi	1
	Haripur	Kot Siadan	1
		Khalabai	8
		Ghazi	1
		Thana Kot Najibullah	8
		Anwana	1
		Sari Kot	1
		Dahinda	1
		Mankarai	1
		Pindi Kamal Khan	1
		Sheronwala	1

4. BALUCHISTAN

District	Tehsil	Villages	No. of Interviews
Zhob	Zhob	Naray Zai	2
		Mughal Kot	1
Makran	Turbat	Kalatak	1
		Aabsar	4
		Dasht Kundan	1
		Joosak	2
		Shaji Tamp	2
		Kosh Kalat	1
		Shahnaz	1
		Saloo	1

District	Tehsil	Villages	No. of Interviews
		5. AZAD JAMMU & KASHMIR	
Mirpur	Mirpur	Chattarpari	2
		Jathan	1
		Pindi	2
Poonch	Rawalakot	Haloorna Maira	3
		Tarar Khel	1
		Pachoof	5
		Jairooti	1
		Nariala	1
		Tarnai	1

APPENDIX C

OCCUPATIONAL CLASSIFICATION
USED IN THIS REPORT

I

Classification of Occupations Alongwith Their
Two Digit PSCO-68

Group		Name of Occupation	Code of PSCO-68
Production Workers	a.	Unskilled Labour	
		Agricultural Labour	6-21
		Non-Agricultural Labour	9-9
	b.	Skilled Labour	
		Mason	9-51
		Carpenter	9-54
		Welders	8-72
		Plumbers	8-57
		Machine Operators	8-38, 8-34
		Mechanics	8-41
		Steel Binder/Fixer	9-52
		Painter	9-3
		Blacksmith	8-31
		Goldsmith	8-80
		Drivers	9-73, 9-74, 9-8
		Tailors	7-9
		Watchmaker	8-42
		Denter	
		Turner	
		Furnace Fitter	
2. Professional and Managerial Workers		Engineers	0-2 & 0-3
		Doctors	0-61
		Teachers/Professors	1-3
		Executives/Managers	2-1
		Accountants	1-1
		Computer Programmers/ Operators	0-83 & 3-42
		Nurses	0-71
		Laboratory Technicians	0-5
		Photographer	1-63
3. Clerical Workers		Storekeepers	3-91
		Typists/Clerks	3-21
		Site Clerk	3-99
		Telephone Operator	3-80
		Accounts Clerk	3-31
4. Service Workers		Cook	5-31
		Laundrymen	5-60
		Security Guards/Watchmen	5-89
		Barbers	5-70
		Peon	5-99

5. <u>Salesmen/Businessmen</u> Salesmen   4-51

               Businessmen   4-99

6. <u>Miscellaneous</u>   Most of the professions under this category
                 fall under the heading 'production workers'
                 i.e. the PSCO Codes 7/8/9. Some of the pro-
                 fessions belong to 'professional workers' or
                 'service workers' also. Only those professions
                 have been lumped with the category 'miscella-
                 neous' where generally only one or two persons
                 have migrated.

II

LIST OF CATEGORIES

I. HIGHLY QUALIFIED

101. Engineers, Civil, Electricial, Mechanical, Marine
102. Assistant Jounior Engineers/Technicians with Diplomas only.
103. Scientists -- Ph.Ds in various fields
104. Doctors ---- a) Specialists
        b) General Duties
105. Teachers/Professors --- a) Ph.Ds with long experience
           b) M.A., M.Eds & B.Eds
           c) M.As with experience

106. Architects/Planners
107. Senior Executives/Managers
108. Junior Executives
109. Surveyors with long experience
110. Geologists
111. Soil Specialists
112. Mineral Specialists
113. Chartered/Cost Account Specialists
114. Banking Specialists

II. HIGHLY SKILLED

201. Inspectors for Excavation
202. Operators of Buldozers
203. Excavators Operators
204. Mobile Crane Operators
205. Trailor Driver
206. Grader Driver/Operators
207. Engine Mechanic Heavy Equipment
208. Plant Operators Heavy Equipment Mechanic
209. Shovel Operators
210.
211. Heavy Plant Operators, Electrical
212. Earth Moving Equipment Operator/Mechanics
213. Computer Programmer.

III. SKILED

301.	Carpenters	(Trade experience of 5 years essential
302.	Steel Binder	
303.	Masons	
304.	Storekeeper	
305.	Timekeeper	
306.	Typist/Clerk	
307.	Overseers	
308.	Administration Assistants	
309.	Electrical Foreman	
310.	Civil Foreman	
311.	Shuttering Carpenter	
312.	Steel Fixer	
313.	Heavy Duty Driver	
314.	Diesel Mechanic	
315.	Petrol Mechanic	
316.	Welder	
317.	Plumber	
318.	Electrician	
319.	House Maids Trained	
320.	Cook.	
321.	Mixture Concrete	
322.	Carpenter Foreman	
323.	Iron Workers	
324.	Pipe Fitter	
325.	Plumbing Foreman	
326.	Printers	
327.	Furnace Filler	
328.	Turner	
329.	Cutter	
330.	Moulder	
331.	Electrical General Foreman	
332.	Pipe Fitter General Foreman	
333.	Painter General Foreman	
334.	Structural Steel Erector General Foreman	
335.	Civil Work Supervisor	
336.	Car Driver	
337.	Accounts Clerk	
338.	Pay Roll Clerks	
339.	Survey Assistant	
341.	Loader Operator	
342.	Launch Driver	
343.	Camp Surveyor	
344.	Excavator Foreman	
345.	Site Clerk	
346.	Tailor	
347.	Safety Fair Inspector	
348.	Maintenance Operator	
349.	Lineman Electrician	
350.	Accountant Technical	
351.	Equipment Mechanic	

353. Receptionist
354. Baker
355. Inspector for Compressor
356. Inspector for Cleaning/maintenance
357. Male Nurses
358. Sanitary Fitter
359. Tillers
360. Blacksmith
361. Workshop Foreman
362. Salesman
363. Packing Supervisor
364. Head Rigger
365. Chippers
366. Compounders
367. Draftsman
368. Soil Tester/Laboratory Assistant
369. Chargehand Marine Filler
370. Gas Cutter
371. Armateur Maker
372. Cushion Maker
373. Laboratory Technician
374. Shoe Repairer/Maker
375. Bench Grinder
376. Ductman
377. Mechanist Tool
378. Pipe Fabricator
379. Stenographer
380. Radio Mechanic
381. Goldsmith
382. Driver
383. Photographer
384. Telephone Operator
385. A.C. Mechanics
386. Computer Operator
387. Medical Helper
388. Denter
389. Watchmaker

IV. SEMI-SKILLED

(Trade experience with less than 2 years experience)

401. Carpenter
402. Helper Steel Fixer
403. Assistant Cook
404. Kitchen Helper/Assistant Cook
405. Erector Helper
406. Totawala
407. Bar Binding Man
408. Placing Concrete Man
409. Boat Deck Hand
410. Work Controller
411. Waitor
412. Laundryman

413. Pump Operator
414. Head Security Guard
415. Barber
416. Blockmaker
417. Front Leader
418. Tyreman
419. Fisherman
420. Chainman
421. Book Binder

V. UNSKILLED

501. Coolies
502. Labourers
503. Shop Labourers
504. Dredge Fill Labourers
505. Cableman Labourers
506. Cleaner Labourers
507. Sweepers
508. Jack Hammer Labourers
509. Peons
510. Watchman
511. Guardsmen
512. Seaman
513. Agricultural Labourer
514. Industrial Labourer
515. Dockyard Labourers etc.

FAMILY OCCUPATIONS

710. Staff Nurse

OTHERS

900. Not mentioned
901. Army Officers
909. PIA
918. Defence Forces
919. House Wife
955. Business
988. Government service
999. Private Service
888. Student

RANA