The work of the Anjuman Samaji Behbood and the larger Faisalabad context, Pakistan

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IIED Working Paper 7 on Poverty Reduction in Urban Areas

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The ten case studies demonstrate the important roles that local institutions have (or can have) in contributing to poverty reduction in urban areas. They show that:

- many aspects of poverty need to be addressed, including not only inadequate livelihoods, income levels and asset bases but also poor quality and often insecure housing, inadequate infrastructure and services, inadequate legal protection of poorer groups' rights, and "voicelessness and powerlessness" within political systems and bureaucratic structures;
- there are often positive multiplier linkages as actions to reduce one aspect of poverty can help reduce other aspects;
- there are many possible entry points for reducing poverty (including some for which little or no external funding is needed) and many kinds of local organizations or institutions that can contribute to this;
- the form of the local institution that can reduce poverty varies with context; they can be community organizations, federations of community organizations, local NGOs, local foundations, municipal authorities or, on occasion, national government agencies or local offices of international agencies;
- one of the critical determinants of the success of poverty reduction initiatives is the quality of the relationship between "the poor" and the organizations or agencies that have resources or powers that can help address one or more of the deprivations that poorer groups suffer; and
- sustained poverty reduction requires city and municipal government agencies and political structures that are more effective, more accountable and more able to work with low-income groups and their community organizations.

International agencies need to develop or expand funding channels to support local institutions that can deliver for low-income or otherwise disadvantaged groups (including the organizations, associations and federations formed by these groups as well as local NGOs and local government agencies) while also remaining accountable to them. Such channels should also support the capacity of these institutions to widen the scale and scope of poverty reduction programmes and recognize that much poverty reduction depends on new attitudes and actions by local government institutions.

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ABBREVIATIONS AND LOCAL TERMS

Abbreviations

ADB	Asian Development Bank
ADC	Additional Deputy Commissioner
ADP	Annual Development Programme
APD	Additional Project Director
ASB	Anjuman Samaji Behbood
BASWO	Boo Ali Seena Welfare Organization
CDC	Community Development Concern
CDU	Community Development Unit
DG	Director General
ECNEC	Executive Committee for National Economic Cooperation
FAUP	Faisalabad Area Upgrading Project
FDA	Faisalabad Development Authority
FMC	Faisalabad Municipal Corporation
GOP	Government of Pakistan
KAIRP	*Katchi Abadi* Improvement and Regularization Programme
KHASDA	Karachi Health and Social Development Association
MD	Managing Director
MNA	Member National Assembly
MPA	Member Provincial Assembly
MPCO	Multi-purpose Community Organization
NOC	No-objection Certificate
NTPW	National Trust for Population Welfare
OCT	Orangi Charitable Trust
ODA	Overseas Development Agency (UK)
ODP	Okara Development Programme
OPD	Organization for Participatory Development
OPP	Orangi Pilot Project
PAC	Project Approval Committee
PMU	Project Management Unit
RTI	Research and Training Institute
SAP	South Asia Partnership
SKAA	Sindh *Katchi Abadi* Authority
WAPDA	Water and Power Development Authority
WASA	Water and Sewerage Authority
WID	Women in Development
WSC	Water Supply Committee
YCHR	Youth Commission for Human Rights

Local terms

anjuman	organization
baithak	drawing room
bradries	clans
chak	village
janazagah	place where people hold funerals
mandi	market
marla	30.25 square yards or around 25 square metres
mohallas	neighbourhoods
muraba	squares of 25 acres
nallas	drainage channels

kanal	20 *marlas* or 605 square yards
katcha	temporary
katchi abadis	squatter settlements
khal	small water channel
Rajbah	small canal
patwari	lowest level revenue collector
pucca	permanent
sikni	transfer to urban
tatima	legal division of an acre

PREFACE

In September 1988, Diana Mitlin of the International Institute for Environment and Development (IIED), UK, suggested that I carry out a study on the scaling up of the Orangi Pilot Project (OPP). I informed her that I was already involved in such a study for the UNDP-World Bank Water and Sanitation Programme for South Asia but that I would be interested in looking at the growth patterns and service provisions in Faisalabad from the point of view of communities and other interest groups. Faisalabad is the third largest city in Pakistan and an important industrial centre. I further suggested that I could relate my findings to the work of the Anjuman Samaji Behbood (ASB), an NGO replicating the OPP model in the low-income settlements of the city. IIED agreed to give financial support for this undertaking.

My colleagues, Architect Salim Alimuddin (joint director OPP-RTI) and Akbar Zaidi (economist and researcher), and I spent about a week in Faisalabad during March and April 1998, talking to government officials, community members, informal developers, contractors, shopkeepers and NGOs in order to sketch a picture of the city, its problems and any future potential for development work. A list of people and organizations that we met is given in Appendix 1. Earlier, Architect Asiya Sadiq and I spent four days as part of the UNDP-World Bank Orangi Replication study, the findings of which form part of Section V of this report. These four days were spent with the ASB in their project area, talking to their staff, area activists and community members. Our research work has been aided by the fact that Salim Alimuddin and I carried out previous research in Faisalabad in 1989 and have worked closely with the ASB since 1994. The reasons for involving a number of people in this research work were to acquaint them with conditions in Faisalabad so that they could undertake further research independently of each other in the future, and also to create a group that shared a common knowledge base and working methodology.

IIED was interested in our assessing, in the light of our findings, the needs of agencies in the North and the direction that they should follow when dealing with development issues. I have not done this for I feel that the report is comprehensive enough for them to make their own analysis and reach their own conclusions. However, five points are clearly brought out in this study which may be of interest to them:

- Development does not take place with funds. It takes place through the development of skills, self-reliance and dignity. The three are closely inter-linked and follow each other in the order in which they are mentioned. They make relationships within community, and between community with government agencies, more equitable and this change in relationships brings about changes in government planning procedures and, ultimately, in policies.
- “Capacity and capability-building” of government agencies can never be successful without pressure from organized and knowledgeable grassroots groups. Only activists, who have to be identified, trained and supported financially, can create such groups. Formally trained professionals and technicians are not an alternative to these activists, and the formation of groups such as these forces transparency in the functioning of government agencies. The most important aspect of transparency is the printing of accounts and their availability to community members.
- One of the major reasons for disasters in government planning is that ideal plans are made and then finance is sought for them. Often, this finance does not materialize. Things would be very different if planning were undertaken on the basis of a realistic assessment of available funds and if an optimum relationship could be arrived at between resources (financial, technical and other), standards and demands, and if planning could recognize and accommodate the fact that all three are dynamic and can change over time.

- Poor communities do not own programmes developed by “others”, however participatory these programmes may be. It is government agencies that must learn to participate in people’s programmes and in their existing processes.
- The role of NGOs and support agencies is primarily to educate but for this they must, before anything, have a knowledge and a sympathetic understanding of the context in which they are working.

This study is one of ten case studies being coordinated by the IIED which examine innovation in reducing poverty in urban areas. This effort is being funded by the UK Government’s Department for International Development (DFID) and the Swiss Agency for Development and Cooperation (SDC). The authors would like to thank the IIED, DFID and the SDC for their support and also S. Akbar Zaidi for contributing Section VIII of the study. In addition, the authors would like to thank the ASB and the OPP for their assistance and for making their reports, documentation and records available to the research team.

Arif Hasan
Karachi, 15 December 1999

SUMMARY

This case study describes the work of a local NGO, the Anjuman Samaji Behbood in Faisalabad, which demonstrated the capacity to support community-built and financed sewers and water supply distribution lines in the informal settlements in which most of Faisalabad's population lives. It also suggests a model whereby provision for water, sanitation and drainage could be much improved in the city despite deficiencies in the existing infrastructure and institutions and the limited availability of local resources.

Background

Faisalabad is one of Pakistan's largest cities; by 1998, it had close to 2 million inhabitants. There has long been a wide gap between the growing population's need for land for housing with provision for piped water, sanitation and drainage and the capacity of the government agencies responsible for such provision. Two-thirds of Faisalabad's population live in areas with little or no official provision for services, and most new housing and land developments take place without official approval. Less than half the city's population have piped water and less than one-third are connected to the sewer system.

The Faisalabad Development Authority is the main policy-making body and is responsible for supervising development; the Water and Sewerage Authority comes under it. Funding shortages has meant that projects to improve water and sanitation have consistently not been completed. The Water and Sewerage Authority has a serious financial crisis and large deficits - and its operating costs are increasing (especially for electricity, which is needed to power water and sewage pumps) whereas its revenues (drawn mainly from water and sewerage charges) are not. Its very limited investment capacity also means that many uncoordinated investments in water, sanitation and drainage are made. Most new housing developments are undertaken informally (outside of any master plan) and each neighbourhood seeks to improve its water, sewers and drains; but because of the limited capacity of the Water and Sewerage Authority, they often seek funding and develop projects independently.

Often, some of the funding for investments in water, sanitation and drainage comes from "grants-in-aid", which are funded from government revenue and given to each national and provincial assembly member to spend. Each of these politicians identifies and funds schemes that are implemented in their constituency but on an *ad hoc* basis, without reference to any larger plan nor coordinated with larger public works programmes. Municipal councillors also have similar funds, although on a smaller scale. The different grants-in-aid controlled by different politicians support many investments in drains and water supplies but the work is often expensive and of poor quality, with drains that do not work and water supplies that do not reach the outer areas of the settlement. New sewers and drains often empty their effluent into neighbouring streets. There is little coordination between the Water and Sewerage Authority and the different projects supported by the grants from national, provincial and municipal politicians. Most settlements have Water and Sewerage Authority trunk sewers close by but local sewers and drains are often not connected to them.

The Faisalabad Development Authority is not elected and comes under the provincial government. An elected council and mayor head the Faisalabad Municipal Corporation, which has little link to the Development Authority and is subservient to the provincial government executive (which has the power to overrule the decisions of its council). Revenue collection is very deficient and revenue shortfalls make the city increasingly

dependent on provincial government funds - but these have also proved either uncertain or unreliable.

This provides the context in which there has been a search for new ways to improve water, sanitation and drainage that can serve the settlements that develop informally but that can also integrate into the system of water mains and trunk sewers managed by the Water and Sewerage Authority.

The work of Anjuman Samaji Behbood (ASB)

In Dhuddiwala, one of the many informal settlements in Faisalabad, a local welfare organization, the Anjuman Samaji Behbood (ASB), has emerged both to undertake some modest local development work and to arrange receptions for political representatives and influential government officials. It generated many requests for water supply, sewerage, drainage, electricity and social facilities but even when promises of support were obtained, these were never fulfilled. The ASB, like many other local organizations, came to depend for its functioning on funds from politicians. The ASB then sought to undertake development work with community funds, including solid waste management, street cleaning and drain construction. But the development work was often of poor quality and expensive and the ASB lost local support. It ended up concentrating on organizing political rallies.

Nazir Wattoo, an electrician working in an automobile workshop, played a central role in developing the ASB. He came into contact with the work of the Karachi-based NGO Orangi Pilot Project and began to consider the possibilities of using their model, which supports community-managed installation of water and sanitation with full cost recovery.[1] The model implies that each lane within a settlement that wants improvements has to organize and work out how to pay for the cost of the infrastructure and the connection charges. The model has provided sewer systems serving hundreds of thousands of low-income groups in Karachi and is currently being implemented in other cities in Pakistan. To implement the model in Faisalabad, the ASB undertook a survey to document and map existing water and sewerage facilities in the areas in and around Dhuddiwalla. It then installed the infrastructure, with households taking out loans to help them pay for their share. The ASB was confident that it could achieve cost recovery; one of its studies showed that the inhabitants were spending large sums each day purchasing water and this demonstrated the scale of “effective demand’” that could pay for better quality provision. However, acting upon this proved difficult and time-consuming. There were long negotiations with the Water and Sewerage Authority for permission to connect to its water supply network. One reason for this was the bureaucratic procedures necessary to obtain permission for the water connection to cross a road; in the end, the solution was to make the connection at night, without permission. The case study also documents the difficulties facing any initiative that seeks to cover its costs through user fees - many of the households either made illegal connections to the pipelines that were developed or did not pay the charges, or informally purchased or obtained water from neighbours who were connected. There was also opposition from politicians who were worried that a scheme such as this undermined their support.

This case study also describes the difficulties encountered in developing better sanitation in an area with a high water table and the lack of a slope; the sewers that were developed had

[1] The full report that follows this summary includes some details of the other programmes of the Orangi Pilot Project, including health programmes, support for improving the quality of low-cost housing, loans for micro-enterprises and support for improving schools.

to connect to a distant trunk sewer. However, despite the difficulties, 1,300 houses were connected and this has transformed the neighbourhood. As the report notes:

> "Waste water and sewage have disappeared from them. Those that have been paved are now clean and full of people. Children play there, women gather there and residents have started planting trees.... Residents have come together to arrange for the collection and disposal of solid waste and for the sweeping of lanes. There is collective pressure on the councillors to install street lights and this is working" (pages 49-50).

A local doctor who helped form the ASB reports that water and sanitation-related diseases have fallen by over 60 per cent and observes that "...doctors are losing money. They will have to shift to settlements where water and sanitation do not exist or they will become broke and homeless." The inhabitants are saving money that previously went on doctors' fees and medicines. The value of properties has gone up and quarrels over water and sanitation have disappeared.

Many communities are now asking the ASB for technical assistance in laying sewage lines and a second phase is underway, developing a new collector sewer to serve 1,000 households. Now that the model has been shown to work, the ASB is being offered support from international donors (most of which it is refusing because of its commitment to developing a model that does not depend on external funding). Like Orangi Pilot Project, the ASB also feels that development has to take place at a pace dictated by the commitments and priorities of the local inhabitants rather than according to an externally imposed timetable from international donors. It is also having to re-evaluate its role; given the demand for its advice, it is shifting towards working more as a trainer and a provider of services. Maintenance is a particular problem, so it has set up a maintenance unit that can clear blocked trunk sewers and pump water from plots, and which should become self-financing.

Lessons from the case study

- It proved possible to develop good quality provision for water and sanitation in low-income settlements in Faisalabad, funded by what low-income households are able or willing to pay.
- It was possible to draw on the Orangi Pilot Project model developed in Karachi but it was necessary to adapt it to local circumstances.
- The solution needed time to develop and time to work out how to overcome local difficulties (including those posed by households in the community who were seeking to get the water free and by local politicians hostile to the scheme).
- The local NGO was able to develop and fund secondary sewers (it is often assumed that this is not possible).
- Obviously, solutions that do not depend on donor funding (especially grants) are more suitable and sustainable but this poses difficulties for donors who need to spend their money and for development banks that need to provide loans.
- The work of the ASB, like the work of Orangi Pilot Project in Karachi, demonstrates the great potential for improving water and sanitation in low-income areas through partnerships between community organizations and local NGOs (who can work together to install and pay for the water and sewer pipes within the settlement) and municipal authorities (who can provide the water and sewer mains to which these pipes connect).

Other issues[2]

- Development does not take place with funds. It takes place through the development of skills, self-reliance and dignity. The three are closely inter-linked and follow each other in the order in which they are mentioned. They make relationships within communities, and between communities and government agencies, more equitable and this change in relationships brings about changes in government planning procedures and, ultimately, in policies.
- "Capacity and capability-building" of government agencies can never be successful without pressure from organized and knowledgeable grassroots groups. Such groups can only be created by local activists, who need to be identified, trained and supported financially; formally trained professionals and technicians are no alternative to such activists. The formation of such groups forces government agencies to become more transparent in their functioning. The most important aspect of transparency is the printing of accounts and their availability to community members.
- One of the main reasons for the very poor government urban planning record is that ideal plans are made and then finance is sought to implement them – however, often the funds do not materialize. Much more could be achieved if planning was based on a realistic assessment of available funds and if an optimum relationship could be developed between resources (financial, technical and other), standards and demands, and if planning recognized and accommodated the fact that all three are dynamic and can change over time.
- Low-income communities do not own programmes developed by "others", however participatory these programmes may be. It is government agencies that must learn to participate in people's programmes and in their existing processes rather than seek to incorporate them into public programmes.
- The role of NGOs and support agencies is primarily to educate but for this they must, above all, have a knowledge and a sympathetic understanding of the context in which they are working.

[2] These draw not only on the experience with the ASB but also with the experience of Orangi Pilot Project staff working in Karachi and other urban centres; some are taken from Arif Hasan's preface.

The work of the Anjuman Samaji Behbood and the larger Faisalabad context

Salim Alimuddin, Arif Hasan and Asiya Sadiq

I. FAISALABAD: ESTABLISHMENT AND GROWTH

a. Establishment and Growth of Faisalabad[3]

FAISALABAD WAS ESTABLISHED between 1895 and 1905 as a *mandi* or market town. Before its establishment the area was the flood plains of the river Chenab, a tributary of the Indus, and was used as pastureland. In 1902, the lower Chenab canal was built by the British and it converted the flood plains of the Chenab into perennially irrigated areas. Peasants were brought in from Eastern Punjab and settled on the newly irrigated lands. As a result, the local pastoral clans rebelled against the British. The rebellion was ruthlessly crushed and the local clans were declared "criminal tribes" and were excluded from government service and educational institutions.

The function of the market towns in the newly established canal colonies in the Indus Valley was to serve as a centre for grain and cotton storage and its despatch by train to Karachi for export. Agricultural support services were also located in the *mandi* towns.

The old name of Faisalabad was Lyallpur. It was named after Sir James Lyall, the Lieutenant Governor of the Punjab. Around the city, the agricultural area was developed on a grid iron plan in squares of 25 acres, each square known as a *muraba* and given a number. Certain *murabas* were set aside as villages, known as *chaks*. Land was allocated in *murabas*, around each *chak*, for future expansion, amenities, housing, storage purposes and agricultural infrastructure. The revenue department was set up to manage and govern this development. The division of the agricultural areas into *murabas* explains the manner in which the city has expanded both formally and informally over the years.

The town was laid out by Captain Pepham Young in the form of a square on an area of 45 hectares with room for extension to the north-west and south-west. The roads radiating from the centre, where there stood a Clock Tower, resembled the flag of the United Kingdom, the Union Jack. Even before the end of the first decade after its founding, the town was better equipped with amenities than other towns of what was then British India. The water system comprised two large reservoirs with a capacity of 4.8 million gallons and was designed to supply 100,000 gallons of filtered water per day (the power for which was obtained from a water wheel in the Tolbwala *rajbaha* (canal) when the canal was open and from a steam pump during canal closure) and was distributed throughout the town through stand pipes which were also used to flush the drains. The drainage system comprised outer and inner intercepting drains with subsidiary drains in the more inhabited portion of the town. Garbage and night soil removal and disposal, street-cleaning systems, public lavatories and large bathing tanks were established. Three slaughterhouses (separate for Muslims and Sikhs) were set up. Main roads were lit. Grain stores and markets were established and separate facilities built for cow keepers and tenants of the town farm. The civil station (ie. area for government officials) was in the north and south-west of the town with, three main lines of buildings. Offices and police buildings were nearest to the "native" town, the second line comprised mainly civil officers' houses and the third line, separated from the second by municipal gardens, was occupied by the canal officers; the compounds were large, ranging from six to eight acres each. The early public buildings were the Deputy Commissioner's house, the Qaisri Gate (1898), the Clock Tower (1905-13), and the District Board and municipal buildings. The main residential area, Douglaspura (1920), was followed by 40 other *mohallas*, by which time the city had expanded to cover 7.8 square kilometres.

[3] This section draws on a profile of Faisalabad prepared for the Swiss Development Cooperation by Reza Ali, Salim Alimuddin and Ahmed Saeed in 1989.

Industry came to the town during the 1930s, with the Lyallpur Cotton Mills (completed in 1934) being the first major unit followed by three other units in the same decade.

After Independence in 1947, the town grew rapidly, initially due to the influx of Muslim refugees from India and later due to government policies that promoted industrialization and Green Revolution technologies.

Today, Faisalabad has become a sprawling, rapidly expanding city characterized by large unserviced areas and *katchi abadis* where the vast majority of the population reside in poor living conditions. The planned and well-laid out low-density areas provide housing for government officials and staff, and the city entrepreneurs (many of whom have houses in other cities as well).

b. Population Increase

The increase in the population of Faisalabad from 1901 to the 1998 census is given in Table 1 below.

Table 1. Faisalabad: Population 1901-1991

Y e a r	Population	Increase over last census figure	Percentage growth over last census figure	Growth rate per cent per annum
1901	9,171	-	-	-
1911	19,008	9,337	101.8	-
1921	23,136	4,128	21.7	-
1931	42,922	19,786	85.5	-
1941	69,930	27,008	62.9	-
1951	179,000	109,070	155.7	9.9
1961	425,240	246,240	147.6	8.9
1972	823,344	398,104	93.6	6.2
1981	1,232,000	408,656	49.6	4.6
1998	1,977,246	745,246	60.5	3.5

SOURCE: GOP census reports
* Estimated

c. Reasons for Growth

From 1901 to 1921

In these two decades the population of Faisalabad increased from 9,171 to 23,136. This increase was due to the establishment of the city and its administrative structure. In this period, the flood plain was brought under cultivation and in 1910 the railway was established to link the town with Karachi port.

From 1921 to 1941

During 1921-1931, the increase in population was due to an increase of about 40 per cent in the production of wheat and almost 100 per cent in the production and export of cotton. Between 1931 and 1941 industries started to develop in Faisalabad and, in this period, three large cotton mills, including the Lyallpur Cotton Mills which was completed in 1934, were set up. Labour for these mills was also brought in from eastern Punjab, thus increasing the settler population.

From 1941 to 1961

In the period 1941-1951, the population of Faisalabad increased by 155.7 per cent, largely as a result of an influx of refugees from India into the city. The Sikh and Hindu populations were forced to leave the city and their properties were occupied by Muslims coming from India. However, the influx of Muslims was much greater than the Sikh and Hindu populations leaving Faisalabad. Camps for the incoming refugees were set up near the city centre and these eventually became permanent settlements. Almost all these settlements were on agricultural land belonging to the Sikhs. A camp was also set up for the out-going Sikh and Hindu populations, again on agricultural land, around Khalsa College and this developed into *katchi abadis* for the incoming refugees. In addition to the refugee influx, anarchic conditions in the countryside, as a result of the partition of British India, forced many people into the city.

In the period 1951-1961, the population again increased by 147.6 per cent. This was for two reasons: first, Faisalabad was declared an industrial zone with a tax "holiday" as an incentive for investors. As a result of this, a large number of textile mills were established. Second, Green Revolution technologies were introduced in the agricultural hinterland of Faisalabad. This forced, and continues to force, a large number of peasants off their land or requires that at least one member of small landowner families work in the urban areas so that the household can be sustained. Between 1947 and 1958, the number of industrial units increased from 20 to 690.

From 1961 to 1981

During 1961-1971, Faisalabad grew at a rate of 6.2 per cent per year. The natural growth rate was about 3 per cent. Migration into the city was the result of a demand in the international market for cotton yarn. To meet this demand, small looms were installed all over the city and labour from the rural areas moved in to operate them. In addition, there was growth in industrial activity, mainly in the steel fabrication sector and in carpet weaving. Most of these units were small and a large number can be categorized as informal or cottage industries. Between 1958 and 1980, the number of industrial units increased from 328 to 8,380 and Faisalabad came to be known as the "Manchester of Pakistan".

From 1981 Onwards

Faisalabad has continued to grow at a rate of 3.5 per cent per year. This fall in the growth rate is due to a fall both in the natural growth rate and in the in-migration rate. The rate of increase in the number of industrial units has fallen considerably and the disruption caused in the countryside by the introduction of Green Revolution technologies in the 1960s is a stabilising factor. In addition, Pakistan has over-produced both in cotton textiles and in yarn, and wheat is no longer an export item.

II. URBAN PLANNING AND MANAGEMENT AGENCIES

a. The Agencies Involved

THE NATURE AND FUNCTIONS of government institutions involved in development in Faisalabad are similar to that of other large cities in Pakistan. These institutions are the Faisalabad Development Authority (FDA); the Faisalabad Municipal Corporation (FMC); the Water and Sewerage Authority (WASA); and the Cantonment Board.

b. The Faisalabad Development Authority (FDA)

Nature

The FDA is a statutory body and functions under the control of the Housing, Physical and Environmental Control Department of the provincial government. It is not an elected body but the mayor of the city is a member of its governing council.

Functions

The FDA is a policy-making body for the development of the city and it is also in charge of arranging for and supervising such development. In addition, it is responsible for the formulation and administration of building regulations, the management of parks and gardens and subsoil water management. The FDA, through WASA, is also responsible for the provision of water supply, sewerage and drainage. It is also responsible for the upgrading of slums and *katchi abadis*, and for traffic engineering.

Finances

The FDA raises finance through land development and its sale; through leases, regularization and the issuing of building permits; and through federal and provincial loans and grants, which are sometimes part of foreign assistance for urban development projects. The FDA, like all other development authorities in Pakistan, has an increasing financial deficit.

c. The Faisalabad Municipal Corporation

Nature

The FMC consists of a “political” section and an “executive” section. On the political side is the elected municipal council with the mayor as its head. Each councillor represents a ward which, on average, consists of a population of 50,000. On the executive side, the FMC is part of the provincial department of local government which, at the corporation level, is headed by the municipal councillor who belongs to the provincial bureaucracy. The relationship between the executive and political wings is governed by the 1979 Punjab Local Body Ordinance. The Ordinance gives the executive the power not only to overrule the decisions of the council but also to suspend or supersede the council for a period of six months if, in the opinion of the executive, the council has not managed its affairs satisfactorily.

Functions

The FMC is responsible for the maintenance and repair of roads; street paving in certain areas; removal of encroachments; fire fighting; provision and maintenance of street lighting and road signs; primary education; maintenance of tertiary open drains; health and sanitation; solid waste management; and recreation and social welfare. In addition, the FMC also gives grant in aid to its councillors so that they may carry out small urgently needed developments in their areas. However, these works are limited to building open drains, street paving and street lighting. Each councillor receives an average of about Rs 600,000 per year as grant in aid.

Finances

The FMC raises revenue through octroi, property taxes, taxes on the transfer of property, rents and conservancy charges.

d. Water and Sewerage Authority (WASA)

Nature

WASA is a department of the FDA, and the FDA Director-General (DG) is its chair.

Functions

WASA is in charge of planning, developing, operating and maintaining water supply, sewerage and drainage, and is empowered to collect charges for these services from the beneficiaries.

Finances

WASA's main source of revenue is from water and sewerage charges. However, power and operating costs of WASA are increasing while revenues do not show a corresponding increase. There are a large number of illegal and uncharged for connections that deny revenue to WASA.

e. Cantonment Board

The Cantonment Board looks after the cantonment area. It is in charge of local development, the operation of services and the maintenance of the cantonment area. Its sources of revenue are conservancy charges, property taxes, development charges, lease charges and various fees, such as for building permits, the regularization of buildings and land use changes. The Cantonment Board has its own building by-laws and there is no coordination between its development programmes and those of the FDA.

f. MNA/MPA Funds for Development

Since 1985, members of the National Assembly (MNAs) and members of the Provincial Assembly (MPAs) have received funds of up to Rs 10 million and 5 million a year, respectively, for development works which they identify and which are implemented by government agencies, which they also identify. In Faisalabad, there are three MNAs and six MPAs, and over the last 14 years they have received more than Rs 630 million. The MNAs and MPAs identify schemes for their constituencies on an *ad hoc* basis. These schemes are not part of a larger plan for the city and as such they often create more problems than they solve. Also, the contractors for the implementation of these schemes are chosen on a political basis. These two factors, when put together, adversely affect the functioning of government agencies without benefiting the constituencies of the MNAs and MPAs, and often create conflicts within communities.

g. Some Conclusions regarding the Nature of Local Government Institutions

Non-participation of Communities in Decision-making on Policy and Implementation

The FDA is the policy-making body for the development of Faisalabad. It is not an elected body and nor is it subservient to any representative institution at the local level. As such, the technocrats who man it and who, as a rule, belong to the affluent classes, do not interact with the representatives of the people at the micro level nor do they feel obliged to take their point of view into consideration when dealing with policy matters. The only link

between the FDA and the people is through the mayor, who is a member of the governing board of the Authority. The bureaucracy dominates this governing board.

Ineffectiveness of the FMC

The FMC is an elected body. However, it has no relationship with the FDA other than its mayor is a member of the FDA governing body and, as such, has no say in policy matters on development. Even in the functions it performs, it is subservient to the executive of the provincial government, whose political and economic interests (in certain political conditions) conflict with those of the city. Its survival depends entirely on the wishes of the provincial bureaucracy.

Revenue Collection

Revenue collection in all agencies shows major default in the recovery of taxes and an increasing number of unbilled-for utility connections. In addition, the *katchi abadis*, for the most part, have not been brought within the property tax net. Although there is a municipal councillor for every 50,000 population, the system of recovery remains in the hands of a highly centralized bureaucracy which is finding it increasingly hard to deal with Faisalabad's rapidly expanding population.

Revenue shortfalls mean that the ambitious development projects of the various agencies cannot be fully implemented and their partial implementation is in many ways more detrimental to the city than no implementation at all. In addition, this revenue shortfall makes the city increasingly dependent on provincial government funds, which in the past two decades have proved to be extremely unreliable.

h. Faisalabad Upgrading Project

Background

In July 1989, a memorandum of understanding was signed between the governments of Pakistan (GOP) and Britain, allocating UK£ 25 million as UK bilateral aid for social sector projects in Pakistan. In November 1989, it was agreed that the Overseas Development Administration (now the Department For International Development) and the GOP would develop a slum improvement/urban upgrading project in Faisalabad called the Faisalabad Area Upgrading Project (FAUP). Faisalabad was identified by ODA as the project site since it has a population of 2 million, which was considered the correct size for a UK£ 10-15 million project.

Objective of the Project

The objective of the project is to promote economic and social welfare in the slums and *katchi abadis* of Faisalabad. To achieve this, in 1989 the project aimed first to provide income generation opportunities in the slums and *katchi abadis* through an investment of UK£ 6.8 million; and second, to develop physical and social infrastructure through an investment of UK£ 5.1 million. Project area communities are supposed to generate UK£ 1 million or one-twelfth of the total cost.

To achieve this, the participatory "process" approach to urban development was adopted. Special emphasis is laid on tackling the problems of women in development (WID) by providing training in broad WID issues, gender analysis and planning. FAUP is not to implement a separate WID component but gives priority to women's needs as part of an integrated programme in which men will be involved.

Short History of the Project

Consultants started work on the project in mid-1992, when a revised timetable was established for the programme. By December 1993, the PC-1 for the project had been approved by the government of Pakistan and letters were exchanged between the two governments. By January 1994, the process of team building and staff training had started and a core team for the Project Management Unit (PMU) was established. Fieldwork began at the same time, as did the process of building a rapport with the community. The project area was divided into four pilot areas and these were surveyed and mapped. Details of the pilot areas are given in the Table 2 below.

Table 2. FAUP Pilot Areas

Abadi	**Type**	*Population*	**Houses**	**Area (in acres)**
Shadab Colony	Slum	18,000	2,100	100
Rasool Nagar	***Katchi abadi***	2,500	285	7
Khan Model Colony	Slum	1,600	232	25
Noor Pura	Slum	1,900	311	38
Chak 7/JB	***Katchi abadi***	15,000	1,800	75
Islam Nagar	***Katchi abadi***	21,000	2,361	49
Total		**60,000**	**7,100**	**294**

SOURCE: FAUP reports

An attempt was made to establish a working relationship between FAUP, WASA, FMC and the social sector line departments, and work with some of them has been undertaken. Progress has not been as effective as FAUP staff would have liked and this they attribute to a lack of interest on the part of government agencies and to the slow working of government departments.

Phase I of the project (now complete) lasted two years and was to cover a population of 60,000 in the four pilot areas. Phase II (four years) was to cover an additional population of 180,000.

Structure of FAUP

Project Management Unit. The FAUP is managed by the PMU, which is an autonomous body within the FDA. It is responsible for contacting government line departments and agencies and for coordinating FAUP's work with them. The DG of the FDA is the FAUP director and chair of the FAUP Steering Committee. The FAUP Additional Project Director (APD) is appointed by the FDA from its staff. The role of the PMU as envisaged by the PC-1, includes creating Multi-Purpose Community Organizations (MPCO), involving communities in the planning and implementation of infrastructure, health, education and enterprise projects. These projects are identified and selected by MPCOs and approved by a Project Approval Committee (PAC) headed by the APD. This process is very different from the normal practice of government.

Community Development Unit (CDU). The CDU consists of a senior social organizer who works with a team of male and female social organizers. There is one male and one female social organizer for every pilot area. Their function is to develop awareness, help communities identify their needs and develop proposals for neighbourhood projects that can be supported by the FAUP.

PMU Specialists Unit. This unit consists of specialists who work in close contact with each other, and with the senior social organizer and his/her team. The specialists consist of a senior engineer, an economist/monitoring and evaluation specialist, an

education specialist, a health specialist and an enterprise development specialist. The specialists in the unit are to develop an overall understanding of the conditions and issues in the project area and their larger linkages and develop the detailed designs, implementation and procedures for their work. In addition, they are to advise the CDU in their respective disciplines for projects that have been identified.

Foreign Consultants. Foreign consultants work within the FAUP in advising and assisting the project manager and his special staff. Short-term consultants also make regular visits. These consultants consist of urban health, education and enterprise development experts.

Steering Committee. The Project Steering Committee consists of the FDA director-general (chairman); the project manager of FAUP (secretary); an ODA consultant project management advisor; the managing-director of WASA; the mayor of FMC; the director-general *Katchi Abadis*, Punjab; representatives from the Punjab Planning and Development Department; the PMU finance director; an NGO representative; a member of the public; and any other person co-opted by the Committee.

Operational Procedures and Achievements

Box 1 sets out FAUP's operational procedures.

Box 1. FAUP: Operational Procedures and the Role of Communities

Community Interaction Strategy

This strategy consists of:

- familiarization with the area (recce survey)
- individual contacts and project introduction
- community meetings and description of project details
- formation of multi-purpose community organizations (on the basis of participatory approach rather than representation)
- identification of key persons (activists)
- needs expressed and prioritizations
- development of options
- project preparation
- project approval by community
- implementation/execution
- impact monitoring/evaluation
- amendments as a result of the learning process

Role of Communities

For tertiary level projects, the role of communities in FAUP projects is:

- initial identification undertaken by the community and the resolution forwarded to FAUP
- the community agrees to pay 50 per cent financial contribution in cash or kind
- possible options are developed with the community
- cost estimates are shared with the community
- a joint bank account is operated with the community
- an implementation committee is formed to execute the project
- implementation committee purchases the materials and hires the labour/workers
- the community remains involved in the execution of the projects
- the community signs to verify the purchase receipts
- the community maintains the account register
- the community signs the completion certificates
- the community resolves any disputes during execution

For secondary level projects, line agencies are responsible for the planning, design, implementation, and full financing of the project. However, communities are involved as follows:

- initially, the projects are identified by the community in consultation with the PMU
- the community is taken into confidence with respect to design and implementation
- the community is made responsible for the removal of encroachments (if any) and for the timely execution of the project
- the community is involved in day to day monitoring of the project to maintain quality of work
- the community approaches the line agencies to resolve any issues which might arise

In primary level projects, line departments are responsible for the planning, design, implementation and financing. The community is involved only in identifying the issues.

SOURCE: FAUP reports

FAUP's achievements are set out in Table 3. In addition to these, a major achievement of the FAUP is that it has been able to set up a fully equipped office in an apathetic, if not openly hostile, environment and promote the concept of community participation in government planning.

Table 3. FAUP Achievements: Type and Number of Projects up to June 30, 1997

Activity	Type	Number of projects	Total cost (Rs)	Sharing (Rs)		
				FAUP	Community	Other depts.
Sewerage	Secondary Tertiary	17 30	7,624,850 599,018	7,515,150 299,509	 299,509	
Road/street paving	Secondary Tertiary	2 22	5,753,000 545,470	5,753,000 272,735	- 272,735	
Water supply	Secondary Tertiary	2 -	7,596,000 -	7,596,000 -	- -	
Street illumination	Secondary Tertiary	1 -	38,000 -	38,000 -	- -	
Park development	Secondary Tertiary	- 16	- 670,650	- 335,325	- 335,325	
School development		55	3,835,960	3,282,332	553,628	66,500
Percentage			**100**	**85.58**	**14.41**	**1.72**

SOURCE: FAUP reports

FAUP Evaluation

It is difficult to evaluate the FAUP in terms of sustainability since its reports do not furnish us with any accounts. However, an institutional review of the project in March 1997 raised concerns regarding sustainability once ODA funds are no longer available. Concerns regarding replication have also been raised and options for change have been suggested, which include taking the project out of government hands and implementing it through an NGO which will take the place of the PMU. Problems of working as a government institution with a non-government strategy were also identified by the institutional review. In physical terms, FAUP's impact has so far not been substantial and nor has it been able to bring about any major change in the functioning of government planning. However, it can be an important support organization to NGOs and CBOs working in the development sector in Faisalabad, if it agrees to support them rather than only the MPCOs that it helps create.

III. URBAN PLANNING AGENCIES: FUTURE AND PRESENT PLANS

a. The Faisalabad Master Plan

IN ADDITION TO the FDA, FMC, WASA and Cantonment Board, there are other agencies involved in the development of Faisalabad. These include the Water and Power Development Authority (WAPDA), a semi-autonomous body of the federal government, and the Sui Northern Gas Pipelines Limited, a public sector corporation under federal control, that provides natural gas for domestic and industrial purposes. Thus, the responsibility for the planning, development, delivery and maintenance of services is shared by a large number of agencies sometimes operating under independent statutory regulations. Since the powers of FDA and FMC over these agencies is limited, the task becomes extremely complex. To overcome this problem, a master plan directorate was established in the FDA in 1976 to revise and update the 1968 Master Plan or if necessary to prepare a new plan.

After preliminary studies and surveys, the work on the Master Plan (or structure plan as it was called) was suspended because the provincial Planning and Development Department insisted on engaging experts for the evaluation of the proposals, while the FDA requested permission to engage consultants to develop the plan. The controversy was finally resolved in January 1985, when the services of a professor from the University of Engineering and Technology, Lahore as consultant were acquired and the plan was finalized under his supervision.

The Plan was not implemented due to the absence of institutional coordination, political leadership and funds. Meanwhile, Faisalabad continued to grow. In November 1993, when the then Prime Minister, Benazir Bhutto, visited Faisalabad, the citizens demanded the preparation and implementation of a new, feasible plan. As a result, she directed the Commissioner of Faisalabad Division to prepare a practical master plan and promised that resources would be diverted and utilized for its implementation.

Experts available in Faisalabad were constituted into a team for this purpose. They prepared the outlines of a plan on an “issue basis” which they felt would serve the needs of the city for the next 25 years. This plan consisted of four sectors: roads and transport; environmental improvement; social sector development; and water and sanitation. The reasoning behind these four sectors is given below.

Roads and Transport

One of the major components of the Master Plan was the immediate improvement of the road infrastructure inside and around the city of Faisalabad. It was felt that the absence of good roads, pavements and rainwater drainage was the main reason for congestion, environmental pollution, economic losses due to slow transportation of goods and materials, and the yearly washing away of the road infrastructure due to the monsoons. The details of the proposals are given in Appendix 2, Table 1. It was estimated that implementation would cost Rs 3,505.80 million. However, according to Faisalabad communities, not even 10 per cent of this work has so far been implemented. Apart from resource constraints, one of the major problems in building the roads was that road widening was an integral part of the scheme. In many cases, there are encroachments along the roads and their removal is politically not feasible. Also, there are neither funds nor lands for rehabilitating those who are affected.

Environmental Improvement

The Plan pointed out that the physical growth of Faisalabad has been disorderly and not subject to any regulation. People had converted their residences into industrial

establishments and occupied amenity areas and infrastructure reservations. *Katchi abadis* were growing and becoming denser, and major wholesale markets, industrial estates and bus and cargo terminals were now within the city. These activities were causing environmental pollution, congestion and, due to their expansion, inappropriate land use changes were taking place. The shifting of much of these activities was proposed along with a number of other measures. Details of the proposals are given in Appendix 2, Table 2. The total cost was Rs 435.10 million of which Rs 258.60 million were to be raised through the sale of constructed assets and from NGOs. Very little work has been done on these proposals.

Social Sector Development

It was felt that the enormous developments in trade and industry undergone by Faisalabad had no doubt improved its economic situation. However, Faisalabad had grown without any planning and, as such, the quality of life of its citizens had suffered considerably. Therefore, a number of social sector and institutional complexes were proposed for the city. The details are given in Appendix 2, Table 3. The cost of building these facilities was estimated at Rs 1,270.66 million of which Rs 533.17 million were to be raised by sale of constructed assets and from NGOs.

Attempts at implementing these proposals have been made. The fruit and vegetable market was moved from within the city and is now situated about 20 kilometres from the centre of Faisalabad. As a result, prices for vegetables have increased. The traders have now decided to build their own market on the Faisalabad by-pass. Public latrines were also built but somehow they have disappeared. According to residents, they have been converted into shops through an arrangement between FMC staff and various entrepreneurs. Three incomplete sports complexes, on which no work is being done at present, were a part of this plan.

Water and Sanitation

The Plan considered water, sanitation and drainage to be the most important problems facing Faisalabad. It noted that these systems had not developed and this adversely affected the living conditions, health and mobility of the people. It also noted that due to the topography of the region there are several sewage-pumping stations which stop functioning during electricity load shedding or failures. As a result, large areas that the sewage system serves get flooded. Also, since there are no sewage treatment plants, raw sewage is discharged into water bodies, depressions and into the irrigation drainage systems. As great emphasis was given to this sector by the Plan, and since water, sanitation and drainage issues have been the expressed priorities of Faisalabad NGOs and CBOs, the various plans developed for this sector are discussed below.

b. Water, Sanitation and Drainage Plans

The 1975-2000 Master Plan

A water, sanitation and drainage Master Plan was prepared with the financial assistance of the Asian Development Bank (ADB) in 1975-76. The Plan was for a 25-year period, up to the year 2000. Phase 1 of the Plan was approved by the Executive Committee for National Economic Cooperation (ECNEC) in 1985 (10 years on) for Rs 1,513.26 million, which figure was subsequently revised and approved for Rs 2,412.12 million in 1992. The salient features of Phase 1 of the project are given in Appendix 3, Table 1.

If Phase 1 had been implemented, 80 per cent (or a population of 1.12 million), 63 per cent (or 0.88 million) and 82 per cent (or 1.15 million) of Faisalabad's population would have been served with water, sewage and drainage facilities, respectively. However, the

project could not be completed due to a shortage of funds. Water supply targets were achieved for the most part and commissioned in July 1992. The sewage component of Phase 1, which was only 18 per cent of the project cost, could not be completed. As a result, the additional water supply has added considerably to the sewage and drainage problems of Faisalabad. The details of the remaining Phase 1 water supply works costing Rs 56.13 million and sewerage works costing Rs 283.44 million are given in Appendix 3, Tables 2 and 3. At present, only 32 per cent of Faisalabad is served by a proper water borne sewage system.

The drainage channels, however, were completed and, in the absence of a sewage system, are being used for collecting and carrying domestic as well as industrial effluent.

The Updated Water, Sanitation and Drainage Master Plan

Since the 1975-2000 Master Plan could not be implemented, it was updated in 1992-93 for the next 25 years, up to the year 2018. It is to be implemented in three phases (including Phase 1 described above). Phase 2 deals with short-term needs up to the year 2000 and the remaining two phases are classified as long-term needs up to the year 2018.

Water Supply. A summary of short and long-term water supply development needs are given in Appendix 3, Tables 4 and 5. Short-term needs require an investment of Rs 463 million. Since these funds are not available, the Plan has identified immediate needs. These are given in Appendix 3, Tables 6 and 7 and their cost has been worked out at Rs 89 million. A major part of the work consists of laying a distribution system.

Sewerage. Sewerage targets for Phase 1 were to be completed by 1988-89 but none of the components could be completed and, due to an increase in population and water supply, conditions have deteriorated considerably. The 1992-93 updated Master Plan has identified both short and long-term requirements for the city. These are given in Appendix 3, Tables 8, 9 and 10 for short-term requirements and in an Appendix 3 note "Long-term Requirements for Sewerage". Areas in Faisalabad that are without sewerage are listed in Table 11. Rs 877.27 million are required to implement the short- term development works under Phase 2 of the Plan.

Due to financial constraints, it became obvious to the planners that the short-term needs could not be met. As a result, immediate sewerage needs were identified in 1992-93 and a scheme called "Faisalabad Sewage and Drainage Project" was prepared. It consisted of two parts, which are described in Appendix 3, Tables 12 and 13. The project was approved by PDWP on 19 July 1993 for a cost of Rs 97.93 million. An allocation for Rs 20 million was made for it in the 1993-94 Annual Development Plan. However, the scheme was deleted from the ADP later on due to a lack of funds. It is important to note that a major component for sewerage development is the installation of tertiaries.

c. Financial Constraints of FDA, WASA and FMC

FDA's budget for the years 1996-97, 1997-98 and 1998-99 is given in Appendix 4, Table 1. It shows that in 1996-97 and 1997-98, the ratio of development to non-development budget is almost 1:1. However, in 1998-99, the development budget is far less than the non-development budget. If this trend continues, Faisalabad will face very serious problems in dealing with the demand for infrastructure and amenities. Also, the budget shows a large gap between proposed and actual figures. This points to a serious problem in relating planning to available resources.

WASA's budget for the same years is given in Appendix 4, Tables 2.1 and 2.2. The tables show that WASA operations have resulted in severe deficits and that expenditure has been increasing faster than revenues. Three years ago (1996-97), WASA's position was much better as it showed an opening balance of Rs 71.42 million, which declined considerably in the next two years. The 1998-99 budget (to February 1999) shows a deficit of Rs 7.65 million. This means that WASA is in deep financial crisis and that it will have to

either cut down its badly needed development works or borrow from external sources to meet its current and future expenditures. Then, it will have problems servicing its debts and will become a big burden on the provincial government.

FMC's budget is given in Appendix 4, Table 3. The FMC budget shows that over the years, the Corporation has managed to maintain a balance between expenditure and the generation of revenue. However, it needs to increase its revenue so that larger sums can be spent on infrastructure development. Unfortunately, the FMC's administrative and overhead costs have been increasing far more in proportion to its development budget.

IV. FAISALABAD: THE GROUND REALITIES

a. Economy and Employment

Industry

The Trend towards Smaller Units. Faisalabad is the largest industrial city of Pakistan after Karachi. According to the Faisalabad Master Plan Survey 1985, in 1947 it had 20 industrial units. By 1985, this number had increased to 8,620, of which 4,695 were looms and an additional 23 were big textile units. In addition, there were 1,191 steel fabrication units and 682 carpet manufacturing units. Due to the large number of looms and textile units, Faisalabad has often been called the Manchester of Pakistan. However, it is no Manchester because, by 1985, over 6,200 of its 8,620 industrial units were small units in the "cottage industry" category whereas, before 1962, almost all of its 690 units at the time were large and medium-sized ones. This change from large and medium-sized units to small ones has continued since 1985 and has had a big impact on the physical and social environment in and around Faisalabad.

The Reasons for Smaller Units. In the 1960s, the government declared all textile units consisting of four looms or less to be cottage industries and exempted them from tax. As a result, bigger units were broken down into smaller units and disbursed throughout Faisalabad low-income settlements. Also, this discouraged investment in larger units for the future. Again, in the 1980s, the government declared all units of up to 40 looms to be cottage industries and, although they were not exempt from tax, they were given tax rebates. The result has been that the larger factories that survived, such as the Kohinoor Textile Mills, which had 5,000 looms, have also been wound up and their properties sold to real estate developers. At present, it is estimated that there are over 175,000 looms in the Faisalabad area.

Government Plans for Industrial Estate and Markets. The FDA has not been able to provide space for industrial growth. Thus, agricultural land around Faisalabad has been sub-divided and turned into industrial areas. Conditions in these areas are described in Box 2. Faisalabad is also a major business and commercial centre due to industrial activity that is closely linked to its cotton and wheat producing hinterland. It manufactures tractor spare parts, trolleys, harvesters, diesel engines, generators and other machinery, and tools used in agriculture. It is also a major market for scrap metal which is recycled in many of the Punjab's intermediate-sized cities. For this enormous industrial and trading activity, FDA has provided only a few markets which are listed in Appendix 5.

Box 2. Faisalabad's Industrial and Commercial Areas

Most of Faisalabad's industrial and commercial areas have developed informally. Even those that have been developed by the government develop a lot of informal activities within them that occupy open spaces meant for activities such as vehicle parking and loading and unloading bays.

Maqbool Road is an important industrial area of Faisalabad. It is about five kilometres south-west of the Clock Tower. According to the factory owners in the area, there are between 150 to 200 factories and foundries. These factories manufacture harvesters, threshers, trolleys and various components for agricultural machinery. These products are exported to all the major market towns of Pakistan. The area also includes textile units that undertake dyeing and washing. The water for these activities is acquired by tube wells within the factories. The area was developed after 1959, before which it was all agricultural land, and has been leased by the users from the original owner. There are about 20,000 workers in these factories and around 30 per cent are from the city; the rest come from nearby villages. Environmental conditions at Maqbool Road are bad. There is no drainage system and therefore the large quantities of water used by the textile industry cannot be disposed of. In addition, there is no proper sewage system as a result of which the sewage gets mixed up with waste water, creating environmental problems and problems of movement for vehicles and pedestrians. The undrained waste water and sewage have completely destroyed the asphalt road surfaces, with resultant large ruts. There are no proper facilities for loading and unloading nor for parking of cargo carrying vehicles. They simply occupy the inundated roads. Maqbool Road itself is being widened and surfaced. In so doing, the needs of the foundries and the shops have not been taken into account and, as a result, problems relating to loading and unloading will increase considerably. The Maqbool Road factory area is under threat as the government wishes to relocate it outside Faisalabad municipal limits.

Adjacent to Maqbool Road is Faisalabad's scrap market. Ten to 12 years ago this market used to be on Summandri Road. It was moved here by the FMC when Summandri Road was being widened. The land on which it is located was all agricultural. According to the scrap dealers, they purchased the land directly from the landlord and the FDA and FMC were not involved. There are more than 100 dealers in the market who buy scrap through tenders in newspapers. Very few mobile scrap dealers come here to sell. The market deals almost entirely in scrap steel. This is used in the foundries to make billet, rolled steel, tires and girders, and also in the light engineering industry. Almost all the market's labour comes from nearby villages by bicycle. As the market is outside the municipal limits, the FMC does not provide it with water, sewerage, road paving and electricity. There is a scrap dealers association but its role in the provision of services is negligible. As a result, the environmental conditions in the market are bad. There is congestion, an absence of traffic and cargo handling management and the roads are without proper paving. The scrap market dealers complain that business is decreasing since there is very little money in the market and it is impossible to get a formal loan for purchasing raw materials. They claim that if loans were available they could improve not only their businesses but also the environmental conditions in the market. Many would like to shift to a better and more accessible location.

212 Market is the central iron market in Faisalabad. Manufactured steel products such as mild steel bars, girders and angle iron are sold here. The land on which the market is located was originally agricultural and a market was planned for the area by the FMC in 1980. The plots were auctioned by the Agricultural Department, and uniform shops were constructed by FMC. The shops have covered *verandahs* to their fronts that are now all encroached upon. There are no proper loading and unloading arrangements nor any space for the parking of cargo and other vehicles. According to the shop owners, there are eight to ten workers per shop, including drivers. Ninety per cent of the workers come from the nearby villages and only 10 per cent from the city. Business has fallen considerably in the last two years but the shop owners cannot identify the exact reasons for this. They feel that it is because housing construction has slowed down and because no new factories are being built.

SOURCE: Observations and interviews

Location of Larger Industrial Units. In the absence of space within the city, the larger industrial units have located themselves outside the metropolitan area, along the roads linking Faisalabad to other cities of the Punjab. These units obtain their electricity from the grid system along these roads and locate themselves near drainage channels linked to the irrigation system so that their effluent is removed to the natural water bodies. Informal settlements then develop around these industries. These industries do not require any

building permits or other permission from the FDA or FMC since they are outside Faisalabad metropolitan limits.

Employment

The figures for the 1998 census have yet to be compiled. However, according to the 1985 Master Plan surveys, 52.7 per cent of Faisalabad's population were self-employed. Much of this employment was related to micro-enterprises servicing the industrial sector. These enterprises included: making cardboard boxes for packaging industrial goods; piece work for the garment industry; rope making; piece work for the shoe making industry; manufacturing components for the light engineering industry; retail outlets; and vendors and hawkers serving transit populations at various transport and cargo terminals in the city. In most manufacturing enterprises, men, women and children from the same family work together as most of these activities are carried out in the home. In addition, 23.5 per cent and 11.1 per cent of the workforce worked as unskilled and skilled day-wage earners, respectively. Only 9.9 per cent of Faisalabad's population were employed in regular jobs in formal sector enterprises and 2.9 per cent were in government service.

Estimates vary, but there is a consensus that between 100,000 and 150,000 persons come into Faisalabad to work from villages up to 25 kilometres away. These villages have become dormitories and cash earnings come more from employment in Faisalabad than from agriculture. In addition, many Faisalabad entrepreneurs have located looms in these villages, thus bringing about major social and economic changes.

Repercussions of Industrialization and Employment Trends

The decision in the 1960s to give a tax holiday to units of four looms or fewer resulted in a proliferation of looms in all the low-income settlements and *katchi abadis* of Faisalabad. This meant noise and air pollution and the emergence of a transport, packaging and services sector to the loom industry that caused congestion in the settlements. This has created major problems, not only for the settlements but also for Faisalabad as a whole since its infrastructure was not geared to cater to these activities.

The decision to declare units of 40 looms or fewer as cottage industries has also led to the break-up of large textile industries into smaller ones. This has meant the end of large formal sector trade unions and the emergence of contract labour, as a result of which minimum wage and labour laws can be by-passed. It has also resulted in the old industrial establishments being sold and their land being converted into markets and housing developments, thus causing further congestion in the city.

The development of industries along the roads linking Faisalabad to other cities in the Punjab has created "corridor development" and the use of irrigation and natural drainage channels for the disposal of effluent. This is causing considerable visual pollution and pollution of the water bodies. Again, the daily migration of labour into Faisalabad from the neighbouring villages creates problems for the city. This is because, at a formal level, the city has not organized itself for receiving this daily influx. Resting, eating, transport and related activities and toilet facilities for this influx are all organized informally or not at all. This causes congestion, unhygienic conditions and conflict between providers of these facilities and the establishments whose lands and zones of influence they occupy.

Present Economic Conditions

In conversations with various communities, real estate developers and traders, one point came across very strongly, namely that there is increasing unemployment and a decline in business. Various reasons for this have been given by community members and entrepreneurs and the consensus is that the main reason is the dissolution of the finance companies (for example, Punjab Co-operative and Taj Company). Landlords, the general

population and traders had invested in these companies, who were offering high interest rates, and these had fled with their money, which amounted to Rs 4 billion. This created a sudden money gap. Another reason is the non-functioning of the textile industry. Looms are not working because of the sales tax that has been imposed and the very large increases in electricity charges. Also, since the army moved in to recover the Water and Power Development Authority (WAPDA) charges, it has become difficult to have an illegal connection or not pay for electricity. It is generally agreed that if the textile industry functions well, all businesses function well since money is generated. With no jobs being created, the cost of agricultural sub-divisions for housing has also decreased substantially since workers increasingly prefer to cycle, walk or take a bus from their villages to Faisalabad for work purposes rather than acquire land for a house. Another reason that business people have given for the economic crisis in Faisalabad is the lottery schemes that the banks have initiated. They claim that people are investing their money in these schemes in a big way.

b. Housing

The Demand-Supply Gap

Between 1947 and 1998, Faisalabad's population increased by about 1.9 million, for which a minimum of 200,000 housing units are required. However, between 1947 and 1998 the government has been able to provide only 38,785 plots and houses. This includes nuclear houses and 22 flats developed for bulldozed *katchi abadi* residents. Details of the housing schemes developed by the government are given in Appendix 6.

Katchi Abadis

As a result of the demand-supply gap, *katchi abadis* have developed all over Faisalabad. These *katchi abadis* are in proximity to the city centre and, for the main part, are migrants from India and their descendants. The majority of *katchi abadis* are on state land but a sizeable number have also developed on agricultural land vacated by the departing Sikhs and Hindus at the time of partition.

The *Katchi Abadi* Improvement and Regularization Programme (KAIRP) was established in 1978. The programme is run by the FDA *Katchi Abadi* Directorate. Initially, only those *abadis* with more than 100 units were to be regularized. However, in 1985, that figure was reduced to 40 as a result of which many more *abadis* became eligible for regularization. A list of *katchi abadis* classified according to the 1978 and 1985 criteria is given in Appendix 7. The programme involves providing 99-year leases to individual house owners and providing development to the *katchi abadis*, namely the provision of water, sewerage, gas, electricity, road paving and social sector facilities.

In these *katchi abadis*, development works have been carried out partially by different line departments. Lease charges for five *marla* (c. 125 square metres)[4] plots amount to Rs 172 and the cost of plots greater than five *marla* is recovered through market rates. The lease charge does not include the development cost, which is different for each settlement. In addition to the partial work done by FDA in these *abadis*, area councillors have also invested in their development. However, the work in these *abadis* has been extremely slow and uncoordinated. The scale of this can be judged from Table 4 below.

Table 4. Lease Position regarding *Katchi Abadis*

	Total	Transferred	Housing units	Sale deeds	Before

[4] One *marla* is 30.25 square yards or around 25 square metres

	settlements			issued	
Old	13	12	11,885	868	1.1.1978
New	72	36	15,000	600	23.3.1985
Total	85	48	26,885	1,468	

SOURCE: FDA reports

Low-income, Unserviced Areas on Private Land

In addition to *katchi abadis*, which can be regularized as they are on government land, there are also similar unserviced areas on private land. Many of these are so large that it is inconceivable that they could be bulldozed. In most cases, they have acquired legal or illegal water and electricity connections, and their councillors and MNAs and MPAs have invested money in their development. A list of these unserviced areas is given in Appendix 8.

Densification

In the *katchi abadis*, and also in the middle-income areas of Faisalabad, densities are increasing rapidly because new families are being created. In the middle-income areas, there is still space to expand both horizontally and vertically however, in the *katchi abadis* and lower-income settlements, plot sizes vary from two to seven *marlas* (50 to 175 square metres). In some of these settlements, there are ten to 15 people living in one house on three to five *marla* plots. Vertical expansion of these houses is not possible due to the poor quality of construction. In many cases, these houses are used not only for residential purposes but also as business enterprises and workshops. As a result of congestion, houses in many settlements keep changing hands, and whoever has the means to do so moves out to the informal settlements being created through the sub-division of agricultural land on the city's fringe. For example, in Allama Iqbal Colony which was developed as *marla* plots in 1976, only 15 to 20 per cent of the 5,900 original allottees are still there, simply because the plots are too small to accommodate an extended, or even a large, family.

Informal Sub-divisions of Agricultural Land

The Housing Demand-Supply Gap. The large demand-supply gap in housing is met through the development of settlements with the informal sub-division of agricultural land on the fringes of the present city. Estimates for the scale of such sub-division vary. According to the FDA, 2,000-3,000 plots are put up for sale every year however, the informal developers claim that the figure is between 6,000-8,000. Most of the schemes are small-scale, usually with between 50-200 plots each. The plot sizes measure five, seven and 10 *marlas*, with the five *marla* plots being in the majority.

Location of the Sub-divisions. Almost all the schemes are within the metropolitan limits of Faisalabad and are located on the roads connecting Faisalabad to the other cities of the Punjab. The price of a plot in these schemes depends on which road it is located off, how far it is from the road and how far it is from the city. Schemes that are more than 2-2.5 kilometres from the inter-city roads do not sell easily. This is because transport is available on the inter-city roads and it is not easy to walk more than 2-2.5 kilometres. As a result, ribbon development is taking place along the inter-city roads. (For an understanding of the prices for these plots and increases over time see Box 3.)

Box 3. A Description of the Informal Settlements Created by the Sub-division of Agricultural Land

Faisal Town was developed in 1981-82, with 180 plots. These plots measure five, seven and ten *marlas*. In 1981, they were sold at Rs 500 per *marla* and today the cost is more than Rs 5,000 per *marla*. The scheme is located on Jaranwala Road. All the plots have been sold but about 30 per cent still remain unoccupied. Most of the people living in the scheme work on looms in Faisalabad and transport is available as the scheme is near the road.

Mehran Colony is also on Jaranwala Road. The scheme was developed in 1986 and, in 1987, the cost of a *marla* was Rs 4,000. At present the cost is Rs 24,000-28,000 per *marla*. Most of the people living here learnt of the scheme through the property dealer's agents. Once all the plots were sold, the developer had nothing more to do with the scheme. Although the scheme is totally sold out, about 20 per cent of the plots lie vacant. These belong either to speculators or to others who have another place to live and who do not wish to move here because electricity and sewage facilities are not available. However, a few houses have taken electric connections from an adjacent settlement and the WAPDA bills are shared by all the beneficiaries. Water is not a problem as the ground water is good and hand pumps can be installed. The developer has raised the level of the roads by about two feet (61 cm)[5] but not that of the plots. To earth-fill the plots, individual owners employ Afghanis who have the necessary equipment. Most of the people living here are house owners and the settlement residents feel that only 5 to 10 per cent of the residents are renters. The difference in cost between a plot that is filled up to road level and one that is not is Rs 20,000. The difference in cost between a corner plot and a non-corner one is Rs 30,000. The developer has laid a sewage system that functions badly, and disposes of into a canal that ultimately serves the agricultural fields. Children go to school, as there are about 15 private schools in the vicinity, which charge between Rs 50 to Rs 100 per child per month.

Ilyas Town is another settlement, also off Jaranwala Road. The scheme has 123 plots that sold at Rs 15,000 per *marla*. All the plots have been sold but only a few have been occupied. The landowner's uncle, who is developing another scheme next to Ilyas Town, developed the scheme in 1992. In all the settlements, the residents say that environmental conditions are much better than in Faisalabad inner-city and the ground water is also of better quality than that supplied by WASA.

SOURCE: Observations and interviews

The Developer and their Mode of Operation. The most important player in the development of these settlements is the middleman or developer (see Box 4). He purchases land from a farmer, sub-divides it into plots and sells it to prospective house builders. Alternatively, he enters into an agreement with the farmer whereby he plans the scheme, develops some infrastructure, and finds the buyers who then make direct payments to the farmer with the middleman getting a commission. However, the most successful schemes are those where the farmer and the middleman enter into a "joint venture". These schemes are more successful because payments from buyers can be recovered in monthly instalments over a two to four-year period. Because of this arrangement, the price of the plots can be increased and, at the same time, they sell easily since they suit the paying capacity of the buyers. The plots are transferred to the buyers' names in the revenue department records since there is no law preventing these transactions. The strategy of recovering the cost of land in instalments was adopted by the developers only six to seven years ago as a consequence of the declining capacity of buyers to pay for the land in one go or to pay a large sum of money as down payment.

Box 4. The Informal Developers of Faisalabad

[5] This Report uses measures based on traditional English linear and square measures. One foot is 30.48 cm; one yard is 0.9144 metres; one acre is 0.40468 hectares.

Rana Bashir Ahmed is mainly an industrial plot developer but at present he has no work in that area as no new industries are being set up. However, he has developed three housing schemes, which he planned without the involvement of any government agency, and no one has ever stopped him from carrying out this activity. The schemes that he has developed were never registered except in the documents of the *patwari*. Neither is *sikni* required if *tatima* is done. Where he is working at present, land is purchased from the owner at Rs 1.5 million per *killa* (eight acres/3.2 hectares) and sold at Rs 25,000 per *marla* (or Rs 5 million per *killa*). Rana claims that 5,000 to 7,000 plots are being developed in Faisalabad every year on the inter-city roads. He says that people have no other housing option available.

Chaudhary Ghulam Rasool Cheema is another Faisalabad informal developer. His family came from Gurdaspur in India and lived near a village on Jaranwala Road. His first job was as a WAPDA storekeeper. He began this business because his salary was not enough to support his big family. He has been a member of the Pakistan Peoples Party and later of the Pakistan Muslim League. To start up his business he sold a piece of land that he owned in his village, about 20 kilometres from Faisalabad. He chose to work along the Jaranwala Road because the people in the area knew him because of his political activities. He planned his first housing scheme in 1990 but work on it only started in 1994. Up to now, he has completed five small schemes, each with 70 to 150 plots. The size of the plots is usually five *marla*, with a 30-foot (9.1 metres) frontage and 45-foot (13.7 metre) depth. The streets are 20-28 feet (6.1-8.5 metres) wide and he raises the streets two feet (60 cm) above the road level. If the streets are not raised then people do not buy the plots because they are afraid that the settlement will get flooded. The street earthworks are undertaken by Afghanis, who have trolleys and jack machines for the job. Local people do not do this work since they have no experience and no machinery. Mr Cheema employs two people as office staff, and a number of "field workers" who contact prospective clients, prepare the layout on-site and supervise earth filling. When a project begins, he usually has about 20 field workers who provide forms to the clients for Rs 10; thus, if they sell ten forms in a day they earn Rs 100. To advertise a scheme, a pamphlet is prepared and is sent out in newspapers, inviting young men with intermediate or matriculate level education to come and work as field staff. These young men visit areas which are congested or where people do not own their houses. They brief them about the scheme and try to convince them that they should buy a plot. Most of those who respond to Mr Cheema's advertisement already have experience in this field. They are given the further incentive of a commission for each plot that they sell. Mr Cheema himself undertakes the planning of a scheme, after which sketches are given to a draughtsman for further development. The draughtsmen who work for him are FDA employees and are hired by him on a per job basis. The most important criteria for the purchase of land for a scheme are the availability of transport, which allows access to the main inter-city road, and electricity. If the land is more than two kilometres from the inter-city road, the scheme does not sell. There is no attempt to develop corner plots or commercial plots. It is simply a five-*marla* sub-division. In the smaller schemes Mr Cheema provides no services such as water, sewerage or electricity. People acquire water through hand pumps, which they later convert to piston pumps, sewerage through self-help (it invariably disposes into a canal) and electricity through lobbying with WAPDA. The developer does not keep any plots for speculation purposes but 30 per cent of the plots normally remain unsold for a period of three to four years. There is a written agreement with those who purchase plots and proper records of receipts for paid instalments. People invariably pay regularly by coming to Mr Cheema's office. For the transfer of land from the landowner to Mr Cheema, both parties visit the divisional headquarters where land records are kept. Here they pay the legal as well as the "other" charges. In the revenue department ledger, land remains as agricultural and streets and roads are recorded as amenities. The cost of the transfer of land to the developer is borne by the purchaser.

Mr Cheema is in the process of developing a large housing scheme on 25 acres. He has purchased this land from a brigadier at a cost of Rs 23 million. He and his partner have paid Rs 2 million as an advance for the land, which they raised by selling their agricultural land. This advance payment has given them the right to plan and advertise the scheme. With the advance instalments they hope to pay the brigadier the full amount in 20 months. Within the scheme they have planned parks, schools and a market, and they will also provide water, electricity and sewerage. They have plans to get this scheme approved by the FDA. However, to do this, they will have to pay about Rs 700,000 to the FDA in addition to legal charges. With two-thirds of the money that the brigadier has made through the sale of his land, he intends to educate his children and arrange for their marriages. The remaining third he wishes to give away as charity to the poor in the name of God.

Besides this grand scheme, Mr Cheema is also developing a small scheme, called Al-Farooq, on 2.75 acres. It consists of 70 plots of five *marlas* each, all of which have been sold although no houses have been constructed so far. He purchased the land for Rs 400,000 an acre and is selling it in instalments at Rs 48,000 per plot. He is providing no services.

When Mr Cheema started his business in 1990, he had to look out for people who wanted to sell their agricultural land. Now that people know that he is in business and has an office where plans are displayed, landowners come to him themselves. Also, wherever he develops a scheme, he puts up a board on which the name, plan and details of the scheme are given. Mr Cheema says that the success of these schemes lies in the fact that the developers have understood what a poor man can afford to pay and they act accordingly. He also says that if the government could support this activity and provide the developers with some loans, then in two to three years time there would be no one left in Faisalabad who was homeless.

SOURCE: Observations and interviews

The developer has the settlement plan drawn up by a draughtsman, who is usually an FDA employee and who is paid a lump sum for this work. Once the plan has been prepared, marketing of the plots begins. The developer puts an advertizement in the newspapers asking young men with intermediate or matriculate level education to apply for employment. Their work consists of identifying settlements where people may be in need of new homes due to the expansion of their families. In these settlements, they talk to people, often go house to house and introduce the scheme. They sell application forms to people who are interested and arrange contact between them and the developer. For every form they sell, they are paid Rs 10. In some cases they are also paid a commission if they arrange for the sale of plots. Thus, the developer has no regular overheads for marketing his scheme and no regular employees either. According to the developers, the vast majority (70 to 80 per cent) of plot purchasers are from Faisalabad city who want space for their young married children or who wish to stop paying high rents. Many of them move to the new schemes because environmental conditions there are better than in the Faisalabad inner-city low-income settlements. However, in spite of the pull factor of the settlements, it takes 10 to 15 years before they are fully occupied. This is because people also buy property for their children and for speculation.

The scheme is based on a grid iron pattern and is determined by the parameters of the *muraba*, or 25-acre square, whose dimensions are 1,100 feet by 1,100 feet. A 5-*marla* plot usually has a 30-foot frontage and a 45-foot depth. The width of the street is kept between 20 and 25 feet. To promote their work, the developers also print and distribute promotional leaflets. Appendix 9 gives an example of an English translation of such a leaflet.

Facilities Provided by the Developer. The developers do not provide open spaces or plots for amenities. However, they do raise the level of the roads to 2-2.5 feet above the level of the land to prevent flooding. These earthworks are contracted out to Afghanis who have the necessary machinery and expertise (see Box 5). The earth is obtained from the fields of those farmers whose land is higher than the irrigation channels and who wish to lower the level of their land so as to avoid pumping water for their fields. In some cases, developers do provide a sewage system, complete with underground pipes and manholes. However, a disposal system is seldom provided and the sewage either flows into a cesspool, a natural drainage channel or into an irrigation canal. Electricity and water are not provided. Residents collectively struggle to acquire electricity after they have started living in the scheme. They tap the subsoil aquifer for water and, if it is saline, they make a bore adjacent to the nearest canal, where the subsoil aquifer is usually potable.

Box 5. Afghanis and Earthworks

Before the Afghan war, the *Pawandas* of Afghanistan used to migrate to the Punjab plains in autumn and stay there until spring so as to escape the harsh Afghan winter. They used to bring their donkeys and camels with them. During their stay in the plains, they built and repaired mud walls around orchards, carried out earthworks relating to agricultural infrastructure and levelled agricultural lands. With the Afghan war, many of the *Pawandas* did not go back but settled in the Punjab to become earthwork contractors. They purchased machinery and live in camps from where they operate.

Ghulam Yasin is one such contractor. He owns one trolley and has been working in the Faisalabad area for the last ten years. Muhammad Toor Khan is another contractor. He has a jack machine and ten trolleys. The drivers belong to their clan; they do not get a salary but are paid a "commission" for each item of work that they do. The labour is hired on contract. The Afghan contractors get work orders from landlords and also from contractors working in the urban areas. They purchase earth from agricultural landowners who wish to lower their land to allow water to access it. They pay the landowners Rs 1,500 to Rs 2,000 per *kanal*[6] for a depth of two feet. For filling up to five feet they charge Rs 50 per *kanal*. To fill a five-*marla* plot five feet deep they need four to six days and two to three labourers on site. Each trolley's capacity is 350 cubic feet and costs Rs 300 on the outskirts of the city and Rs 400 in the city itself. The Afghanis are also working in the districts of Sahiwal, Okara, Bahawalnagar and Sheikhupura.

SOURCE: Observations and interviews

Reasons for Non-involvement with FDA or FMC. The schemes developed through the sub-division of agricultural land have no relationship at all with the FDA or the FMC. The legal position is defined in Box 3. The reason why the developers do not approach the FDA for approval is obvious. The FDA fee for granting approval is Rs 1,000 per acre and 20 per cent of all plots have to be pledged to the FDA. In addition, the FDA has elaborate planning standards for roads, amenities and other services. These standards would increase the cost of the scheme by 30 to 50 per cent more than it now costs the informal developers and the purchasers.

Other Processes of Acquiring Land for Housing

***Katchi Abadis* on Board of Revenue Lands**. *Katchi abadis* were developed between 1947 and the late 1970s on government land, when refugees came and occupied state land or land vacated by Hindus and Sikhs. Later, these settlements increased in density as a result of migration from the rural areas, and new settlements were also created on Board of Revenue lands. The process of new settlement creation was simple. A person or a group moved in and occupied part of the land. Then negotiations took place with lower-ranked staff in the revenue office to "buy" the land at a nominal price. After this, the land was sub-divided and sold to incoming migrants. Once the settlements became large enough, they sought the support of their political representatives for survival and ultimate regularization. Very few such settlements are now being created in Faisalabad because there is very little Board of Revenue land left within the city limits.

***Katchi Abadis* on Railways Lands**. *Katchi abadis* on railway land are still being developed as there is considerable land available and the Railway Land Department allows middlemen to build houses there. Homes begin as tents and subsequently become proper houses. The boundaries of the houses slowly expand, enclosing more space, and a number of families move into this space. These families pay the middleman, who shares this with the railway staff. The middleman then moves on to another piece of railway land while the settlement he created keeps on expanding. Often during the tent phase and the expansion phase, the railway magistrate's staff initiates processes for the removal of these illegal structures. However, the middleman, who is really a commission agent for the railway staff, negotiates an end to these processes by arranging payments from his clients to the magistrate's staff, thus allowing the squatters to remain.

[6] One *kanal* is about 600 square yards

The railway has started giving 38-year leases to its employees for constructing houses on its land. Most of these plots have been sold informally on the open market and non-railway related families are now living in these settlements along the railway tracks. When the leases expire, it will not be possible to remove these settlements for, by then, they will have built permanent houses.

Lobbying by People Ejected from Agricultural Lands. The area surrounding Faisalabad is agricultural. The process of informal sub-division and urbanization means the ejection of tenant farmers from their lands and also often means the sale of land on which villages have been built as, sometimes, this land is owned by landlords. These ejected communities collectively lobby with government agencies, bureaucrats and politicians to acquire land for living on. Box 6 gives an example of such lobbying.

Box 6. Sheikhanwala – Peasants Evicted from Agricultural Land

Sheikhanwala is a settlement adjacent to lands owned by an influential landowner. The families who had worked on his land for generations were evicted and have now created this settlement, which is on government land and where they have been allowed to live on a temporary basis. These families were sharecroppers and had houses on the landlord's property. However, this property now falls within Faisalabad's urban sprawl and the landlord wishes to sell it to developers and thus no longer requires the services of these families. They pleaded with him to let them have a small and most inexpensive part of the land so that they could continue to have homes. They reminded him of the association he and their families had had for generations. He nonetheless evicted them and they could not seek any legal redress.

These people belong to the Christian community. The church has helped them with advice and put them in contact with concerned officials but that is all. The people approached their MPAs and MNAs and the record of their meeting was forwarded to the Additional Deputy Commissioner (ADC). The elders of the community met the ADC and asked him to provide them with land at a low cost. The ADC sent them to the *patwari*, who then came to their settlement for a site survey, after which he asked them to pay Rs 300,000, which works out at Rs 10,000 per family. Against this payment, they would be provided with a three-*marla* plot[7] but would not own the land. They would simply be allowed to build their houses and live there. They are willing to accept this, hoping that this de facto arrangement will be regularized during some election process. They have already collected Rs 80,000 and given it to the *patwari*. They do not know, or do not wish to say, how much of this money is being paid informally and how much of it is legal. The people living in this settlement now work as day-wage labour in the city or in the agricultural sector. There are three to four children in each family but they do not go to school, which they used to do before.

Other communities, also evicted from agricultural land, have been luckier than the people of Sheikhanwala. One community that was evicted, called Islampura, moved onto the railway line when the Faisalabad-Jaranwala line was abandoned. Initially it was a small community. However, once settlement began, other communities and families (not necessarily evicted ones) came and settled there. They removed the railway tracks and used them as girders for roofing their homes. Nobody stopped them from occupying the land and nobody gave them permission to build their homes. Ground water is available and electricity is supplied by WAPDA and was acquired as a result of negotiations for votes with the prospective MNA and MPA candidates prior to the elections.

SOURCE: Interviews

FDA's Constraints in Providing Support for Housing

According to FDA estimates, developers are sub-dividing agricultural land for housing on a large scale (2,000 to 2,500 plots per year) to meet the housing demand which is estimated at 7,000 for the low-income groups. There is no housing scheme in the public sector at present nor is there any plan for one in the future. One of the reasons for this is that

[7] One marla is 30.25 square yards or 25 square metres

the FDA does not own any more land. In addition, there is no plan to integrate the informal housing projects into a larger city plan. Of all the schemes developed by the informal sector, not even 10 per cent are approved by the FDA and, in most cases, the FDA has no knowledge of them.

The FDA has many problems. It has no source of income; there is no monitoring of either developments in the city or of the housing situation; the town planning directorate does not have a proper city map and it cannot prepare one because it has no transport facilities for surveying purposes.

The FDA's planning and building permit regulations are complex and expensive for developers to follow. In addition, it has elaborate planning standards for roads, amenities and other services. Therefore, the cost of a plot developed in accordance with its procedures is unaffordable to low-income groups unless loan facilities are available to them.

The transfer of agricultural land is controlled by the Revenue Department, and that too by its *patwaris.* As such, the FDA only gets to know of the informal schemes after construction work has begun. By then it is too late to take action and, even if it is not too late, the FDA does not have a demolition squad.

Politicians are also a hindrance to the working of the FDA. They own agricultural land and want to develop it, by-passing the FDA and, in the process, saving costs and increasing their profits. The FDA does not have either the legal or bureaucratic support necessary to fight these strong vested interests. In addition, it has no land acquisition act and, without land, it cannot have any housing schemes and, without housing schemes and building permits for them, it cannot generate revenues.

Under these conditions, the FDA is unable to deal with the housing issues in Faisalabad although it has been given this responsibility in its charter.

The House Building Process

The majority of families who move onto plots in informal sub-divisions first construct a hut and a boundary wall. Very often the boundary wall is made of sun-dried brick or simply earth. To obtain water, they install a hand pump or, if their neighbour has one, they arrange to get water from them. If a number of plots are inhabited at the same time, the families group together to install a community pump. Usually, ground water in Faisalabad is brackish except near the irrigation channels; if the water is brackish, they install a pump near the canal as long as it is not more than one kilometre from their settlement. Women and children fetch water from this pump which, invariably, is on land belonging to the Irrigation Department. Over time, huts, with their thatched roofs, are replaced by nine-inch burnt brick walls set in mud mortar. Roofs are invariably steel girders spanned by T-iron channels which carry brick tiles. Polythene sheets are laid over as water proofing and earth mixed with straw, to a thickness of about nine to 12 inches, is spread on for insulation purposes.

Residents often get together to lobby their MNAs and MPAs for an electricity connection for the settlement; they usually succeed during an election campaign. Alternatively, if electricity lines are not too far from the settlement, an enterprising individual will get a connection and then sell electricity to his neighbours. An electrician in the settlement will carry out the extension of the distribution system or, if one is not available, a WAPDA lineman is informally hired for the purpose. Often, this sale of electricity does not involve any profit for the individual who has a connection and, by virtue of providing electricity at cost, he becomes a leader and in the long run may become an important member of a political party.

Initially, waste water and sewage is disposed of in cesspools. As the settlement grows, unpaved open drains carry the waste water to plots which are empty and which have not been earth-filled to the level of the road. Once these plots are occupied, the residents collectively search for an irrigation channel to which the unpaved drains can connect. The fact that the roads and plots in the settlement are 2-2.5 feet above ground level makes this connection possible. Before elections, the communities try and get their roads paved and

their unpaved open drains lined with brick. This is done through meetings with their current and prospective MNAs, MPAs and councillors.

Many homes have businesses within them. The business part of the house opens onto the road and the residential area is at the back. Bricks for house building are either ordered directly from kilns or are purchased from dealers. There are stores in most settlements that sell roofing elements as well. All dealings for the purchase of construction materials are in cash, unlike Karachi where a credit system operates. Unskilled labour is provided by family members and a mason is hired for erecting the walls and laying the roof. There is no shortage of skilled labour in Faisalabad and the house owners are aware of building practices and materials, which are similar to those in their villages. As such, they know how to relate to the various actors in the building process (see Box 7).

Box 7. The House Builders

Subedar Abdul Majeed lives in the informal sub-division settlement of Tariqpura. He purchased an eight-*marla* sized plot[8] in 1985 at a cost of Rs 3,000 per *marla*. He made the payment in one go with dues he recovered on retirement from the army. He started construction in 1989, when he built one room and a boundary wall. In 1996, he constructed two more rooms. Bricks were purchased directly from a kiln because it was cheaper than buying them from a dealer. The roof is made of wooden beams and planks covered with earth and he says that this is the cheapest form of roofing. He disposes of his waste water and sewage into a *khal* and has a hand pump, whose water he uses both for drinking and other purposes although it is slightly brackish. There is no electricity in the settlement but he has acquired an individual connection for which he has paid Rs 4,000 to WAPDA.

Kabir Hussain purchased a 2-2.5 *marla* plot in 1990 at a cost of Rs 6,000 per *marla* in the informal sub-division scheme of Kot Umar. There are 400 houses in the scheme, each consisting of 2–2.5 and five-*marla* plots. He made the payment in one go and constructed a thatched hut. Four years later, he built a proper room with brick walls and a wooden roof. Open paved drains were provided by the councillor but they are not functioning, since they have become silted up and there is no proper disposal point for them. The drains run into fields, to which the farmers object, and this is a cause of tension. Drinking water is obtained from a hand pump near the canal about half a kilometre away, which the community installed. The family also has a hand pump in the house, whose water is used for other purposes than drinking. There is no school or clinic near the settlement and to reach the main road one has to walk the unpaved road along the canal bank.

Niamat Ali purchased a seven-*marla* plot at a cost of Rs 7,000 per *marla* in Nafees Town in 1993. He paid for the plot in two instalments of Rs 10,000 each, with a gap of six months in between. Funds for the purchase of the plot were raised by selling buffaloes that he owned in his village. He had enough money to construct a proper brick room with a wooden roof. After six months, he constructed another room and after another four months he constructed a *baithak*. Just six months ago, he built a bathroom. The roofs of the rooms, apart from the first one, are of T-iron and brick tiles. He was able to purchase bricks on credit because he had a relative who owned a kiln. If credit had not been available, he would not have been able to have a T-iron and brick tile roof. Like Kabir Hussain, he gets drinking water from a bore near the canal and has another bore in his house for water for other purposes. The bore in the house cost him Rs 1,900. Sewage is disposed of in unoccupied plots which have not been earth-filled.

Muhammad Rafiq purchased a 2–2.5 *marla* plot in 1997 at a cost of Rs 14,000 per *marla* in Nafees Town. He made the payment in one go although the possibility of paying in instalments did exist. However, had he paid in instalments, he would have had to pay about 15 per cent more. He raised the finance by selling his agricultural land, his wife's jewellery and a buffalo. He constructed one room and one year later added a shop. A kitchen has just been completed. The shop floor is paved but the floors of the rooms are of compacted earth; when he has the money he will pave them. He purchased bricks on credit because he knew the kiln owner and he has repaid this credit in instalments. Without the credit facility, for Rs 3,800, he would not have been able to build a permanent room.

[8] One marla is 30.25 square yards or around 25 square metres.

Muhammad Arshad has a brick store in Bilal Colony on Jaranwala Road. He purchases bricks from a kiln four kilometres away and has been in business for the last six years. He buys first-quality bricks for Rs 980 per thousand and second-quality bricks for Rs 750 per thousand, which includes transport costs of Rs 120 per thousand bricks. He sells first-quality bricks for Rs 1,200 per thousand and second-quality bricks for Rs 850 per thousand but this does not include the cost of transportation. All his dealings are in cash and if he could have a credit line of Rs 10,000 he could triple his business.

Muhammad Yaseen owns the Noorani iron store, also on Jaranwala Road. He purchases girders and T-iron for roofing from Lahore and sells them to house builders and contractors. The materials come from Lahore on trailers, which can carry loads of 35 to 40 tonnes. He can purchase materials on credit from the manufacturers or their middlemen although this means paying 20 per cent more. If a bank loan at 18 per cent interest per year were available, this would be helpful but credit at 20 per cent for purchase is economically not feasible however, he does not sell materials on credit except to friends and relatives. He provides two qualities of girder: number one quality weighs 2.5 kilogrammes per running foot and number two quality weighs two kilogrammes per running foot.

SOURCE: Interviews

c. Infrastructure

Existing Conditions

Government Planned Housing and Resettlement Schemes. In the government schemes, sewerage, road paving, drainage and water supply are available. The sewage and drainage systems are linked to trunk sewers and pumping stations which dispose into irrigation drains and canals. However, due to poor construction quality and poorer maintenance, the sewage systems do not function well and choking and overflowing is common. The rainwater drainage channels have also been filled in with solid waste and during the rainy season the sewage system carries the rainwater. As a result, during the monsoons many settlements are flooded with a mix of sewage and rainwater. Due to this, there is widespread disease in the post-monsoon period and the roads are badly damaged. These are repaired after a few months in an ad hoc manner or not at all. Residents consider sewage and drainage-related problems to be the most serious ones in their settlements (see Box 8).

Box 8. Conditions in the Resettlement Schemes

Mubarikpura was Faisalabad's largest *katchi abadi* with a population of 10,000. Its name was changed to Sir Syed Town after its redevelopment in 1985. The settlement was originally formed in 1947 when refugees from India came and settled on government land in the factory area near Lyallpur Cotton Mills. It was redeveloped because the level of the streets was much higher than that of the houses and people were literally living in ponds. In the resettlement scheme, space was allocated for a park, a school and proper roads, which meant that not everybody could be accommodated; some were thus settled in Ahmedpur, Allama Iqbal Colony and Madina Town. The people are happy. They have water, the sewage system works, they have electricity and garbage is removed almost daily by the FMC staff. The only problem people complain of is that the roads are low lying and in the rainy season water accumulates on them. Most of the population consists of labourers working in loom factories, on a contract basis. These loom factories are situated within the settlements and the residents estimate that they number about 100. Besides these factories, there are small hosiery, stitching and knitting units.

Allama Iqbal Colony was planned in 1976 to resettle the families dislocated from the factory area *katchi abadis*. In this scheme, built quarters on 2.5-*marla* plots were provided, which were to be paid for by the allottees in easy instalments. The monies are still outstanding and the interest on the sums has increased many-fold. The land was provided free of cost and the scheme has developed wide roads, a water supply, a park, a school, a post office and other amenities, as well as 5,900 built quarters and 750 shops, all spread over an area of 190 acres. Most of the original allottees, about 75 per cent, have left, the reason being that the quarters are too small to accommodate a large family. They also fetch a reasonable price, between Rs 150,000 and Rs 200,000, and with this sum one can buy a big plot in the sub-division schemes on the city fringes where environmental conditions are better. There is not enough water in the colony, the sewage system only works in the dry season and the roads are in a bad state of repair. People claim that FMC staff carry out maintenance and remove solid waste only when they are paid informally by the residents.

SOURCE: Observations, interviews and FDA reports

Conditions in the Inner-city *Katchi Abadis* and Semi-serviced Areas. In the inner-city *katchi abadis* and semi-serviced areas, most development works have been undertaken through councillors' schemes. The councillors are only allowed to build open brick paved drains, brick paved streets and provide street lighting. These have been provided in an unplanned manner to most of the inner-city settlements. The open drains are supposed to carry waste water and it has been assumed that people would build soak pits for the disposal of excreta. However, this has not happened and most of the open drains are directly connected to latrines and therefore carry excreta as well. Solid waste is often thrown into these drains, which results in clogging and flooding. In addition, many of the drains have no disposal points. They simply join a larger unpaved drain or directly dispose into a depression. Increasingly, these depressions are being reclaimed, making the functioning of the open drains difficult. Sometimes, people pay the owners of these depressions to be allowed to discharge their sewage into them. In many cases, the drains are connected to WASA's trunk sewers and, since they dispose of solid waste as well, they clog the WASA system. This means that in the rainy season, the settlements are flooded. However, the streets here are narrow and brick paved, and through traffic and heavy vehicles cannot use them. Therefore, they have the potential to be developed as environmentally friendly areas. In many of these settlements, communities hire sweepers at Rs 15 to 20 per household per month to keep the streets clean and to remove solid waste. In most cases, this solid waste cannot be disposed of since the FMC manages to remove only 30 per cent of Faisalabad's garbage. Therefore, the solid waste piles up and this often results in conflict between the neighbourhood where it is piling up and the neighbourhoods which are the source of the solid waste. Eventually, through pressurising the councillors, the waste is removed and the process starts again. For details regarding conditions in the settlements, see Box 9.

Box 9. Conditions in the Inner-city Informal Settlements

Railway Colony No 1 is near the railway station and runs along the railway track, and provides quarters for railway employees. Refugees from India came and occupied all vacant land between and alongside these railway quarters at the time of partition. Since then, the land has changed hands many times. Whenever there is new construction or new additions to the old, railway staff issue a memo and, on that basis, a report is lodged with the police. People involved in this construction activity are arrested. They then offer the police a bribe, get bail, are released, and the activity continues. There is now no land left for new houses so these are built as encroachments on the streets. The squatters use the sewage system that was built for railway staff. It is old and does not function properly and gutters overflow all the time. Homes are sold and their price depends on the nature and extent of construction as the land has no value. Most of the people are day-wage earners on building sites and in the markets. A few work in the mills and some have donkey carts. One part of the settlement was bulldozed five years ago to construct a road. As a result, 615 households were evicted. The road has been constructed but people point out that there is still enough space to house 615 homes along the road. Those who were evicted filed a case against their eviction in the High

Court, who directed the government to provide those who were affected with alternative plots not more than five kilometres from Railway Colony No 1, plus Rs 50,000. The government, however, provided only land 20 kilometres away at Go Khowal Workshop. Very few people took the plots, and those who did sold them and came back as the plots were too far away from the city and there were no jobs in the vicinity. The people are still waiting for the implementation of the High Court decision. They are willing to purchase land on easy instalment terms and build their own homes, provided the land is within the city or on the main transport corridors. Meanwhile, they fear eviction. "When we go to sleep at night, we are not sure whether our houses will remain till the next morning."

Mohalla Farid Gunj was first occupied by people coming from India. They erected tents, then built mud structures and, more recently, built permanent homes. Government announced a regularization scheme for this settlement but so far no action has been taken. Services have been acquired in bargains with political candidates in the last three or four elections. There are no problems with flooding during the rains because the settlement, unlike others in Faisalabad, is in an elevated position. Solid waste is the major problem. People have hired sweepers who collect garbage from the houses and streets but there is no disposal point and the FMC does not collect garbage regularly. The people are vendors, donkey-cart owners and drivers; about 10 per cent of them are educated and work in offices. There are no looms in the settlement but some people work in looms situated elsewhere. The community thinks that about 20 per cent of the adult population are unemployed. The better houses in the locality are owned by people who have gone to work in the Middle East and who send back remittances. A few households have moved to Karachi where they are doing much better than they were in Faisalabad. The majority of children do not go to school because schools are expensive and fees and the cost of books are beyond the reach of 80 per cent of the residents.

The refugees who settled in Bahadur Singhwala come from the Indian cities of Amritsar or Jalandhar. There are over 200 houses in the settlement and the land originally belonged to the Sikhs. Plot sizes vary between 1.25 and four *marlas*. Most of the original inhabitants have gone to other settlements where they have acquired larger plots and have houses. Piped water is available through WASA's main line and electricity is legally supplied. Sewerage has been laid on a self-help basis and requires constant maintenance. It disposes into the WASA trunk sewers, which are often clogged, resulting in flooding of the settlement.

SOURCES: Observations and interviews

Informal Sub-divisions of Agricultural Land. Infrastructure conditions in these settlements were explained in a previous section. The major problem facing these settlements relates to the disposal of waste water and sewage. Since the settlements are situated higher than the agricultural fields, they have no difficulty in disposing onto agricultural land but often the farmers object. However, as urbanization increases, settlements have to come together to find disposal points. These are usually small irrigation channels. As new schemes are built in the neighbourhood of old ones, these small channels are absorbed by the urban expansion and the disposal points become irrigation canals. Disposing into an irrigation canal means pumping since the canals are usually in a more elevated position than the agricultural land. Many of the agricultural land sub-division schemes involve the expansion of villages, where people own cattle. The disposal of dung becomes a major problem and clogs up both the drains and the disposal points.

Problems with Councillor, MNA and MPA Schemes

Councillor Programmes. The FMC councillors are only allowed to develop open paved drains, brick paved streets and street lighting. Most of the work that is carried out through their programmes takes place in the *katchi abadis* and low-income, under-serviced settlements. The work is funded by the grant-in-aid that the councillors receive from the FMC or from funds allocated to the schemes approved in the ADP. Most of the development is haphazard, un-coordinated and sub-standard in quality. This is because it is undertaken in a piecemeal fashion over the years, since the funds allocated to the councillors are too small

to develop the area in one go. As a result, the drains built under this programme normally do not function, water does not reach the extremities of the distribution system and, often, road paving is sub-standard. Thus, large sums, which could be better utilized, are wasted.

The problem with councillor programmes is that there is no settlement Master Plan to follow. Consequently, the work that is carried out is done on an ad hoc basis and bears no relationship to larger planning considerations. Thus, paved streets are often torn up to lay gas, water and sewage lines and drains empty their effluent onto neighbouring unpaved lanes. Also, in many settlements there is more than one councillor and a lack of coordination between them makes it impossible to tackle issues of a common nature such as an access road or a secondary drain.

A councillor's decision to develop a certain street in a neighbourhood is politically motivated rather than need or planning-related. The development is carried out for those who have helped him in the elections, his friends and relatives or those who can be of assistance to him in the future. That this development may be detrimental to a few other lanes (especially if people who belong to the "rival" group live there) is of no concern to him. In addition, no detailed design for or supervision of the works is carried out. Often, the contractors employed to do the work do not even have simple survey equipment and use unskilled labour for skilled jobs. Communities complain that the contractors' profit margins are exceptionally high and that the contract is not based on merit but rather on the relationship between the councillor and the contractor. Where the community is organized and has building skills, it manages to get the councillor and the contractor to do a better job, and gets lanes re-paved after the laying of gas pipes or sewerage has damaged them. The FMC and its executive are not concerned with the nature and manner of work carried out in the poorer areas because these areas are not politically powerful.

MNA/MPA-funded Development. MNA/MPA-funded development has all the problems that councillor-funded development has. However, there are differences. The MNA/MPA projects are large in scale and can consist of almost any item of development. Their constituencies are also large and, as such, they often undertake not only on-site or neighbourhood development but also development that has a direct bearing on city level infrastructure and its planning. However, as this development is also decided upon in an ad hoc manner, it does not relate to larger city level plans or to the neighbourhood development that is being carried out through the councillor's programmes or through community efforts. Also, there is no coordination between the projects of different MNAs and MPAs. There is a general consensus, both among neighbourhoods that have been the beneficiaries of these programmes and the government agencies that have implemented them, that these programmes have benefited only contractors and the MNAs and MPAs. There is a further consensus that they have made a mockery of the master and sector plans developed by the FDA and FMC. Apart from the inappropriateness of the MNA/MPA projects, the work done through them has been sub-standard and of a much poorer quality than work done through normal programmes.

Problems with WASA Planning

WASA has a Master Plan for water supply and sewerage. However, due to financial constraints and political pressure, work is not carried out according to the plan but, rather, on an emergency and ad hoc basis. For example, if under the Master Plan a ten-inch diameter water line is to be laid but at the time of implementation there are financial constraints, then a six-inch water line will be laid. Later, when funds for a ten-inch line are available, it is re-laid in addition to the six-inch line. The same holds good for sewage projects as well. A major problem with WASA master planning is that it is not related to funds that are available, or are likely to be available. Often, the provincial government promises funds but they are seldom provided. Also, there is no coordination between MNA, MPA and councillor projects, the gas company and WAPDA on the one hand and WASA on the other.

Almost all the inner-city *katchi abadis* and under-serviced areas have WASA trunk sewers adjacent to them or laid alongside them. However, there are no secondary sewers connecting these settlements to the WASA trunk sewers and most of the laterals are open paved and unpaved drains. There are also numerous neighbourhoods that have laid an underground sewage system and/or water supply distribution lines on a self-help basis or through MNA/MPA programmes. To complete the system, laterals and secondary drains are a priority, since garbage from the open drains clogs the trunk sewers, flooding the settlements and also causing the pumps to seize up. In addition, the existing infrastructure has to be integrated into the WASA Master Plan. However, this infrastructure, including the open drains, has not been documented and, as such, realistic planning of secondary and primary infrastructure that can integrate it cannot take place.

WASA's major expenditure is on electricity. There are heavy-duty pumping stations both for water supply and sewage disposal which operate 24 hours a day. When the electricity fails, the water supply is affected and sewage floods the settlements. Because of solid waste entering the system, pumps need constant repairs and this also is a major expense. In addition, WASA has problems generating revenue since it bills only "legal" connections. Communities point out that most of the connections are illegal and they will remain illegal because WASA staff charge for them informally. Recently, there has been a move to bill for water and conservation charges all those houses that have an electricity connection and which are within the municipal limits, the logic being that they all benefit from the WASA pumping stations. Anjuman Samaji Behbood (ASB) a Faisalabad NGO, estimates that this will increase the number of WASA clients from about 50,000 to about 250,000. In ASB's opinion, all the housing and commercial units who discharge their sewage into the WASA system, even if only through open drains, should be charged. But for that to happen, plans of the settlements are required and these do not exist.

Repercussions of Ground Realities

As a result of what has been described above, Faisalabad has some of urban Pakistan's worst living conditions, with two-thirds of the population living in largely unserviced areas. Over half the population have no piped water and less than one-third have sewerage. In 1985, when the last comprehensive survey was carried out, 186,000 people lived in 27,200 houses in squatter settlements on 596 acres of public land officially classified as *katchi abadis* according to the 1985 criteria; and this substantial shortage of housing and infrastructure services, particularly for the low-income groups, is growing rapidly.

In 1990, the backlog was estimated at more than 150,000 units, including a replacement need of 13,000 units for dilapidated stock. The annual requirement in order to meet population growth stands at 12,000 new units, not taking into account any backlog or replacement need. Although there is a dearth of data and information on housing, the following statistics from the 1985 FDA survey provide an overview:

- there were 268,181 households living in 195,452 dwelling units, ie. 1.37 households per unit;
- there were 432,818 rooms for an estimated 1985 population of 1.4 million, ie. 3.25 persons per room; the 1980 housing census figure was 3.4 persons per room (and 2.1 rooms per unit);
- of the 195,452 dwelling units, 48.6 per cent were classified as being in "good" condition, 44.17 in "fair" condition and 13,043 or 7.3 per cent as dilapidated and/or dangerous; 70 per cent were "*pucca*", 22 per cent were "semi-*pucca*" and nearly 8 per cent were "*katcha*";
- 78 per cent of households lived in accommodation they owned and 19 per cent in rented premises; this compares to the 1980 housing census figures of 74.7 per cent and 16.4 per cent, respectively;

- 95.7 per cent of the dwelling units were on plots measuring less than ten *marlas* (76.7per cent were smaller than five *marlas*); 2.8 per cent measured between 11 and 20 *marlas* and only 1.5 per cent were larger than 20 *marlas*. In terms of availability of infrastructure services, the 1985 FDA survey results are summarized in the Table 5.

Table 5. Infrastructure Services - 1985

	Households	
	Numbers	**Percentage**
Water:		
• Piped	85,071	42.0
• Community taps	7,431	3.7
• Hand pumps	109,710	54.0
• Wells	243	0.3
Sanitation:		
• Sewerage	64,724	32.0
• Septic tank		3.2
• Night soil	97,361	48.1
• Other	33,871	16.7
Energy:		
• Gas	64,016	31.6
• Electricity	167,071	82.5

SOURCE: Greater Faisalabad Master Plan (1986)

It is impossible that the conditions described by the 1985 statistics could have improved since, because there is an widening gap between Faisalabad's expansion and increasing density and what the government agencies have been able to provide. The situation is similar in other intermediate cities of Pakistan but is more serious in the case of Faisalabad because it is an industrial city and, as such, its economic activities generate serious environmental pollution which damages not only the city but also the natural environment around it.

V. THE WORK OF THE ANJUMAN SAMAJI BEHBOOD, DHUDDIWALA

a. Dhuddiwala, Hasanpura and Rasool Nagar

FAISALABAD CITY CONSISTS of *chak* numbers, or numbered villages, which became urbanized over time. The layout of these *chaks* was planned in 1885. The original city is *chak* number 212 and the area which includes Peoples Colony, Madina Town and Kohinoor Textile Mill is *chak* number 213. *Chak* number 214 consists of 94 *murabas*, including Dhuddiwala East and Dhuddiwala West. The rest of the *murabas* were agricultural land. Land in Dhuddiwala and the *chak* itself was owned by three *bradries* or clans. These were the Wattoos, the Kamonkas and the Balas. With the two *murabas* that constitute Dhuddiwala, the government had reserved land for expansion. Refugees settled on some of this land at the time of partition, along with a few families who came from the rural areas. These settlers were allowed to settle free of cost by the *chaudhries*, or leaders of the clan,

for humanitarian reasons. Due to this, and later developments, the population of Dhuddiwala has increased from 500 in 1947 to 8,080 in 1999.

According to senior citizens in Dhuddiwala, after 1955, rural-urban migration to Faisalabad grew as a result of the setting up of industries. The two large industrial units, National Silk Mill and Kohinoor Textile Mill were established adjacent to Dhuddiwala. As a result, mill workers and their families started acquiring land from the c*haudhries*, initially with leases or rented, and later on purchased. On purchase, the land was paid for in instalments. Ground water in Dhuddiwala was brackish but the c*haudhries* dug a deep well and were lucky enough to find potable water. A tap was fitted to the bore and water was available free for all. As a result, more migrants began to settle in and around Dhuddiwala in order to have easy access to potable water. The *chaudhries* simply sold the land and laid out the main streets; lanes, plots and open spaces were all organized by the people themselves. Most of the plots measured between two and four *marlas*. There were no middlemen involved in this development, as there are today. Hasanpura and Rasool Nagar are two settlements that developed on the Dhuddiwala agricultural lands.

Until the early 1960s, Dhuddiwala and its adjoining settlements used the open fields as latrines and water came either from the deep bore or from irrigation channels. However, when the settlements began to increase in density, using the fields was no longer convenient, especially for women, and the irrigation channels also started to get polluted. As a result, by the late 1960s, over 50 per cent of the households had built soak pits and had installed hand pumps in their homes. But the water table in Dhuddiwala kept rising as a result of water-logging and soon the soak pits started overflowing into the streets and diseases and environmental degradation increased. The government's anti-water-logging programme consisted of installing deep tube wells along the main irrigation channels and pumping water back into the canals. As a result, water levels fell drastically in the late 1960s and most of the hand pumps became inoperative. This spelt the beginning of the water and sewage problems in Dhuddiwala and its adjacent settlements of Hasanpura and Rasool Nagar.

There were also problems of a social nature in the new settlements, relating to health, education and funerals. In 1968, Dr Naseer, a medical practitioner, and his friends formed an organization, or *anjuman*. The *anjuman* identified ten persons with secondary and intermediate level education, and who were comparatively well-off, and asked whether they would spare one hour each evening to teach 35 students who had completed their primary education. The programme started from three *baithaks,* or drawing rooms, which people offered for this purpose. The *anjuman* also helped the successful students to gain admission to the high school in Faisalabad. In 1970, the *anjuman* took on the responsibility of upgrading the school in Hasanpura. In the late 1970s, Chaudhry Abdul Ghafoor, a member of the district council from Dhuddiwala, informed the *anjuman* that he had managed to get budget approval for a road linking the area with Faisalabad. The *anjuman* felt that the road would cause conflict, as it would not equally benefit all the settlements. They asked their council member to divert the funds for the road to the upgrading of the school. As a result, the primary school was upgraded to a middle school and then to a high school in 1986. The *anjuman* also purchased land in Hasanpura from the Auqaf Department in an auction, and established a *janazagah,* a space for holding funerals. People contributed Rs 150,000 for the construction of its boundary wall.

Today, Dhuddiwala, Hasanpura and Rasool Nagar comprise 1,010, 1,000 and 200 households, respectively. According to the residents, about 60 per cent of the working population is employed in the formal industrial sector or on looms. Residents also claim that more than 50 per cent of the population under the age of 20 can read and write.

In addition to the *anjuman*, another welfare organization was formed in 1964, the Anjuman Samaji Behbood (ASB), which is replicating the Orangi Pilot Project (OPP) in Dhuddiwala, Hasanpura and Rasool Nagar.

b. The Formation and Evolution of ASB

The formation and evolution of the ASB is very closely linked to the career of its coordinator, Nazir Ahmed Wattoo. He was born in 1944 in Dhuddiwala, where his family have been farmers since 1882. However, he has not followed his family profession. He obtained a diploma in electrical works from the local polytechnic and then worked as an electrician for 12 years. He supplemented his income at different times by working as a stationery supplier, a general contractor and as editor of a magazine. At present, apart from being the coordinator of the ASB, he has shares in an automobile workshop.

As problems in Dhuddiwala increased as a result of urbanization, Nazir Wattoo motivated a few like-minded and educated young people to form a welfare organization. The team consisted of four of his primary school friends, a high school graduate and a tailor's shop owner. The organization was registered under the name Anjuman Samaji Bebhood (ASB) and the tailor's shop was used as offices. Stationery, postage and registration expenses were met through donations from the team members. The fund soon proved inadequate and the team started to depend on donations and charity from prominent people in the area. These funds were used for arranging receptions for political representatives, influential bureaucrats and technocrats from line agencies. At these receptions, speeches were made in their honour, they were garlanded, food and beverages were arranged, and they were presented with requests for a water supply, sewerage, drainage, electricity and social sector facilities for the area and its inhabitants. In response, the dignitaries promised these facilities and more, but nothing concrete and sustainable came of it. However, the practice became a habit and encouraged the ASB team to rely on funds from area politicians to run their organization, in return for which they supported one or other political candidate or party. Thousands of *anjumans* operate in this manner in Pakistan.

Since the lobbying process was not successful in bringing development to Dhuddiwala, ASB also undertook development work with community funds. This included solid waste management, cleaning of streets and the construction of open drains. It was from these experiences that ASB identified sewage disposal and water supply as the most urgent problems facing Dhuddiwala and its neighbouring settlements. However, ASB's development work was never successful because it was expensive and technically faulty and did not function properly. This created distrust between ASB and the communities, who felt that ASB had robbed them. Soon, development work had to be abandoned.

A time came when most of ASB's time was being spent on organizing political rallies, campaigning for elections and spreading propaganda against their actual or perceived political opponents. This resulted in bad relations between ASB and other NGOs and civic agencies working in Dhuddiwala. To overcome these conflicts, Nazir Ahmed Wattoo decided to contest the elections to the FMC council, first in 1979 and then again in 1984. He lost both times.

The work of ASB was a failure as was Nazir Ahmed Wattoo's political career. However, this experience brought him into contact with CBOs and national level NGOs. It also led to his participation in workshops and seminars and in becoming a partner in the programmes of various agencies such as the National Trust for Population Welfare (NTPW), PVNAH and the Social Action Programme. This widened his vision and convinced him that meaningful change was not possible. But then, in 1987, he met the principal consultant to the OPP in a seminar at the Rural Development Foundation in Islamabad. The OPP consultant was impressed by Mr Wattoo's clarity and outspokenness and invited him to visit the OPP in Karachi and to replicate its work in Dhuddiwala. As a result, Nazir Ahmed Wattoo visited the OPP for the first time in December 1987.

c. The Orangi Pilot Project

Orangi Township

Orangi is Karachi's largest *katchi abadi* and has a population of 1.2 million. Dr. Akhtar Hameed Khan, the renowned Pakistani social scientist, established the Orangi Pilot Project (OPP) there in 1980. In 1988, the project was reorganized into four autonomous institutions: the OPP Research and Training Institute (RTI); the Orangi Charitable Trust (OCT); Karachi Health and Social Development Association (KHASDA); and the OPP Society which channels funds to these institutions.

The OPP considers itself a research institution whose objective is to analyze Orangi's outstanding problems and then, through action research and extension education, find viable solutions. These solutions can then be applied, with modifications where necessary, to other settlements and can become part of state policies. The OPP does not fund development but, by providing social and technical guidance, it encourages the mobilization of local resources and the practice of cooperative action. Based on these principles, the OPP has evolved a number of programmes, some of which are described below.

The Low-cost Sanitation Programme

This programme is managed by the OPP Research and Training Institute (RTI). It enables low-income families to construct and maintain an underground sewage system with their own funds and under their own management. The OPP provides social and technical guidance (based on action research), tools and implementation supervision. The OPP's work has shown that people can finance and build underground sanitation in their homes, their lanes and their neighbourhoods. This development is called "internal" development by the OPP. However, people cannot build "external" development, consisting of trunk sewers, treatment plants and long secondary sewers. This, only the state can provide. In Orangi, people have invested Rs 78.79 million on internal development (including 405 secondary sewers) in 5,987 lanes consisting of 90,596 houses (there are 104,917 houses in Orangi). It would have cost the state more than six times that amount to do the work. The programme is being replicated in seven cities in Pakistan by NGOs and CBOs, and in 49 settlements in Karachi by the Sindh Katchi Abadi Authority (SKAA). The OPP concept has been accepted by the Karachi Municipal Corporation (KMC) and SKAA and is being applied to their development plans.

The Family Enterprise Economic Programme

This programme is run by the Orangi Charitable Trust (OCT), which was formed in 1987. The OCT borrows from commercial banks and then lends on to small family businesses but without the red tape and with no collateral required from borrowers. The loans vary between Rs 1,000 and Rs 75,000, and the aim is to increase production and generate jobs, which is what has happened. Loans are usually given to people who have expertise in what they plan to do or who are already operating businesses. Interest on the loans is charged at the current bank rate of 18 per cent. At present, there are 6,555 units being supported by OCT loans totalling Rs 123,738,610. Of this amount, Rs 97,327,482 has been paid back with a mark up of Rs 22,999,610. The recovery rate is 97 per cent. The World Bank has also given a grant as a revolving fund for the programme.

The OPP's Low-cost Housing Programme

This programme is operated by the OPP-RTI and provides loans and technical assistance (based on research) to building component manufacturing yards(or *thallas* as they are called, in Orangi) so that they can mechanise and increase their production, improve their products and train their staff. In addition, the programme trains masons to use the new technologies and components that are being developed at the manufacturing yards. House builders are also given advice on how to relate to the manufacturing yards and masons and also advice on design, lighting, ventilation and other hygiene-related design

aspects. In order to provide such advice, the OPP is in the process of training para-professionals who are mostly young unemployed youth from the Orangi communities, and who are paid by house builders or those who want improvements to their homes. The OPP housing programme thus tries to create a more equitable relationship between the various actors in the housing field, as a result of which housing has improved in Orangi.

So far, 57 *thallas* have been mechanised, which has generated employment, and machine-made blocks and roofing elements are being produced not only for Orangi but also for the rest of Karachi. In addition, 33 masons have been trained and two para-architects have started working independently, designing homes and community building and being paid for it, after two years training at the OPP-RTI.

Health Programme

The OPP's Health Programme is operated by KHASDA and originally consisted of developing women's organizations at the lane level, where the sanitation system has been built. A mobile team of experts gave advice to such organizations, through discussions and meetings, on common diseases in Orangi, their causes and ways of preventing them. It also gave advice on hygiene, immunization and family planning. As a result, 90 per cent of the households that were part of this programme immunized their children and over 45 per cent families adopted birth control. However, the OPP could not reach more than 3,000 families through this method and the project was revised.

In the revised model, the health programme is imparted through training to local women teachers, managers of family enterprise units and doctors in private clinics, thus anchoring the programme institutionally in schools, private clinics and family enterprise units. A health centre is operated at the OPP office, which provides vaccines and family planning supplies to the activists. Due to the sanitation and health programmes, infant mortality in those parts of Orangi that built their sanitation system in 1982 has fallen from 130 to 37 per 1000 live births in 1991.

OPP's Education Programme

OPP's Education Programme is run by the OPP-RTI and, through social and technical guidance, it improves and upgrades the physical conditions and academic standards of private schools in Orangi. These private schools cater to the needs of the vast majority of Orangi school-going children. Physical improvements are made with loans from OCT and advice from OPP-RTI. Academic improvements are made by arranging teacher training through existing relevant organizations, the provision and use of libraries and audio-visual aids, and the publication of manuals and guide books.

Financial support is extended during the three stages of establishment of these schools. In the first stage, a small start up grant of Rs 3,000-6,000 is necessary for setting up a school. Within a year, the school is institutionalized and the need arises for physical expansion, which requires Rs 20,000-30,000. This support is very important for the survival of the school. Finally, a loan is needed for upgrading as the school has now become a formal educational institution; the school is able to take on a loan which it can be repay through income.

OPP has provided 364 loans to such schools. Teacher training through Allama Iqbal Open University is also being coordinated. The education entrepreneurs hold their monthly meetings at OPP office, where they share information on registration and teaching methods.

Significance of OPP Programmes and their New Directions

The OPP research, programmes and documentation have provided NGOs, CBOs and government agencies with successful models for overcoming the physical, social and economic problems faced by low-income settlements and communities. These have been

successfully tested through government-OPP-community participation projects but have still to become official policy. The infrastructure development models in particular reduce capital costs, ensure good quality work (since communities acquire skills for building internal infrastructure, for maintaining it and for supervising government work for external infrastructure), and create a more equitable relationship between government agencies and poor communities.

Increasingly, the OPP is becoming involved in policy issues and in promoting macro-level solutions, based on its models, for sanitation, health, housing and economic issues. This has led the OPP to document 189 *katchi abadis* in Karachi and to put forward physical and economic proposals for upgrading the *nallas* of Karachi, through which most of city's sewage flows. For this purpose, the OPP trains young people from low-income settlements who, after their training, become not only an asset to the community to which they belong but also a part of a larger movement to create self-reliance, freedom from foreign loans and grandiose projects, and a more equitable relationship between low-income communities and government agencies and their plans. At present, there are 20 young people undergoing 90 days training for surveying, documentation, design and estimating existing and/or proposed infrastructure in low-income settlements. In addition, there are seven young people undergoing a two-year course in becoming para-architects. Two previously trained para-architects are now practising in their settlements.

Based on its documentation of Karachi's *katchi abadis* and on its work, the OPP has developed proposals for a sewage system for Karachi. These proposals cost only a fraction of the government proposals that were to be funded by the Asian Development Bank (ADB). In principle, these proposals have been accepted and the ADB loan has been cancelled.

The Four Barriers to the Acceptance of the OPP Concept

The OPP has identified four barriers that communities face in taking on the responsibility for internal infrastructure and other social sector initiatives. These barriers are the:

- **psychological barrier**: communities feel that the building of a house is their responsibility but that the development of infrastructure and of the lane is the responsibility of the government;
- **social barrier**: people have to come together to form some sort of organization to build infrastructure and take over the lane and open spaces. The organization should be large enough to be effective but small enough to be cohesive. In Orangi, the organization has been lane-based and consists of 20 to 40 households;
- **economic barrier**: the cost of development of infrastructure should be low enough for people to afford. This requires technical research and the development of cost-effective community-based building procedures; and
- **technical barrier**: people do not have the technical expertise or tools to design, build and supervise underground sewage and water supply systems. To do this they need tools, technical advice and managerial guidance.

Replication of OPP Programmes

Many NGOs and CBOs from all over Pakistan have asked the OPP for support in replicating its programmes in their localities. For the replication process, the NGO/CBO leadership and area activists are invited to the OPP-RTI for orientation. If, after orientation, they are interested in the programme, they are provided training at the RTI, and the OPP staff visits their area and provides advice. The important aspects of the training consist of how to motivate communities; surveying, mapping and estimating; supervisory work; and documenting the development process.

A UK NGO, WaterAid, has provided funds to the OPP for the replication process. With these funds, the OPP trains students, young professionals and community activists and

documents *katchi abadis* in Karachi. Outside Karachi, NGOs and CBOs are provided with small start-up grants for replication. If, after a year, it appears that the replication might succeed, the concerned NGO/CBO receives direct WaterAid funding for its non-development expenses. Many of the NGOs and CBOs that have received OPP and WaterAid support outside Karachi have been identified by the South Asia Partnership and by the UNDP LIFE Programme.

d. ASB's Psychological Barrier

When Nazir Ahmed Wattoo visited the OPP in 1988, he expected that the OPP would fund the ASB for building infrastructure in Dhuddiwala and its neighbouring settlements. In many conversations, he has stated that he was disappointed when he was presented with the OPP programme and that he was not able to relate to its transparent manner of working, since it was so different from the way the ASB had worked since 1964. However, the concept intrigued him and he came back many times to the OPP to learn more about its work. However, he was not convinced and so he met and had long meetings with the people of Orangi who had built their sanitation systems and had received micro-credit. According to him, it was these meetings that made him feel that the programme could be replicated in Faisalabad. But again, he was hesitant because he felt that people would not be willing to make investments in development on his advice because of his past associations and failures. He even doubted that communities, given their psychology of dependence on politicians and civic agencies, would accept the model. These were issues he debated at great length with the OPP team over a period of six years.

In February 1993, a WaterAid team consisting of Ray Heslop (technical advisor to WaterAid) and the OPP consultant visited Dhuddiwala. They surveyed the situation and discussed the possibility of initiating a water and sanitation pilot project in the area with ASB involvement. Mr Wattoo was tempted and, as a result, he visited the OPP again in April 1994, for formal training; he was accompanied by social activists from Dhuddiwala.

e. Arrangements for the Commencement of Work

In September 1994, Hafeez Arain, a social organiser from OPP visited Dhuddiwala. He met the community and introduced OPP as a loan-giving agency which promoted "self-help" development. It was decided between the ASB and OPP that a small credit programme amounting to Rs 100,000 would be initiated in the area to help establish a relationship of trust between the ASB and the community. The credit programme was designed so that Nazir Ahmed Wattoo identified the loans for micro-credit but they were directly returned to the OPP. The money transactions were kept under the OPP's control to avoid any misunderstanding between the ASB and the community, since Nazir Ahmed Wattoo felt that people would not trust him. Soon after Hafeez Arain's visit, a six-month agreement was signed between ASB and WaterAid. According to the agreement, ASB was responsible for surveying, documentation and mapping of the existing water and sewage facilities in the areas in and around Dhuddiwalla and identifying a suitable pilot project for the replication of the OPP infrastructure model. To this purpose, Nazir Ahmed Wattoo was given training and orientation by the OPP at the OPP-RTI, and on-site at Dhuddiwala.

f. The Beginnings: ASB-OPP Micro-credit Programmes

Identification of the Credit Units

The OPP started the credit programme on a small scale. Rs 100,000 was approved and RS 20,000 was to be invested in each of five credit units (for details of credit units see Box 10). The programme started with three units, identified by Nazir Ahmed Wattoo. These included two television repair shops and a small-scale entrepreneur, all old and trusted

residents of Dhuddiwala. Nazir Ahmed Wattoo had earlier helped the two television shop owner's set up their businesses and knew that they needed more money to expand their work.

Box 10. OPP-ASB Micro-credit Programme Details as on 31 March 1999

Position of units:

Male units:	232 : 83.75 %
Female units:	45 : 16.24 %
Total:	277 : 100.00 %
Closed units:	166 : 59.92 %
On-going:	111 : 40.07 %

Financial position:

Total amount loaned:	Rs 4,351,500
Repaid by borrowers:	Rs 3,376,495
Balance to be recovered:	Rs 587,353
Total mark-up paid:	Rs 668,635
Mark up paid to ASB:	Rs 115,314
Overheads till March '99:	Rs 110,000
Defaulter:	Nil
Recovery:	88.48 %
Death case:	4
Closed units:	199
Ongoing units:	78

Note: Credit is obtained from Orangi Charitable Trust (OCT) Karachi at 50 paisas per Rs 1,000/day and given to clients at 60 paisas per Rs 1,000/day.

Types of units:

Bakery	01	Consumer stores	62	Cloth shop	10	Clinic	07
Crockery	03	Cosmetics	02	Carpets	01	Decorators	01
Dairy cattle	17	Elec. store	13	Embroidery	11	Garment factory	08
Hotels	04	Hardware	02	Junk dealer	05	Leather works	03
Medical store	04	Moulding	01	Printing press	01	Repair shop	01
Stationery	07	Spare parts	05	Small business	42	Stitching	10
Supplier	05	Shoemaker	02	Steel works	02	Taxi motor	04
Thela	13	Typing institute	01	Water land		Workshop	17
Home school	01	Hairdresser	01	Development	04	Video shop	04

SOURCE: ASB Progress Report, April 1999

Nazir Ahmed Wattoo was very clear that if the OPP replication was to succeed, he needed to re-establish the trust the community once had in him and so he made his choices very carefully. He waited until these three units were successfully underway before identifying the remaining two. This measure strengthened his reputation and restored the community's confidence in the ASB. Soon, Nazir Ahmed Wattoo started to be approached by people who wanted credit and, to cater to this demand, he made a formal proposal to the OPP to extend the credit programme.

The Credit Programme and Two-way Trust Building

The ASB carefully monitored the five loans and gave regular reports on their progress to the OPP. As a result, the OPP developed trust in the ASB and, at the same time, the ASB became creditable in the eyes of the community. A large number of businesses started to approach the ASB for loans, promising to follow the procedures that the OPP had laid down. This two-way trust building was clearly identified by OPP social organizer Hafeez Arain and on that basis it was decided to expand the credit programme. Since then, the number of credit units has risen from five to 277, with an 88.48 per cent recovery rate. Details of the credit programme on 31 March 1999 are given in Box 10.

g. The Water Project

The Beginning of the Project

The ASB analyzed the success of the credit programme and their previous failures. Nazir Ahmed Wattoo became very critical of the work that he had done previously, since it had produced no lasting physical or social improvement in the area; at the same time, it had produced a large number of dependants within the community who benefited financially from this work but remained suspicious of the motives of the ASB and of each other. On the other hand, the success of the credit programme gave them confidence in the OPP approach and in the ASB's capability and capacity to promote it. As a result of this analysis, the ASB decided to initiate a pilot water supply project financed and managed by the community.

Identification of the Project Area

Hasanpura was identified and chosen as the pilot area for the water supply project because of its severe water problems. Most of the households had installed hand pumps, however, due to waterlogging, houses in the area were threatened by rising damp and the water quality had suffered due to a rise in the water table. As mentioned earlier, in order to solve this problem the FDA installed eight deep tube wells on the major irrigation canals in the area and pumped the ground water into the canals. This lowered the water table and the hand pumps became inoperative.

Contacts with WASA

After Hasanpura had been chosen as the pilot area, Nazir Ahmed Wattoo, with help from the OPP team, identified a WASA water main about 1,100 feet from Hasanpura, which could be tapped for getting water to the settlement. However, since WASA permission is required to tap any line, the ASB made a formal application to WASA for this purpose. WASA responded by saying that it was impossible to treat Hasanpura as an individual case as it formed part of a larger WASA water supply plan. WASA further stated that its plan would be implemented in 2008 and that too depended on the availability of funds. Another problem was that the pipeline would have to pass under a major road for a distance of 110 feet and for that, special FMC permission would be required.

The ASB discussed this reply with the OPP and it was decided to calculate the total expenditure that Hasanpura residents incurred due to the non-availability of potable water. According to the ASB analysis, Hasanpura residents get drinking water from outside their settlement, from donkey-cart vendors. Underground water from shallow bores is used for washing clothes and for other purposes and is extracted by a large number of electrically operated pumps. According to ASB calculations, every house was purchasing 35 litres of water each day at a cost of Rs 5. Thus, the total expenditure for 1,000 houses was around Rs 5,000 per day, that is Rs 150,000 per month or Rs 1,800,000 per year. Since almost every house had an electric pump for extracting ground water, around 730,000 units of electricity were consumed annually, amounting to Rs 1,460,000 per year. Additional community expenses incurred for washing clothes using saline water were also assessed. It

was estimated that an additional 4,800 kilograms of laundry soap were consumed annually by 1,000 households, at an additional cost of Rs 960,000. The additional consumption of bath soap amounted to around 96,000 pieces, at an estimated cost of Rs 672,000. The use of saline water, the dearth of clean water and poor sanitary conditions were also responsible for various diseases. It was estimated that residents spent about Rs 2,400,000 annually on medicines and doctors. Open drains were also causing waterlogging and were damaging the housing stock as a result of rising damp. It was estimated that each house spent about Rs 2,000 per year dealing with this problem, that is RS 2,000,000 for 1,000 houses. Taking into account all of the above factors, it was estimated that the community was spending Rs 9,292,000 annually. If a water supply was installed in the ASB areas by 2008, at this rate the community would spend Rs 100 million between now and 2008. A water and sanitation system could save them this expense. It was therefore decided that the community should be informed of these figures and be presented with the OPP alternative. However, before this could be done, it was necessary to identify community activists.

Identification of Community Activists and Strategy for Work

In September 1995, a team of activists was formed in Hasanpura. In order to identify members for this team, Nazir Ahmed Wattoo contacted Najabat Hussain Sial, an ex-political activist and homeopathic doctor living in Hasanpura. Najabat Sial identified Muhammad Siddique and Haji Muhammad Yousuf as the two most respected and active persons in Hasanpura. Muhammad Siddique is an old shopkeeper from Hasanpura and Haji Muhammad Yousef is the caretaker of the local mosque and an ex-*patwari* who served in the irrigation department for 35 years. As such, he was very familiar with Hasanpura and the adjoining areas. Nazir Ahmed Wattoo approached these two persons and, after detailed discussions, they decided to support the concept and its implementation.

Wattoo, Yousuf and Sial decided not to approach the community immediately but rather, to keep talking to individuals concerning the programme in order to gauge their reaction whilst, at the same time, maintaining a low profile so as not to build up false hopes. This methodology was practised for over three months and a consensus on laying a water line was developed. Once it was felt that the community would support the idea, the first community meeting was organized in November 1995 in a local mosque that was identified by the people. The meeting was attended by 48 residents. At the meeting, Nazir Ahmed Wattoo presented the OPP concept and emphasized the fact that this was a “non-political” project. He proposed that a people’s committee should be formed to organize and undertake the development work and that the ASB would only be a teacher, an advisor and a liaison between the OPP and the people. The community accepted the idea and a ten-member Water Supply Committee (WSC) was chosen.

Financing the Project

Once the decision to start the project was made, the issue of the funds necessary for this undertaking was raised by the WSC. The committee felt that it needed funds for laying the main pipeline. Individual lanes could then lay their own distribution lines and households would connect to them; when they did so, they would pay their share the costs and thus the project costs would be recovered. The ASB proposed that the WSC should ask the OPP for a loan, which would be returned after individual water connections had been paid for. The community accepted the proposal but the OPP suggested that WaterAid should be asked for a revolving fund for the water project. A loan application for Rs 200,000, for laying 1,100 running feet of main pipeline, was made to WaterAid by the ASB. The application was approved and an agreement between the Hasanpura Water Supply Committee and the ASB was framed, under which the WSC was made responsible for collecting money from water connections, for keeping accounts, for purchasing construction materials and for supervising the construction of the main line and the distribution lines in the lanes.

No objection certificate for Connection to WASA Main Line

On the ASB's advice, the WSC, before starting mobilization and organization of the community, made an application in November 1995 to the Managing Director (MD) of WASA for a "no objection certificate" (NOC) for making a connection to a government water source. The MD passed on the application to the deputy MD who then passed it on to the engineer in charge of the area who, after giving his approval, sent it to the Deputy Director of the Planning and Development Department. The whole process took over three months and, at every stage, the ASB had to apply pressure on the WASA staff and give money, in an informal manner, to junior staff in the department so that the file would be kept moving. Finally, in January 1996, the NOC was given with the proviso that the four-inch main pipeline that had been proposed by the ASB be increased to six inches. However, in November 1995, the WSC had decided not to wait for the NOC but to begin work.

Organizing the Work

After the formation of the WSC, an OPP team consisting of an engineer and a social organizer visited Dhuddiwala and trained the ASB team in mapping, surveying, estimating and planning the water supply line through involving them and the water supply committee in preparing the plans and estimates.

WaterAid funds were received in November 1995, after which a purchase committee was formed which included Nazir Ahmed Wattoo, a WASA fitter (not in his official capacity), and three members of the water supply committee. The WASA fitter was included since he was a Hasanpura resident and had technical expertise. The committee was made responsible for buying and storing materials until the work could be started.

A major dispute took place within the committee. Some members, supported by part of the community, felt that the four-inch diameter pipeline proposed by OPP engineers was insufficient for 1,000 households and insisted that the line should be at least six inches in diameter. Nazir Ahmed Wattoo tried to convince them that a six-inch line was not necessary. The dispute intensified but was resolved by Haji Muhammad Yousuf who proposed that a six-inch pipe line should be laid under the metalled municipality road in Hasanpura and the rest of the line should be four-inch. The community accepted the compromise. The NOC for connection with the WASA main line, which was granted later, also directed that a six-inch diameter line should be laid but the community did not follow this up.

Crossing the Metalled Road

The WSC decided to begin work by laying the water line under the metalled road. Permission from the FMC was required for road cutting. The committee contacted junior staff in

the FMC who told them that getting permission would take a long time and would also involve illegal payments to FMC staff. They suggested that the committee should go ahead and lay the line across the road and subsequently pay any fine. This process was simpler and cheaper and the ASB decided to follow their advice; the committee also discussed the matter with the area councillor and he too backed the suggestion. However, the work had to be done clandestinely so that it remained unnoticed by the FMC and was not stopped, and this could only be done after dark.

On November 24, 1995, the laying of the pipeline was inaugurated by Haji Master Ghulam Nabi, the oldest member of the Hasanpura community. He was chosen by consensus by the active members of the settlement. Excavation began at 9 pm and the 110 running feet were laid across the road in one night. The excavation was then refilled and the road repaired. WASA would have needed three days to carry out this work. Throughout the night, committee members and the municipal councillor remained on site to deal with any possible stoppage of work. However, work carried on and it was only in the morning that an opposition group in the area reported the cutting of the road without permission and the laying of the pipeline to the area magistrate. The case fizzled out because of support from the councillor and FMC executives, and WASA had no objection because only a pipeline had been laid and no water connection was involved.

Connection with the WASA Main Line

Connecting the 1,100 running feet of ASB line to the WASA main line could only be done if the existing WASA line was emptied. To do this, a pump was required. The WSC asked WASA officials for a pump but were refused. The problem was overcome when a pump was acquired informally from WASA pump operators for a payment of Rs 2,000 and two WASA fitters were informally hired to work on the connection. All the work was done clandestinely and was executed in six hours in the freezing cold. After the connection was made, the line was extended into the project area by 400 running feet within a few days and the first tap was installed at the offices of the ASB. The community was ecstatic when they saw clean water coming out of the tap.

Procedures and Costs

The procedure and costs for acquiring a water connection are as follows. After a lane is organized, the ASB is approached and a request for a water connection is made. The lane households who want a connection are asked to pay Rs 20 each to cover the costs of stationery and printing of the forms that are used to register the request. Then the ASB contact WASA and each applicant household has to pay WASA connection charges of Rs 1,175. Originally, this was Rs 1,363 but was reduced by WASA in July 1997. A design for laying the water line is then drawn up by the ASB, executed by the lane community and supervised by the ASB team. The average connection cost per house works out at Rs 600, depending on the length of the pipe and the excavation necessary to make the connection; this payment is made to the WSC. An additional payment of Rs 1,300 per household has to be made, also to the WSC, for the cost of the lane line and the water main already laid with funds from WaterAid. Finally, a sum of Rs 100 is paid to the WSC as service charge. Thus, the total cost of acquiring a water connection works out at Rs 3,195 per household.

The design and estimate for the main water line are as follows. The system is designed for 1,000 houses in 84 streets although the actual number is 829. The extra 171 households were included in the estimate as it was expected that they would join in from the neighbouring settlements. The number of realistic beneficiaries was calculated at 700 households, or 70 per cent of 1,000, and the total project was calculated at Rs 910,000, or at Rs 1,300 per household, excluding connection expenses.

Problems and Conflict

Soon after the main line had been connected to the WASA water line, differences arose within the WSC. The reasons for this are unclear but seem to be related to the ego problems of two members who subsequently left the committee. These two members started maligning the work of the ASB and approached the area MPA. They informed him that the ASB and the WSC were using the water project to build a constituency for themselves and that they were his political opponents. They also informed him that they were giving water connections to the community in violation of WASA rules. The MPA reacted and called the WASA MD for an explanation. The WASA MD informed the MPA that the WSC was not making illegal connections since they had acquired a WASA NOC. In addition, they were paying WASA connection charges.

The MPA then started laying his own water line in Hasanpura, promising free connections for the community. Once the MPA began this process, progress on the water project slowed down. The ASB decided to counter this situation by informing the community of the sub-standard nature of the work being done by the MPA's contractors. This was there for all to see. In addition, it was also pointed out that WASA could not provide any more water to the area as per its plan. This generated considerable debate in the community. Meanwhile, the MPA's project fizzled out within a couple of months and people realized that it had been a hoax.

In these circumstances, it was necessary to build the community's spirit. Choudhary Muhammad Akram, a member of the WSC, decided to organize his lane as a demonstration model. The community was organized and a design drawn up according to the procedures laid down by the ASB. A connection charge of Rs 3,195 per household was requested. People objected, saying that this figure was too high and so the ASB requested an exemption from WASA connection charges. The request was considered by WASA but, three months later, it was refused. After this, the community decided not to waste any more time and collected Rs 22,000 from six houses. With this money Chaudhry Muhammad Akram undertook the laying of the first lane.

Unauthorized Connections and Further Conflict

Opponents of the ASB struck back in August 1996 when Nazir Ahmed Wattoo was visiting the OPP-RTI for a training session. With support from the political party in power, they managed to make 65 unauthorized connections from the water lines laid by the WSC. They paid no charges either to the WSC or to WASA. The WSC contacted Nazir Ahmed Wattoo in Karachi and told him that the community was furious and wanted to take revenge on the opponents of the water project. However, on OPP advice, Nazir Ahmed Wattoo asked the community to keep calm and to prepare to take legal action against the illegal connections. An application requesting their disconnection was made to WASA but it took three months before WASA approved the request. Meanwhile, work slowed down again, due to this new conflict.

WASA issued disconnection orders in November 1996. Those who had made illegal connections were fined Rs 500 each and the connections were made legal only after the WASA connection charge of Rs 1,175 had been paid. However, they refused to pay an additional Rs 600 to the WSC. As a result, the ASB filed a petition with the senior civil judge in Faisalabad requesting him to order that no water connections could be acquired without ASB's approval and a payment to the WSC. The petition was accepted and households who had made illegal connections were forced to pay. In September 1997, 13 members of the Hasanpura community approached the area's MNA and MPA and informed them that ASB's activities in Hasanpura were a threat to their political standing. They further said that ASB's activities were of a commercial nature and that ASB was extorting money from the poor. The MNA and MPA agreed to look into the matter.

When the WSC became aware of these events, it decided to meet the political representatives and explain the nature of ASB's water and sanitation work. In October 1997, it made a presentation to the MNA and the MPA and misunderstandings were cleared up. As a result of the meeting, the MPA decided to give support to the ASB programme and issued a

directive to WASA's MD that no new connections should be issued to anyone unless they were willing to make the required payments to the WSC.

In spite of the civil judge's order and the MPA's directive, WASA's MD continued to issue connection notices to people who had not paid the ASB/WSC charges. As a result, the ASB filed a writ petition against WASA's MD in the Punjab High Court and also complained to the WASA board regarding their MD. This led to a meeting at WASA in December 1997 where the Vice Chairman of the WASA Governing Board directed the MD that, in future, no new connections would be provided from the community's line without first consulting the ASB. The Vice Chairman also stated that if these orders were not followed, strict action would be taken against the MD.

After the December 1997 meeting, WASA officials became very cooperative and work progressed smoothly in the ASB project area. In January 1998, the writ petition was withdrawn by the ASB.

Details of Work Done and Loan Recovery

Table 6 gives details of the work undertaken and the expenses incurred on the water supply project up until June 30, 1999.

Table 6. ASB Low-cost Water Supply Project, Hasanpura: Cumulative Works from 1st September 1995 to 30th June 1999

Total number of streets in Hasanpura	84
Total number of houses in these streets	1,000
Total area	25 acres
Total length of these streets	13,500 running feet
Streets where water pipe has been laid	36
Length of 3"-6" diameter main lines laid in 36 streets	6,339 running feet
Legal connections provided	253 houses
Applications for connections in process	15

Expenses Incurred - Description	**Expenses (in Rs)**
Main lines: 1,925 running feet 6" and 4" diameter	194,901
Lane lines: 4,414 running feet 3" diameter	284,395
Misc. (BRIV.)	56,000
Payment to WASA as connection fee @ Rs 1,363 and Rs 1,175 (two rates prevailed during this period)	333,371
253 houses connection charges @ Rs 600 per house	151,800
ASB service charges	7,900
Total cost up until 30 June 1999	1,028,367

WASA estimates for this project	Rs 3,200,000
ASB estimates for this project	Rs 1,300,000
Difference of cost effective programme being run by ASB	Rs 1,900,000

SOURCE: ASB Progress Report, June 1999

According to Table 6, the community had invested Rs 1,028,367 in this work. Rs 73,500 has been recovered from the Rs 200,000 WaterAid loan at a rate of Rs 300 per household. The recovery has been slow, as slightly more than 30 per cent of households are connected to the system.

Reasons for the slow pace of connection include the following:

- people who make a connection share it with their neighbours who therefore do not feel the need to make a connection themselves;
- uncertainty regarding the programme as a result of opposition from within the community and from the politicians has prevented people from making connections;

- water lines were laid in the lanes once enough money had been collected to lay them, irrespective of how many households were willing to connect. This procedure is now being revised by the ASB and in future only lanes where over 70 per cent of the households agree to participate will be supported and given permission to connect to the main line.

h. ASB's Sanitation Project

The Beginnings

While the water supply project was being planned, investigations into sanitation and drainage issues in Dhuddiwala and its adjacent settlements were being undertaken by the ASB, with OPP assistance. It was observed that the majority of households in the project area disposed their sewage into paved or unpaved open drains in the streets. As a result of this, damp and erosion had affected the foundations and walls of the houses. Also, many of the drains were choked and were only cleaned when there was a major crisis. It was therefore decided to adopt also the OPP model for sewerage.

Both the OPP and the ASB had established their credibility within the community as a result of the credit programme and the initiation of the water project. Visits to the OPP-RTI by activists and community members had further strengthened this credibility. Therefore, when meetings were held to explain the programme, there was an enthusiastic response. A team comprising Nazir Ahmed Wattoo as coordinator/social organizer, Aziz Ahmed, his brother, as technician and Haji Muhammad Yousuf as assistant, was formed.

After initiating the project, the OPP team visited Dhuddiwala regularly and helped the ASB to identify sewage disposal points. Visits to the OPP-RTI in Karachi were also arranged for the project team. Details of the OPP and ADB team visits to Faisalabad and Karachi are given in Tables 7 and 8.

Table 7. Visits from ASB Staff, Community Members and Activists to OPP for Orientation and Training (December 1987 to February 1999)

Month/Year	Number of persons	Training provided	*Number of days*
December 1987	1	Orientation	1
March 1988	1	Orientation	1
December 1988	3	Orientation	2
June 1989	1	Orientation	2
December 1989	1	Orientation	1
September 1990	6	Orientation	7
February 1991	1	Orientation	2
June 1992	1	Orientation	1
November 1992	1	Orientation	1
May 1993	1	Orientation	2
October 1993	1	Orientation	2
April 1994	1	OPP programmes	1
July 1995	1	Organizational set up/finance	3
September 1995	1	Sanitation/micro-credit (m-c)	3
January 1996	7	Sanitation/m-c/health	7
February 1996	8	Sanitation/m-c/health	4
July 1996	1	Sanitation/m-c/health	2
October 1996	1	Sanitation	2
January 1997	1	Sanitation	2
April 1997	1	Sanitation/m-c	2
May 1997	1	Sanitation/m-c	3

June 1997	5	Sanitation/m-c/health	3
July 1997	1	Sanitation	2
October 1997	1	Sanitation	2
February 1998	1	Sanitation/m-c	6
March 1998	1	General workshop	6
May 1998	1	Sanitation/m-c	3
June 1998	2	Sanitation	5
July 1998	1	Sanitation	11
August 1998	1	Sanitation/m-c	3
November 1998	1	Sanitation	14
March 1999	1	Sanitation/m-c	2
May 1999	1	Sanitation/m-c	3
June 1999	1	Sanitation/m-c	2
December 1999	1	Sanitation/m-c	2
Total	**60**		**Days: 115**

SOURCE: ASB/OPP records

Table 8. Visits by OPP-RTI Staff to ASB to Provide Training

Month/year	**Name of person**	**Reason for visit**	*umber of days*
January 1991	Anwar Rashid, Joint Director	Micro-credit (m-c)	2
May 1994	Rasheed Khatri, Engineer Hafeez Arain, Social Organiser	Joint survey of project area	3
May 1994	Salem Aleemuddin, Joint Director	Survey of project area	3
February 1994	Ray Heslop and Arif Hasan, WaterAid Team		2
September 1995	Rashid Khattri Noor Muhammad Saifi, Technician	Sanitation	3
October 1995	Rashid Khattri Noor Muhammad Saifi	Sanitation	5
January 1996	Noor Muhammad Saifi	Sanitation	14
April 1996	Noor Muhammad Saifi	Sanitation	9
January 1997	Anwar Rashid, Perween Rahman	Sanitation/m-c/ Organizational set up	3
April 1997	Rashid Khatri	Sanitation	1
April 1997	Salim Alimuddin	Sanitation	1
May 1997	Salim Alimuddin	Sanitation	3
October 1997	Salim Alimuddin	Sanitation	1
November 1997	Salim Alimuddin	Sanitation	3
December 1997	Noor Muhammad Saifi	Sanitation	5
January 1998	Noor Muhammad Saifi	Sanitation	14
January 1998	Anwar Rashid, Perween Rahman	Sanitation/m-c/ Organizational set up	3
October 1998	Salim Aleemuddin	Sanitation	3
November 1998	Rashid Khatri	Sanitation	6
January 1999	Anwar Rashid, Perween Rahman	Sanitation/m-c/ Organizational set up	2
Total			**Days: 86**

SOURCE: ASB records

Social organization and mobilization of the community was easy as contacts had already been established for the water project and activists identified. A number of people

volunteered their help and Dr Naseer, a member of the WSC offered to organize his lane as a demonstration model.

Procedure and Costs for the Sanitation Model

In the OPP's work in Karachi, the disposal points for sewage were the natural drains. In the case of Faisalabad, these were not available. In addition, the topography of Faisalabad is flat and there are almost no slopes. Therefore, the sewage system could only be built if it could be connected to WASA trunk sewers, some of which were at a considerable distance from the project area. Consequently, the ASB decided that laying a collector sewer that would connect with the WASA trunk was the first priority as this would motivate the lanes to connect to it. It was also decided that households would not contribute to the construction of this collector sewer but would pay for its cost when the lanes were connected. Since at that stage there was no money to lay a collector sewer, it was decided that a lane should be developed that could be connected to an existing WASA trunk sewer.

The following procedure emerged:

- the building of a collector sewer to connect to a WASA trunk sewer. This cost was to be borne by a revolving fund and was to be recovered from households when a lane connected to the collector sewer. So far, the average cost per household for the collector sewer has been about Rs 600;
- the construction of the lane sewer by the community, at their expense and under their supervision and management. The cost per household has worked out at between Rs 700 and Rs 900; and
- installing a latrine pot and P-trap in each home, which works out at a unit cost of Rs 750. Thus, the average cost per household for the entire system is between Rs 2,050 and Rs 2,250.

It was decided that during the connector sewer construction, work would be stopped when it reached a lane intersection. At that stage, the lane would be asked to lay the lane sewer and connect to the collector sewer. They were informed that a connection would not be allowed once the collector sewer had been built beyond the intersection. It was further decided that every household would have a small one-chamber septic tank, whose main purpose was to prevent solids from entering the sewage system and choking it up rather than for sewage treatment.

Laying of the First Lanes

In Hasanpura, the open drains from 35 lanes discharged their sewage into a canal that had originally been used for irrigation purposes, as a result of which the canal was choked with garbage. In 1989, the FMC built an open drain parallel to this canal and connected it to a WASA trunk sewer in the neighbourhood. This drain too was often choked and, as a result, lanes were inundated. Whenever there was a crisis, households collected money and hired scavengers to clear up the drain and make it functional again. Dr Naseer's lane was one of the 35 lanes that connected to the FMC open drain.

Once the organization and mobilization of Dr Naseer's lane had begun, the ASB requested technical help from the OPP. Noor Muhammad Saifi, the OPP technician and social advisor, was sent to Hasanapura for ten days, where he provided on-the-job training to the ASB team in documentation, estimating, levelling, use of shuttering for manholes and the laying of pipes. Construction work on the lane began in January 1996.

Dr Naseer was unable to continue his work due to differences between him and some of the lane members. A new social organizer was chosen through a consensus of sorts and the community started to lose interest in the project. The ASB panicked and, in order to motivate the community, gave them a loan of Rs 5,500 to finish the work, which was provided by

WaterAid's water supply fund. Noor Muhammad Saifi was not informed of this, as the ASB knew that giving a loan for work at lane level was against the OPP's philosophy.

The work gained pace after receiving the loan and 534 running feet of underground sewage line serving 32 houses was completed. However, people hesitated to make individual connections, as they were unsure whether the system would work. Eventually, one young man took the risk and by-passed the old open drain to connect to the new system and built a one-chamber septic tank. People saw that the system worked and other houses started to make their connections. At the same time, other lanes started approaching the ASB for technical assistance in laying their sewage system.

Five lanes were completed in the following five months. They all disposed into the FMC open drain but due to the condition of the open drain, they did not function well. The ASB decided that if the system was to function, the FMC drain should be cleaned and replaced by a collector sewer, which would connect to the WASA trunk sewer. In addition to the 35 lanes, the Jalyi Market shops also used the FMC open drain and it was decided to involve the shopkeepers in the project as well.

Laying of the Jalvi Market Collector Sewer

Jalvi Market is a commercial area in Dhuddiwala, which was developed by an informal developer. It consists of about 700 shops and these disposed their sewage into the FMC open drain, also known as the Jalvi Market drain. Since the drain constantly overflowed, it adversely affected environmental conditions in the market. Nazir Ahmed Wattoo informed the developer of their plans to replace the open drain by an underground collector sewer and asked him to participate in the work. The developer initially refused, as he was afraid that his money would be misused. However, when he saw the work being undertaken in the lanes and the building of the water supply system, he approached Nazir Ahmed Wattoo and offered to take part. What motivated him was the fact that improved environmental conditions would increase the property value of the shops. He offered to pay the ASB Rs 150,000, as 50 per cent of the estimated cost of the underground collector sewer. On OPP's advice, the ASB declined this offer and, instead, asked him to purchase the materials for the sewer line. The reason for refusing a cash donation was that he would probably have claimed later on that his funds had been misused.

The ASB requested OPP's help in designing and laying the Jalvi Market collector drain. The OPP sent Noor Muhammad Saifi back to Dhuddiwala for two weeks, where he trained the ASB team and supervised the commencement of the work. This began on November 4, 1996 and was completed in four months; 1,700 running feet of trunk sewer was laid.

The laying of the Jalvi Market sewer was not an easy task. Cleaning it, diverting the water and laying the sewer all involved intensive and dirty work. Four teams of labourers quit, refusing to complete the work, with a fifth team completing it but at higher rates. The pace of development was very slow with only two pipes being laid per day. However, the community was impressed with the work of the fifth team and decided to give them a Rs 5,000 reward. The completion of the collector sewer was a major boost for the ASB and it motivated the communities to mobilize and request ASB support for their lane sewers. The ASB identified further connections to existing WASA trunk sewers as disposal points and the programme expanded.

To finance the collector sewer, the ASB used materials provided by the Jalvi Market developer and funds recovered from the WaterAid loan for the water project. In addition, individuals from the community made contributions as loans.

Details of Work Done

Details of work done by the community with ASB support are given in Table 9.

Table 9. ASB's Low-cost Sanitation Project

Location	Number of lanes	Length (running feet)	Number of houses	Cost of tertiary lines (Rs)	Cost of internal fittings (Rs)*	Total cost (Rs)
National Colony	3	582	38	28,480	53,200	81,680
Dhuddiwala	27	3,573	161	190,381	225,400	415,781
Hasanpura	51	7,664	540	455,580	756,000	1,211,580
Niamat Colony	6	1,600	64	83,526	89,600	173,126
Rajada Town	4	635	37	31,435	51,800	83,235
Al-Najaf Colony	1	160	16	10,320	22,400	32,720
Jalvi Market	14	2,591	97	130,684	135,800	266,484
Jalvi TR line	2	1,820	41	277,305	57,400	334,705
Factory Area	1	310	10	26,587	16,083	42,670
Abdullah Town	3	1,668	48	123,542	67,200	190,742
Daruslam Colony	2	300	12	13,800	16,800	30,600
Iqbal Nagar	2	418	22	17,974	30,800	48,774
Mujahid Town	5	680	30	35,330	42,000	77,330
Bilal Colony	18	3,232	178	270,800	249,200	520,000
K.T.M. Chowk	2	210	6	12,600	8,400	21,000
Total	**141**	**25,443**	**1,300**	**1,708,344**	**1,822,083**	**3,530,427**

* This includes house connection and latrine cost

SOURCE: ASB Progress Report, June 1999

In addition to the lane sewers listed above, 1,820 running feet of collector sewers have also been laid at a cost of Rs 277,305. Thus, the total cost of the work undertaken so far is Rs 3,807,732, and the proportion of investment in the collector sewers compared to the lane sewers works out at 1:13.73.

i. Repercussions of the ASB Water and Sanitation Programmes

Requests from other Communities and Future Plans

After the completion of the Jalvi Market collector sewer, numerous communities applied to the ASB for technical assistance for laying their sewage lines. The ASB has considered requests from those settlements which are in the neighbourhood, including Hasanpura No 2, Bilal Colony and Kehkeshan Colony No 2. These have now been included in the ASB Project Area Phase 2.

By the first quarter of 1998, the ASB completed the surveying, mapping and planning of these settlements and identified the location for a 3,300 running feet collector sewer that would need to be laid and connected to a WASA trunk sewer. This collector sewer would serve 1,000 houses in 52 lanes, who would build 12,000 running feet of underground lane sewers. According to the plan, each lane would have its lane organization and there would be three committees building the different lengths of the collector sewer. It was estimated that work on the collector sewer would be completed in four months and the lane sewers would require two years to be completed. For the trunk sewer, the ASB applied to WaterAid for a revolving fund of Rs 500,000 which would be recovered from the lanes as and when they connected to the collector drain. The fund was made available in the 1998-99 financial year.

However, work has not yet begun on the collector drain. This is because plans were often changed due to insufficient and often inaccurate information regarding WASA disposal points and future plans. Also, the OPP was reluctant to begin work since it felt that the ASB did not have the technical expertise to survey and implement such a large project. Aziz Ahmed Wattoo therefore underwent extensive training, first at the OPP and then on site in Faisalabad, and this was tested by OPP's engineer, Rashid Khatri, through on-site survey work and estimating done by Aziz Ahmed Wattoo. As a result of this training, Aziz Ahmed Wattoo can now work independently but will require help in complex situations and in developing master plan concepts which integrate different neighbourhoods. Work on the new collector drain is about to begin.

Communities from eight new settlements, which were created through the informal sub-division of agricultural land, have also applied to the ASB for assistance; the developers of these schemes did not provide any infrastructure. The ASB has visited three of the settlements, to present its programmes and it has prepared documentation, designs and estimates. Reaction from the communities is awaited.

Offers of Collaboration and Funding

A number of national and international NGOs and agencies have offered support and collaboration to the ASB. CIDA (Canada), Asia Foundation, Trust for Voluntary Organizations have all offered the ASB financial support. They have, along with the UNDP-World Bank Water and Sanitation Programme and UNDP-LIFE, invited the ASB to their workshops and seminars. However, the ASB has not accepted their financial help because they feel that the people of Pakistan may be poor individually but, as the OPP and the ASB have demonstrated, they are quite capable of financing infrastructure collectively. Also, the ASB feels, as does the OPP, that development has to take place at the pace of the people and cannot be pressurized through large funds. However, Nazir Ahmed Wattoo has accepted invitations to workshops and seminars where he has presented his work and delivered the message of self-reliance. Like the OPP, he feels that the ASB is not a consultant nor a contractor but rather, a teacher who guides people to make them self-sufficient.

Action Aid has sent a group of 26 people belonging to two union councils from the Faisalabad region for orientation to the ASB. Six of them have applied to the ASB for work to be done in their villages. Action Aid has also sent a group of activists, councillors and staff from the district of Haripur in the North West Frontier Province for orientation along with people from a neighbouring village. Caritas Faisalabad sent a group from *chak* number 232. The method for laying sewers was explained to them, they then borrowed three sets of manhole shuttering from the ASB, sought their advice and went back to their *chak* and laid their sewer lines at their own expense. Nazir Ahmed Wattoo has been invited by Environmental Protection Society, a local Swat NGO, to visit Swat in the NWFP and various communities in the Punjab. Anjuman Falah Behbood (AFB) from Rawalpindi, which is also replicating the OPP model with WaterAid funding, has visited Dhuddiwala with its staff, area councillors and activists for orientation and training as have groups from Multan who are in contact with the OPP. Nazir Ahmed Wattoo is also being consulted by the Conservation and Rehabilitation Centre (CRC), which is working on the conservation of the ancient city of Uch in the Punjab. The OPP is providing technical support to the CRC, and the ASB project area is seen as a training ground for Uch activists and CRC staff. For details of various visits by CBOs, NGOs and international agencies to the ASB and by the ASB to other CBOs and organizations, see Table 10.

Table 10. Important Workshops, Presentations and Visitors

Dates	Event	By	Sponsoring organization
13.02.96	Visit to ASB	Executives of Social Action Programme (SAP)	SAP
20.03.97	Visit to ASB	Executive of Trust for Voluntary	TVO

		Organizations (TVO)	
04.04.97	Visit to ASB	CBOs and activists from Action Aid programmes	Action Aid
23.04.97	Visit to ASB	TVO executive	TVO
05.11.97	Visit to ASB	Fr. Jorge Anzorena (SELAVIP representative)	SELAVIP
13.04.98	Visit to ASB	UNDP group	UNDP
24-25.08.98	Presentation at Islamabad workshop	ASB	Action Aid
26-27.08.98	Presentation at Lahore workshop	ASB	UNDP/GEF
03.09.98	Presentation at Islamabad workshop	ASB	National Rural Support Programme
27.09.98	Meeting with Faisalabad councillors	ASB	ASB
08.10.98	Visit to ASB	Fr. Jorge Anzorena	SELAVIP
14-15.11.98	Presentation at workshop in Faisalabad	ASB	UNDP-World Bank RWSS
12.12.98	Visit to ASB	M.M. Qureshi, Federal Secretary Women's Development	Ministry of Women's Development
23.01.99 13.02.99 23.02.99	Visit to ASB	Community groups and Action Aid staff	Action Aid
18-19.03.99	Presentation at workshop in Faisalabad	ASB	UNDP-World Bank RWSS

SOURCE: ASB records (for details see Appendix – 10)

Changed Attitude of Government Agencies and Politicians

The Social Action Programme (SAP) of the government of Pakistan has offered the ASB a grant to expand its development work. The ASB has attended SAP's workshops but has refused the grant. Instead, they asked SAP for a loan but this was refused. In September 1998, the Punjab Social Welfare Department invited the ASB to Lahore to present its work to 25 social welfare officers from the district. In addition, undergraduate and post-graduate students from the Social Welfare Department, University of the Punjab, have visited the ASB in groups. Muzzaffar Mehmood Qureshi, Federal Secretary of the Ministry of Women Development, spent a day at the ASB and directed the commissioners of a number of divisions to visit it. The UNDP-LIFE and GEF programmes have also directed a number of their partners to visit the ASB. Nazir Ahmed Wattoo also made a presentation of ASB's work to senior civil servants at the National Institute of Public Administration in Karachi in May 1999.

Three councillors from Faisalabad visited the ASB in September 1998 for orientation. The ASB has convinced them not to invest in water supply or sewerage at the lane level but to spend their funds on building collector sewers and paving the lanes where water supply and sewage lines have been completed. The councillor from the ASB project area has already started following this advice and has paved six lanes in which water and sewage lines have been laid by the community.

In September 1999, ASB was invited to present its work at an NGO workshop organized by the FAUP in Faisalabad. After the workshop, a discussion was held between the FAUP consultant and staff and the ASB. The possibility of FAUP working with the ASB was explored and it was suggested that the FAUP should fund and build collector and trunk sewers and the ASB should motivate communities and support them to fund and build lane sewers. It is hoped by the ASB that this will be possible.

WASA's relationship with the ASB has also undergone a change. At the neighbourhood level, there is considerable interaction between WASA area staff and the activists and staff of

the ASB. The ASB monitors their work and, since it now has an understanding of water and sewage-related issues, there is growing acceptance of its role. At the WASA head office too, ASB contacts have developed into mutual understanding and respect. Since WASA does not have area plans, it has on more than one occasion used the plans prepared by the ASB to help it design area sewage and water supply proposals.

Improved Physical and Social Conditions in the Project Areas

An observation of the lanes in the project area shows that an unbelievable physical change has taken place. Waste water and sewage have disappeared from them. Those that have been paved are now clean and full of people. Children play there, women gather there and residents have started planting trees. Before, trees were only planted in the homes. Residents have also come together to arrange for the collection and disposal of solid waste and for the sweeping of lanes. There is collective pressure on the councillors to install street lights and this is working. Dr Naseer reports that the incidence of water and sanitation-related diseases has fallen by over 60 per cent. He says in good humour, "…doctors are losing money. They will have to shift to settlements where water and sanitation do not exist or they will become broke and homeless." In the many meetings that have been held between the residents and the authors of this report, community members have said that water and sanitation-related quarrels that were common between neighbours have now disappeared and the value of their properties has gone up. They also said that they were making considerable savings on medicines and doctors fees, which they could now use to improve their homes.

ASB: Emergence of New Needs

With the development of sewerage and water supply systems in the ASB project area, request from communities, and changed attitudes of government and donor agencies, the ASB had to re-assess its future needs and directions. First, it was assuming the role of trainer, for which it required better-trained staff and training materials. Second, the infrastructure that it had helped develop needed maintenance and, for that, equipment, funds and manpower was required. And three, an expansion in its work meant covering a larger area and, to do that effectively, transport was necessary. To take care of these demands, the ASB took the following actions:

Video Documentation. After the completion of about 50 lanes for water and sanitation, the ASB hired a commercial video maker to make a video recording of its programme, with the aim of developing training and orientation material for other CBOs and NGOs. However, hiring the equipment for this purpose was very expensive, so the ASB applied to WaterAid for funds to purchase video equipment. It was agreed that the equipment would remain with the ASB, who would be responsible for maintaining it, but that it could also be used by other CBOs and NGOs in the Punjab for recording their work and for training purposes. WaterAid granted them funds and the equipment was purchased for Rs 320,280 in the financial year 1998-99. The ASB then hired a Karachi film company "Imagine Films" to make a video of its work. The film was completed in May 1999 and is being used for motivation and orientation, and interested communities and organizations can also purchase it for Rs 650. The ASB intends to make four training films relating to motivation techniques; surveying and mapping techniques; the purchasing of materials and the keeping of accounts; and on-site work.

Staff Requirements. For any expansion of the work, more and better trained staff will be needed. So far, the only technical member of staff at the ASB is Aziz Ahmed Wattoo, who was trained by the OPP-RTI both in Karachi and on-site in Faisalabad. The ASB hired Imdad Hussain and Bhatti, at different times, as technical persons before they decided to train Nazir Ahmed. Both Hussain and Bhatti were formally qualified, especially Bhatti who has a diploma in civil technology. However, they were not willing to work with communities and wanted a conventional technician's job and working environment. For this reason, they did not stay long. Other attempts to recruit formally qualified technicians have been unsuccessful. Because of this, Aziz Ahmed will have to improve his skills through further training at the OPP-RTI and

become a trainer of local, educated community members. It seems that this is the only way that the non-availability of technical staff can be overcome.

Maintenance Unit. Due to the lack of maintenance capacity in WASA, continuous problems were faced by the ASB regarding the maintenance of sewage lines built by the people. The more serious problem however, was the continuous choking of WASA trunk sewers that adversely affected the functioning of the community-built sewers. Whenever a crisis occurred, communities got together, collected money, hired sweepers and the WASA line was cleaned. Sometimes, WASA provided a pump for doing this and the approximate cost to the community for removing the sludge from a line worked out at Rs 800 to Rs 1,200. To overcome this problem, the ASB asked WaterAid to fund a maintenance unit. The request was approved and a maintenance unit was set up in August 1997, consisting of a de-sludging pump, a safety kit consisting of a diver's suit and mask so that a person can enter the trunk sewer safely, and two sweepers, hired as manual labour. WASA was informed of the setting up of this unit. The kit is available to any community that has a sewerage committee. WASA sewers serving the community-built sewage systems have been de-silted at three locations so far. The ASB has not charged the community for this as it considers this work to be in the experimental stage. However, in the future, the ASB intends to charge Rs 200 per hour for their services. This will take care of fuel, transport, operation and labour costs and is less than one-third of what communities spend at present. The ASB has also received requests for the removal of water from open plots, which are being used to dispose sewage for a number of houses. The ASB has provided this service and has recovered costs. It also feels that the unit will help overcome sanitation-related maintenance issues and will be self-financing.

Transportation. Due to the increase in the size of the project area, the ASB felt the need for a transport vehicle. Consequently, WaterAid accepted ASB's request for a vehicle, which was purchased in February 1999 for Rs 400,000. The vehicle is a KIA pick-up and can be used for transporting materials. Before the vehicle was purchased, manhole shuttering and construction materials were transported by donkey-carts and the community was charged anything between Rs 20 and Rs 40 for a one-way trip. The ASB intends to charge the same price and the profits will be used for the repair and maintenance of shuttering. A removable sewage-collecting tank and jetting pump have been purchased and arrangements for mounting them on the pick-up when required have been made. This will be used for cleaning the one-chamber septic tanks and for carrying away sewage when WASA trunk sewers have to be de-sludged. At present, WASA sewer men charge Rs 300 for cleaning a one-chamber septic tank. They do not do it properly and dispose the silt they remove into the lane. Having the vehicle has also enabled the ASB to visit neighbouring rural areas to present their work. Previously, they had to hire a van for carrying their staff, activists and equipment.

VI. RESULTS OF OPP REPLICATION PROJECTS OUTSIDE KARACHI

a. The Status of the Projects

SO FAR, THE ASB is the most successful of the OPP replication projects outside Karachi. The replication projects fall into three broad categories, which are discussed below**.**

Projects that Never Developed. Two projects that were supported by WaterAid funding and OPP training never materialized. These are Okara Development Programme (ODP), Okara and the Community Development Concern (CDC), Sialkot. The ODP was introduced to the OPP by the Youth Commission for Human Rights (YCHR), Lahore, in 1994. The YCHR was supposed to supervise the project and help it evolve. However, this did not happen as the YCHR itself had certain operational and staffing problems. The OPP tried to keep in touch with the ODP but there was no response from them. Subsequently, the OPP requested WaterAid to discontinue funding the project.

The case of the CDC, Sialkot was similar. The CDC is an old NGO operating in Sialkot since 1985 and was introduced to the OPP by the South Asia Partnership, Lahore, in 1994. YCHR was supposed to train and give technical support to the CDC, and OPP engineers

visited the CDC project area in 1995 and provided ten days of technical training in surveying and mapping to CDC surveyors. However, the CDC did not send any reports regarding its work to the OPP nor did any construction work on sanitation take place. As a result, the OPP requested WaterAid to discontinue funding the CDC. The reasons why the CDC could not replicate OPP's work are that the CDC has a history of lobbying for development and in this it has been fairly successful. It was difficult for it to shift from lobbying to development. Also, its leadership was very busy in human rights issues, attending seminars and expressing concerns regarding the social and political conditions in Pakistan in general and its own project area in particular. ODP and CDC have each received Rs 162,842 from WaterAid.

Sanitation Projects that Fizzled Out. YCHR, a Lahore-based NGO established in 1989 by a group of university graduates, was introduced to the OPP by South Asia Partnership in 1991. The OPP supported the YCHR with training and guidance both in Lahore and at the OPP-RTI in Karachi. The Swiss NGO Programme also supported YCHR from February 1993 to January 1996. In addition to sanitation, the YCHR adopted the OPP's micro-credit programme in September 1992 and took on the role of trainer for other NGOs. However, YCHR's emphasis shifted from sanitation to education and health. The reason for this shift was YCHR's involvement with the Social Action Programme of the government of Pakistan, through which YCHR received a grant of Rs 6.4 million, and the sanitation and credit programme became secondary. Also, a clear division between the finances of the credit programme and other programmes was not maintained, creating some financial and administrative confusion. A large number of staff were employed by the project and staff turnover was considerable. As a result, consolidation of work became problematic. Currently, the YCHR's main work is in education, health and support to government plans in solid waste management.

The Boo Ali Seena Welfare Organization (BASWO), Muzzaffargarh, was introduced to the OPP in 1996 and WaterAid subsequently gave them support. Physical training on sanitation was also undertaken with community funds in the same year. In 1997, the organization went through a lot of internal problems. The coordinator of the organization was accused by project staff and communities of misappropriating money meant for the purchase of survey instruments. This divided the organization and many attempts to bring it together since then have failed in spite of the fact that various development proposals for community organization and fund-raising have been made, many of them with OPP support. Meanwhile, the coordinator accused by the organization of corruption has got a job with a foreign-funded NGO in Islamabad and left the town.

The Organization for Participatory Development (OPD), Gujranwala, was introduced to the OPP by YCHR in 1993. The organization successfully adopted the OPP micro-enterprise credit model. It also adopted the OPP sanitation model for which the OPP gave technical training and guidance both in Karachi and on-site in Gujranwala. The project was initially successful but work started to decline after mid-1997. The OPD carried out an internal evaluation at the time and decided to close down its sanitation programme. It felt that sanitation was not a neighbourhood affair but had to be dealt with a higher level, and felt that it could do this by motivating the local authorities and by collaborating with them. The OPD also felt that almost 50 per cent of the households in its project area could not afford the cost of the OPP model. As a result of the evaluation, OPD priorities are now education, credit and health, for which it is operating successful programmes, and it keeps in touch with the OPP. Meanwhile, the OPD coordinator, Bahar Ali, is now a senior executive in the Save the Children's Fund (UK) office in Islamabad. Funds provided by WaterAid to OPD for sanitation from 1994 to 1997 amount to Rs 821,217.

Projects which have Consolidated. ASB Faisalabad and AFB Rawalpindi are two projects that have consolidated their sanitation and water supply projects. In both cases, their success is a result of their having been able to adapt the OPP model to local conditions rather than simply adopt it. In addition, in both cases, constant contact with the OPP has been maintained and there has been no internal conflict within the organizations. Also, they have shown no impatience for quick results or for acquiring large funds. Another organization with similar qualities is the Environmental Protection Society in Swat, whose work is still in the initial stages.

Changes in OPP's Policies

As a result of its experience with replication projects, the OPP has decided to choose its partners carefully. To begin with, only a small start-up grant is provided to NGOs and CBOs for the sanitation programme. If they show signs of promise, only then is an agreement between them and WaterAid finalized. It has been observed that CBOs relate to the OPP model better than NGOs, whose staff and leadership belong outside the project area. This is now an important aspect that the OPP looks into when deciding with whom to collaborate. The OPP has also learnt that the CBO or NGO with whom it works must have a team of social and technical people with whom it can relate. Such a team is not always available and needs to be built up. The methodology for building up such a team from within the community has now been evolved and, as has been demonstrated by many OPP replication projects, a social organizer and technical person from outside the community is not a viable alternative.

VII. REASONS FOR ASB'S COMPARATIVE SUCCESS

a. Adapting but not Adopting the OPP Model

THE ASB HAS adapted the OPP model to its context. Changes have been made in the methodology for motivation, in financing external development and through taking on service provision for the maintenance of infrastructure.

The ASB, unlike the OPP, did not begin by holding meetings to motivate communities. It identified "respectable" community elders with whom it held individual dialogues and they, in turn, spoke to people who were under their influence. It was only when this process had been completed that a meeting was called. Even then, the elders decided on where and when to hold the meeting. Each development work was converted into an event. The inauguration of the water line by an elder, complete with banners and a gathering, is one example. Muhammad Naseem, a famous populist artist from Faisalabad, was invited to inaugurate a sewage line in the settlement although he lives in a formally planned middle-income settlement. Through him, the ASB has been able to lobby for support from government agencies and also to get him to design their literature and posters. Since he has numerous visitors, he is able to spread the message of the ASB. These innovations in motivation reflect the reality of Faisalabad as opposed to Karachi. In Faisalabad, the ASB is dealing with a homogenous and cohesive society, which has its roots in the soil. In Karachi, one is dealing with a migrant population where traditional values and organizations no longer exist. This also helps explain the ASB's effective interaction with area councillors.

The ASB's decision to build external infrastructure with a loan and then recover it from the beneficiaries is also a departure from the OPP model. Again, this decision was taken after a careful examination of local conditions and a firm belief that social pressure could be exerted to recover the loan. However, the decision to lay the external infrastructure first was proposed by the OPP and was followed by communities in Karachi, Sukkur and Hyderabad, in areas where a disposal point was not available.

The decision by the ASB to organize the maintenance of the sewer system and to provide a service for it is, again, a major departure from OPP work. The OPP has always asserted that it is not a service provider and this work should be organized, undertaken and financed by the communities themselves or by entrepreneurs. It will be interesting to see how the ASB maintenance model works out and what administrative and financial pressures it puts on the organization.

b. The Role of Nazir Ahmed Wattoo

Nazir Ahmed Wattoo's personality and experience has been pivotal in whatever success has been achieved by the ASB. He had the advantage of having spent about 25 years interacting with politicians, government agencies and communities before becoming involved with the OPP. As such, he knows the nature of the government institutions, their procedures, the manner in which one has to deal with them and the relationship between them and the politicians on the one hand and communities on the other. He is at home with legal processes and has access to courts and lawyers. Since he has interacted with various elements of society, he knows how to motivate them and use them for his cause. Because of his failures in lobbying for development and in politics, he was willing to try a new approach, which is why he accepted the OPP philosophy and methodology and realized that there were no shortcuts to improving the conditions in low-income settlements.

Nazir Ahmed Wattoo took his time getting to know the OPP and displayed no impatience. In the same way, in the course of his work on ASB programmes he has shown no impatience either. The most important thing that Wattoo has learnt is that development does not come through money but rather, through teaching people how to look after themselves and to develop their skills for this purpose. Because of this, he has rejected various offers of grants, which would have forced him to expand his work and staff, thus increasing his dependence on unreliable funds and people. The most important element in ASB's work is that all decisions are taken collectively and with the involvement of community members. In addition, unlike many NGOs and CBOs, the ASB's accounts are transparent and available for community members to examine, and this builds trust and confidence.

c. Low Cost, Culturally Compatible

ASB's major achievements are its low overheads and small staff. This makes management easy and also creates a greater understanding between it and the communities it works with. The three-member staff is also drawn from the community, thus strengthening the entire process. The health and credit programmes of the ASB are completely separate, both financially and organizationally, from the water and sanitation programmes. In addition, there is no conflict between the organizational culture of the ASB and the communities it works with. These points mentioned above are reflected in Tables 11 and 12.

Table 11. Approved Water and Sanitation Budget of ASB for the Financial Year April 1999 – March 2000

Items	Approved budget (Rs.)
Staff salaries:	
- Coordinator	96,000
- Assistant social organizer	66,000
- Surveyor/supervisor	72,000
Operational costs:	
- Postage and stationery	12,000
- Printing of maps	5,000
- Office maintenance	16,000
- Maintenance of shuttering	6,000
Equipment:	
- Tools and shuttering	6,000
- Audio-visual	15,000
- Training	25,000
- Technical back-up support	60,000
Total	**379,000**

SOURCE: ASB Progress Report, June 1999

Table 12. Total Funds received by ASB from WaterAid for Water and Sanitation Projects

Financial year	Description	Amount received (Rs)	Actual expenses (Rs)	Balance (Rs)
1995-96	Amount received for annual budget plus Rs 200,000 as revolving fund for water project	405,160	458,622	- 53,462
1996-97	Amount received for annual budget	301,251	291,928	+ 9,323
1997-98	Amount received for annual budget	251,470	155,708	+ 95,762
1998-99	Amount received for annual budget	434,327		
1999-2000	Amount received for annual budget	379,000		
	Total received for budget and revolving fund	1,771,208		
	Deduct Rs 200,000 for revolving fund	- 200,000		
	Sub-total "A"	**1,571,208**		
1997-98	Amount received for video and sewer maintenance unit equipment	305,002	305,002	Nil
Nov. '98	- Video-making - Trunk sewer revolving fund - Transportation (truck and equipment) For project No 5814 (video-making)	320,280 500,000 705,000 116,710		
	Total for equipment, video and revolving fund	1,943,992		
	Deduct Rs 500,000 for sewer revolving fund	- 500,000		
	Sub-total "B"	**1,443,992**		
	Total "A" plus "B"	**3,015,200**		

SOURCE: ASB reports

Against a total investment of Rs 1,571,208 for staff salaries, operational costs, office equipment and training, the community has been able to invest Rs 4,558,794. In addition, capital expenses for sewer maintenance unit equipment, the truck and related equipment, the video camera and the making of a video film amounted to Rs 1,443,992. As the work expands, the ratio of ASB expenditure to community investment is bound to fall.

VIII. PERCEPTIONS OF FAISALABAD CITY-LEVEL GOVERNMENT INSTITUTIONS REGARDING THE ASB AND THE OPP

a. Preamble

THIS SECTION CONSISTS of a note by Akbar Zaidi and is based on fieldwork and meetings with a number of senior employees from three of Faisalabad's key infrastructure delivery institutions. Officials from the FAUP, WASA and the FDA were interviewed between February 12-15, 1999 and were asked for their opinions and analysis of the work undertaken by the ASB in the area of Hasanpura in Faisalabad. Also, since the ASB had been working closely with the OPP, they were asked for their views on the work of the OPP.

b. Questions put to Officials

Questions put to the officials included the following:

- How do government officials in Faisalabad perceive the work of the ASB?
- Are they familiar with the type of work that the ASB has undertaken?
- Do they feel that this type of work can/ought to be undertaken by NGOs in Faisalabad?
- Can the work of ASB in Hasanpura be replicated in other low-income settlements in the city?
- Can this sort of work be coopted by government institutions at the city level?
- Is there any relationship between the work of the ASB and government? Is it possible to build a working relationship between ASB and government in the future?
- Are government employees familiar with the work of the OPP? Have they learnt anything from this work? Is it of any relevance to government in Faisalabad?

c. Discussions with FAUP

The officials who were interviewed at FAUP included Ataullah Khan, Additional Project Director, FAUP; Wajid Hasan, Senior Social Organizer, FAUP; Khatib Alam, consultant; and Ejaz Ahmed, social development consultant.

Although there was no intention to compare the nature and type of work undertaken by the ASB and FAUP, this seemed to be the underlying theme in discussions with FAUP staff. They emphasized the fact that it was impossible and wrong to compare the nature and scale of work undertaken by the two institutions. FAUP staff argued that the ASB was very small in scale and restricted to only one locality, while their own work in Phase 1 of the project covered four localities and four times as many households. They argued that theirs was a government project and they wanted communities to work with government rather than without it, as has been the case with the ASB. Moreover, they emphasized the fact that their work was multi-dimensional and included not only water supply, sanitation but also health and education, areas that ASB did not address. Moreover, they felt that FAUP was empowering communities because they set up Multi-Purpose Community Organizations (MCPOs), unlike the ASB which they felt was only a service provider providing water and sanitation and not an NGO involved in community welfare and empowerment as defined by FAUP. A fundamental difference they identified between the two organizations was that the ASB asked the community to provide full funding for the cost of infrastructure and labour, whereas FAUP asked for only a 50 per cent contribution from the community, with government (the FDA in this case) providing the other half. It was acknowledged that, since FAUP "is government", things are slow to materialize, unlike initiatives in the ASB which do not have this constraint. The ASB was seen as having the advantage of being 'flexible'. However, FAUP staff felt that their procedures, while slow, allowed easier auditing and more accountability than most NGOs.

No difference in the quality or the nature of work between the two organizations was found regarding sanitation infrastructure. Both bought the same types of raw materials, usually from the same source. Since there are differences in the costs of the two sanitation projects, with FAUP's being somewhat higher, FAUP felt that this was on account of some differences in design. (FAUP designs are also based on OPP designs, as are those of the ASB). An important difference noted by FAUP was that the ASB's sanitation programme was restricted to household and lane level (tertiary), whilst FAUP undertook both tertiary and secondary infrastructure and, in the case of the FAUP, community contributions were not sought, with FAUP providing full funding for trunk sewers. Since FAUP was critically dependent on funding from the UK government's Department for International Development, some of the FAUP staff felt that the project would not be able to continue if funding came to a halt and most MPCOs would fold.

It was felt that the ASB would not be able to "scale up" its work and would not be able to install a secondary sewer system as it costs too much and the community would not be able to afford these costs. When informed that the ASB was already in the process of setting up such a system, they felt that the ASB would not be able to maintain it. Besides, they felt that at a

tertiary level the ASB has worked only with communities and since a secondary system requires interaction with government, the NGO will have to change its outlook and style of work. It was felt that FAUP's approach was better than the ASB's as the internal sanitation and sewerage was done by the community with FAUP taking care of the secondary level.

All FAUP staff conceded that the ASB's work had been a success and that it had achieved its targets. One explanation for the success of the ASB was the perception that Hasanpura was a far more prosperous area than three of FAUP's areas, hence it became easier for households to contribute the full cost of sanitation services. Another important factor for the success was seen to be the personality, initiative and drive of Mr Wattoo and his team. Although some FAUP staff felt that the ASB had done well for itself, they also felt that it was a "one man show" and felt that without Mr Wattoo, the organization would fold. They felt that a basic difference between FAUP and the ASB was that the latter was an organization/institution, while the ASB was critically dependent on the efforts of Mr Wattoo alone. Moreover, questions were raised about what the ASB would do next and about how the organization would sustain itself after most or all of the houses in its project area had been provided with sanitation services.

Some FAUP staff were more critical of the way their organization had interacted with the OPP than with the latter's philosophy. They felt that the OPP, which has a representative on the FAUP Steering Committee, has never really acknowledged its work; the OPP's representative has also not turned up at any Steering Committee meeting (except possibly once). A major criticism of the OPP articulated by those interviewed was the feeling that the OPP "never acknowledges any of its weaknesses". With reference to Arif Hasan's book *Working With Government*, it was felt that the problems faced by the OPP are mentioned nowhere and neither are its failures. Moreover, there was a perception that the OPP does not believe in working with government, whereas FAUP wanted to emphasize the fact that communities should develop initiative, be empowered but also accept government as a partner. It was said, "FAUP was doing very little on OPP's lines" and also that the OPP works in alienation with government and does not need to depend on line departments for operation and maintenance due to OPP's topography. A concern was also expressed by interviewees that the OPP was very dismissive of FAUP's work. They felt that senior OPP members visited Faisalabad but never visited FAUP.

It was said that the OPP was essentially like the ASB, also a "one man show" and not an institution like FAUP, and that the OPP model could not be replicated and therefore had weaknesses. (FAUP was seen to be a replicable model.) The OPP and the ASB were seen as "the same thing" and, since the OPP was backing and "selling" the ASB, donors had become interested in the ASB. Much of the success of the ASB was seen to be due to the support of the OPP. However, it was felt that the ASB's credit programme was a major achievement and a mechanism that allowed the ASB access to a potentially large number of households. FAUP's credit programme was awaiting approval of funds for Phase 2 of the project.

FAUP staff felt that the ASB never acknowledged its staff's help and contribution. It was mentioned that at least three FAUP staff (all consultants rather than FDA/FAUP staff) had helped the ASB to prepare presentation and other material but that FAUP had not been given any credit for this.

d. Discussions With WASA

The WASA officials who were met and interviewed were Aftab Masood, Director of Revenue; Majeed, Director of Hydrogeology; and Gul Hafiz Khokar from the Community Infrastructure Unit.

It seemed that the two WASA directors did not really know very much about the activities of the ASB but, nevertheless, felt that it was doing a "good job". The Director of Revenue said that the ASB had helped WASA generate a large amount of revenue by bringing on-line numerous new consumers. He felt that whatever infrastructure work the ASB undertook,

WASA was bound to take over and would be responsible for all operation and maintenance costs, as long as basic standards and specifications were maintained.

The Director of Hydrogeology felt that the ASB did not have the same technical capability as FAUP and that whilst FAUP, as a government department, is supposed to have its development projects vetted for materials and specifications, the ASB is exempt from this. He felt that FAUP was changing a system of delivery in the government sector, while ASB's initiative was just an independent initiative. The long-term maintenance capacity of the ASB was also questioned and it was felt that there was no guaranteed reliability to ASB's interventions. There was also concern about ASB's sustainability and the Director felt that there was no certification of its specifications either. He was also concerned about the subsequent transfer of ASB's schemes to WASA, suggesting that it was not clear how these schemes would be incorporated into WASA's overall system.

The Director of Hydrogeology and the official from the Community Infrastructure Unit had heard of the OPP and of Dr Akhtar Hameed Khan but they were not aware of the nature of the work undertaken by the OPP other than it took place in a low-income area of Karachi. They accepted the fact that they had learnt a great deal from NGOs in the water and sanitation sector and that these NGOs would have to take over some of the load from WASA, which was facing a shortage of funds. However, they felt that the roles and responsibilities of NGOs and of WASA, within a new relationship, would have to be well defined and that they were working on a concept which clarified these terms of partnership between WASA and NGOs. However, they really were not aware of what and how NGOs work and may have been repeating the "working with NGOs" attitude increasingly found in government departments.

e. Discussions with FDA

A meeting took place with Randhawa, Director of Town Planning and Parvez Zahid, Public Relations Officer, FDA and WASA.

These two FDA employees knew even less about the ASB and the OPP than the WASA officials. They had heard about their work but knew none of the details and areas in which the two worked. They also felt that FAUP was not taken seriously at the senior level in the FDA and that it existed only because of donor insistence. Both these officials were far more interested in discussing FAUP and its failings rather than the issues put to them.

f. Some Observations

It is important to stress that the above comments are not wholly representative of the views and opinions of the institutions to which the officials belong. It may be that too few officials were interviewed in WASA and the FDA to provide a "representative sample". (Attempts were made to talk to the heads of both institutions but neither was available.) However, it is possible that they do represent the general perception held by many.

It thus appears that very little information or knowledge exists in relevant government departments about the work of either the ASB or the OPP other than among officials and consultants at FAUP, which is probably perceived as a direct competitor of the ASB. They may be familiar with the names of both organizations but little else seems to be known. Hence, the questions posed above regarding government perceptions suggest that there is either no government interest regarding initiatives such as the ASB or that the ASB has not tried to advertise its accomplishments and seems to have side-stepped government altogether. In either case, it seems that while the ASB has achieved much at the level of Hasanpura, it is perhaps not yet in a position to influence government. Perhaps extending the project area or working in other areas and development sectors would be a first step in government taking real interest in the work of the ASB.

IX. RELEVANCE, CONSTRAINTS AND FUTURE DIRECTIONS

a. Relevance

THE ASB MODEL consists of the following:

- community-built and financed sewers and water supply distribution lines in the lanes;
- ASB-built collector sewers and neighbourhood main water lines financed through a revolving fund and recovered from the community; and
- WASA-developed trunk sewers and disposal points and water source development and main lines.

Given the financial and technical constraints of the government agencies as described in Sections II and III of this report and the ground realities as described in Section IV, Faisalabad cannot acquire a proper water and sanitation system for its existing and rapidly expanding population for at least the next two decades. The ASB model points a way out if it can become part of official planning policy. Figures in the appendices clearly point out that lateral and collector sewers and water distribution lines account for a major part of the funds required for water supply and sanitation development. Also, the funds required for an ASB-type organization are very modest. The model also increases knowledge about local infrastructure-related conditions and creates community organizations and activists. These community organizations and activists are not created as a result of pressure from the ASB or through promises of a subsidy. They are created because people need water and sanitation and, as such, the programme is entirely demand driven. The model, through support from the OPP, also develops technical skills within the community and thus promotes self-reliance and creates a more equitable relationship between government agencies and local communities.

b. Constraints

The ASB model is closely linked to the personality and competence of Nazir Ahmed Wattoo. He is the moving spirit behind both the ASB model and the institution. For the model to grow and to become sustainable, it is necessary that new people or existing activists be trained to take over his roles and responsibilities. This training should be done consciously and OPP support should be sought for it. The ASB has to become an institution if its work is to survive and grow.

The demand that the ASB now has to deal with requires an increasing number of technical people. Aziz Ahmed can train these people at the local level with support from the OPP. When work begins in areas other than Dhuddiwala, Hasanpura and Rasool Nagar, persons who can undergo this training should be identified and supported. The OPP has a history of doing this and it can pass on its knowledge and know-how to the ASB. However, for relating local planning to city-level plans, the services of a consultant will be required when the work expands beyond the neighbourhood level. Dialogue with WASA will also be necessary and, for this, documentation and an understanding of existing infrastructure and its condition are essential.

c. Recommendations for Future Directions

Documenting Existing Infrastructure

To meet communities' demand for sewers and water supply, the ASB will need to identify disposal points and water sources. This can only be done by identifying the location of WASA trunk sewers and water mains. Also, in order to integrate existing neighbourhood infrastructure into its planning, settlement surveys will have to be done. Visits to various settlements indicate that if the existing infrastructure and its problems can be mapped, then the whole approach to infrastructure provision in Faisalabad will undergo a change. A similar exercise in Karachi carried out by the OPP has resulted in new policy directions. It is recommended that young men of matriculate and/or intermediate level education should be recruited by the ASB and trained at the OPP for this purpose. This documentation may take two

to three years to prepare and should be analyzed and the analysis shared with WASA and FDA staff.

Further Study on Informal Development

For the foreseeable future, Faisalabad is going to continue to develop housing through the informal development of agricultural land, simply because formal development as structured at present is not affordable to the lower-income groups and also because the FDA has no funds or land for it. The FDA can direct this informal development through the appropriate development of trunk infrastructure. For this, a further study on informal development patterns and locations is required. The investigations on this subject that are part of this report are simply a modest beginning. Also, work needs to be done on developing small decentralized and affordable sewage treatment facilities for the informal schemes as it is going to be difficult and very expensive to integrate them into a larger sewage master plan for the city. The informal schemes also need to be integrated into a larger city plan and for this their documentation is essential.

Links with Academic Institutions / FAUP

The documentation of existing infrastructure, continuous research on informal settlements, relating WASA plans to ground and community realities, and the integration of informal development into a larger city plan can all be aided by linking the ASB work to the research work of an academic institution with a relevant discipline. Possible institutions that could work with the ASB are the Departments of Architecture and Planning at the University of Engineering and Technology, and the National College of Arts, both in Lahore. A meeting between the ASB and the National College of Arts on the subject was held in September 1999 and the possibility of collaboration has been explored.

The possibility that FAUP might develop missing trunk and secondary infrastructure, and that the ASB might help to develop neighbourhood infrastructure has already been explored. This idea should pursued and further dialogue carried out.

Developing the ASB into a Demonstration and Training Area

The ASB project area has already become a demonstration and training area for CBOs and NGOs from other parts of the Punjab. However, it is necessary to see how this can be supported and made more effective. Both the OPP and the ASB have suggestions on the subject but it is necessary to involve other ASB and OPP partners in setting out directions. It is recommended that a workshop involving the ASB, the OPP, the AFB, Omeed Multan, EPS Swat, CRC Uch and the Lodhran Pilot Project should be held for this purpose.

APPENDICES

Appendix 1

Persons Met and Places Visited by Salim Alimuddin and Arif Hasan

Date	Time	Persons	Description of person	Place
12.03.99	0930-1030	Nazir Ahmed Wattoo	Coordinator ASB	ASB office
	1400-1900	Nazir Ahmed Wattoo	Coordinator ASB	ASB office
13.03.99	0940-1010	Community meeting	Community members	Railway Colony No 1
	1020-1040	Inayatullah	Industrialist	Maqbool Road industrial area
	1045-1100	Ejaz Ahmed	Ch. iron store	Dodo Bara market
	1105-1115	Community meeting	Community	Mominabad
	1115-1140	Community meeting	Community	Sir Sayed Town
	1145-1215	Javed and community members	Resident	Raja's Land, Shaikhanwala
	1220-1240	Liaqath Ali	Resident	Samanabad garbage dump along Railway Colony
	1245-1320	Mohd Manzoor	Scrap dealer	Scrap market
	1400-1510	Reza Ali	Community member	Mohammadi Colony
	1545-1700	Nazir Wattoo	Coordinator ASB	ASB office
	1700-1750	Dr Naseer	Resident	Hasan Pura
	1810-1845	Noor Mohd, Ch Mushtaq	Broker, owner of informal housing scheme	Mehran Colony
	1900-2000	Rana Bashir Ahmed and community members	Residents	Hasan Pura
14.03.99	1045-1120	Mohd.Hanif and community members	Residents	Farid Ganj
	1140-1200	Talib Hussain	Residents	Bahadur Singh Walla
	1220-1325	Ch Gulam Rasool Cheema	Developer	At his office
	1335-1355	Inayat Ali Shah and community members	House owner and community members	Islampura
	1355-1430	Meeting community members	Community members	Faisal Town
	1430-1515	Shabir	Resident	Ilyas Town
	2030-2200	Zaman Khan	Journalist	
15.03.99	0940-1020	Community meeting		Zulfiqar Colony
	1045-1130	Liaqath Ali Randhwa	Director of Town Planning	FDA
	1240-1300	Arif Hassan and Nazir Wattoo	ASB	ASB office (data collection)

	1300-1425	Nazir Ahmed	Interview (on problems of local government)	ASB office
	1110-1145	Danial and Nazir Wattoo	Earth fill contractor	ASB office
	1325-1345	Mujeeb Shamsi	Accounts officer	FMC
	1345-1355	Chief accounts officer		FMC
	1400-1435	Munir Badar	Additional director	FDA
	1445-1500	Aftab Masood	Director of revenue	WASA
	1525-1540	Ejaz Chohan		FAUP
	1715-1730	Arshad	Brick seller	At his shop
	1740-1750	Noorani iron store		T-girder shop
	1755-1810	Mohd Yasin		T-girder shop
	1815-1830	Ghulam Yasin	Earth fill contractor	
	1850-1900	Toor Khan	Earth fill contractor	
11.04.99	1210-1225	Niamat Ali	Owner	Informal sub-division
	1245-1255	Mohd,Rafiq	Owner	Informal sub-division
	1310-1405	Kabir Hussain	owner	Informal sub-division
	1420-1430	Abdul Majeed	Owner	Informal sub-division
	1430-1445	Ghulam Sarwar Cheema	Owner	Informal sub-division
12.04.99	1100-1110	Abdul Ghaffar Passha	Deputy director engineering	FDA
	1115-1200	Mujeed Shami	Accounts officer	FMC
	1215-1230	Wasim Mehmood Khan	Additional DG	FDA
	1240	Rana Ghaffar	Director finance	FDA
	1300	Ahmed Khan		
	1350	Mohd. Rafiq Gul	Director estate	FDA
	1445	Munawar Hussain	Head clerk *katchi abadi* cell	FDA

Persons Met and Places Visited by Akbar Zaidi In Faisalabad

Date	**Time**	**Persons**	**Description of Person**	**Place**
Between 12.3.99 and 15.3.99		Wajid Hasan	Senior social organizer FAUP, FDA staff on deputation	FAUP
		Ejaz Ahmed	Consultant (GHKI)	FAUP office
		Khalid Alam	Consultant (GHKI)	FAUP office
		Attaullah Khan	Project director FAUP (FDA staff on deputation)	FAUP office
		Aftab Masood	Director of hydrogeology (WASA)	
		Mr Majeed	(WASA)	
		Gul Hafiz Khokar	(WASA)	Community information unit
		Mr Randhawa	Director of town planning	FDA
		Parvez Zahid	Public relations officer FDA and WASA	FDA WASA

Appendix 2

1994 MASTER PLAN PROPOSAL

Table 1. City Roads

Sr. no.	Scheme	Cost (Rs in million)	Self-financing through NGOs	Government financing (Rs in million)	
				Short-term execution	Long-term execution
1.	Inter-city roads	1,475.20	-	400.00	1,075.20
2.	Intra-city roads	382.45	-	78.20	304.25
3.	Construction of overpasses	371.80	-	123.94	247.86
4.	Construction of underpasses	19.12	-	19.12	-
5.	Faisalabad by-passes	291.79	-	291.79	-
6.	Dual carriageway Faisalabad-Sheikhupura	870.24	-	870.00	-
7.	Improvement of traffic junctions and overhead bridge	95.20	-	95.20	-
	Sub-total	**3,505.80**	**-**	**1,878.49**	**1,627.31**

SOURCE: FDA reports

Table 2. Environment Improvement Plan

Sr. no.	Scheme	Cost (Rs in million)	Self-financing through NGOs	Government financing (Rs in million)	
				Short-term execution	Long-term execution
1.	Shifting and development of hide and skin market/slaughter house	10.00	10.00	-	-
2.	Shifting of: - fruit and vegetable market - grain market	 72.60 80.00	 72.60 80.00	 - -	 - -
3.	Shifting of general bus stand	96.00	96.00	-	-
4.	Development of parks and open spaces	44.50	-	44.50	-
5.	Establishment of an industrial estate	Not worked out	Self-funding	-	-
6.	Solid waste management	-do-	-do-	-	-
7.	Establishment of *gawala* colonies	-do-	-do-	-	-
8.	Commercial plazas	-do-	-do-	-	-
9.	Hatted factories	-	132.00	44.00	88.00
10.	Warehouses	Not worked out	Self-funding	-	-
11.	Public latrines	-do-	-do-	-	-
12.	Public utility services	-do-	-do-	-	-
13.	Bulk oil depot	-do-	-do-	-	-
14.	Army welfare food industry	-do-	-do-	-	-
	Sub-total	**435.10**	**258.60**	**88.50**	**88.00**

SOURCE: FDA reports

Table 3. Social/Institutional Buildings

Sr. no.	Scheme	Cost (Rs in million)	Self-financing through NGOs	Government financing (Rs in million)	
				Short-term execution	Long-term execution
1.	High court bench	12.78	-	12.78	-
2.	University at Faisalabad	665.87	-	-	665.87
3.	Radio/TV station	58.84	-	58.84	-
4.	Parking plaza and office complex	314.04	314.04	-	-
5.	Export display centre	81.28	81.28	-	-
6.	Sports complexes	34.28	34.28	-	-
7.	Civic centre	94.05	94.05	-	-
8.	Children's complex	9.00	9.00	-	-
9.	Science city	-	-	72.58	-
10.	Urban transport system	-	-	-	-
	Sub-total	**1,270.66**	**533.17**	**71.62**	**665.87**

SOURCE: FDA reports

Appendix 3

DETAILS OF WATER AND SEWERAGE MASTER PLAN

Table 1. Phase 1: Targets

Water supply:	
• Construction of tube-wells	25
• Collector main	11.85 kms
• Transmission main	17.2 kms
• Primary distribution main	41.15 kms
• Construction of in-line booster station	15,000 m^3 per hour
• Construction of terminal reservoir	10.5 mgd
• Construction of elevated reservoir	0.5 mgd
• Secondary distribution mains	70.5 kms
Sewerage:	
• Trunk sewers	14 kms
• Branch sewers	53.4 kms
• Sewerage pump stations	5
• Sewerage treatment plants	2
Drainage:	
• Drainage channels	20 kms

SOURCE: WASA reports

Table 2. Remaining Water Supply Works: Phase I

Sr. no.	Description	Funds required to complete the civil works (Rs in lacs)
1.	Installation of electrical / mechanical equipment at 18 and in-line booster pump station (6W)	26.50
2.	Construction of 25 tube wells and allied works	30.00
3.	Construction of in-line booster pump station and chlorination building	21.90
4.	Construction of collector/transmission main	135.38
5.	Construction of arterial main, 14W	9.00
6.	Provision and laying of 12, 5 AC pipe 15W	19.69
7.	Making connection with existing system 15WC and 15 WB	78.78
8.	Construction of 1R and attached pumping station, 16W	27.37
9.	Construction of storage room for chlorine cylinders	2.30
10.	Construction of telecommunication building	15.10
11.	Construction of storage shed at 1R	4.30
12.	Construction of main valve chambers for collector / transmission main	50.00
13.	Construction of mechanical workshop at 1R	25.00
14.	Construction of quarters for mechanical/electrical staff (15)	35.00
15.	Construction of resident engineer's residences at 1R and in-line booster pump station	25.00
16.	Repair of special valves	50.00
17.	Monitoring of wells	6.00
	Total	**56.13 million**

SOURCE: WASA reports

Table 3. Remaining Sewerage Works: Phase I

Sr. No.	Description	Expenditure until 30.11.1993 (Rs in lacs)	Funds required to complete the balance of work (Rs in lacs)
1.	Construction of western domestic trunk sewer (35B)	377.77	140.00
2.	Construction of sewage pump station No 3 and No 30 (6.5)	116.60	59.00
3.	Construction of sewage pump station No 28 and effluent pump station contract 6.5	62.71	58.00
4.	Construction of sewage pump station No 34 and No 35 (65C)	88.35	50.00
5.	P/L trunk sewer from PS 35 to PS 36 (35D)	…	121.00
6.	Construction of trunk sewer Samanabad (35C)	31.04	80.00
7.	Construction of sewage pump station No 36	…	300.00
8.	Construction of western industrial trunk sewer (35A)	222.87	4.00
9.	WAPDA charges for all pumping stations	6.17	53.83
10.	Construction of western domestic treatment pounds (55A-1)	112.17	400.00
11.	Construction of western domestic treatment pounds (55A-2)	196.47	359.00
12.	Construction of western domestic treatment pounds (55B)	…	278.60
13.	Cost of land for domestic treatment pounds 9,455 acres payable to Revenue Department, government of Punjab	241.00	931.00
14.	Cost of land for industrial treatment pounds (55B)	202.23	…
	Total	**1,657.92**	**2,834.43**
			283.44 million

SOURCE: WASA reports

Table 4. Summary of Water Supply Development Needs: Short Term

Sr. no.	Description	Cost (Rs in million)
1.	Water TP at Jhal Khanuana water works	263
2.	Replacement/rehabilitation of existing tube wells, R.B. Canal	26
3.	Pipeline to industrial area	19
4.	Improvement/extension of distribution	155
	Total	**463**

SOURCE: WASA reports

Table 5. Summary of Water Supply Development Needs: Long Term

- New tube wells along R.B. Canal
- Extension of existing Chenab well-field
- Development of new well-field near Chenab River and second transmission
- Development of well-field at Chenab River and third transmission

SOURCE: WASA reports

Table 6. New Areas to be served Water Supply

Sr. No.	Name of area	Length to be laid (funning feet)
1.	Jamil Town	10,000
2.	Ijaz Town	10,000
3.	Rehmat Town	10,000
4.	Iqbal Town	10,000
5.	Ahmadabad	10,000
6.	Nasirabad, Manzoor Park, Mughalpura, Nestrabad, Leamandabad	49,000
7.	Nishatabad	22,000
8.	Usmanabad	10,000
9.	Ghausiabad	2,000
10.	Ayub Colony (*katchi abadi*)	5,000
11.	Dhuddiwala and adjoining areas	20,000
12.	Chak No 224	2,500
13.	Hajiabad, Ashrafabad, Saddiqueabad, Garden Mohalla, Jamilabad, Mattopura	30,000
14.	Islamia Park	5,000
15.	G.M. Abad	10,000
16.	Nigehbanpura	2,500
17.	Nisar Colony	2,000
18.	Shadabad, Millat Road, areas around Noorpur	10,000
	Total	**200,000**

SOURCE: WASA reports

Table 7. Immediate Improvement Needs: Water Supply

Sr. No.	Name of work	Cost (Rs in million)
1.	Replacement of undersized and defective distribution lines (100,000 running feet)	36.00
2.	Extension in distribution system (200,000 running feet)	18.00
3.	Rehabilitation of existing tube wells along Rakh Branch Canan (22)	12.00
4.	Laying of 800 mm pipe water supply for industrial area Nishatabad (5 km)	23.00
	Total	**89.00**

SOURCE: WASA reports

Table 8. Short-term Requirement: Proposed Trunk Sewers for Western Zone

Sr. no.	Area	Length (kms)
1.	M/Wala Railway crossing-Sargodha Road-View Colony-G.M. Abad-WDTP	14.00
2.	Millat Town to Western industrial treatment plant	2.00
3.	Central sewer along Circular Road	6.25

SOURCE: WASA reports

Table 9. Short-term Requirement: Proposed Trunk Sewers for Eastern Zone

Sr. No.	Area	Length (Kms)
1.	Mushtaq Dyeing-Abdullahpur Tezab textile mill-pump station along Satiana Road	20.00
2.	Pump station along Satiana Road - proposed pump station at Dhuddi Minor	0.60
3.	Peoples Colony to D-Type Colony-Yasinabad-Muhammadi Colony-proposed pump station	5.25
4.	Samanabad to proposed pump station	2.00
5.	Sullage carrier from pump station at Dhuddi Minor-proposed treatment plant	9.91
	Total	**37.76**

SOURCE: WASA reports

Table 10. Cost Estimates (Short-term Development Works)

Sr. no.	Description	Cost (Rs in million)
1.	Trunk Sewers	391.22
2.	Lateral sewers/sullage carriers	281.60
3.	Sewage pumping stations	204.55
	Total	**877.37**

SOURCE: WASA reports

Table 11. Areas without Sewerage System

Sr. no.	Description	Area (ha)
1.	Naseerabad, Ahmedabad, Manzoorpura, Nishatabad, Luamanabad, Mohallah, Baghbanpura, Sharifpura, Mughalpura	227
2.	Siddupura, Namil Town, Rehmat Town, Ijaz Town, Iqbal Town, Faizabad, Muftipura	128
3.	Munirabad, Kamalpura, Madina Town, Ilyas Park, Rehmanabad	100
4.	Nasirabad, Liaquatabad 1 & 2, Liaquat Town, Saifabad, Rashidabad, Sheikh Colony, Farid Town, Ayub Colony, Qasimabad	182
5.	Hasanpura, Madinaabad, Badar Colony, Kehkushan Colony, Dhuddiwala	146
6.	Farooqabad, Mohalla Korla, Sohailabad, Murad Colony, Basti Abdullahpur	126
7.	Chak No 224 (Fateh Din Wali), Karim Park, Haideri Mohallah, Khan Model Colony, Gulzarpura, Chak No 224 (Wazir Khan), Basti Allah Hule area along disposal water drain Jaranwala Road to Qasim Shah Chowk	252
	Total	**1,161**

SOURCE: WASA reports

Note on Long-term Requirements for Sewerage:

During Phase 3 (2001–2010), the plan is to expand the area served by sewerage through the construction of about 53.2 kilometres of trunk sewers and 110 kilometres of laterals. This proposal further includes an open 9.9 kilometre sewage drain and work will be required on four pumping stations (1.3–5.5 m^3 capacity).

During Phase 4 (2011–2018), it is proposed that the development programme should comprise 58.4 kilometres of trunk sewers, 220 kilometres of laterals and two open sewage drains totalling 15.9 kilometres. Work will be required on 4 pumping stations (0.6–9.0 m^3 capacity).

SOURCE: WASA reports

Table 12. Faisalabad Sewage and Drainage Project: Components of Part 1

- Construction of sullage carrier from Satiana Road pumping station to Madhuana drain (27,000 running feet).
- Construction of trunk sewer from Abdullahpur pumping station to Satiana Road via Jaranwala Road, Passport Office Road and Satiana Road (36” to 72” diameter).
- Construction of sewage pumping station, 75 cusec capacity at Satiana Road.

SOURCE: WASA reports

Table 13. Faisalabad Sewage and Drainage Project: Components of Part 2

- Construction of trunk sewer from Gumit Rail bazaar to main pumping station Ghulam Muhammad Abad (G.M. Abad) (36” to 54” diameter).
- Construction of trunk sewer along Sulan Road, Tezab Mills Road, Warispura, D-Type area and other lateral sewers in different areas of the city.
- Rehabilitation/upgrading of pumping station, Mansoorabad, Tariqabad and D-Type Colony.

The estimated cost is Rs 65.01 million.

SOURCE: WASA reports

Appendix 4

FDA, WASA AND FMC BUDGET

Table 1. Faisalabad Development Authority: Development Budget (Rs millions)

1996-97	Proposed	Actual
• Tameer-e-Watan (Punjab government)	74.196	15.653
• Deposit works	68.445	13.776
• Own sources	91.380	13.067
• Non-development	43.796	39.213
1997-98		
• Tameer-e-Watan (Punjab government)	51.906	22.962
• Deposit works	17.444	6.022
• Own sources	148.332	16.592
• Non-development	53.877	43.790
1998-99		
• Tameer-e-Watan (Punjab government)	120.845	15.199
• Deposit works	12.118	1.055
• Own sources	133.222	2.460
• Non-development	50.719	30.193

SOURCE: FDA budget reports

Table 2.1. Statement showing the WASA Annual Non-development Budget and Actual Income and Expenditure for the Year 1996-97 and 1997-98

(Rs in Million)

Particulars	1996 – 97		1997 -98	
	Budget	Revised	Budget	Revised
A. Opening balance	**71.424**	**71.424**	**50.740**	**50.740**
B. Receipts				
• Water supply sale	57.500	52.920	70.000	50.670
• Share of property tax	30.000	30.000	35.000	-
• Sewerage	37,500	29.250	45.000	36.780
• Hire charges of machinery	0.100	0.030	0.100	0.040
• Sale of waste water	0.500	0.420	0.500	0.290
• Establishment charges from development schemes	-	2.600	15.000	14.970
• Interest on investment	5.000	5.360	1.500	3.560
• Others	10.226	3.826	4.500	2.810
Total:	**140.826**	**124.406**	**171.600**	**109.120**
C. Expenditure				
• Salary and wages	73.565	67.805	77.090	71.980
• Employees other benefits	6.480	7.673	10.000	10.570
• Repair and maintenance of water supply and sewerage	7.520	10.430	11.500	15.330
• Material and store	1.450	1.460	1.600	2.050
• Travelling vehicle running expenses	2.695	2.642	2.830	2.940
• Establishment charges	1.610	1.430	1.540	1.840
• Existing system electrical expenditure	100.000	30.060	100.00	29.192
• Office electricity, gas and oil for pumping station	4.290	4.960	4.780	6.810
• Rent, rate and taxes	0.500	0.120	0.500	-
• Anti-water logging	1.450	1.170	-	-
• Consumer survey	0.070	-	-	-
• Legal charges and audit fee	0.500	0.800	0.500	0.294
• Repair and maintenance of project	4.600	4.040	5.000	4.322
• Funds transfer to development budget	12.500	12.500	12.500	7.630
• Other charges	3.820	-	3.370	1.252
Total:	**221.050**	**145.090**	**231.210**	**154.210**
D. Surplus/Deficit (B-C)	**80.224**	**20.684**	**59.610**	**45.090**

Opening balance for the year 1996-97	71.424
Less shortfall during the year 1996-97	20.684

Opening balance for the year 1997-98	50.740
Less shortfall during the year 1997-98	45.090

Opening balance for the year 1998-99	5.650

SOURCE: FDA budgets

Table 2.2. Statement showing the WASA's Operating Income and Expenditure for the Year 1998-99

(Rs in million)

Particulars	Provisional budget 1998-99	Actual up to 28.02.99
A. Opening balance	**5.650**	**5.650**
B. Operating receipts		
• Water supply	85.000	36.173
• Sewerage	60.000	24.369
• Share of property tax	65.000	4.014
• Sale of sullage	2.000	0.030
• Hire charges for machinery	0.100	0.077
• Interest of investment	4.000	2.058
• Share from development scheme	15.000	4.075
• Others	4.600	1.116
Total:	**235.700**	**71.912**
C. A plus B	**241.350**	**77.562**
D. Operating expenditure		
• Salaries and wages	79.900	49.600
• Employees / other benefits	12.080	6.892
• Repair and maintenance of W/S	3.300	1.742
• R/M sewerage and drainage	10.200	6.679
• Material store	1.300	0.847
• Travelling vehicle running expenditure	2.400	2.099
• Establishment expenditures	1.350	0.900
• Existing system elect; expenditure	90.000	9.510
• Office elect; gas and oil for pumping stations	4.580	3.909
• Rent, rate and taxes	0.500	0.025
• Legal charges and audit fee	0.500	0.095
• Repair and maintenance of project	4.800	2.168
• Funds transfer to development budget	26.400	0.640
• Others	3.220	0.308
Total:	**240.530**	**85.214**
Surplus/Deficits (C minus D)	**0.820**	**(-) 7.652**

SOURCE: WASA budget reports

Appendix 5

BUSINESS AND COMMERCIAL CENTRES BUILT BY THE GOVERNMENT SINCE 1947

Faisal Market: This project, covering an area of 15 *kanals*, is situated on Dijkot Road. Project costs were estimated at Rs 50 *lacs* for the construction of 116 shops.

Gulistan Shopping Centre 1, 2: This shopping centre is planned for a 110-acre area consisting of 171 shops.

Chenab Market: This market is situated in Madina Town on an area of six acres. Besides shops, the market consists of a mosque and auditorium etc. Construction costs were estimated at Rs 3 crore.

Dosobara Market: This market has wide roads and a park. The height of the shops is 16 foot eight inches. Three-storey residential apartments have been built above the shops. The estimated cost for 144 shops and 126 flats was Rs 2 crore.

Faizabad Market: In this scheme, shops are provided with a 14-foot wide verandah to the front. On top of the shops there are flats for middle-income groups.

Iran Market: Illegal shops were set up in this market, which is located adjacent to D-Type Colony on an area of 13 acres. The market has 484 shops with wide roads, a mosque, a bank and a post office.

SOURCE: FDA publications

Appendix 6

DETAILS OF GOVERNMENT HOUSING SCHEMES

Housing Supply

Between 1947 and 1991, the FDA has developed only 38,785 plots and houses. This includes 4,700 nuclear houses and 22 flats developed for residents of bulldozed *katchi abadis*.

Housing Schemes/Resettlement Schemes

Gulistan Colony No 2: This scheme was developed on 110 acres on Millat Road. Besides 100 residential plots, the scheme consisted of a school, a dispensary, a park etc. at a cost of Rs 234 lacs.

Dosobara Part I and II: This scheme was spread over an area of 21 acres consisting of 494 plots for lower- and middle-income groups. A *katchi abadi* situated adjacent to this new scheme was also included in the scheme, and 3- and 7-*marla* plots were provided to the *katchi abadi* dwellers.

Dosobara Part III: This was a resettlement scheme for a *katchi abadi* factory area. The scheme was spread over an area of 139 acres. All modern civic services were provided at a cost of Rs 3 crore 30 lacs with FDA's own resources. The scheme also included a market.

Millat Town: This scheme was initiated on Millat Road, some nine kilometres from the city and covered 386 acres. Development works cost an estimated 10 crore 76 lacs. The scheme consisted of 5,700 plots.

Weaver Colony: This scheme was planned adjacent to Ghulam Muhammadabad, covering 27 acres and consisting of 621 plots. The estimated cost of development works was Rs 87 lacs. The scheme was developed to shift the loom industries in Ghulam Muhammadabad.

Ahmed Nagar: This scheme is situated at 225 R.B., covers an area of 92 acres and consists of mostly 3-*marla* plots. It was planned to rehabilitate residents from *katchi abadis* in the city, which had been affected by development works being carried out there. The estimated cost for the development of this scheme was Rs 2 crore.

Allama Iqbal Colony: This scheme was developed in 1976 to resettle 10,500 families from Punjab's largest *katchi abadi* factory area. By 1983, the FDA had spent Rs 9 crore 30 lacs on the development of this scheme (more information in Draft 1).

Khararyanwala Township: This township was planned 20 kilometres from Faisalabad, over an area of 3,700 acres. The scheme includes a business and an industrial area within it.

Millat Town Extension: In addition to the existing Millat Town scheme of 366 acres, Millat Town Extension was planned adjacent to it with an area of 387 acres.

Islamnagar Flats: The FDA initiated this project in 1980 and government land adjacent to Islamnagar was selected for the purpose. This three-storey building consisting of 96 flats had an estimated cost of Rs 50 lac.

SOURCE: FDA publications

Appendix 7

LIST OF KATCHI ABADIS

(Declared According to 1985 Criteria)

Sr. no.	Name of *Katchi abadi*	No of houses/ survey units	Popula-tion	Area		
				Kanal	Marla	Gunta
	I. Improved *katchi abadis*					
1.	Mandar Seeta Ram Chak No 212/RB	50	250	1	12	0
2.	Basti Essian No 2	250	1,155	54	3	0
3.	Gujar Basti	187	1,122	35	2	0
4.	Gurunanikpura	52	312	8	0	0
5.	Partab Nagar	638	3,828	90	6	3
6.	Gaushalla	300	1,800	12	8	0
7.	Murrian	341	2,046	32	8	0
8.	Rafiqabad near Premier Mills	144	920	16	14	0
9.	Near Premier Mills	474	2,370	21	9	0
10.	Risale Wala No 12	200	1,200	24	0	0
11.	Basti Essian, Jhang Road	85	510			
12.	Punj Pir, Jhang Road	40	246			
13.	Nasirabad, Jhang Road	90	540			
14.	Chak No 279/RB, Sq No 17 and 18	888	5,228	291	12	0
15.	Sher Singwala Kalan	121	726	58	0	0
16.	Sher Singwala Khurd	70	420	13	3	0
17.	Judgwala	234	1,404	85	9	0
18.	Kookianwala	43	258	5	10	0
19.	Chak No 279/RB Khurd	73	438			
20.	Near ABC cinema	41	280	4	0	0
21.	Nadir Khan Wali 279/RB	285	1,710			
22.	Rehmanpura near ABC cinema	51	255			
23.	Madanpura near slaughter house					
24.	Madanpura (St No 7)	152	912	15	6	0
25.	Yang Wala near Agricultural University	168	904	34	2	0
26.	Nasirabad/Akbarabad – I	266	1,596	36	8	0
27.	Gole Bhatta/fish farm	414	2,484	41	0	0
28.	Faizabad near graveyard	79	450	10	0	0
29.	Ganda Nala	322	1,610	38	16	0
30.	Chur Majra with Konnawali Gali – I	882	4,530	60	0	0
31.	Chur Majra with Konnawali Gali – II	47	262	6	0	0
32.	Kashir Road near Punnu Chowk	55	330	25	0	0
33.	New Islamnagar	106	330	24	0	
34.	Baselines Islamnagar	211	1,266	32	12	
35.	Bole-di-Jhuggi	86	516	21	11	
36.	Taj Colony	114	590	16	5	
37.	Mai-di-Jhuggi	74	330	0	9	
38.	Noorpur – II	112	712	44	3	
39.	Gokhuwal Millat Road	296	1,776	87	8	0
40.	Near Crescent Sugar Mills	272	1,500	83	9	6
41.	Faroqabad near Mansoorabad	111	666	14	17	5
42.	Waheed Park	53	318	6	3	5
43.	Railway Pul Tariq Abad I and II	408	2,040	4	10	0
44.	Opposite Muslim High School Tariqabad	41	246	5	8	0
45.	Sarwala Distributory	300	1,500	47	6	0

46.	Hussainabad	173	1,030			
47.	Shaheenabad I & II near railway quarters	110	660	24	3	0
48.	Saad Bela	162	810	20	18	0
49.	Kohinoor Flats	53	318	24	5	0
50.	Bahadar Singhwala	93	570	8	10	0
51.	Bishan Singhwala	40	240			
52.	Shamash Nagar	63	378	17	12	0
53.	Eisa Nagri	64	384	12	6	0
54.	Maskeenabad near old railway line	126	736	26	10	0
55.	Rasool Nagar	258	1,250	3	9	0
56.	Usmanabad	80	480	19	0	8
57.	Suhailabad	42	252	8	18	0
58.	Ganda Singhwala near Batala Colony	93	570	21	16	0
59.	New Kausarabad near Peoples Colony	77	660	7	18	0
60.	Near Siddique Textile Mills	40	200		9	0
61.	Railway Crossing – 8	252	1,632	36	0	0
62.	Gharibad Godown No II	66	396	24	0	0
63.	Railway Crossing-II Dijkot Road	55	330	3		
64.	Old central jail	634				
65.	Near Railway			4	15	0
66.	Chowk Choudhry Flour Mills	64	394	52	17	0
67.	Kausar Abad near Jhang Road	164	984	4	0	0
68.	Mananwala Sq No 80	180	1,480		0	
69.	Talabwali	190	1,140			
	II. *Katchi abadis* with fewer than 40 Units					
70.	Railway rest house	5				
71.	Railway quarters near mosque	22				
72.	Ginash Flour Mills Road 212/RB	26				
73.	Ayub Colony	12				
74.	Opposite civil hospital	17				
75.	Railway Colony near Janbaz Force	28				
76.	Millat Road attached Sargodha Road	12				
77.	Jamia Chishtia	1				
78.	Near Bahari Colony	5				
79.	Near Weaver Colony	15				
80.	Near racecourse Islamnagar	33				
81.	Awami Colony	36				
82.	Farid Court	26				
83.	Mansoorabad near graveyard	21				
84.	Railway Gate No 9 Lal Mills Chowk	30				
85.	Ilyas Park					
86.	Near Municipal Degree College	26				
87.	Harcharnpura	38				
	III. *Katchi abadis* (extended municipal limits unimproved)					
88.	Changar Mohallah/Himmat Pura (Jaranwala Road)	-	113	0		
89.	Dhup Sari (Sargodha Road)	95	20	11	0	
90.	Chak No 7/JB (Sargodha Road)	1,993	598	3	0	
91.	Marzi Pura (Narwala Road)	430	89	4	0	
92.	Rasool Nagar (Jaranwala Road)	258	64	11	0	

SOURCE: FDA Directorate of *Katchi Abadis*

Appendix 8

FAISALABAD: LOW-INCOME, UNSERVICED AREAS ON PRIVATE LAND (Based on FDA Sample Survey 1989)

Sr. no.	Name of area	Housing units (number)	Area (acres)
1.	Bhatta Colony Sargodha Road	100	10
2.	Chak No 7 Punjward	2,000	75
3.	Hussain Abad Millat Road	300	25
4.	Haider Abad near Johar Colony	300	15
5.	Luqman Abad Sanat Sing Road	800	25
6.	Dastgir Colony near Muhammad Khan Town	250	30
7.	Jamil Town near Faiz Abad	300	25
8.	Medina Abad near Chotee 79	700	50
9.	Shadab Colony Jhang Road	3,000	175
10.	Jamil Park near Kookianwala	700	50
11.	Nusrat Colony near Latif Park	400	12
12.	Fareed Town Jhang Road	500	30
13.	Saifabad near Octri Post Jhang Road	1,200	50
14.	Altaf Ganj Jhang Road	500	30
15.	Muzaffar Colony Nawabanwala	500	50
16.	Masoodabad Nawabanwala	600	40
17.	Minan Town Nawabanwala	400	50
18.	Sohailabad near Iron Market	170	25
19.	Sindhu Town (old chak) Summandry Road	200	30
20.	Gousia Abad Chak No 224/R.B	400	75
21.	Wazir Khan Wali (Mohallah Nisar Abad)	650	120
22.	Barket Pura	400	50
23.	Dawood Nagar near Church	200	25
24.	Ahmad Abad near Kareem Park	250	50
25.	Noor Pur (Dhuddi Wala)	350	50
26.	Hussan Pura Jaranwala Road	2,500	100
27.	Small Dhuddiwala	670	25
28.	Himmat Pura/Changar Mohallah	700	37

Appendix 9

SHADAB TOWN: PROMOTIONAL LEAFLET (English Translation of Urdu original))

Following the Atomic Blasts in India and Pakistan

A Blast in Faisalabad

NEW SHADAB TOWN

Registered piece of land, electricity, paved roads and sewage system available!

Khaksar ("Dust of one's feet") Developers offer a golden opportunity to the less fortunate in society to own land and build houses. In these times of inflation, when it is difficult to provide even for your children's bare necessities, Khaksar Developers have launched an affordable housing scheme adjacent to Jaranwala Road.

The introduction of this scheme is in keeping with Khaksar Developers' decade-old tradition of making the impossible possible. In these times of backbreaking expenses, they have the foresight and sensitivity to keep in mind poor people's income and affordability in spite of the fact that prices and monthly instalments for residential plots are rising every day. Living is made easy for the poor and rich alike by the Khaksar Developers scheme.

Location

The scheme is situated near an urban public transport stand, a taxi stand, the Shaheed Rafiq trust hospital, a government hospital, a petrol pump, the Sabzi Mandi (vegetable market), a government high school, a national bank, a police station and a factory area. Shadab Town stands amidst all these facilities which cater to the basic needs of life.

Booking is in progress on a first-come, first-served basis. Do not miss your chance to get the best deal.

A down-payment will ensure your registration.

Guarantee

For those friends and patrons who have no trust in the integrity and honesty of property dealers: Dear friends, the whole world is not alike. We (Khaksar Developers) have been your trustworthy servants for the past ten years, proof of which is the successful completion of ten housing schemes and a commercial market. To keep your trust intact, we are here once again to serve your interests with a guarantee to develop Shadab Town.

Khaksar Devlopers has the amazing opportunity of being able to give ownership rights and the permission to construct with an advance payment.

Immediate registration on half-payment, the rest to be paid in instalments

Good News

If you want to win a free plot through a ballot, pay Rs 1,000 and become a contestant. The lucky winner will be allotted a free plot.

On completion of the sale of the whole scheme, a 5-marla plot and an *Umra* (pilgrimage to Mecca) ticket will also be given free through a ballot.

Town Visit
Every day from 9 in the morning to 12 noon.

Note

The office is open each day.

Loan Facility

If you want to build immediately and do not have the resources, Khaksar Developers can offer you a loan for house building.

Contact: **KHAKSAR DEVELOPERS**
Jalvi Market, National Colony Stop
Jaranwala Road, Faisalabad

Tel: 72 9460
71 4189

Appendix 10

LIST OF VISITORS TO THE ASB FROM 01 OCTOBER 1998 TO 31 MARCH 1999

Organization	Persons	Designation
UNDP	Ms Mehjabeen Abidi	Provincial Coordinator
OPP	Dr Akhthar Hameed Khan	Founder OPP
SKAA Karachi	Tasneem Ahmed Siddiqui	Director General
Faisalabad Social Welfare Department	Rana Abdul Sattar	Deputy Director
Omeed (NGO), Multan	Khwaja Zia-ul-Haq	
WASA Faisalabad	Gul Hafeez Khokar	CIU WASA
UNDP Quetta	Karim Nawaz	Provincial Coordinator
Social Welfare Department Faisalabad	Sarfaraz Cheema	Officer
Al-Hilal Welfare Society (NGO) Faisalabad	Ch Qaimdin Wirak	President
MCF Hajvery Town, Faisalabad	Faryad Ali Asad	Municipal Councillor
WASA Faisalabad (O&M)	Ch Muhammad Anwar	Assistant Director
Taraqee (NGO) Quetta	Qurban Garshin	
Social Welfare and Special Education Department, Women's Development Division, Government of Pakistan	Muzafar Mehmood Qureshi	Federal Secretary
Social Welfare Department	Rana Abdul Sattar	Deputy Director
"	Abdul Quddous	Assistant Director
"	Sarfraz Ahmed	Officer
Family Planning Association of Pakistan, Faisalabad	Ms Umtal Hafeez	Field Director
Punjab Municipal Development Fund Company, Lahore	Khalid Sultan	Manager
PMDFC	Mohd. Saleem .Akhthar	Technical Advisor
PMDFC	Zafar Iqbal Qureshi	Director
LG&RD Department, Lahore	Imtiaz Ahmed	DG *katchi abadis*
WASA, Lahore	Mian Mohd Amin	Managing Director
TVO, Lahore	Sayed H. Bukhari	Regional Programme Officer
YCHR, Lahore	Shazia Khan	Executive Director
Housing Urban Development & Public Health Engineering Department, Lahore	Kareem Bukhsh	Technical Advisor
Municipal Corporation, Rawalpindi	Tariq Iqbal Khan	Chief Engineer
Charitable Society, Rawalpindi (NGO)	Dr Manzoor Ahmed Butt	
AFB, Rawalpindi (NGO)	Hameed Ullah	General Secretary
Pan Environment, Gujranwala (NGO)	Sajjad Ismaeel	
OPD Gujranwala (NGO)	Aliya Warraich and Qurban Raza	
Municipal Corporation, Multan	Azhar Mehboob Mlik	Chief Engineer
Awaz Foundation (NGO)	Mohd Zia Ur Rehman	Executive
SEPHE CIRCLE (NGO),	Ch.Abdul Javed Majeed	

Multan		
Municipal Corporation, Multan	Ajmal Hussain	Chief Medical Officer
Omeed (NGO), Multan	Khawaja Zia ul Haq	
PSRF (NGO), Multan	Haidar Iqbal	Chairman
AAGAHI (NGO), Mulltan	Faisal Khwaja	Programme Officer
DCET, Karachi	Noman Ahmed	Professor
Natural Resource Management Project, Balochistan Forest Department, Quetta	Nayyar Iqbal	Sociologist
Govt. Municipal Degree College	Students group	
Bangladesh Action Aid (NGO)	Shahabbudin Ahmed	Programme Manager
AFB (NGO), Rawalpindi	Members	
	Mian Anees Ahmed	Advocate, Faisalabad
Welfare Society Gurunanak Pura, Faisalabad ((NGO)	Members from Ameer Hamza	
Imagine Films, Karachi	Hasan Zaidi	Director
Action Aid Haripur	Members	
FAUP, Faisalabad	S.M. Khatheeb Alam	Director
FAUP, Faisalabad	Ijaz Ahmed	Consultant
Planner Lahore	Raza Ali	Consultant
AIM (NGO)	Rubina Mughal	
Anjuman-e-Tameere-e-Watan (NGO)	Saifullah Aziz Dr. Muhammad Younus	Officer bearers
CAP, Faisalabad (NGO)	Shahid	Executive Director
WASA, Faisalabad	Gulam Yazdani	Director O and M
WASA, Faisalabad	Gul Hafeez Khokar	CIU
SPDI, Islamabad	Asad Naqvi	Research Associate
Local Government and Rural Development, Government of Pakistan Islamabad	Naeem Akhthar	Director
UNICEF, Islamabad	Raja Sher Afzal	Project Officer
Action Aid	Members plus two Action Aid staff	Staff

SOURCE: ASB records