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# ORANGI PILOT PROJECT MODELS

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SECTION 1

1.Orangi Pilot Project (OPP)  
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OPP was sponsored by BCCI Foundation.It has been working in Orangi since April 1980.It publishes a quarterly progress report which contains financial statements and quarterly and cumulative tables of work.The 42 report has come out in July 1990.Besides numerous case studies and monographs have also been published.(annexure 1)

OPP considers itself a research institution whose objective is to analyse outstanding problems of Orangi,and then, through prolonged action research and extension education, discover viable solutions.OPP itself does not construct sewerage lines,or set up clinics or schools or industrial homes etc.It only promotes community organisation and self management.By providing social and technical guidance it encourages the mobilisation of local managerial and financial resources, and the practice of cooperative action.

OPP is very fortunate,thanks to BCCI Foundation and other donors,in possessing both the resources and the autonomy required for innovative research,experiments, demonstration, and extension.

2.OPPs model programs  
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During the last ten years OPP has patiently analysed some basic problems and evolved the following model programs :-

1.A low cost sanitation program which enables low income families to construct modern sanitation - (pour flush latrines in their homes and underground sewerage pipelines in the lanes)- with their own funds and under their own management.

2.A low cost housing program which introduces stronger machine made concrete blocks and batten and tile roofing costing much less than reinforced concrete.

3.A basic health and family planning program for the segregated illiterate or semi literate low income house wives which teaches them

\* scientific causes of common Orangi diseases and methods of preventing them

\* methods of birth control

\* growing vegetables in their homes

And provides them with

\* immunization

\* and family planning services

4. A women work centres program which organises stitchers and other garment workers into family units dealing directly with exporters and wholesalers thus escaping from the oppression of petty contractors. It also inculcates managerial skills and cooperative action.

5. A program of supervised credit for small family enterprise units which increases production, employment, managerial skills and business integrity.

6. A school programs which assists in the upgrading of the physical and academic conditions of schools established by private enterprise.

I shall briefly describe the performance of these programs in Orangi.

### 3. The Katchi Abadi of Orangi

But first I must introduce you to the "katchi abadi" (unplanned settlement) of Orangi. Settlement in Orangi began in 1965. After 1972 it grew rapidly. At present it extends to about 8 thousand acres. The settlers have bought land from dalals (touts) and built their houses without official help.

A survey made in Nov 1989 shows the following figures:-

	(OPP area)	(non-OPP area)	total
sectors	66	44	110
lanes	3389	2958	6347
houses	49941	44181	94122

The majority belong to the working classes- labourers, skilled workers, artisans, clerks, technicians, shopkeepers, peddlers etc. Average monthly family income is estimated to be around one thousand rupees.

The population is estimated to be between seven and eight lakhs. It includes Mohajirs (old immigrants from India), Biharis (urdu speaking immigrants from Bangladesh), Pathan immigrants from northern areas, immigrants from Punjab, local Sindhis and Baluchis. Orangi is called "mini Pakistan."

Familiarity with Orangi reveals that a town larger than Colombo or Gujranwala receives scanty services from official agencies. The people of Orangi depend mainly on "informal" sources. Land is obtained through dalals; credit, materials and advice for housing is obtained from thallewalas (block manufacturers). Self supporting schools teach their children. Quacks (physical and spiritual) treat their ailments. They continuously resort to the black market or the bribe market for business facilities or welfare amenities or peace from harassment.

That this informal sector and its black market is many times the size of the official sector indicates the weakness of government planning for the poor. At the same time it indicates the vitality of the poor and their skill in the art of survival. Besides their vitality is demonstrated by the presence everywhere of "anjumans" (associations) which lobby intensely all the time, presenting claims and guarding gains. It is further demonstrated by the growing consciousness, especially among the younger generation, of their collective vote power and street power.

## SECTION 2 -OPP'S LOW COST SANITATION PROGRAM

### 1. The dilemma of sanitation and sewerage

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The sanitation and sewerage problem in the katchi abadies presents a dilemma :

on the one hand without sanitary latrines and underground sewerage lines both the health and property of the residents is endangered;

on the other hand the current conventional cost, official or commercial, cannot be paid by them.

This dilemma cannot be solved by foreign aid. The hope of optimistic planners to upgrade katchi abadies with foreign assistance ignores the fact that the beneficiaries are in no position to pay the conventional cost, (which becomes higher in foreign aided projects). Besides foreign donors themselves are in no position to pay the total astronomical cost.

### 2. The problem of sanitation in Orangi - 1980

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Poor sanitation is the chief characteristic of slums. In 1980 bucket latrines or soakpits were being used for the disposal of human excreta and open sewers for the disposal of waste water. We can label it as medieval sanitation.

Medieval sanitation was damaging health : typhoid, malaria, diarrhoea, dysentery and scabies were rampant. The children who played in the filthy lanes were special victims. Substantial portions of family incomes were spent on medicines.

Poor drainage was causing waterlogging and reducing the value of property.

Our investigation showed that the residents were quite aware of the twin problems of sanitation and drainage. They clearly saw the causes of damage to their health and property.

Then why did they not exert themselves to construct their sanitation and drainage as they had exerted themselves to build their lanes and houses? (They had built 94,000 houses).

### 3. The four barriers

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Our research discovered four barriers :

1. The psychological barrier : Orangi residents firmly believed that it was the duty of official agencies to build sewerage lines as a free gift. Their leaders encouraged and confirmed the belief in free gifts or "free lunch" as the Americans say.

2. The economic barrier : the conventional cost for sanitary latrines and underground sewerage lines built by official or commercial agencies was beyond the paying capacity of low income families.

3. The technical barrier : the low income families had indeed built their houses, mostly with the advice of masons, and they had also built bucket latrines and soakpits. But neither the people nor their advisors, the masons, possessed the technical skill required for construction of underground sewerage lines.

4. The sociological barrier : construction of underground sewerage lines requires not only high technical skill but also social organisation for collective action. This did not exist in Orangi lanes in 1980.

### 4. Adopting the research & extension approach (R & E)

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OPP's task was to remove the four barriers. As a first step a small office was set up with a team of social organisers and technicians.

OPP in fact presumed to become the research & extension (R&E) wing of KMC and KDA (Karachi Metropolitan Corporation and Karachi Development Authority), hoping that one day not only KMC but all municipal corporations will recognize the need for such a wing to assist low income houseowners.

R & E has been extremely successful in the case of small farmers. Its assumptions are that

1. The small farmers can and should manage and finance their own farms
2. But assistance should be given to them in three respects :
  - a. research, e.g, HY varieties, improved methods & implements, plant protection, animal husbandry etc
  - b. extension, i.e, dissemination and demonstration of research findings to small farmers
  - c. provision of adequate and reasonably priced (some time even subsidised) services and supplies.

The position of low income houseowners in a katchi abadi is analogous to the small farmers and the above assumptions are quite valid in their case.

OPP has successfully tested the R & E approach for introducing low cost sanitation and low cost housing in Orangi.

There are four levels of a modern sanitation system

1. inside the house - the sanitary latrine
2. in the lane - underground sewerage lines with manholes and house connections
3. secondary or collector drains
4. main drains and treatment plants

OPP found the house owners willing and competent to assume the responsibility of constructing and maintaining all sanitary arrangements at the first three levels with their own finance and under their own management, like the small farmers. These three levels constitute 80 to 90 % of the system. The main drains and the treatment plant must remain, like main roads and water lines, the responsibility of a central authority.

Through R & E approach it became possible to reduce drastically the cost of construction and to persuade the house owners to accept full responsibility.

Research consisted in

1. simplifying the design
2. fabricating standardised steel shutterings
3. surveying and mapping

4. preparing models, slides and audio visual aids
5. preparing instruction sheets, posters etc

Extension consisted in

1. finding activists in the lanes
2. training lane managers and masons
3. providing accurate plans and estimates
4. loaning tools and shutterings
5. social and technical guidance and supervision

5. Removing the economic barrier  
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Of the four barriers the most formidable was the economic barrier or the high conventional cost of sanitary latrines and underground sewerage lines.

Yet for densely populated sectors there was no alternative to the modern sanitation system. To insist that slum dwellers should remain content with medieval sanitation (i.e bucket latrines, soakpits, and open sewers) is adding insult to injury. It is doubtful if the medieval system can be safely retained even in thinly populated villages. To impose it in congested townships like Orangi and Baldia is promoting disasters to health and property.

For a whole year the focus of OPP's research was on the basic question: is it possible to lower the cost of sanitary latrines and sewerage lines to such an extent that the house owners of Orangi could afford to pay it.

It was found that the cost can be reduced to a surprising extent by

1. simplifying designs and methods of construction
2. by eliminating kickbacks and profiteering by providing free technical guidance to lane managers and enabling them to work without contractors.

To give an example: simplified designs and the use of standardised steel moulds reduced the cost of sanitary latrines and manholes to less than 1/4 of the contractors rates.

And after the elimination of the contractor's profiteering the basic cost of labour and materials came down to less than 1/4 of the conventional cost.

As a result of this research OPP could advise an Orangi family, owning a house on a 100 sq yd plot, that by investing



another 1000 rupees they could have a sanitary latrine inside the home and underground sewerage line in the lane.

1. sanitary latrine	Rs 300
2. house connection	200
3. share of lane sewerage line	450
4. share of secondary drain line	50

An average Orangi family has invested 20-25 thousand rupees in their house. So the scale of this investment was not beyond their means.

OPP could now proceed to remove the other barriers. Without this drastic reduction in cost it would not have been possible to persuade the low income families to undertake the responsibility of self-financing, self managing and self maintaining the underground lane lines.

The drastic reduction in cost is possible only when construction is self financed and self managed without the corrupt and exorbitant middlemen.

People have to depend on the contractor because he has technical knowledge and tools. OPP trained the lane managers and gave them technical guidance, and loaned them tools and shutterings, thus enabling them to escape from kickbacks and profiteering.

#### 6. Removing the psychological barrier

Removing the psychological barrier (viz the mistaken belief that they will get sewerage and sanitation as free gifts) did not prove as difficult as it appeared at first.

In the first place the house owners, contrary to the planners stereotype, were not destitutes. No doubt their incomes were low, but they had built their houses with their own savings. The house was their most valuable asset, and they were totally dedicated to its improvement. Soakpits and waste water were causing waterlogging, seriously damaging the houses and reducing their value. We found in the owners' desire to improve their real estate a powerful motivation for constructing sanitary latrines and underground sewerage lines.

A second equally powerful motivation was the protection of health, specially of their children. The mothers saw most clearly the connection between filth and disease. They soon realized that sanitary latrines and dry lanes would reduce disease and the consequent heavy expenditure. Another motivation was to banish for ever the expense and botheration of delinquent sweepers and overflowing soakpits.

When the families realized that with the investment of one thousand rupees, (an average one months income), they could immediately get these benefits to their health and property they decided not to wait for uncertain promises but do the work themselves. After all they had not waited for houses to be built for them ( which was also being promised) by benign leaders. They had built their own houses, brick by brick, saving and investing month by month. They had done so because they urgently needed houses and considered house building as their own responsibility.

Now they were told that they should consider the lane also as their responsibility. They should consider the lane as an extension of their house. They should manage and finance the lane as they had managed and financed the house. At first there was some grumbling, but quite soon the message was accepted widely.

#### 7. Role of social organisers and technicians

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Everywhere in Orangi ( as elsewhere) there are "anjumans", associations, societies, clubs, etc. Most of these are designed for lobbying and canvassing and not for constructive work. None of them could build a sewerage line. Therefore a new kind of organisation was created. The lane was made the unit of construction.

OPP's technicians surveyed the lanes, ascertained levels, prepared maps, plans and estimates. OPP' social organisers explained to the home owners in the lanes that for the sake of their health and well being they could themselves construct sanitary latrines and sewerage lines. They could get technical guidance from OPP and also tools and shutterings. But first of all they should form a cooperative unit. Generally an activist was found in the lane who became a lane manager, held more meetings of the lane residents, created consensus, settled disputes, collected individual contributions, and supervised the work.

Social guidance removed the sociological barrier and technical guidance removed the technological barrier.

#### 8. Progress of low cost sanitation in Orangi -1981-June 1990

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OPP's sanitation program (the model of self managed, self-financed and self maintained sanitary latrines and underground sewerage lines) was presented to the people of Orangi

in 1981. Its acceptance can be judged from the following tables :

It may be pointed out that in 1982, OPP's sponsor, the BCCI Foundation, invited UNCHS (HABITAT) to start a sanitation project in Orangi. From 1982 till 1989 OPP's sanitation program was restricted to only half of Orangi. The division was made as follows : (the ban was lifted last year).

	(OPP area)	(non-OPP area)	total
sectors	66	44	110
lanes	3389	2958	6347
houses	49941	44181	94122

As given in the 42 quarterly progress report ( page 7) the present position of low cost sanitation is as follows :-

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CONSTRUCTION OF SEWERAGE LINES & SANITARY LATRINES  
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CUMULATIVE JUNE 1990

	OPP AREA	NON-OPP AREA
sewerage lines	3011	1201
(length rft)	729133	325223
secondary drains	256	76
(length rft)	109844	21523
sanitary latrines	45014	20033

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PERCENTAGE OF COMPLETION  
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OPP AREA	
total lanes	3389
lanes with sewerage lines	3011
percentage	88.84 %
total houses	49941
houses with sanitary latrines	45014
percentage	90.13 %
NON-OPP AREA	
total lanes	2958
lanes with sewerage lines	1201
percentage	40.6 %
total houses	44181
houses with sanitary latrines	20033
percentage	45.34 %

PEOPLE'S INVESTMENT IN SANITATION (RS)

OPP AREA	number	cost (Rs)	average
sewerage lines	3011	9831965	3253.98
secondary drains	256	1325178	5176.47
sanitary latrines	45014	22507000	500.
total cost (Rs)		33664143	
NON-OPP AREA			
sewerage lines	1201	4541587	3769.01
secondary drains	76	232576	3033.89
sanitary latrines	20033	10016500	500.
total cost (Rs)		14790663	
grand total		48454807	

Note : KMC has also made some investment in lane sewerage and secondary drains (through councillors). The comparison is interesting :

KMC INVESTMENT IN LANE SEWERAGE & DRAINS (RS)

OPP AREA	number	cost (Rs)	average
sewerage lines	397	7720200	20563.10
secondary drains	79	3872520	49019.24
NON-OPP AREA			
sewerage lines	126	2994660	23702.50
secondary drains	19	793440	40974.54
grand total		15380820	

9. DEMONSTRATION EFFECTS

The demonstration effect is visible everywhere. Lane lines and sanitary latrines built with their own money, and under their own management are being maintained by the lane residents at their own cost. They have become accustomed to higher standard of sanitation for which they are willing to pay.

As a result of the intensive training of masons in the technology of sanitary engineering, and the widespread training of lane managers, the level of skill is now far advanced in Orangi and the people have become less dependent on OPP for social or technical guidance. The difference from other katchi abadies is now noticed by every visitor.

A clear demonstration has been made that the dilemma of modernising sanitation in katchi abadies can be solved by mobilising managerial and financial resources of the house owners themselves by providing them social and technical guidance through R & E approach.

There has been no need for a large revolving fund and no expensive botheration about recoveries and defaults.

The Orangi model of self managed and self financed low cost sanitation has been adopted outside Orangi in some cases. Here the local people have replicated the model at their own initiative and with their own resources as in Orangi.

OPP provides some social and technical guidance. Social guidance consists in bringing the outside activists to see the work in Orangi and talk with Orangi lane managers. Technical guidance consists in supplying plans and estimates after survey of outside lanes.

The low cost sanitation and housing program of OPP has been much observed and evaluated by the World Bank and the Asian Development Bank. With their encouragement OPP has been registered as a Training & Research Institution with Orangi as its demonstration area.

### SECTION 3 - HEALTH & FAMILY PLANNING PROGRAM FOR LOW INCOME HOUSEWIVES

#### 1. Two causes of ill-health in Orangi

In June 1984 OPP started a pilot program of imparting basic health education to low income house wives. In Jan 1985, at the insistence of Dr Sheila McCraw of ODA, family planning education was also included in the program.

Our research showed that incidence of disease was very high in Orangi. Typhoid, malaria, dysentery, diarrhea, scabies were very common. Measles, TB and polio were frequent. There was very high infant and mother mortality.

There were two principal causes for the prevalence of so much ill health : the first principal cause was the lack of sanitation. Open sewers, exposed excreta, and garbage dumps, spread harmful germs, polluted water and food, bred mosquitoes and flies. The second principal cause was the ignorance of these segregated, illiterate or semi literate poor women of modern hygiene, of the causes of disease and its prevention.

The low income families of Orangi were paying a high price for the lack of modern sanitation and for the ignorance of modern hygiene. Sickness in Orangi, as elsewhere in Karachi, is very expensive: treatment of a child's typhoid may consume more than a months income of the family. And there were so many children and so much typhoid.

One paradox revealed by survey research was that as far as clinics are concerned ( including private doctors, homeopaths, hakims, and quacks) the katchi abadi of Orangi had proportionately more 'medical facilities' than many cities of Pakistan. A sample survey showed that a substantial portion of the income of 500 families was spent on 'doctors'. Clinics and quacks were doing their best to cure disease and the poor people of Orangi were paying them handsomely. But very little was being done to prevent disease or remove the basic causes of sickness.

OPP's programs undertook first to introduce modern sanitation, and then to teach the house wives the scientific causes and prevention of common Orangi diseases.

## 2. Popularising modern sanitation

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How modern sanitation was popularised has already been described. Some 'experts' recommend that low income bastis can do without sanitary latrines and underground sewerage. In the opinion of these experts bucket latrines, soakpits, and open sewers are good enough for basti dwellers. Surely these experts are aware that the high incidence of disease was controlled in the nineteenth century in the British Indian army, or in London or Paris only after the introduction of modern sanitary arrangements. Can we really ask our poor people to be satisfied with medieval sanitation, while we, the elite, have modern sanitation? Can we really ask them to stew in their own juice?

We found that the common people of Orangi were quite aware of the connection between filth and disease. Improvement of their health and improvement of their property were powerful motivations for self finance and self management of sanitation. We also discovered that very often the wives were more concerned than the husbands because the heavy burden of illness (nursing and expense) fell mainly on wives. We saw many examples where reluctant husbands were forced by their wives to pay the sanitation contribution.

## 3. Popularising the concept of prevention - the obstacles

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The illiterate or semi literate women of Orangi are different from our emancipated ladies in two important respects : unlike our ladies the poor women of Orangi are truly traditional and truly segregated.

Now the traditional outlook teaches that disease is a mystery or perhaps the work of evil spirits. Orangi women do run readily to a doctor or an exorcist or seek the intercession of ancient or living pirs. But usually they are ignorant

of the real cause of disease and are unfamiliar with the concept of prevention.

The traditional viewpoint about women and children is that women should remain in 'Purdah' (segregation), while the men should feed and clothe them. A wife should regard her husband as 'majazi khuda' (human god); she should produce as many children as possible; and she should firmly believe that the Good God will always provide for every one of them.

Traditionalism imposes segregation and segregation enforces traditionalism. Segregation makes illiterate or semi literate women almost inaccessible to outside agents of change. Traditionalism fortified by segregation makes them distrustful of the outside agent of change.

Of course the new social and economic forces and urban pressures are disrupting and destroying both traditionalism and segregation. But the poor Orangi women are caught on the horns of a dilemma : it is becoming more and more difficult to follow the traditional code of conduct; and yet when they have to discard old conventions they do it with a guilty conscience.

Meanwhile, during this period of transition, any program which seeks to promote new attitudes and practices among the tradition bound segregated women of low income families, must find answers to two urgent questions : first how to gain access and secondly how to create trust ? A third question arises in the case of programs which, in addition to advice and instruction, also include supply and services. That question is how to build an efficient and convenient system of delivery for this strange clientele : the segregated house wives?

OPP is fortunate that with the help of donors favouring innovative research it has found some answers to these nagging questions. The full story of this exploratory research can be read in OPP's quarterly progress reports. Here I can only briefly relate the highlights.

#### 4. Assumptions of the program

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The health and family planning education program was started with the following assumptions :

1. In the process of changing attitudes and opinions of segregated women the main problem for the outside agent of change is access. Custom decrees that women should stay at home. Generally they go out only in emergencies or on special occasions.

We found that 'welfare centres' become ineffective on account of customary segregation. To be within real reach of segregated women a 'welfare centre' or family planning clinic should cover no more than 20 or 30 lanes, which requires that there should be 200 to 300 centres for the 6000 thousand Orangi lanes.

2. Instead of a fixed centre or clinic OPP introduced a new system :

- A. mobile training teams
- B. a selected activist family or contact lady for 10 /20 lanes
- C. regular scheduled meetings at the activist home
- D. formation of a neighbourhood group by the activist

Each mobile team consisted of a lady health visitor and a social organiser. The teams were directed by a lady doctor. The teams were provided with transport and they held as many meetings as possible on every working day

3. In the beginning it was considered advisable to hold separate meetings for family planning. The separation was made because it was found that, although in the general meeting there many women who were anxious about birth control, there were also a few who were indifferent or hostile. These unconcerned few were belligerently inclined to raise traditional objections and browbeat the needy ones.

As in our country discretion is better part of valour we did not tangle with our male chauvinists, but left them to be tackled by their wives.

## 5. Insights gained

### A. Organisation

1. As initially assumed it was very important to gain real access. One years experience proved that not only the need but also the awareness of the need was already present. The obstacle was the lack of fruitful contact between the extension or change agent and the potential adopters.

2. The creation of a bond of trust was as important as the creation of access. The segregated women of Orangi had pre-industrial attitudes : they dearly cherished personal relationship and personal advice.



3. The creation of the bond of trust depended on the frequency of contacts between the educating teams, the activist contact lady and the neighbourhood groups.

4. The contact lady activists proved essential links. As friendly neighbours they became trusted advisers and conveners. They eagerly welcomed the teams and cooperated fully. The neighbourhood meeting was not a serious challenge to the tradition of segregation.

#### B. Family planning

1. Unexpectedly after six months the subject of birth control became ideologically non controversial in the neighbourhood women meetings. At the request of the groups themselves separate meetings were discontinued and family planning became a common topic.

2. It became necessary to arrange a decentralised system of delivering supplies. For the men the chemist shops were readily available as agents and supplies were delivered to them on cash payment. But Orangi women cannot go to a chemist shop to purchase contraceptives. For the women the group activist, the contact lady, became an ideal distributing agent. An intimate neighbour she became a permanent and confidential source of supply for the members of her group. IUD and ligations were taken care of by LHVs in the mobile team.

3. The greatest change was the emergence of birth control adopters, specially IUD and ligation adopters, as strong advocates to their neighbours of the practice of birth control.

#### 6. Revised model

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Since January 1985 OPP's basic health and family planning education and services were confined to 3000 families in order to fully test our approach and ascertain the response of segregated housewives. Much has been learnt : how to create access, how to establish a bond of trust, how to build a convenient delivery system, how to spread the knowledge and practice of disease prevention and family planning among tradition bound segregated women. Above all how to reach out to large numbers of clients.

Now on the basis of survey research we have come to the conclusion that the mobile teams and neighbourhood group meeting in activist family homes is quite effective. Among the 3000 families, as a survey by Dr Fauzia of Aga Khan

medical college shows, over 90% children are immunized, 44% families practice birth control, epidemic diseases are controlled and hygiene and nutrition improved. We can say that just as sanitary latrines and underground sewerage lines have changed external conditions, similarly disease and birth control education have changed the mental outlook of 3000 families. We confidently invite a survey to compare the attitudes and practices of these families and their disease and birth figures with the attitudes and figures of other groups lacking sanitation and health education.

In the light of our experience we have now revised our model to reach out to larger number of families. Instead of continuing to visit the same families for a long period of time we have prepared a three months course on

prevention of common Orangi diseases  
methods of family planning  
improved nutrition and hygiene  
kitchen gardening

20 family activists will be selected every three months and neighbourhood group meetings are held four times a month in the activists home. Upto 25 women are attending the training meetings. Such is their eagerness to learn that every participant is paying one rupee to the activist lady for attending the meeting.

Immunization service is provided in the meetings and the continuation of family planning supplies is assured by enrolling the activist lady as an agent.

It is hoped that the existing four teams will be able to train 2/3 thousand families every year. However it is possible to raise this number to 4/5 thousand by adding four more teams without adding to the cost of transportation.

At present the budget for the annual health program is Rs 370000 (\$ 18,000). With four more teams it will go up to Rs 500000 (\$ 25,000). The average annual cost of teaching prevention of disease and birth to one low income family would thus come to Rs 150 ( \$ 7.5).

#### SECTION 4 - PROGRAM OF WOMEN WORK CENTRES

##### 1. Background research

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The program of Women Work Centres (WWC) was started in March 1984. After five years of intensive efforts it became self managed and self financed.

Based on the quarterly progress reports (18 to 39) the story of these five years of struggle and growth is related in a monograph published by OPP in December 1989. The second chapter of the monograph summarises the objectives, the approach, the initial difficulties and frustrations. The third chapter gives the highlights of consolidation and expansion, along with the lingering problems during the second and third years. The fourth chapter describes the push towards autonomy in the fourth and fifth years. The fifth and final chapter outlines the present position of the completely autonomous and solvent WWCs.

OPP was aware of the importance of promoting economic programs. But our first efforts to rehabilitate Banarsi silk weavers or other artisans were miserable failures on account of our ignorance of Orangi and its residents. The sanitation program made us familiar with Orangi's social and psychological factors. In 1984 we decided once more to start model building research in the economic field.

This time we began cautiously with market surveys. We realised that the traditional patriarchal pattern of exclusive dependence on the earning of the father was being shattered by the rising cost of living, uncertain employment etc. In Orangi wives and daughters were being forced to work in order to supplement family income.

In fact we found that Orangi was the biggest pool of cheap women and child labour in Krachi and thousand of women and children were already engaged in some kind of 'gainful employment'. But the terms and conditions of work were extremely onerous.

We studied the Social Welfare 'Industrial Homes' and Training Centres, and understood their limitations. We came to the conclusion that instead of introducing new crafts or teaching new arts we should first assist those who are already working for the market. We should teach them to protect their interest, and upgrade their productive and managerial skills chiefly through social and technical guidance.

## 2. The stitchers of Orangi

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The numbers and categories of depressed women workers are very large indeed. The problem is vast. At first only one category could be chosen. We selected the largest category, viz : the stitchers. Several hundred Orangi women were earning a little money with their sewing machines - the majority were doing simple stitching for contractors.

Large quantities of cheap cloth goods, like shopping bags, yellow dusters, kitchen towels etc are exported from Karachi to Europe and America. The exporters engage petty contractors who employ women and children. We could not find out the exporters margin of profit; but we did find that the contractors were keeping upto 50 % of the exporters wages for themselves. The contractors were not only giving unjustly low wages to the helpless women; they were also cheating them in other ways and sometimes even harassing them sexually.

### 3. How to help the stitchers - support organisation

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After the survey research OPP's action research explored ways and means of helping the stitchers - evidently the poorest and most distressed section of Orangi. First a supporting organisation was set up - now registered as a Trust. It assumed the contractors functions ( without the contractors profit) - to procure orders from exporters, to distribute the work, to ensure quality and punctuality, to make delivery to exporters and collect payment for wages.

It set up 'Work Centres' with both simple sewing machines and industrial machines. It arranged the training of workers as well as supervisors and managers from among the stitchers. It obtained donations for the equipment of the centres, and for distribution of machines to indigent stitchers.

### 4. How to help the stitchers - women work centres

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For organising, training and servicing the stitchers 'women work centres' were set up. OPP's women work centres (wvc) were quite different from Social Welfare and philanthropic 'Industrial Homes'. A WVC was managed by a family. It was located in their home. The supporting institution, OPP, did not pay any salaries or rent. From the very beginning the aim was to make the WVC self supporting.

OPP's staff brought the exporters assignment to the WVC which was allowed to charge a small commission for supervision and overheads. OPP insisted that the managing family's main income should come not from the commission but from wages earned by members of the family by working on the machines themselves.

A WVC was equipped with some industrial machines and sewing machines for 10 to 15 workers. However the more

important functions of the WWC were distribution, collection, checking, finishing and packing of the exporters orders. It was also in the truest sense a 'learning by doing' training place. Stitchers from the neighborhood came to the WWC for receiving and delivering assignments which they completed in their homes at their leisure. Thus they were saved from much inconvenience and harassment. OPP staff regularly examined the WWC's accounts and the payment cards of the stitchers to ensure that they got a full and honest share of the exporters wage. Frequent meetings of the stitchers were held for health education and general information.

#### 5. Problems and difficulties

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The WWC program was not easy to implement : it faced many problems and difficulties :

An insidious problem was how to avoid the pitfalls of philanthropy and paternalism. There was a great hunger for doles and subsidies. OPP had proclaimed that it was not a profit making enterprise; at the same time it had neither the capacity nor the inclination to distribute doles. We had made it quite clear that WWCs were not to become permanent pensioners like the welfare industrial homes. Unlike the industrial homes they had to become competitive and get into the mainstream commercial market, by acquiring the good will of the exporters through quality and punctuality. This was a hard message which often roused resentment.

To upgrade the skill of stitchers, to ensure quality and punctuality was a hard job. New stitchers were inclined to be both tardy and slovenly. At the same time there was continuous grumbling about wages. There was neither loyalty to the supporting institution nor work discipline. OPP was seriously handicapped by its welfare association. At first the best workers did not join the WWCs. They wanted to remain loyal to their old contractors. OPP had to labour like a physiotherapist : uplift the unskilled, the weak and the unenterprising. It was not only hard work ; it caused much financial loss. However gradually in the second and third year the bunglings, grumbling and losses grew less and less. A disciplined cadre of skilled stitchers began to emerge.

Our third difficulty was the behaviour of our patrons - the exporters and contractors. They generally tried to offer lower rates and some of them wanted to treat the non profit seeking OPP as knaves treat fools : playing tricks, delaying payments etc. As WWCs grew stronger we got rid of the tricky

customers, and dealt only with reliable parties.

Another ominous difficulty was the disturbed condition of Karachi. Orangi was a specially explosive area because large numbers of Pathans, Mahajirs, Biharis, Punjabis, Sindhis and Balochis lived in close proximity to each other. Undoubtedly in fratricidal riots the the poorest suffer most. The presence of a support organisation proved a great boon during such times of trouble. OPP's managers and vehicles rushed to the exporters during curfew relaxation and kept the WWCs supplied with orders. The ominous threat of riots and curfews still hangs over Karachi and the people of Orangi should learn to live with it.

## 6. Consolidation and expansion

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OPP's aim was to improve the condition of the stitchers. However this could be done only within the market frame work and not with doles and stipends. The only real safeguard for the stitchers was to ensure the flow of work and wages. If work and wages stop not much else can be done.

The market situation is not an easy one for the stitchers. Work is seasonal and its volume and rates are subject to the vagaries of international trade. Besides there is cutthroat competition. There is little possibility of supporting stitchers indefinitely with subsidies as the handful of workers in the charitable industrial homes are supported. The only way to safety is through competitive skill and cooperative loyalty. In the third year a network of competitive WWCs and a cadre of skilled stitchers and managers began to form.

The WWCs proved themselves to be economical units. In the first place their overhead expenditures were quite low. Rent was saved by location in the family home. The whole family participated in production and supervision. Most workers were close neighbours. Work hours were conveniently flexible. Some time work continued till late in the night.

A WWC managed by a committed family for its own benefit and for the benefit of close neighbours is a good model. It is also far more congenial to the segregated muslim women than the factory or the contractors workshop. WWC's were helping the weakest and poorest section of Orangi society. Enquiries showed that where the contractor was previously paying Rs 15 WWCs paid Rs 20 or more to the stitchers. Case studies published in our urdu journal show that some stitchers were the main support of the family because the husband was unemployed or a drug addict or a chronic invalid. Others were widows.

## 7. "Weaning"

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By the fourth year WWC had become competitive wage earners. They had plenty of orders from exporters who were reliable pay masters. The managers had learnt to supervise the stitchers strictly; losses due to defective work had been reduced. Now we began to push the centres towards full autonomy-financial and managerial. We explained to them that now that they were strong enough to carry their burdens on their own shoulders they should no longer depend on OPP's support, and they should not demand that OPP should subsidise them for ever. We suggested that they should form a managing committee, hold frequent meetings and take over the functions of the supporting institution.

The curtailment of support and subsidies, or the assumption of full financial and managerial responsibility, was not welcomed gladly. It went against our feudal traditions of dependence on patrons. At first WWC's resisted the push towards autonomy as a child resists weaning. With the same persistence with which we had trained and helped the WWCs in the first three years, we kept pushing them towards independence in the fourth and fifth year, till in the sixth year the support organisation was disbanded and all subsidies disappeared.

## 8. Present position of WWC program

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There is no longer any support budget for staff, or transport or advances.  
 For purchase of machines, equipment etc, WWCs can get loans from Orangi Trust.  
 WWCs are paying instalments for machines supplied to them by OPP.

After five years the WWC's promoted by OPP have considerable assets - financial and managerial. Their reputation is well established and they are getting orders directly from exporters.

The emergence of talented lady managers of WWC can be regarded as a remarkable achievement of the program.

Another remarkable result is the formation of new stitchers family centres. There are now 38 such centres in addition to 13 old WWCs.

For the setting up of the old WWCs much energy and money was spent by OPP.

The new WWCs make no demand for OPP's time or subsidy. They do not demand canvassing by OPP for orders from exporters, or transportation service.

They do not demand free equipment or fixtures or compensation for losses.

Their only demand is for a loan which they start repaying in monthly instalments.

To end this brief outline I give below the table of monthly wages distributed in the old WWC since 1984. For details see the 42 quarterly progress report and the monograph : WWC-Story of Five Years

#### MONTHLY WAGES

MONTH	Y-84	Y-85	Y-86	Y-87	Y-88	Y-89	Y-90
JAN		9491	70241	74421	148380	210000	198000
FEB		6560	38056	86319	217275	225000	190000
MAR	2736	12902	86638	87247	134544	244800	211200
APR	3845	23147	138323	152395	132600	198000	190000
MAY	2977	41845	90925	124039	121700	185000	202000
JUN	2172	33946	84271	119472	65500	191200	214500
JUL	3864	37025	76377	153159	52467	190000	
AUG	5109	33735	97994	130270	64306	132000	
SEP	2969	40437	153741	144883	87230	157000	
OCT	5646	46463	115709	206294	105500	162000	
NOV	5578	75046	60226	201522	143500	273000	
DEC	5719	61283	45859	123750	151110	243000	
TOT	40615	421880	1058360	1603771	1424112	2411000	1205700
CUMUL	40615	462495	1520855	3124626	4548738	6959738	8124823

#### SECTION 5 - ECONOMIC PROGRAM FOR FAMILY ENTERPRISE UNITS

##### 1. OPP's latest pilot project

After successfully organising hundreds of stitchers into women work centres OPP started a pilot project for helping family enterprise units. Hundreds of families in Orangi are maintaining themselves by small enterprises, mostly located inside the family dwellings, utilising the labour of their women and children. This is a very competitive pattern in poor countries. Its advance form can be seen in Hongkong. Orangi family enterprises operate in the informal sector and receive very little help from banks or other official institutions.



A gradual strategy has been adopted : first individual enterprises are being selected for closely supervised credit. Then pre-cooperative groups are being formed. Finally consolidated groups may be registered as cooperative societies.

It is realised that that at present there is no tradition of loyalty or business integrity among the prospective clients. Our common people have been deceived and cheated so many times that they are no longer faithful to any institution and are in their turn quite ready to deceive and cheat.

Cooperation depends on sincere activists. Existing leaders are more interested in serving their own interest rather than the interest of others. Therefore it is essential to promote and wait for the emergence of sincere activists from among the loyal clients. Evidently the creation of loyalty and integrity and the training of activists requires great patience and involves many risks. The real test of loyalty and integrity is timely repayment of loans and increased production. Previous experiences of small loan programs have not been very encouraging.

## 2. Objectives of the family enterprise program

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The broad objective of course is the uplift of family enterprise units which in Orangi employ the largest number of workers and offer quickest and cheapest scope for expansion. But the workers have no tradition of loyalty to banks or of mutual aid or cooperation

OPP and Orangi Trust have started this pilot project with supporting grants from the Federal Bank for Cooperatives and the Swiss Development Corporation and a line of credit agreement with the National Bank of Pakistan.

The pilot project is trying to

1. evolve better methods of management
2. discover correct criteria for selection
3. learn the art of effective supervision
4. learn the art of adequate recoveries
5. create honest clients by inculcating loyalty
6. teach cooperative action, purchase and marketing.

### 3. Present position

Since September 1987 much has been learnt in respect of

1. character of family units
2. accounting and management of loans
3. guidelines for selection
4. guidelines and methods of supervision
5. the difficult art of recovering loans

A heavy price has been paid for the lessons as will appear from the following table :

ANNUAL ANALYSIS OF FAMILY ENTERPRISE LOANS AND  
RECOVERIES - SEPT 1987 -31 MAY 1990

YEAR	LOAN	UNITS	RECOVERY	%	BALANCE	%
Y87-88	1175475	107	785918	66.8	389557	33.2
Y88-89	1105450	95	743933	67.3	361517	32.7
Y89-90	1983900	182	455960	22.9	1527940	77.1
TOTAL	4264825	384	1985811	46.5	2279014	53.5

Loan instalments range from 20 to 40 months. The selection of units in the first year was too hasty. There are 27 serious defaulters. Although strenuous efforts are being made to recover the instalments, but it seems that on account of the mistakes made in the selection of units 20 % of the first year's loan may turn out to be bad debt.

In the light of experience the mistakes made in the first year have been corrected as far as possible. Consequently recoveries have improved and it is hoped that the percentage of bad debts would fall considerably in the case of second year loans and still more in the case of third year loans.

However, loans to small units operating in the informal sector carry large amount of risk. The risk is due not only to dishonesty or foolishness but also to misfortunes like riots, curfews, thefts, fires etc. In fact Banks keep away from small units for reasons of insecurity. At the same time our surveys show that the returns to small family units in the shape of increased income and employment are often 50% or more.

The way out of this dilemma is again to provide social and technical guidance to these units and thus create security. We think that on account of our guidance about three hundred loyal clients have been created. They have invested the loans wisely, increased their incomes and profits, and repaid loans regularly. We can say that they have learnt business ethics and thus become secure customers.

As the program takes root and more units join better work ethics and business ethics will begin to prevail as has already happened in the case of WWCs.

#### 4. Categories of small units

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According to our latest classification there are 26 categories of small units who have been given supervised credit - a total of 384 units since Sept 1987.

Chief among these are as follows :

profession	units	loan	recovery	balance
thelewalas (peddlers)	101	440425	280668	159757
stitching centres	38	508600	174510	334090
grocery shops	38	373900	157038	216862
weavers	29	196500	120750	75750
shoemakers	20	185500	109732	75768
electric shops	14	138000	58800	79200
schools	11	263000	197775	65225
women stores	6	85000	69200	15800

One notable aspect of this program is that it has been able to reach out to women entrepreneurs. Recently we have separated units where the management is mostly in the hand of women and entrusted their supervision to OPP's Women Centre staff. The number of these units is as follows :

old WWCs	13
stitching centres	38
family units	44

Orangi Trust has entered into an agreement to borrow from the First Women Bank for financing women managed units. For this purpose the Trust has deposited Rs 200,000 in PLS account with the Women Bank against which the Bank will advance upto Rs 500,000 for loan to women units.

## SECTION 6 -CONCLUSION

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In the four OPP programs - ( low cost sanitation, family health education, women work centres, family enterprise units ) - the resources of low income groups - (physical, social, financial, and managerial ) - have been mobilised by a supporting institution through teams of social organisers and technicians following a research and extension approach.

I have seen in the last thirty years the same response to this approach in Comilla , in Daudzai , in Gilgit or in Orangi.

I have reasons to believe that low income families anywhere else in Pakistan or Bangladesh ,will respond in the same way to a similar institutional approach.

Far from thinking that the good response is due to my "charisma" I believe that the response is due to the vitality of the approach and its intimate relevance to the real needs of the respondents. I am by no means the inventor of this approach. I have merely (though sincerely) followed the well-known principles of community organisation, which have produced the same benefits in other countries, in the past or present. As Tolstoy says "all happy families are happy in the same way".

## CONDITIONS FOR SELF MOBILISATION OF LOW INCOME GROUPS

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I would sum up the lessons of my long experience of teaching community organisation or self mobilisation to low income groups as below :

I cannot agree with those who think that our common people, unlike Germans or Japanese, cannot learn self discipline. I know that they can, if we give them a chance.

# The first condition is that there must be a supporting institution, whose leadership has abiding faith in the capacity of common people to uplift themselves through social and technical guidance and community organisation.

# The supporting institution and its sincere leadership should have autonomy and adequate resources, and reliable staff of technicians and social organisers.

# The role of the social organisers is crucial because it is through them that the cooperative vision is transferred to the groups.

# The social organisers should search and identify "activists"- pioneers or early adopters of cooperative ideas and methods, who will be the real conveners and managers of cooperating groups.

# The activists have to be continuously trained and guided by the social organisers of the supporting institution.

# The practice of regular group meetings should be promoted assiduously. It is only through frequent assembly that the members will learn responsible control of management and the managers will learn to be accountable.

# Activists and members should be taught to practice responsibility, self management, self financing, self reliance, better work ethics and business ethics.

These conditions are not easy to fulfil. But we should not delude ourselves that teaching community organisation to low income groups is an easy or quick program. My experience has taught me that in our country it takes several years to change existing attitudes which are far from cooperative.

Once when I was very frustrated I asked my brother who was an artillery colonel:

"How long did it take to turn villagers into gunners?"

He replied, "It took nine years."

On hearing this my frustration came to an end, because it takes half that time to train villagers or slum dwellers as cooperators.

We should be prepared to give them that time.

## OPP PUBLICATIONS

### 1. PROGRESS REPORT

- 1.1 Reports 1st to 14th : April 1980 - June 1983
- 1.2 Reports 15th to 21st : July 1983 - March 1985
- 1.3 Reports 22nd to 25th : April 1985 - March 1986
- 1.4 Reports 26th to 29th : April 1986 - March 1987
- 1.5 Reports 30th to 33rd : April 1987 - March 1988
- 1.6 Reports 34th to 37th : April 1988 - March 1989
- 1.7 Reports 38th to 41st : April 1989 - March 1990

### 2. URDU BULLETIN

- 2.1 RTI Khabernama : 1 - 4 : July '89 to June '90
- 2.1,A "Roshni" - Health Bulletin: 1 - 4 : April '89 to March '90
- 2.1,B "Sehar" - Orangi's women's Bulletin : Jan '90 to March '90

### 3. LOW COST SANITATION

- 3.1 Report on Pakistani Project by Dr. Jorge Anzorina : Feb,84
- 3.2 A case study in local participation and community development by Sami Mustafa : April '84
- 3.3 Waterlogging menace in Orangi by Perween Rehman : June '84
- 3.4 Orangi Pilot Project by Akhter Hameed Khan : August '84
- 3.5 Open drains menace in Orangi by Perween Rehman : Oct. '84
- 3.6 Disposal of garbage menace in Orangi by Perween Rehman & Hafeez Arain : Dec '84
- 3.7 Actual cost analysis by Anwar Rashid : Dec,84
- 3.8 Gradual development of sectoral sewerage plan. The story of Alfatha colony : Dec '84
- 3.9 Catalogue of expenditure and work : Jan '85
- 3.10 Gradual development of sectoral sewerage plan. The story of Sector 11-A : Jan '85
- 3.11 Urban services through community participation by Arif Hasan : Feb '85
- 3.12 Gradual development of sectoral sewerage plan. The story of Sector 5 : March '85
- 3.13 Pollution of water mains menace in Orangi by Perween Rehman and Hafeez Arain : March '85
- 3.14 Map of Orangi showing peoples effort for low cost sanitation : June '85
- 3.15 The problem of Katchi Abadis by Akhter Hameed Khan : Oct '85
- 3.16 Low cost sanitation in Mujahid colony construction and maintenance : Jan '86
- 3.17 The low cost sanitation program of the Orangi Pilot Project and the process of change in Orangi by Arif Hasan : Feb '86
- 3.18 The low cost sanitation program of the Orangi Pilot Project: case study documentation by Arif Hasan, Perween Rehman, Shaista Sultan (Prepared for the NGO Habitat project of the U.N year for the shelterless 1987) : June '86
- 3.19 Low cost sanitation Program of the Orangi Pilot Project by Arif Hasan : July '86
- 3.20 Evaluation of OPP's supervised lanes 1981-83 & 1984-85 by Perween Rehman, Saleemalimudin, Anwar Rashid : July '86
- 3.21 Study of two alternative approaches to improvement of low income areas, Madras and Orangi: Experiences by Chetan Vaidya and Arif Hasan : July '86.
- 3.22 Community participation for mobilising local resources: case study of the low cost sanitation program in Orangi by Akhter Hameed Khan : Dec '86
- 3.23 The low cost sanitation program of the Orangi Pilot Project : Six Questions by Arif Hasan : April '87
- 3.24 Catalogue of Expenditure and works of the Orangi Pilot Project : Sept '87
- 3.25 Experiences of three Orangi Pilot Project by Akhter Hameed Khan : Nov '87
- 3.26 Case study of the low cost sanitation model by Akhter Hameed Khan: Prepared for the UIA/UNESCO orientation programme : Dec '87
- 3.27 Low cost sanitation program of the Orangi Pilot Project: Statistical data : April '80 - Jan '88
- 3.28 Rains in Orangi - July '1988 by Perween Rehman, Saleemalimudin and Ahmed Saeed : Jan '89
- 3.29 Low cost sanitation program of the Orangi Pilot Project statistical data April '80 to Dec '89 by Perween Rehman and Anwar Rashid : March 1990.
- 3.30 Orangi Pilot Project Models by Akhter Hameed Khan August 1990

### 4. LOW COST HOUSING

- 4.1 Repairs and Rehabilitation aftermath of the Dec '86 riots by Aqila Ismail, Perween Rehman, Saleemalimudin, Ahmed Saeed : June '87
- 4.2 OPP's riot repair program aftermath of the Dec '86 riots-a pictorial case study : May '87
- 4.3 Catalogue expenditure and works of the low cost housing program of the Orangi Pilot Project : Sep '1987
- 4.4 The housing program of the Orangi Pilot Project by Arif Hasan : Dec '86
- 4.5 Role of Thalla (building component manufacturing yard) in housing by Perween Rehman, Hafeez Arain : Dec '86
- 4.6 House Building by low income families in Orangi by Akhter Hameed Khan August 1990

## **5. WOMEN WELFARE PROGRAM**

5.1 Women welfare program of the Orangi Pilot Project statistical data March'84 to Dec'88 by Anwar Rashid and Muhammad Pervez : 1990

5.2 A practical field work at the Orangi Pilot Project Karachi, Pakistan by A.M.J Verheijen : Jan'1990 Rotterdam

## **6. WOMEN WORK CENTRE**

6.1 Women work centre's story of five year 1984 - 89 by Akhter Hameed Khan : Nov'89

## **7. THE EDUCATION PROJECT**

7.1: Fifty years literacy by Akhter Hameed Khan : Feb'1984

7.2: Ten decades of rural development by Akhter Hameed Khan

7.3: My trouble life by Akhter Hameed Khan 1986 -87

7.4: Education system in Orangi by Akhter Hameed Khan May'84

7.5: Teacher's guide by school organiser

7.6: Educare by Abdul Saleem

## **8. BUDGET AND ACCOUNT**

8.1: Budget 1985 - 86 actuals 85-86 Budget 86-87

8.2: Audited accounts of the Orangi Pilot Project April'1980 to May'86

8.3: Budget 1986-87, actuals 1986-87, Budget 1987-88

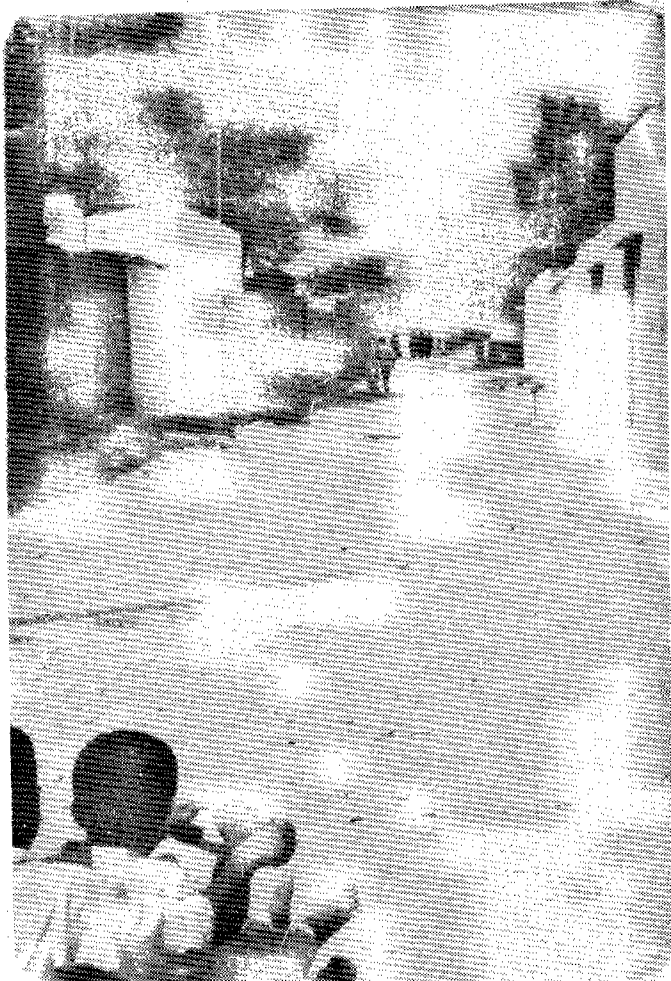
8.4: Budget 1989-90

8.5: Catalogue Expenditure Sept'87

8.6: June'85 Budget, actual June 1984 - May'86

8.7: Proposal Budget June'1984 - May'85

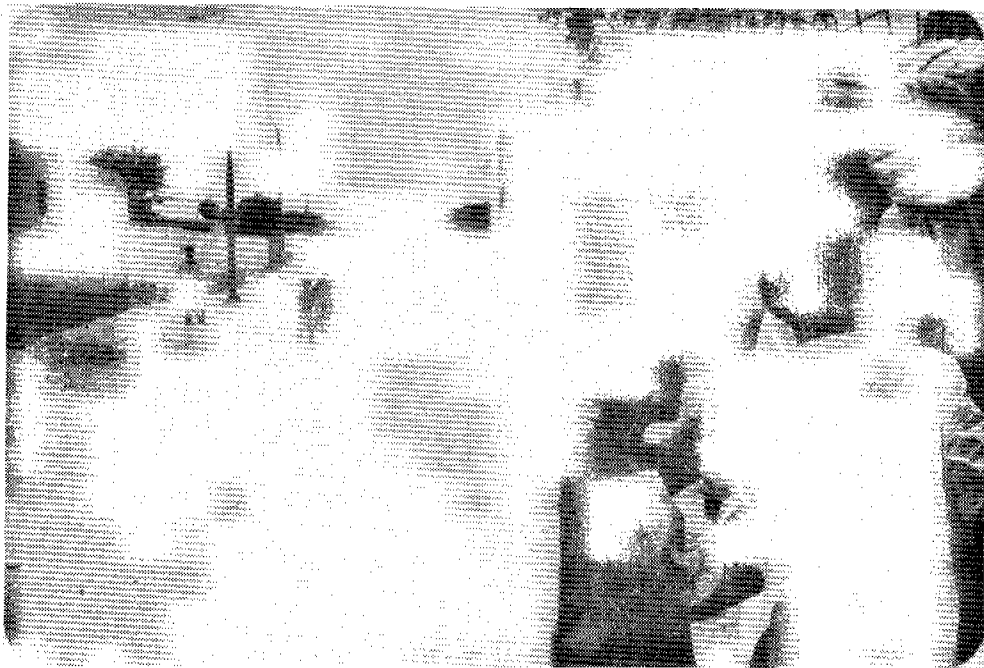
**BEFORE  
BISMILLAH COLONY**



**AFTER**

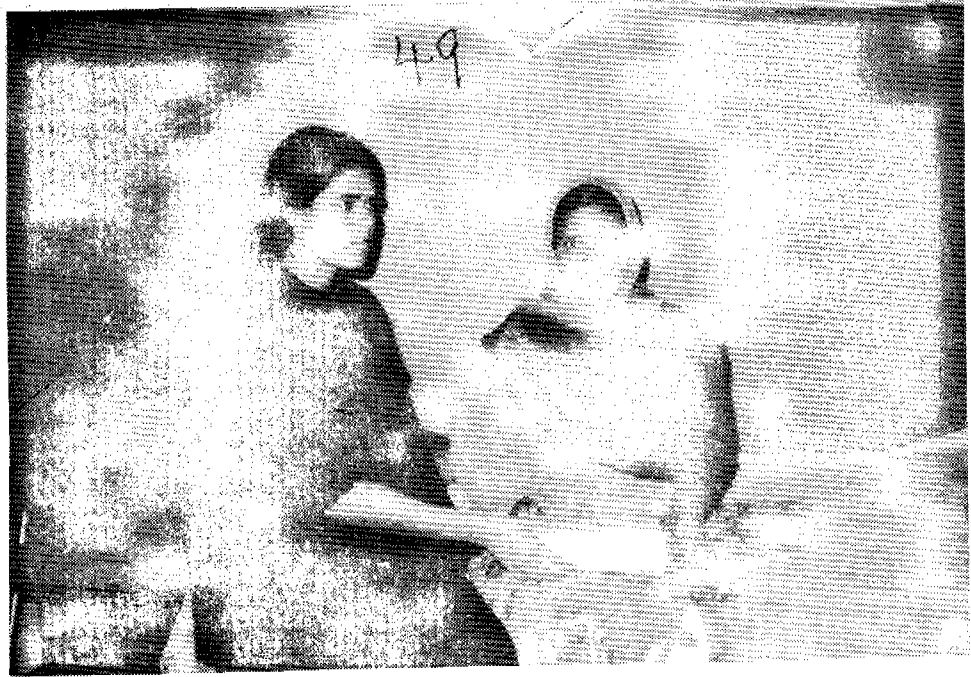


BEFORE - AFRIDI COLONY



AFTER

Women sale agents

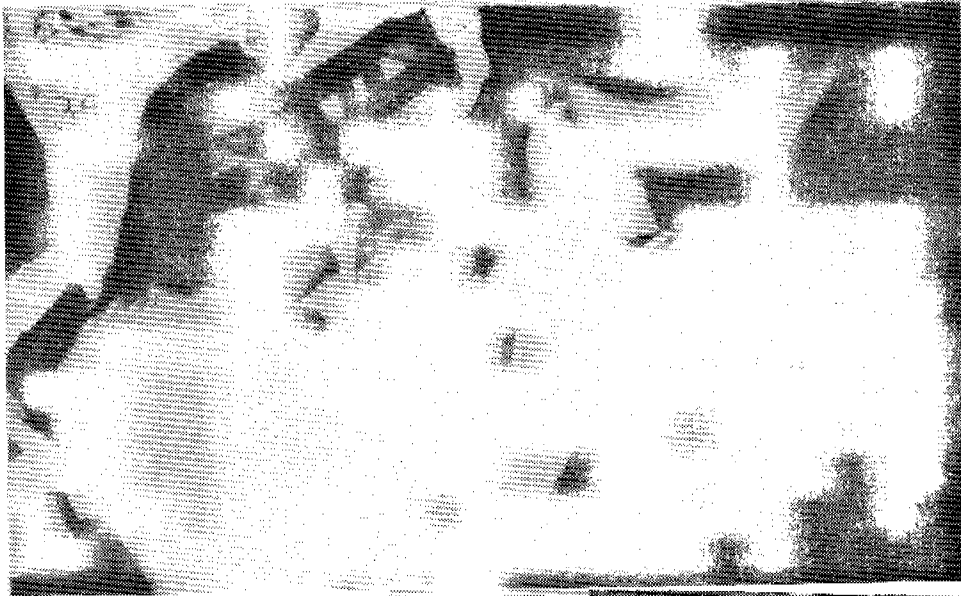


Training of Women organizer at OPP office



HEALTH PROGRAM

Health education meeting



Vaccination



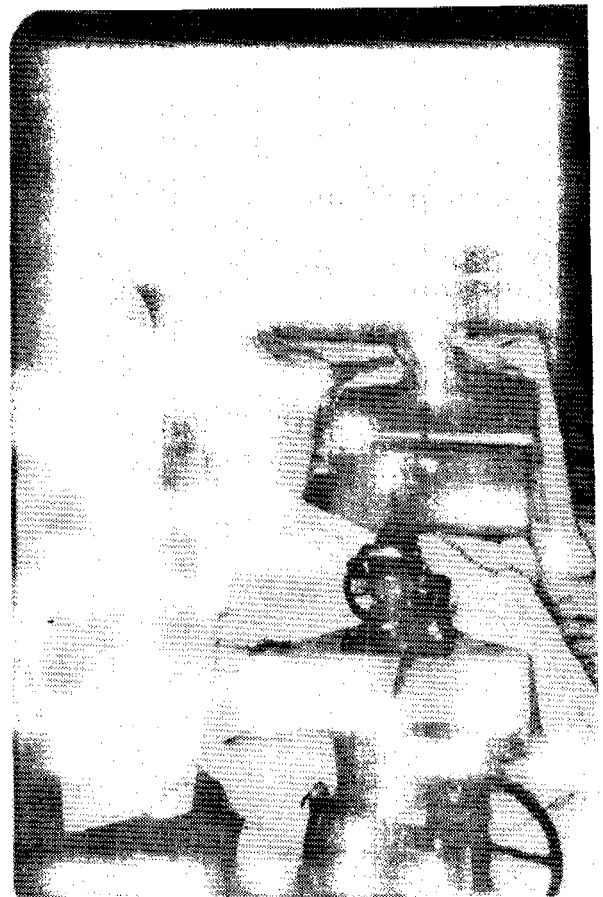
Women Organizers

WOMEN WORK CENTRES

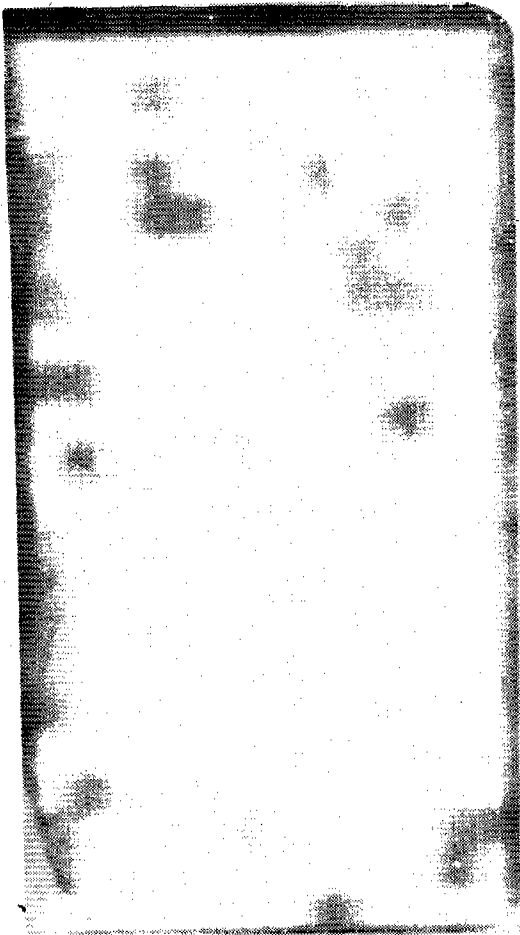
Material procured  
from exporters



Cutting

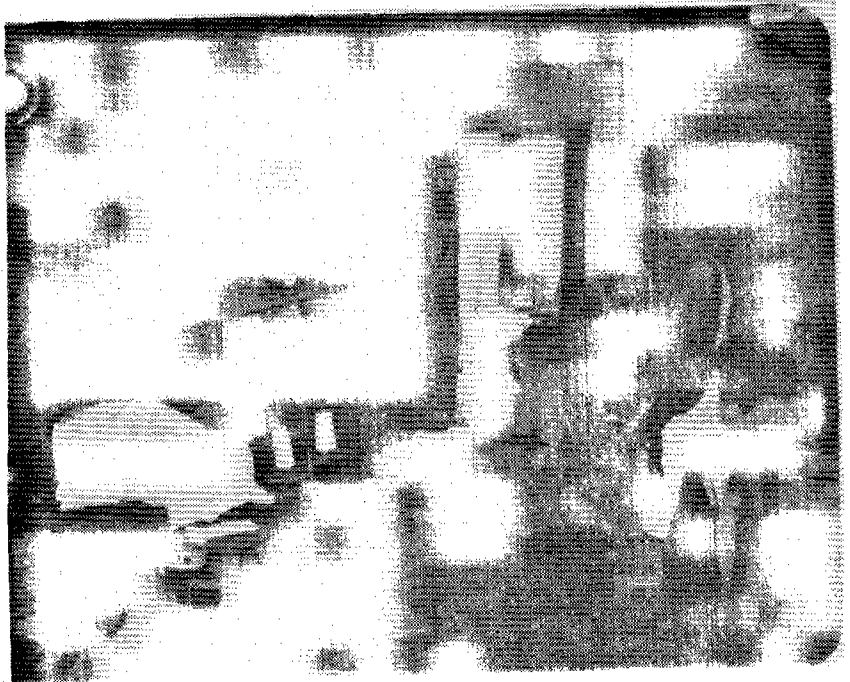


Stitching



Woman at work

Woman organizer supervising the work



Packing  
Women and children  
both at work



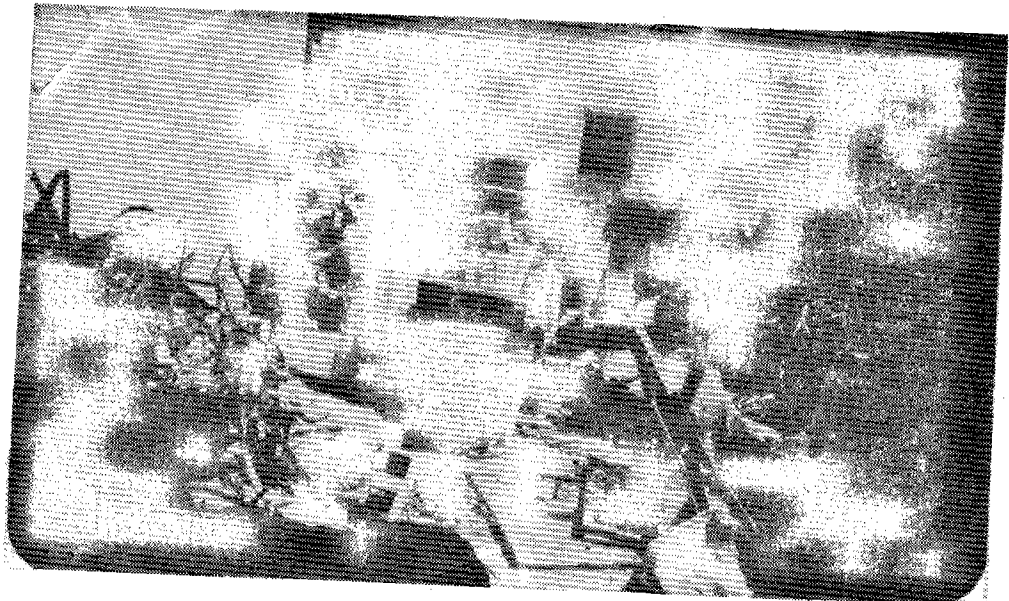
ECONOMIC PROGRAM



Kite maker

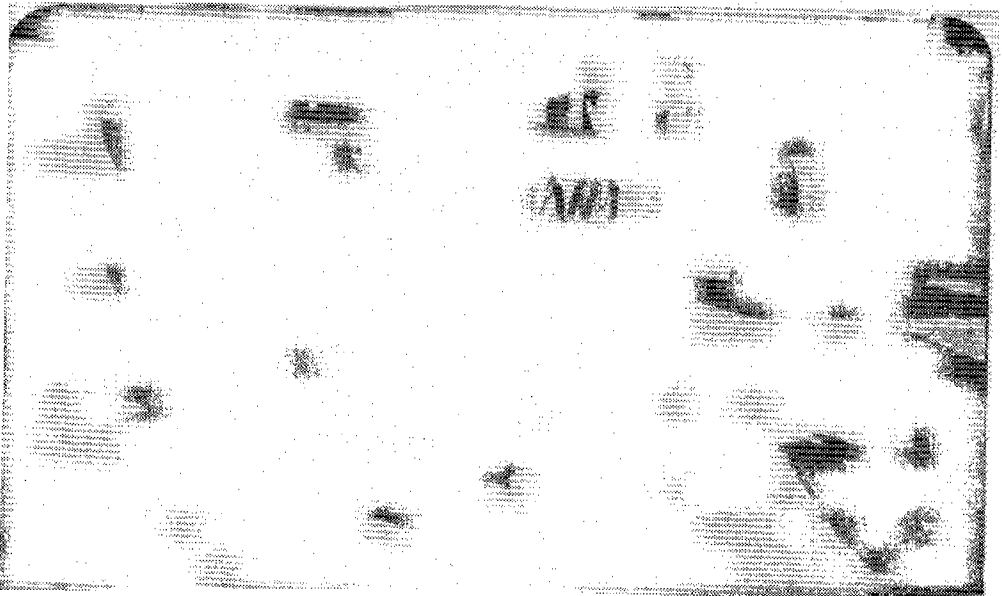


Shoe maker

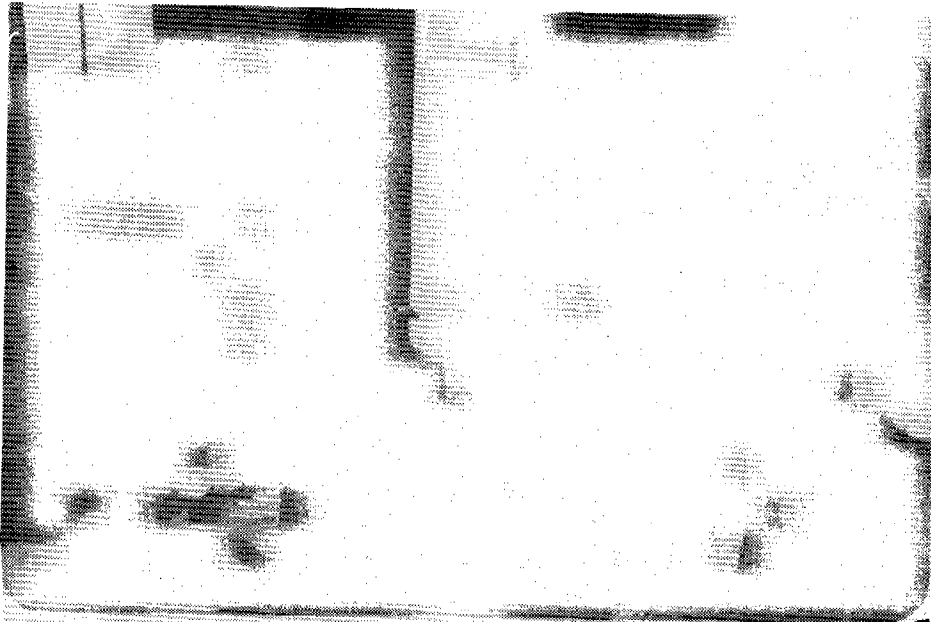


Junk dealer

Push carts



Brush maker



Textile weaver

