

**Public Private Partnerships
*and the Poor***

Series Editor: M. Sohail

Public Private Partnerships *and the Poor*

**Case report 3:
Awami Tanks in Orangi Town, Karachi, Pakistan**

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Glossary

<i>Nazim</i>	Mayor (of a town or a union council)
<i>Naib Nazim</i>	Deputy Mayor
<i>Bhishtee</i>	Manual water carrier who, using a water-filled leather sac, climbs the stairs to supply drinking-water to residents of high-rise apartments that have no supply of their own
<i>Awami</i>	Belonging to people/popular
<i>Canister</i>	A plastic or tin container used to transport water manually and which has a capacity of around 15-20 litres
<i>Rangers</i>	Paramilitary troops
<i>Katchi abadi</i>	Informal settlement

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Section 1

Introduction

During the past two years water and sanitation services in Karachi have been a major urban concern for citizens, civic institutions, professionals, NGOs, and the international lending agencies. The performance of the Karachi Water and Sewerage Board (KWSB), the main agency responsible for water and sanitation in Karachi, has declined. The Hub Dam Source, for example, was planned to provide 100mgd to serve the domestic/retail consumers of Karachi West District but is producing no water at all. This alone led to a drastic shortfall in overall production. The Dumlottee Wells, which normally produce 5mgd consistently, had no supply. Net water production decreased from 447mgd in 1999 to 435mgd in 2000. KWSB has amassed Rs.46 billion in debt because of slow and inadequate recoveries, high overhead costs, overall mismanagement of the organisation, and rampant misappropriation of donor funds acquired for various development projects. Sewerage services are in much the same position. KWSB was not able to deal with even 20 per cent of the total quantity. These factors, coupled with the overall dismal financial situation of the federal and provincial governments, led donors to contemplate new options for the water and sanitation sector.

A fully fledged KWSB privatisation strategy was conceived, prepared, and launched in 1994-95 by the Government of Sindh. It aimed to phase in privatisation through international bidding. But because of pressure from and agitation by NGOs, citizen organisations, and various professional groups – and finally by the order of Sindh High Court – the overall privatisation was deferred. The problems and issues related to water and sanitation and the dismal performance of KWSB continue. KWSB and the Government of Sindh have now resorted to small-scale options such as the privatisation of parts of the system. At present, the KWSB administration and Government of Sindh are reviewing the options for privatising the billing operations, bulk water transmissions, and revenue collection. These attempts are kept confidential, however, and no information is shared with the public.

This backdrop formed the basis of this research into public–private partnerships in water and sanitation in Karachi. As is evident from the KWSB records, there is some potential for public–private partnerships in the bulk supply operations, which account for 36 per cent of the total receipts of KWSB. This is a sub-sector where the commercial, industrial, and institutional sectors get their water. In the domestic/retail sector, the critical areas include the squatter settlements which are on the fringes of the city. These areas normally get only the tailend of the supply, where KWSB's service/supply frequency is either nonexistent or of extremely poor quality. In such locations the community organisations, local religious institutions (such as mosques), and law-enforcement agencies have

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developed a system of supply and storage which provides at least the bare minimum to the residents. A case study of *awami* tanks is documented as a micro example. *Awami* tanks are storage structures that are either developed by the city administration to facilitate the supply of basic water supplies to the tailend areas or else built onsite by community groups such as mosques. The concept and operation of *awami* tanks is entirely welfare oriented, as was confirmed by the baseline study. They are found largely in Orangi Town, but similar types of supply also exist in other areas. More often than not, the supply of water to the *awami* tanks is facilitated through KWSB tankers and the Pakistan Rangers. In cases of extreme scarcity, however, the people pool their money and buy a commercial tanker load of water independently. This water vending in Karachi shows that a public–private partnership could work in the water supply sector provided suitable management and mechanisms are created. Similar micro examples in other contexts have also been identified and researched to back this up.

The current research forms a baseline for testing the validity of the concept and application of public–private partnership. A formal dialogue among the concerned stakeholders will be constructed on the basis of the findings and conclusions of this work.

Section 2

Orangi - a profile

Orangi Township is situated in the Orangi hills in the western part of Karachi. It is the city's largest *katchi abadi* or 'squatter' settlement and covers an area of more than 8,000 acres. About 900,000 people live in 94,122 houses which the people have constructed themselves with help from the informal sector. For the most part the township was created by land-grabbers and middlemen through the illegal occupation and subdivision of state land. What little health and education facilities there are in the settlement are provided by the informal sector and are generally of poor quality. Piped water has been available to most of the settlement since 1984. Before that it was provided by the Karachi Metropolitan Corporation (KMC) and the private sector through tankers.

The vast majority of Orangi residents are working class. They are poor but not destitute. Average earnings per household in 1989 was about 1650 rupees (US\$41.50) per month against an average Karachi household income of 2,100 rupees (US\$52.50).

Section 3

Situation of water supply in Orangi previously and now

Although Orangi Township was planned and began to be developed in 1965, it has had a piped water supply only since 1984. As it is in the west of the city it has used the rainfed stream, the Hub River, as a water source since 1982. The water supply system project was carried out in three phases and was finally completed in 1995. During this period the supply was largely adequate and was a major cause of the rapid expansion of the Orangi settlements. Poor rainfall during the past three years has resulted in a drop in the water level in the Hub, however, and supply has been directly affected. Today there is virtually no supply, and the west of the city in general and Orangi in particular are suffering severely. While there are no exact figures available Orangi's water needs are estimated to be 60 million gallons per day (mgd). The Hub provided 100mgd, which met most of the area's water needs for Karachi. Two measures have been taken by the KWSB and city administration to tackle the water shortages: tankers are bringing in water, and the pumping facilities from the Indus source have been upgraded or modified. The tanker service is providing water in a number of different ways. In addition the North-East Karachi pumphouse has been upgraded to increase pumping capacity from 25mgd to 50mgd; a 25mgd pumphouse has been built at Khawaja Ajmer Nagri (which directly benefits Orangi); 48" and 36" diameter pipes have been used to link up District West with the Indus source network; new valves have been installed; 12 tubewells have been sunk in Orangi, Baldia, Manghopir, and Surjani Town; and 50 water storage tanks of 10,000 gallons each have been built in Orangi and Baldia (although this includes some of the *awami* tanks built in Orangi and Baldia, many are yet to be built).

Section 4

**Tabulated information on the Awami Tanks in
Orangi Town**

	Name of Interviewee	Date of interview	Profession	Amount of water acquired at a time (in awami tank)	Frequency of acquisition	Amount of water acquired at a time (in household)	Views on the provision of water through awami tanks
01.	Qari Mohammad Salim Gulshan-e-Zia, Orangi Town, Karachi.	12 March 2000	Qari/ Mualim	6,000 gallons	Once every 15 days (through the Rangers's tankers)	As per need	It is a good solution. It has provided relief to the people to a considerable extent.
02.	Mr Khushi Mohammad Gulshan-e-Zia, Orangi Town, Karachi	13 March 2000	Retired	6,000 gallons	One every seven days (through the Rangers's tankers)	As per need (no water through the pipelines)	The lack of water has led to this situation. The awami tanks are a temporary relief.
03.	Moulvi Amir Hussain Khan House # CM-220, Gulshan-e-Zia, Orangi Town, Karachi	13 March 2000	Retired	6,000 gallons	Once every seven days (through the Rangers's tankers)	As per need (no water through the pipelines)	Founded in 1982 due to lack of water. Initially the police used to provide water now the Rangers do it.
04.	Nayaz Ahmed Gulshan-e-Zia, Orangi Town, Karachi	13 March 2000	PTCL	6000 gallons of 16.5 kg	Supplied by the Rangers. Weekly	Approval of four tanks but at present only one tank is available. No piped water supply	Because the community is poor, these tanks were established by the Rangers.

	Types and size of awami tanks	History of awami tanks in the area	Management of awami tanks	Distribution of water through awami tanks	Problems and issues related to awami tanks	Possible solutions	Ownership of awami tanks
01.	One tank in the area	Built in 1989 by the Rangers (through contribution of people/ mosque)	Qari, a community elder and Imam runs it	People carry water in boxes/canisters manually. No problems encountered	Not a major problem. Frequency needs to be improved	Not known	Owned by the Madrassah and mosque
02.	Four tanks in the area	Built in 1990 by the people through self help	Mr Khoshi Mohammad looks after distribution. Rangers monitor supply through the tankers	25 houses @ 10 canisters per house for each tanker trip	Inadequate water supply is often a problem	Pipeline needs to be repaired and source to be connected	Owned by the people/ graveyard committee
03.	Four tanks in the area	Built in 1982 by the people	Runs on self help by the people of the area	Public announcements are made on the mosque loudspeaker. People come and collect it	Mr Khushi Mohammad helps in the provision of water	Pipeline exists but there is no water supply in the pipeline	Owned by the people
04.	Five tanks in the area	Built ten years before through the help of Hawaldar Khan (Thalawala)	Thalawala is responsible	There is no system. People take water on their own responsibility	There is no problem in the existing system. Piped water supply should be reinstated	Piped water supply should be reinstated	Hawaldar Khan

	Perception on civic agencies responsible for water supply	Who pays for the water distributed through awami tanks	Financial recoveries from the awami tank system	Handing of money in awami tanks	Operation and maintenance of awami tanks	Overall performance standards
01.	Rangers/water board (KWSB)	No payment is involved. In the past medrassah used to pay when commercial tankers were purchased	No one recovers any money from any one	Nil	Mosque/Medrassah looks after it. Only affluent people used to pay in the past	Satisfactory
02.	Government agencies	No payment is involved. Mohalla people contribute for maintenance/repairs	No one recovers any money from any one	Rs.40 is collected totally by the Mohalla Committee	Mohalla Committee looks after it	Overall system is satisfactory. However water quality has dropped
03.	Government agencies	No payment is involved	No one recovers any money from any one	Nil	Khushi Mohammad facilitates supply of water. People operate and maintain	After every three or four tankers the tank is cleaned and repaired
04.	KMC	No payment involved	No recoveries. No spending of money on repair	Nil	Mohalla Community is responsible for maintenance, cleanliness and supervision	Satisfactory
05.	Ranger will be the best option	No payment involved	No recoveries	Mohalla Committee collect some reasonable amount for repair	Mohalla Committee	Satisfactory
06.	Karachi Metropolitan Corporation	No payment	No recovery	Supply is free	Government responsibility.	Satisfactory

	Perception on poor supply and management of water	Role of valve operator	Perception on the roles and responsibilities in the water sector	Perception on people's roles and responsibilities	Possibility of a PPP as a result of awami tanks	Can water be traded as a good?
01.	Not dealt with in the early days of the settlement	No complaints	Piped water supply should be procured	At the <i>awami</i> tanks people should exercise discipline when acquiring water	Difficult option	People are poor. They cannot pay
02.	Not dealt with in the early days of the settlement	Valve operator never releases any water to	Piped water supply should be procured	People are cooperative	Difficult option	People are poor. They can only pay in dire circumstances
03.	As it is a poor area, nobody cares	Alleged changes of bribery	Now there is relief due to Rangers. It works. But if this is done commercially people will have problems	People are cooperative	Not possible	Not possible
04.	Administrative inefficiency	No meeting with the valve operator	Rangers are the best option. Pipeline water supply should also be regulated through Rangers	Through contribution the community repair the line but the situation does not improve	Not possible	Some action tried for it.
05.	Contract system and political group is responsible for its working	No need of valve operator	Ranger's performance is good. Pipeline supply should also be given to the Rangers	People are co-operative	That private lobby will take commission	Through other agencies
06.	Because of shortage of water in the area	No knowledge	Flexibility by KWSB will improve the service	Should care about cleanliness and co-operative behavior	PPP will improve the situation	Enterprise will not be possible

	Name of Interviewee	Date of interview	Profession	Amount of water acquired at a time (in awami tank)	Frequency of acquisition	Amount of water acquired at a time (in household)	Frequency of acquisition	Views on the provision of water through awami tanks
05.	Mohammad Aslam Mustafa Masjid, Gulshan-e-Zia, Sector 11½, Orangi Town, Karachi	14 March 2000	Garments	250 canisters of 16kg	Every second day	No piped water supply	Every second day	Initially there were no gas, water or electricity services.
06.	Qari M. Alluddin Gulshan-e-Zia, Orangi Town, Karachi	14 March 2000	Qari and religious teacher	About half a tanker	One a week.	There is no piped water supply	Once a week	There was a shortage of water. This tank has improved the situation.
07.	Manzoor Ahmed Gulshan-e-Zia, Orangi Town, Karachi	14 March 2000	Labour	175 canisters	Every two or three days	There is no piped water supply	Every two or three days	There was a shortage of water. This tank has improved the situation.
08.	Abdul-Hayee Jama Masjid Siddiq-e- Akbar, Gulshan-e-Zia, Orangi Town, Karachi	21 March 2000	Telephone operator in textile mills	6,000 gallons from Islam Chowk through the Rangers	Only once every 15 days	There is no piped water supply	Only once every 15 days	There was a shortage of water. The Masjid committee through combined contributions built this water tank.
09.	Syed Ali Imam Al- Manzoor Jama Masjid Baitul Mamoor, Ghaziabad, Orangi Town, Karachi	21 March 2000	Supplier	4,500 gallons supplied from Islam Chowk through the Rangers	Weekly supply	There is no piped water supply	Weekly supply	Because of the problems in the piped water supply, this option was developed.

	Types and size of <i>awami</i> tanks	History of <i>awami</i> tanks in the area	Management of <i>awami</i> tanks	Distribution of water through <i>awami</i> tanks	Problems and issues related to <i>awami</i> tanks	Possible solutions	Ownership of <i>awami</i> tanks
05.	Six tanks of the same size	Built 11 years ago by Mohalla Community through contributions	Mohalla Community is responsible for its operation	People take water according to their need	Need for a bigger tank; Piped water supply should be reinstated	Piped water supply should be reinstated	Mohalla Community
06.	Do not know	Built ten years ago by the Masjid Committee	Masjid Committee	Community's own responsibility	Bigger tank is needed	Need is higher	Masjid Committee
07.	Six tanks of the same size.	12 years ago the block maker Jahingir helped pay for it	Mohalla committee	Community's own responsibility	Bigger tank is needed	Need is higher	Masjid committee
08.	There is no <i>awami</i> tank in the area. Private tankers are the only source.	Two years ago it was established by the Masjid committee	Masjid Committee	Public announcement on mosque loud speakers tells community water is available	Land availability by the government	Expenses of <i>awami</i> tank should be spent instead on improving and maintaining the pipelines	Masjid committee
09.	The tanks are available but not sure about the size.	This tank was built by the Masjid Committee 10 years ago.	Masjid Committee	Distribution is through pumps	These tanks are a temporary solution. Piped water supply should be reinstated	Piped water supplies should be reinstated	Masjid committee
10.	Two to three large tanks.	Built one-and-a-half years ago by the Masjid committee	Masjid Committee	Announcement through loud speakers	Water should be supplied according to community need	---	Masjid Committee

	Perception on civic agencies responsible for water supply	Who pays for the water distributed through awami tanks	Financial recoveries from the awami tank system	Handing of money in awami tanks	Operation and maintenance of awami tanks	Overall performance standards
07.	Karachi Metropolitan Corporation	No payment	No recovery	Supply is free	Mohalla Committee	Satisfactory
08.	Water Board	No payment	No recovery	Supply is free	Masjid Committee pay Rs.50 from our own pockets	Satisfactory
09.	Water Board	No payment	No recovery	Supply is free	Masjid Committee	Satisfactory
10.	Not aware	No payment	No recovery	Supply is free	From our own pockets or from the fund of the mosque	Satisfactory initially but now the picture is different
11.	Karachi Water and Sewerage Board	No payment	No recovery	Supply is free	Paid from our own pockets	Water is easily available, results are not satisfactory
12.	Water Board	No payment	No recovery	Supply is free	Paid from our own pockets	Piped water supply should be reinstated
13.	Water Board	No payment	No recovery	Supply is free	Paid from our own pockets	Piped water supply should be reinstated

	Perception on poor supply and management of water	Role of valve operator	Perception on the roles and responsibilities in the water sector	Perception on people's roles and responsibilities	Possibility of a PPP as a result of awami tanks	Can water be traded as a good?
07.	Agencies did not pay any attention to the repair of pipelines	He was not a responsible person	Piped water supply should improve the situation	Money saving system for poor	For improvement PPP is essential	After Rangers leave the supply will definitely be affected
08.	It is good but not a permanent solution to the problem. KWSB responsible for poor water supply	He provided water only to those who paid him	Efficient water supply and maintenance and repair are responsibilities of water board	Awareness of people is very good	The system is possible	Not possible through the <i>awami</i> tank system
09.	Honest people will improve the situation. Water board responsible	Accountable employee will improve the situation	Honest and responsible people will improve the situation	The people should have to be co-operative and wait for their delivery	The system is possible	The system is still a business
10.	Administrative responsibility	After 15 days he supplies water	Availability of water should be ensured, so that the system will work	The people should have to be co-operative and wait for their delivery	The system is possible	Water supply is still a business
11.	Water board inefficiency	The valve operator have no role when there is no water	Role of water board is negative	People are cooperative and are not satisfied by the working of <i>awami</i> tank	Not aware	Through PPP it is possible
12.	Water board inefficiency	The valve operator has no role when there is no water	Along with the Rangers KWSB should also boast its efficiency	People are cooperative	Not possible	Commercial trend will improve the efficiency

	Name of Interviewee	Date of interview	Profession	Amount of water acquired at a time (in awami tank)	Frequency of acquisition	Amount of water acquired at a time (in household)	Frequency of acquisition	Views on the provision of water through awami tanks
10.	Ahmed Ali Jama Masjid Anwar, Muslim Maywati Colony, Ghaziabad, Orangi Town, Karachi	21 March 2000	Shopkeeper	3,000 gallons through Rangers from Islam Chowk	Half a tanker once a week	There is no piped water supply	Half a tanker once a week	Because of the problems in the piped water supply, this option was developed
11.	Tahir Hussain Noorani Masjid, Ghaziabad, Orangi Town, Karachi	21 March 2000	Salesman	18,000 litres from Islam Chowk through Rangers	Twice a week	There is no piped water supply	Twice a week	Scarcity and purchasing was difficult for poor communities so these tanks were established
12.	Abdul Rashid Ghaziabad, Orangi Town, Karachi	21 March 2000	Blocks worker	14,000 gallons from Islam Chowk through Rangers	Every third day	There is no piped water supply	Every third day	Private tanker price was Rs.350, which was beyond the range of poor. This leads towards development.
13.	Alder Faiz Masih Christian Colony, Ghaziabad, Orangi Town, Karachi	21 March 2000	Shopkeeper	6,000 gallons from Islam Chowk through Rangers	Every third day	There is no piped water supply	Every third day	The poor people spend about Rs.1000 rupees on water alone, so government made these tanks.
14.	Master Younus Christian Colony, Ghaziabad, Orangi Town, Karachi	21 March 2000	Kabari	6,000 gallons from Islam Chowk through Rangers.	Every other day	There is no piped water supply	Every other day	The poor people spend about Rs.1000 rupees on water alone, so government made these tanks.

	Types and size of awami tanks	History of awami tanks in the area	Management of awami tanks	Distribution of water through awami tanks	Problems and issues related to awami tanks	Possible solutions	Ownership of awami tanks
11.	There are about 10 tanks of different sizes	Masjid Committee built this tank a year ago.	Masjid Committee	Arrival of water announced over loud speakers, then people come when they want	Pipeline is completely out of order	These tankers were built at the cost of 14 crores. Pipelines from the tanks would improve the situation	Masjid Committee
12.	Four tanks of different sizes	Established a year ago	Shopkeeper is responsible	Community is free in their demands	Need water tanker daily and the pipeline should be repaired	Pipeline should be repaired	Shopkeeper
13.	Three or four tanks of different sizes	Fayrooz built this tank a year ago	Fayaz and with two helpers	Community is free in their demands	A through-pipeline would improve the situation	Pipeline should be repaired.	Fayrooz
14.	11 tanks of different sizes	Master Younus built it 10 years ago	Master Younus is responsible	Community is free in their demands	Pipeline supplies should be reinstated	Pipeline should be repaired	Master Younus
15.	There is no tank, water has to be purchased from private tankers	It was built eight years ago by the government	Masjid Committee	8-10 canisters per family are available	Daily supply should be ensured	Supply through pipeline would improve the situation	Masjid Committee
16.	Six tanks of same size	It was built a year ago	Mohammad Amin and Shaban are responsible	People's own responsibility	Daily availability will improve the situation	Need daily availability	Mohammad Shaban

	Perception on civic agencies responsible for water supply	Who pays for the water distributed through awami tanks	Financial recoveries from the awami tank system	Handing of money in awami tanks	Operation and maintenance of awami tanks	Overall performance standards
14.	Karachi Water and Sewerage Board	No payment	No recovery	Supply is free.	Paid out of our own pockets.	It is not a permanent solution. Maintenance of these tanks is good
15.	Karachi Water and Sewerage Board	No payment	No recovery	Supply is free	On a self-help basis	In present condition, it is good solution
16.	Do not know	No payment	No recovery	Water provided free	Pay for maintenance ourselves	Not satisfactory
17.	Rangers are the supplier	No payment	No recovery	Water provided free	40-50 rupees from our own pockets	It is not a proper solution
18.	Water Board	No payment	No recovery	Water provided free	Community is responsible for repair	It is good but the results should be improved
19.	Water Board	No payment	No recovery	Water provided free	Only through contributions are the repairs done	The system only works because of the Rangers so the pipeline should be re-instated
20.	Water Board	No payment	No recovery	Water provided free	Through Masjid Committee through distribution	Satisfactory

	Perception on poor supply and management of water	Role of valve operator	Perception on the roles and responsibilities in the water sector	Perception on people's roles and responsibilities	Possibility of a PPP as a result of awami tanks	Can water be traded as a good?
13.	Politics	He has no role	The departments maintained the Awami tank system	People are cooperative	PPP is possible	After privatisation it will be run like a business
14.	Lack of cooperative behaviour and poor community are the main culprits	He has no role	Ranger efficiency is good	People are cooperative	PPP is possible	Through privatisation it is possible
15.	Distance between the settlement will create the problem	He has no role	Public participation should be ensured	Community should think about timing and work cooperatively	PPP is possible	Through privatisation it is possible
16.	Inefficient	There is no piped water supply	Timing is important for the working of the system	Community is co-operative	Not possible	Private sector made water supply run as a business
17.	Inefficient	Valve man has no role	Rangers are the best option	Community is eager for the system to work	Not possible	Not possible
18.	Inefficient	Does not have any connection with valve operator	Rangers are the best option. Water board will not give any security about pipeline water supply	Shortage of water creates problems. Water should be available on a daily basis	On a daily basis[what does this mean?] PPP is possible	Yes
19.	Inefficient	There is no pipeline, so valve operator has no role	Water board does not feel it is responsible	Community is co-operative	PPP is not possible	The present picture is of trade

	Name of Interviewee	Date of interview	Profession	Amount of water acquired at a time (in <i>awami</i> tank)	Frequency of acquisition	Amount of water acquired at a time (in household)	Frequency of acquisition	Views on the provision of water through <i>awami</i> tanks
15.	M. Yousuf Khan Jamia Masjid Hazrat Ali, Muslim Colony, Ghaziabad, Orangi Town, Karachi	21 March 2000	Shopkeeper	600 gallons from Islam Chowk through Rangers	Once per week	There is no piped water supply	Once a week	Poor cannot afford so much heavy expenditure so these tanks were established
16.	Mohammad Amin Yaqoobabad, Orangi Town, Karachi	22 March 2000	Rickshaw driver	3000 gallons from Islam Chowk through Rangers	Every three days	There is no piped water supply	Every three days	Water was expensive, so these tanks were established
17.	Mohammad Iqbal Orangi Town, Karachi	22 March 2000	Garments	6000 gallons from Islam Chowk through Rangers	Every three or four days	There is no piped water supply	Every three or four days	These tanks were established because of water shortages and expensive water
18.	Abdul Haq Jilani Orangi Town, Karachi	22 March 2000	Carpenter	3000 gallons from Islam Chowk through Rangers	Once a week	There is no piped water supply	Once a week	Private tankers were expensive so these tanks were established
19.	Rasool Ahmed Orangi Town, Karachi	22 March 2000	Mill labourer	1000 gallons from Islam Chowk through Rangers	Every two days	There is no piped water supply	Every two days	These tanks were built because there is no piped water
20.	Syed Rayasat Ali Orangi Town, Karachi	22 March 2000	Tailor	6000 gallons from Islam Chowk through Rangers	Every three days	There is no piped water supply	Every three days	These tanks were built because there is no piped water supply

	Types and size of <i>awami</i> tanks	History of <i>awami</i> tanks in the area	Management of <i>awami</i> tanks	Distribution of water through <i>awami</i> tanks	Problems and issues related to <i>awami</i> tanks	Possible solutions	Ownership of <i>awami</i> tanks
17.	Six or seven tanks	Established four months before	Ibrahim and Iqbal are responsible	People's own responsibility	A daily delivery of 3000 gallons would improve the situation	Deliver 3000 gallons daily	Liaquat and Sohail own the tank
18.	Four or five tanks of same size	Established six month before	Mohalla committee and Abdul-Haq Jilani	People's own responsibility	Repair of the pipeline will improve the situation	Pipeline should be repaired	Abdul Haq are Mohalla committee
19.	Two tanks of the same size	Made seven years before through the help of OPP	Rasool Ahmed is responsible	People's own responsibility	Impurity in fuel is common problem.	Pipeline should be repaired	Rasool Ahmed is responsible
20.	Three tanks of different sizes	Build in 1983 with a name of Sadat Quarters	Rayasat Ali	People's own responsibility	Timing is the problem	Pipeline should be repaired	Owner is Sadat Quarters
21.	One tank	Made in 1990	Mohammad Sharif	People's own responsibility	There is no problem in <i>awami</i> tank	Pipeline should be repaired	One tank is Salam's, the other is Safiq's
22.	Two tanks of same size	Hakim Khan built it 14 years ago for the mosque	Masjid committee	People's own responsibility	Two tankers weekly are insufficient	Pipeline should be repaired	Masjid Committee

	Perception on civic agencies responsible for water supply	Who pays for the water distributed through <i>awami</i> tanks	Financial recoveries from the <i>awami</i> tank system	Handing of money in <i>awami</i> tanks	Operation and maintenance of <i>awami</i> tanks	Overall performance standards
21.	Water Board responsibility	No payment	No recoveries	Water is free	Through self-help.	Temporary piped supply should be ensured
22.	Water Board responsibility	No payment	No recoveries	Water is free	Masjid Committee	It should be improved

	Perception on poor supply and management of water	Role of valve operator	Perception on the roles and responsibilities in the water sector	Perception on people's roles and responsibilities	Possibility of a PPP as a result of <i>awami</i> tanks	Can water be traded as a good?
20.	Inefficient	There is no pipeline, so valve operator has no role	Availability should be improved	Availability is good, there are no problems regarding people	PPP is not possible	The present picture is of trade
21.	Inefficient	There is no piped water supply	Supply should be improved	Community is co-operative	PPP is not possible	Not possible
22.	Inefficient	There is no piped water supply	KWSB and Ranger should fulfill their responsibility.	The people are loving	PPP is not possible	Not possible

	Name of Interviewee	Date of interview	Profession	Amount of water acquired at a time (in <i>awami</i> tank)	Frequency of acquisition	Amount of water acquired at a time (in household)	Frequency of acquisition	Views on the provision of water through <i>awami</i> tanks
21.	Mohammad Sharif Orangi Town, Karachi	22 March 2000	Mason (Labourer)	6000 gallons from Islam Chowk through Rangers	Every two or three days	There is no piped water supply	Every two or three days	Decreased availability of supply from Hub dam
22.	Shabrati Mian Jamia Masjid Ghousia, Mansoor Nagar, Orangi Town, Karachi	22 March 2000	Mosque worker	6000 gallons from Islam Chowk through Rangers	Once a week	There is no piped water supply	Once a week	Government response to water shortage

Section 5

Photographic profile



Photograph 5.1. A young man filling the pail of a household from an awami tank in Siddiq-e-Akbar Mosque, Gulshan-e-Zia, sector 11.5, Orangi Town. Nozzle of water motor is visible



Photograph 5.2. People waiting for their turn

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Photograph 5.3. Overview of Ghaziabad



Photograph 5.4. View of a large tank in Ghaziabad. The taps were stolen, so now the water is distributed through pails, buckets, and rope.



Photograph 5.5. View of a lane in Gulshan-e-Zia. The *awami* tank was built at the furthest end.

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Photograph 5.6. People from Gulshan-e-Zia line up to fetch water after it is supplied to the tank by the Rangers.



Photograph 5.7. Internal view of *awami* tank at Mosque Bait-ul-Mamoor, Ghaziabad. The Imam (the head of prayers in the mosque) is filling the vessels for the worshippers' ablutions. Usually, because of water scarcity, the worshippers are advised to carry out their ablutions at home before coming to the mosque for prayers.



Photograph 5.8. Internal view of an *awami* tank in Ghaziabad.



Photograph 5.9. An *awami* tank inside a house at Gulshan-e-Zia.

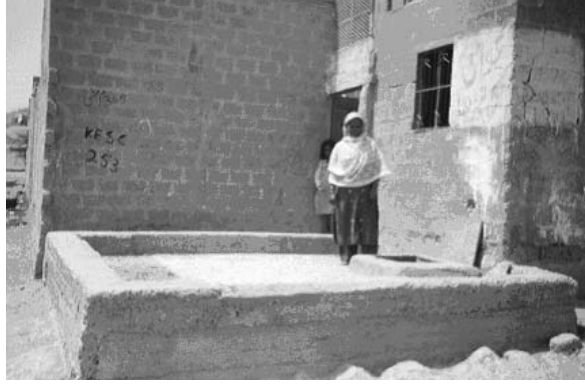


Photograph 5.10. An *awami* tank inside a house in Gulshan-e-Zia. People are filling their vessels under the supervision of community elders



Photograph 5.11. When supplies from the *awami* tanks are inadequate, people have to buy water from the private tanker operators. This tanker is supplying water to the houses in Gulshan-e-Zia, sector 11½, Orange Town.

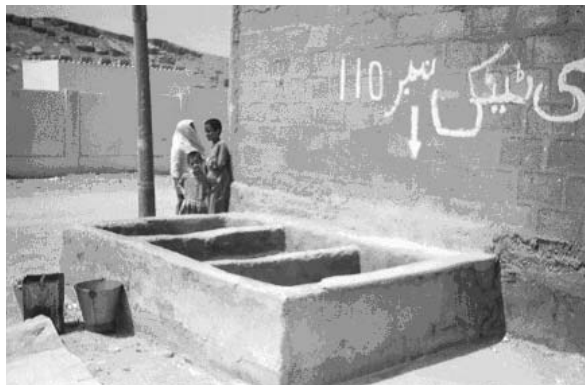
SECTION 5: PHOTOGRAPHIC PROFILE



Photograph 5.12. Vacant plots are often converted into *awami* tanks with the consent of the owners. They are convenient for the women in the community to carry water to their houses.



Photograph 5.13. It is a moment of great festivity and rejoicing when water tankers appear in an area



Photograph 5.14. External view of an *awami* tank in Sector 1½, Gulshan-e-Zia, Orangi Town. People are waiting for the water tanker from the Rangers to fill the *awami* tank before they could fetch water for their household consumption.

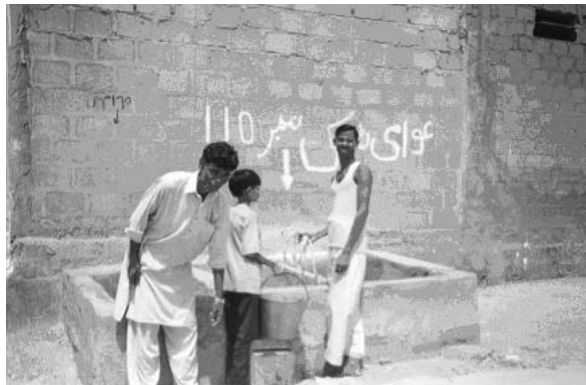
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Photograph 5.15. The awami tanks that are close to the houses of the managers are well looked after.



Photograph 5.16. An overview of Gulshan-e-Zia, Orangi Town, Karachi

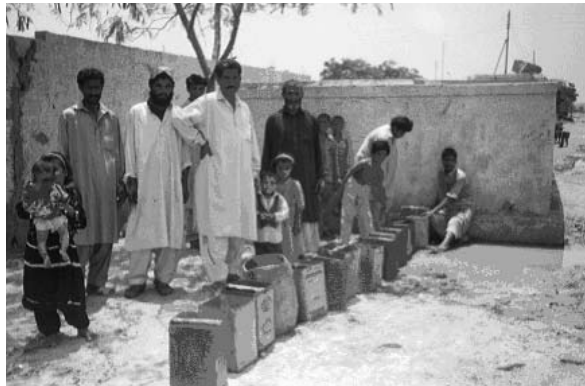


Photograph 5.17. People use a rope and pail to pull up water from the awami tank. It consumes time and physical energy. Only young people are able to manage it.

SECTION 5: PHOTOGRAPHIC PROFILE



Photograph 5.18. View of a lane in Ghaziabad. Stagnant water often seeps through the underground tank causing contamination and health hazards



Photograph 5.19. Desperate people waiting around an *awami* tank in Ghazibad, Sector 11½, Orangi. In some cases they have to wait more than five or six hours. Where management of the tank is inadequate, chaos ensues.



Photograph 5.20. Stagnant sanitation water is a dangerous polluting factor for *awami* tanks. Polluted water could seep into the tank because they are built with blocks and are not water proofed.



Photograph 5.21. An awami tank at Christian Mohalla, Ghaziabad, Sector 1½, Orangi Town. The tank is covered with broken sheets and gets polluted with dust and other impurities. The physical surroundings are a hazardous situation.



Photograph 5.22. The mosque Bait-ul-Mamoor in Ghaziabad Area. Youths are filling vessels for ablution as well as domestic supply.

Section 6

Awami tanks – review and analysis

Some years back, new pipes were laid in Orangi Town. The system collapsed in only a few months, however, so there was absolutely no source of water to these areas. At this point, local people thought about the idea of providing water through *awami* tanks. In some places the government surveyed the areas/locations and built *awami* tanks. People also built *awami* tanks on a self-help basis from where the water was distributed in a uniform fashion.

A few *awami* tanks exist in Gulshan-e-Bihar. Most of the residents of Yaqoobabad, Khalid bin Waleed Colony, and Rais Amrohvi Colony obtain their water from these tanks, which are of different sizes and volumes. Water is supplied totally free. Initially private tankers were commissioned to supply water to *awami* tanks. They charged Rs.200-250 per trip. It was found that these tankers used to obtain the water from the hydrants for free. Karachi Water and Sewerage Board (KWSB) could not run this system successfully. Over time the water supply began to fall. It became so scarce that water riots were about to start. Social workers tried to deal with the situation by lobbying the concerned departments, and finally the issue was handed over to the Pakistan Rangers.¹

The Pakistan Rangers surveyed the water-deficient areas and then started providing water through their own tankers. Each tanker contained 1,200 gallons, or 200-250 canisters. The water was then supplied according to a set timetable. The system is still working.

A problem with this system of supply is that people who have fewer vessels get less water. This often leads to managerial problems. Residents devised an alternative method, whereby a large tank was constructed at the top of a hill. An open pond was constructed, linked by two cement pipes. This is an expensive method, however, and the pressure often falls.

Some people in the area built a tank at a local mosque. For most residents these are temporary solutions. Sometimes a donkey cart also supplies water to the area. It charges Rs.60 for 15-20 gallons approximately. It gets water from the leak in the main pipeline. The water is very polluted and not fit for drinking.

Several people were interviewed in Orangi Town about the *awami* tanks. These interviews were done in February – June 2000 in the following areas:

1. Pakistan Rangers are the para military regiments that are delegated the task of maintenance of law and order and to support the civil administration for the purpose. They also engage in developmental works on specific occasions.

- Gulshan-e-Bihar
- Gulshan-e-Zia
- Ghaziabad
- Yaqoobabad
- Mansoor Nagar

The following views, opinions, and observations were recorded:

- Underground water pipes have been laid in most areas by different government departments/ agencies. With a few exceptions, water never flowed through these pipes.
- In some areas of Gulshan-e-Bihar and Ghaziabad, the water supply is released for 10 to 15 minutes each day. The water pressure is extremely low, however, and only reaches the low-lying areas.
- Water from the pipelines is contaminated and is not fit for drinking.
- The pipelines have been stolen and/or vandalised in some areas. According to common perception, this is done by the staff of contractors or members of a local political group.
- In most of the areas there is no piped water supply. *Awami* tanks are the only way to get any water.
- Usually water is supplied to the *awami* tanks by the Rangers using their own tankers. The has made water availability relatively easily.
- *Awami* tanks are not all supplied the same; some get water twice a week, others once a week, and still others only once a fortnight.
- In some cases, one tanker load of water is divided between two or three *awami* tanks.
- In some cases, the people have to go to the Rangers' post themselves. Often they have to wait for four or six hours. Usually the water is supplied during the night.
- It is feared that when the Rangers are recalled, the existing water supply system through the *awami* tanks will be directly affected.
- In the past, residents could buy tankers of water. In peak summers, they could cost as much as Rs.1000 per tanker. Even today, the private tankers are selling water for Rs.300 to 400. The water sold by these tankers is from boreholes and is highly contaminated and not fit for drinking. People do still drink it in dire emergencies though.
- The Rangers are supplying the water free of charge. Most people who have an *awami* tank are happy with the supply.
- During the daytime, no tanker was observed filling the *awami* tanks, nor were the people found distributing the water through *awami* tanks. However people often came with their vessels and filled them up. Water was retrieved manually using a rope and pail. Only one tank had a tap. Usually the *awami* tanks were full, which shows that they are being supplied regularly.

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- The only government-built water tank was found in Ghaziabad. People have even stolen the tap heads. Most tanks have been cooperatively built by the people themselves. Such tanks are constructed close to the ‘building materials manufacturing yards’ (*thalla*).
- There is no specific location for *awami* tanks. In some cases people provided land from their own plots, and tanks are also constructed in the mosques.
- Water is not sold from *awami* tanks under any circumstances.
- *Awami* tanks are different sizes, but most are medium-sized and capable of providing water to two or three lanes of houses.
- People whose houses are far from the *awami* tanks have many complaints. Their womenfolk, most of whom observe purdah, cannot fetch water during the daytime. If a smaller water tank could be built at the corner of each lane then the issue would be conveniently resolved. Another option is that the water supply pressure in the lines is increased so that water reaches every house without any problem.
- Most people think that water supply using *awami* tanks is only a temporary measure. They want the pipelines to be fully repaired and to have water supplied twice a day.
- In a very few cases the water from *awami* tanks is rationed by the canister load. Usually the people collect as much as they desire or need.
- In every community, there are some people – usually elderly and retired – who manage the *awami* tanks. They remain when water is supplied by the water tanker. They also visit the offices of the Rangers or KWSB and do the usual follow-ups.
- After the *awami* tank is filled people come to fetch water. Sometimes people are notified house to house. Where *awami* tanks are in the mosques, an announcement is made.
- In mosques the household supply is done through small motors. In other cases, people obtain water through water pipes. Organisers, however manage the whole process.
- On days when the supply is inadequate, the people often fight and quarrel to get their water.
- In order to resolve the problems of *awami* tanks, water provision should be done daily or every other day. There should be enough water to meet the people’s needs. The pipelines should be repaired so that they can carry water again. The KWSB should initiate this process and it should be monitored by the Rangers.
- Ever since the settlements were established, there has been a shortage of water and this is still the case. None of the administrations pay any notice. Other related problems are also spreading.
- The *awami* tanks cannot be run on commercial grounds. Attempts should be made to improve their performance. Every alternate lane should have an *awami* tank.
- One option could be that the money that the government is spending on providing water for the *awami* tanks should be spent repairing the pipelines instead.
- According to area people the responsibility of looking after and running the *awami* tank system lies with the people themselves. They must improve the system on a self-help basis.

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- Private tankers operate in these areas. The private tankers are a necessity as the supply of water through the Rangers' tankers is often inadequate. This leads to people using impure water (from the private tankers).
- Public–private partnership are usually not wanted by the people. They emphasised the need to improve the existing system without any extra burden on the citizens.

Section 7

Conclusion and recommendations

The study and analysis of awami tanks clearly shows that communities, with support from the government agencies, can cooperatively address their basic needs. It is significant to note that despite the acute shortage of water in Orangi Town, the low economic status of the households, and an overall feeling of desperation, there has been no communal conflict in the routine operation of awami tanks. The infrequent and inadequate supply of water to the awami tanks has adversely affected the possibility of the indigenous expansion of this technology, however. Communities are concerned about the unavailability of water from the source itself. The assumption that the piped water supply will be reconnected soon also holds back the the extension of awami tank operations. Because of the overall water supply scenario of the city in general and Orangi in particular, it is clear that the piped water supply for Orangi will remain grossly inadequate in the near future. Solutions with the capacity to deliver have to be tried, tested, and replicated. It is also obvious from the study that government alone cannot deliver the services because of their limited capacity to address the problems. There will have to be a partnership that evolves from the people's initiative and runs sustainably.

Awami tanks are an important water supply option that has been developed and sustained in low-income communities. They can be greatly improved by taking some appropriate measures. One, the design and construction of awami tanks needs to be improved. At present, they are built with cement block construction without any plastering or waterproofing, so a lot of water is lost from seepage. Low-cost techniques for constructing stable tanks can be created. Two, by using motors or simple manual pumps, the efficiency of supply can be greatly improved. Three, the communities can negotiate to pay KWSB for a regular supply of water, which will be much less than from the commercial tankers. This alone will enhance the performance of awami tanks considerably. And four, the reality about the piped water supply situation should be clearly communicated to the people of Orangi so that they can consider other options and survival strategies. The prospects of public-private partnerships can also be explored, especially in the wake of the forthcoming local government plan that the government is implementing with keen interest.

Annex 1

List of contact people²

S. No.	Name
01.	Qari Mohammad Salim Gulshan-e-Zia, Orangi Town, Karachi.
02.	Mr. Khushi Mohammad Gulshan-e-Zia, Orangi Town, Karachi.
03.	Moulvi Amir Hussain Khan House # CM-220, Gulshan-e-Zia, Orangi Town, Karachi.
04.	Nayaz Ahmed Gulshan-e-Zia, Orangi Town, Karachi.
05.	Mohamad Aslam Mustafa Masjid, Gulshan-e-Zia, Sector 11½, Orangi Town, Karachi.
06.	Qari M. Alluddin Gulshan-e-Zia, Orangi Town, Karachi.
07.	Manzoor Ahmed Gulshan-e-Zia, Orangi Town, Karachi.
08.	Abdul-Hayee Jama Masjid Siddiq-e-Akbar, Gulshan-e-Zia, Orangi Town, Karachi.
09.	Syed Ali Imam Al-Manzoor Jama Masjid Baitul Mamoor, Ghaziabad, Orangi Town, Karachi.
10.	Ahmed Ali Jama Masjid Anwar, Muslim Maywati Colony, Ghaziabad, Orangi Town, Karachi.
11.	Tahir Hussain Noorani Masjid, Ghaziabad, Orangi Town, Karachi.
12.	Abdul Rashid Ghaziabad, Orangi Town, Karachi.
13.	Alder Faiz Masih Christian Colony, Ghaziabad, Orangi Town, Karachi.
14.	Master Younus Christian Colony, Ghaziabad, Orangi Town, Karachi.

2. (contacted to obtain feedback about the *awami* tanks)

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15.	M. Yousuf Khan Jamia Masjid Hazrat Ali, Muslim Colony, Ghaziabad, Orangj Town, Karachi.
16.	Mohammad Amin Yaqoobabad, Orangj Town, Karachi.
17.	Mohammad Iqbal Orangj Town, Karachi.
18.	Abdul Haq Jillani Orangj Town, Karachi.
19.	Rasool Ahmed Orangj Town, Karachi.
20.	Syed Rayasat Ali Orangj Town, Karachi.
21.	Mohammad Sharif Orangj Town, Karachi.
22.	Shabrati Mian Jamia Masjid Ghousia, Mansoor Nagar, Orangj Town, Karachi.

Annex 2

Interview transcript of Mr Abdul Hameed Ansari, an activist of Gulshan-e-bihar, Orangi Town, Karachi

Name : Abdul Hameed Ansari

Occupation : Businessmen (Import & Export licensed)

Address : Gulshan-e-Bihar, Orangi Town, District West, Karachi

Phone : 6664876

Dated : 05 February 2000

Organisation : Gulshan-e-Bihar Welfare Society (Trust)

Q.1. At first please explain the background of *awami* tanks in Orangi and your own background – how did you get involved with this issue of water provision to Gulshan-e-Bihar?

Ans: I am basically a businessman, but unfortunately, due to my poverty, I am not successful. In Orangi Town water provision is through the Hub dam. In 1988 when the Hub dam water was empty it was because of the inefficiency of KWSB – they had not paid attention to the situation. In our area there was a water supply project, but the KWSB inefficiently depended on rain, which is a natural phenomenon. When they realised that their inefficiency would soon be publicly known and that people would retaliate they immediately handed over the water supply system to the Pakistan Army. When the Pakistan Army took over the system they first visited the most-affected areas, including Gulshan-e-Bihar, Disco More, Ali Nagar, and Al-Hira and its adjacent settlements. As far as our area was concerned there was a city-level water supply project in which Orangi was placed quite high. In my opinion the planning was always done at the lowest level and with a short-sighted approach. If the planning had happened using maps and at levels with an understanding of long-term repercussions the problem that we face today would not have happened. Immediately after their visit the Pakistan Army started boring wells in a few places and they also built water tanks at different places. But these water tanks were built wherever KWSB suggested and carried out layout surveys. These tanks were built

at quite inappropriate places. For instance if you take as an example Gulshan-e-Bihar – no water tank is built here.

Here they bored three times, one boring is done by KWSB whose record I have. Afterwards many *awami* tanks were built but there are still many other places where water tanks were not built and water is not supplied. People are compelled to buy from water tankers on a self-help basis. Some mosques also have *awami* tanks. Here the tanks at the mosques have capacities of around two tankers because these are small mosques and they know that each day they will only receive one tanker for the whole of Gulshan-e-Bihar. There are other settlements, such as Gulshan-e-Zia, Ghaziabad, Raees Amrohi, and many others nearby. They are all waiting for a long time and they are not supplied with water, so they are wholly and solely dependent on water tankers. The water from the private tankers is poor quality, but even if it comes from a trench I have to buy it for drinking purposes. They charge around Rs.200 to 300 for a tanker service. This is because the water tanks were all constructed on the advice of KWSB. The army people did not know the situation in Orangi, and KWSB provided them with maps in which the population and remoteness of the settlements would not have been evident unless they had visited the area and seen for themselves. This is the major problem.

Q.2. How many different types of water sources are available to you?

Ans: We have only one water source and that is water tankers. We are told that Gulshan-e-Bihar receives 100,000 gallons of water each day, but this is only enough for each person to wash his face. The water pipelines are there but with no water and the water tanker is the only source. They spent about Rs. 1400000 on the Gulshan-e-Bihar pumping station. The inauguration ceremony of this project was very fantastic, Prime Minister Benazir Bhutto herself inaugurated it. I am not blaming her or saying that she is responsible for this situation. But the administration that she asked to execute this project, that administration is responsible for this mishap. If you read the newspapers and ask the people about it, they will tell you that, ‘This reservoir was filled during the night using water tankers for the purpose of inauguration. And from the inauguration until today not a single drop of water has been provided through this project. This is the unfortunate scenario before us.’ By 1987 in Gulshan-e-Bihar (or between 1984 and 1987) the water was provided through Banaras from the Hub water source for around three hours a day and we were writing letters to newspapers to try to stop the wastage of water. But now the situation is that we do not send our children to school but instead give them a canister or bucket to go out and get the water. We did not pay school fees but instead had to spend the money on water tankers. Even today we spend around Rs.500 each month to obtain water. We do not pay school fees because at first the child needs to live, only then can he study. We do not even pay the electricity bill because of the water situation and believe me I have an electricity bill of around Rs.6000. Why? Because we have less income. And education, health, food, and shelter are our major items of expenditure.

Q.3. Please give the background of this system of water tankers through which you obtain water. How was this started or established?

Ans: Once the project was inaugurated and still no water was provided, we telegraphed the KWSB, phoned them, and chased them for water provision. I have all the

documents related to it and you can see the efforts made by myself for water provision. At first the KWSB people said that from tomorrow the valve operators will be there and water will be provided. At Disco More they wrote that every day water will be provided for four hours from Disco More to Germany Pumping Station. But neither the valve operator nor the water showed up. In this way they tricked us, particularly an officer of KWSB, Mr Jawed Hamid. I myself met Mr. Misbahuddin, Chief Engineer of the Water Board more than 20 times and held meetings. But all his promises were fake and he never kept them. The contractor came to us to ask us to please rectify and repair the leakages. Without water what kind of leakages did they want to repair? Do they want to repair air leakages in water pipe lines???! Because not even a single drop of water is available.

Q.4. When did the water tanker system start?

Ans: It started initially when 50,000 gallons of water was provided, when the whole of Karachi was going to be declared a disaster area. It was around 1999 but then they stopped this system because they thought we did not need it. At the same time when the army people has bored wells in the area we were dependent on that water, but it was so bad and bitter that one could not drink it nor even use it for bathing. Then the boreholes also failed and were banned within six months because the salt content was very high in that water. And the 50,000 gallons that was provided to us was a mixture of water from the borehole and sweet water from KWSB. Now the water need in the settlement is around 150,000 gallons, whereas they provided only 50,000 gallons. Secondly the water reservoir is built too high up and delivering water to that height is another problem. If they deliver 100,000 gallons water to the reservoir then only 50,000 gallons flow back out. This was the project whose inauguration took place here. At the time of inauguration it was filled with 100,000 gallons water and they pushed the button for distribution. As a result a few yards away the pipeline burst with the pressure of water because there was no connection at that time. In this way the Water Board and administration saved their honour before the Prime Minister, but otherwise no water supply measures have been taken. Afterwards I went to authorities to discuss this issue and they made promises. I organized people of the settlement through the platform of the Gulshan-e-Bihar Welfare Society (Trust) and on a self-help basis one person from each house worked to connect the water. Those connections which were missing we executed ourselves on a self-help basis. We repaired the pipelines that were damaged by the water tankers. Afterwards when the salty bitter water started to come through the tankers we knew that they had not been supplied with water from the authorities. Then we got the maps of the water pipelines in the settlement by NESPAK. The maps were prepared by KWSB to execute the water connections but then not implemented, so people did it on their own. It cost them more than it should have, because they had no information or technical know how. The KWSB contractor also refused to work and said it was not his job to connect 3" line to 6" water pipeline, but when we paid him he did so.

Q.5. Who are the main actors in this process and who gets what?

Ans: There are many local labour craftsmen (*mistri*) who belong to different communities. They were assigned to carry out the labour for daily wages at local rates, and the equipment and material supplied to them by us. Sometimes what happens is that if we order them to dig four trenches but we pay them for three and

the rest of the money is spent on cement. If a socket is required or an iron key we buy it and pay them Rs.25 to 50 which the people provide, depending on who needs the connection?

Q.6. What was the role of KWSB in this process?

Ans: KWSB provided the water tankers, and we kept records such as: When did they come? What was their vehicle no.? Who was the driver? etc. But when the Rangers took over they started issuing a receipt/white paper. Previously two receipts were issued; one receipt was my record and other receipt was stamped by me and that became KWSB's receipt.

Q.7. How and when was this relationship established between your community and KWSB?

Ans: The reason behind the relationship was my efforts for around three to four years on the water issue. When the water problem first arose in our settlement we wrote to the authorities. It was an issue from 1986 and they know my telephone number and my name and I am on their list. When people go to them they ask them to Meet Mr Ansari for water tanker. The people come to my place at any time and even late at night if they need water, and I used to go with them and tell them where they could obtain water. Unfortunately the Engineering Department is so difficult to work with I cannot even describe it to you.

Q.8. At present how is this tanker system working in your settlements?

Ans: Each day 30 tankers come to our settlement and supply 100,000 gallons of water. They distribute this water in two parts, which means they give water to Gulshan-e-Bihar and simultaneously they supply it to Ghaziabad settlement. If you actually want to understand and calculate this system through practical measures, you will learn that every 6 to 10 days water is supplied to each house for around 20 minutes. In some areas water is never supplied. In lower areas water is supplied for around 15 to 20 minutes every 10 days, whereas in the higher hilly areas, only air is supplied and they become happy with the air because water is nonexistent. The reservoir that was built here has a capacity of 250,000 gallons and the tanks are only 100,000 gallons. Now we actually need 200,000 gallons of water each day, so that 100,000 gallons can be stored and 100,000 gallons will come down to the people. It means two day's reserved water is required to make this system function. Now this water can be distributed in four areas in Gulshan-e-Bihar and five areas in Ghaziabad. So one can easily see that this system of 15 minutes water supply every 10 days is not very efficient. But we never give up hope. We think that at least every 10 days we will have enough water to wet our lips. Secondly the system of sewerage water is such that as per maps the sewerage line and water lines co-exist, therefore we also get mixed sewage water and drinking water. When there is enough water for 20 minutes, the first five minutes is sewerage water, then drinking water comes. The major impact of this water system is its adverse affect on children. Our children are compelled to leave the school and go fetch water from tankers, and their education is badly affected.

Q.9. In your opinion, how can this system be improved? And who can play an important role on this issue?

Ans: It wholly and solely depends on the government. It is their job. If they want to improve the situation they can easily do it. We people can only make small efforts in this direction. Now let us take an example to understand the situation. The water is coming from Khwaja Ajmer Nagri to Banaras. Now from Banaras the water comes to Disco More. The distance between them is eight kilometers. (Think about the distance). Now from there the water is pumped, and at that point many individuals connections are also given to consumers. Now from Disco More to Gulshan-e-Bihar pumping station, which is also called Ghaziabad pumping station, the distance is about two kilometers. Now from Disco More to Al-Hira the distance is quite a lot less than two kilometers. If the water is pumped from Disco More to these two points the problem would be solved to some extent. (This is also shown in the maps.) But they do not want to let us have that water connection, because there is a group which is very strong in the institution. If you let a department work alone for five years the people in the department start building a network of illegal operations. Now take an example of a valve operator or valve man. What is his salary? A *sepoyee* [Policeman] arrives in the area and within a few days obtains a motorcycle. If you ask him where he got his motorcycle he cannot answer the question appropriately. Likewise a valve man has a motorcycle and three assistants. Now you think about it. How does he pay those three employees that he appointed himself? Now there is a person known as Shamsheer who is the assistant of a valve man named Salam valve man. Now the Shamsheer is working in the Postal Department. When the water comes to the settlement he does not go to his office but becomes the valve man's assistant. Now there are four or five people like him and they all take water for their own areas. This system is quite common here. Now everybody claims that they are paying for their water. (You know previously people used to hide drinks under their bedcovers, but now they are hiding drinking water.)

Q.10. In this system how is the money distributed and who gets how much? How much to you pay the tankers?

Ans: You know our water reserve is the underground tank in the house. When the tanker comes to the settlement we buy water from him. Sometimes we ask them to come and bring a tanker load for us, but if there is an immediate need or emergency we go to the main road and watch for the tanker and bring him to our house. Then he charges around Rs.300 for one tanker. Sometimes the water he supplies is filthy and unhygienic with a green colour. When we taste the same water by cupping our hands together we can't tell the colour and taste. But when we see it in our tank we find that the water is of very bad quality. If you have water in a glass you can check its colour and taste but when you have it in your hands you cannot. But when we use it for other purposes then we know that water is green and brought from a trench sewer. Now where can poor people get water from? This settlement belongs to poor people, all kind of craftsmen and labourers live here. The people living in Orangi have migrated from Bangladesh. They did not ask for money from anyone but on a self-help basis obtained all the resources, educated their children, built their house, and arranged for water and sanitation. Take the example of Dr Akhtar Hameed Khan, who was he? He was also a migrant, he made an example by creating OPP.

Q.11. How much do you pay for your 15 minutes of water every ten days?

Ans: In this system there is no valveman. The valveman is acting on his own accord. The water tanker system we created because of the crisis. At that time a tanker was costing Rs.1000. And at night people used to go to Manghopir to obtain water by hiding themselves from other people, so that other people could not buy tanker water by paying more than 1000 rupees for a tanker. When we passed from this era in 1986 to 1988, there was an unusual situation in that a fake pumping station was established at Khairabad. The Khidmat Committee people raided this pumping station and closed it down. After its closure we did not have a single drop of water for 30 days. Then we went to the D.C. and with his efforts that system was re-established for a while. The D.C. also favoured us and asked the Khidmat Committee people not to interfere in two issues in Karachi otherwise the law and order situation would deteriorate, and these two issues were water and electricity. After which nobody could control the situation. He was such a nice person for the community that we always remember him. (His name was I think Aziz Memon). He helped us to restart the provision of water. At that time the tankers cost Rs.250 to 300. Since then I have actively worked on this water issue on behalf of the people. Then we made a committee and fixed a monthly donation of Rs.5 per house from the C1 to C4 area. Nobody was compelled to pay. We asked the people who could not give us money to be members of the water committee. Then the issue was registration of the organisation and bearing its expenses, because it was also beyond our means. This organisation was registered as Gulshan-e-Bihar Welfare Society (Trust). Then we took Rs.10 per month donation from each house for two months and registered the organisation. Then we published a letter pad, pamphlets, and sent letters to the authorities to improve the situation. Now you tell me I have a record of three years. In three years we got total donations of Rs.12,000 and if you look at our expenses you will be surprised to see that if we go from here to the department it requires at least Rs.100 per trip. And we used to go every day but now as my personal financial position is very weak I cannot go regularly.

Q.12. Was your organisation established around the issue of water only?

Ans: Initially it was the issue of water, then we looked at other issues in the settlement, because at that time robberies were common. We established a system of community watchmen in the settlement. One person from each house was collected and two people were on duty each night. Gulshan-e-Bihar is the hub of sewerage water. So we contacted KWSB but they say it is not their responsibility but KMC's. KMC people say we have no accessories or equipment to clear the mess. So we went to the newspapers and published a photograph of the situation. Jang newspaper published the photograph and we worked regularly for around three months on this issue and only then did the KWSB people come. At that time the XEN was Shahid Kamal Sahab. He on his own tried to solve this problem, he used to say I want to learn from you how you are solving this problem?

Q.13. In your opinion who can rectify this dilapidated situation of water provision in your settlement?

Ans: This can only be done by the Army people because the situation in our country is such that only power can rectify this system. Now a few days back a person came with a shop with a T.T. (gun) and all the people in the market ran away. Nobody

wants to play with his life and take a risk. Everyone thinks of his own life only. But our life is often in the hands of God. Therefore the government is OK and through them I met with Army and Rangers and before that many times I met the KWSB officers. This is the whole file before you. But my meetings with the Army and Rangers seem quite encouraging. I have worked on this issue very hard. I telegraphed the governor, chief minister, prime minister etc. One day I sent 18 telegrams. But these black sheep only forwarded our applications and we have to come back to this trench. These government people became insensitive. Mr Jawed Hamid once said to one of my friends that the letters I sent to different people if weighed and sold would bring many thousands of rupees. But he had no shame in saying do not talk to me but talk to valve man. Now an Executive Engineer is saying this!!! At that time he asked for payment of 80 per cent to the valve man. I said we will pay 120 per cent to 150 per cent but you should provide us with water.

Q.14. Who is the most important person in this issue – the valve man or someone else?

Ans.: Definitely it is valve man who is more important. For example, if an officer orders that water should go on some particular route the valve man has no authority to change its direction. The valve man has no power. After Jawed Hamid, other XEN came, i.e. Syed Safdar Imam, who also worked for us poor people. He offered to have us connected from that reservoir and asked for Rs.20,000 as a bribe for approval of this project. I went to Mr Misbahuddin and said 'I heard you are in need of money?' He said 'What are you talking about?' I said, 'Mr Safdar Imam told me that "Some share will go to chief engineer, some share will go to our staff, so if you pay Rs.20,000 we will do your work."' Therefore I came to you and I am asking you that if you are in need of money I brought my chequebook you just tell me the date and I will sign. Secondly the driver of Mr Safdar Imam is also asking for Rs.20,000 as a bribe and telling us to give Rs.20,000 now and Rs.20,000 later after the work is finished. It means a total of Rs.40,000 should be paid for only one approval. Is this an injustice or what? You think about it, how many types of people are there?' Afterwards, he was transferred. I was also invited for a meeting. Their people were also present, and Mr Safdar Imam was also called upon. I said over there that, 'I would be no more a Muslim if even one word I spoke was untrue (false). I can give a statement by putting my hand on the holy book that he asked me for Rs.20,000 as a bribe, and I came to you and discussed this issue. He accepted that he asked for Rs.10,000 only.' Can you believe Mr Safdar Imam said that? He asked for Rs.10,000 only!! I said 'If a person can accept and ask for Rs.10,000 he can also ask for Rs.20,000. It is a matter of few minutes. If you forced him to vow on the holy book he will definitely accept all the charges.' So in Gulshan-e-Bihar, Ghaziabad, Gulshan-e-Zia, Mansoor Nagar area, and Raees Amrohi settlements people are very disturbed. If you people can do something please do it as a noble cause. Our children are not getting education but going after water tankers, we are paying the money for water instead of paying school fees. And our sick children are another issue. Because all we have is dirty water we drink without considering its quality and contents. This is one of the main reason behind their illnesses. Our women commonly drink water by putting their scarf or sari on the glass of water so that they filter the filthy contents in the water. God knows this, when I am saying this or seeing this my eyes fill with tears. (He started crying.) We are humans? Is this a life of a human? Is this a life of a human being? Human beings are those who look after

other human beings. All our elected representatives from Gulshan-e-Bihar, MNA, MPAs, etc. What have they given us? Look at Orangi. It is same as it was. All the development has occurred here by the efforts of the Orangi people. I myself could not pay the school fees of my children. I got notices from the school administration for non-payment of school fees for two months. Why? Because I spent the money for school fees on water. I could not pay the electricity bill because I am compelled to buy water. In my family at least three tankers of water are required and I have to spend Rs.900 on water. Now can you imagine if a person is working they get a salary of around Rs.3,000 to Rs.4,000. Now one thousand he spends on water, one thousand he spends on communication. How will his children not become beggars? What will they eat? What will they do? This is something else that we follow the order of Prophet (Peace be upon him) that wear khaki but be clean. Because cleanliness is half belief in God. But what is the benefit of cleanliness, if we do not have water to drink but we are washing our clothes. The women of our house clean the clothes with the same water that they use for cleaning the dishes, and that water they still use for cleaning the house. Think that water they use for how many purposes, and as a repercussion the germs emerge which cause diseases. We have no medical facilities, no park, even no government school is available. There is total blindness in our area if you watch it closely. I forgot to show you that we have no water facilities. But they still send us a water bill from KWSB of around Rs.40,000. What is this?!! What kind of blindness is evident here? There are many bills like that, I told them to throw it into the dustbin or return it to whoever issued the bill. I would not take it. Because it is a cancer for me. Because I become sick of it and I got heart disease by thinking about these bills. I had one heart attack previously and I was in hospital for one week. This is a thought in me. I think about water provision to the settlement, general social welfare, etc. Once upon a time our five children got arrested and got death sentences without any reason. Just to prove that the administration is thieving we got arrested on the charges of kidnapping for ransom. So these children got death sentences without any reason. Therefore we gathered the people and on self-help donations we appealed to the high court and only then we regained the freedom of innocent children. But even then they got sentences of two years' imprisonment. Because as per law if the thief is caught you cannot beat him. But you tell me if a person has been robbed and catches the thief. If you would not beat him will he agree and accept the charges? It is human nature, for example we do not beat him but the public will beat him. If the robbed person catches the thief he would not beat him, but the public will beat him. In the end what happens is that the robbed person got arrested by the police for beating the thief. So in this way we are crying for water and now we've got this situation. Now I am working to establish a school to increase the literacy level among people and simultaneously work for joblessness/unemployment. We are making efforts to get land allotted to build a school. I want to establish a technical high school. In our country we do not need common high schools but a technical high school. Because until and unless a person or child has technical skills he cannot get a job. If from class six a child does not study a technical subject he will not be employed after matriculating from school. But if a child learns the skills to service or make a radio or television he can easily open a shop to service equipment and become an efficient mechanic. He can do both things, i.e. work as a mechanic in the shop and simultaneously study at a school and continue his education plus take responsibility for his house. But after getting a matric certificate what does he get?? Nothing!??

Q.15. Now after discussing all the issues of your settlement what are your future plans, how would you work in the future on the issues of water, education, health, employment, etc., that is do you have a future plan/vision?

Ans.: Yes, definitely, I have many things in mind. Especially I think about donors, if they could support us. Because we are given all the facilities by God almighty. We have such educated and intelligent engineers, that by only looking at the land they can easily tell you what is inside the earth. Obtaining water is not a difficult issue for them because water is coming from the Kalri lake up to Disco. Then why does it not come to Gulshan-e-Bihar up to Al-Hira? It is just a matter of changing the pipeline. Where you have a line of 36"Ø why can you not lay another 36"Ø line? You can increase the water facilities just by laying a water pipeline. It is not possible?! You know this existing water line was laid 20 years ago. Look at the population 20 years ago and now why do you not measure it or quantify it in that manner?? How can it be possible that you work with such an old system? If you want to give water to Gulshan-e-Bihar or Al-Hira it is quite possible. Either you make a pumping station at Qasba No.1 or lay a new line. I can show you, on the map it is quite near and easy. The existing pumping station at Germany school, is a part of Gulshan-e-Bihar. The reservoir is located here. Now they are distributing water from a lower point to a higher point. If we can pump the water to a higher level for the reservoir then why do not make a line connection on the lower side and with only two or three motors water can be pumped to all the settlements in this neighbourhood. Are we storing water here?? Why? If water is coming and being stored here then why do not we supply it to people? There must be a valve operator only. Now this is the map of Orangi. This is the settlement of Pathan Colony, the pumping station is located here. From here the water is pumped through Qasba More and reaches up to Disco More. From here the water is pumped to all the neighbouring settlements. But actually the pumping is required in only few places, such as in blocks F & G and water is supplied there. Actually this pumping station was made for Gulshan-e-Bihar and it was also named Gulshan-e-Bihar pumping station but when the problem is raised in these settlements they diverted the water to them and we were left alone. I also proposed that from this pumping station a 15"Ø water line can easily be laid here and water can be provided because it is not a big distance. It is only 300 to 400 feet away and it can easily be connected with a water line of 15"Ø. One line becomes the input and other becomes the output. But in their map what they did was they laid only one 15" line for both input and output. Now what they do is that when water comes they close a valve and the same water returns back from reservoir they open the same valve and supply the water. This is a running time system and for political reasons they controlled, fixed, and mis-used the system to politically harass the people of Gulshan-e-Bihar, Ghaziabad for their political affiliations.

Q.16. Now in your opinion who can improve and rectify this system?

Ans.: It is quite clear, definitely it is the KWSB who can do this work very easily. But when you go to them or talk to them they will say we have no funds. I asked them when will you have the funds? You are the people who have eaten away all the advance. Even at yesterday's meeting Mr Khalid (KWSB Officer) said that they do not have a contractor. They do not have a fund. I told him that the contractor at the initial stage should only be paid 12 per cent of the money in advance, and only then he is allowed to work on the project. A contractor is bound to pay 12-15 per cent advance money of the project to water Board XEN or the department of KWSB,

only then will he be allowed to work or his payment is released. Otherwise even after the completion of the project he is not paid or his payment remains unreleased. You see Mr Jawed Hamid, ex-employee of KWSB, now he is living in Canada. Because he understood the situation, that now the situation is becoming tight and worse for him, and he could be caught at any time. So he took all the money and left from here. I met him numerous times about this issue and you can see this whole file. Now we are very much dependent on this water. Whenever we see clouds in the sky we pray to God that dear almighty, please send these clouds to Hub dam. But when we hear that Hub dam got no rain we become hopeless. Because we are totally dependent on it. They left us alone to nature, which means that we are without any guardian and dependent on nature and become beggars; that only if someone gives us something to eat only then we can eat. The Government of Pakistan also belongs to us. This is our government. This is our country. For the love of this country we paid much and endured all kinds of suffering. We migrated twice, first to Bangladesh and then to Pakistan. Pakistan was not a sweet heaven where we could get employment and all the facilities, but it was only the love of this country that our elders thought we will eat half Roti but go to Pakistan. We also prayed to God that Oh Almighty, throw us on the mountains but it should be my country Pakistan. But what did our brother Pakistani's do to us from one glass of water? They do not allow us to drink half a glass of water. You know Mr Aasoomal in KWSB. He is really an angel. He gave us very good guidance. He took me to each department to solve our water problem. But other officers refused to help us. In the end he said to me, 'our department is in grave need of prayers. We have to do a noble job of supplying water to the people. But we are not performing our duties. When we supply the water to the people we get prayers and praise from people and simultaneously get money from the people. There was a time in Karachi city when people made sabeels and washed the streets of the city. But now the situation is such that we get no more praise or prayers from people but instead are called bad names'.

Thank you.

Annex 3

Condensed english transcript of group discussions held around the Awami Tanks surveyed

Name: Qari M. Salim and other area residents

Occupation: Qari/Mualim

Address: Gulshan-e-Zia, Sector 11½, Orangi Town, Karachi.

Question: What are your problems regarding water supply?

Answer: Pipeline provision had been provided for the last six or seven years, but the availability is nil. A different councillor came in the last 10-15 years, but no one worked for the problem. There is no arrangement for electricity. In my opinion, all these problems will be solved only by a military government because all the other are corrupt.

Question: In the public tank system or other method who received the money?

Answer: The water is supplied free.

Question: For these systems, there is a definite need for tankers, so who pays for them?

Answer: Mohalla people through contribution.

Question: In your opinion, how is the system working?

Answer: It is working well. Many people are benefiting from it. If water is supplied in abundance, a variety of new problems will be generated for the poor community.

Question: Who is responsible for cleanliness, inspection, and maintenance?

Answer: The Mohalla Community is responsible for it, and the water is provided according to health standards.

Question: What are the problems in the water supply system?

Answer: The contractors are the main culprits of the inefficient system. They always worked for their own benefit. Pipelines are provided only for their own

people. If anyone from any squatter settlement complains they make lame excuses. Rangers made a considerable improvement in the water system.

Question: What is the role of the valve operator?

Answer: They have no role.

Question: In your opinion, which people or department would improve the present system?

Answer: In our opinion the Rangers are the best option, as their behaviour with the people is good. Every 15 days army officers came to inspect the supply system. These people are the best, and we are happy.

Question: What should be the responsibilities of the people who will benefit from the system?

Answer: Sometimes tankers come without enough information about the location of the tanks; we will provide that information.

Question: What is your opinion about the private people or agencies that worked in collaboration to improve the system?

Answer: These private agencies will work only for few years, then after that the same story will happen again.

Question: How much water can you fetch at one time?

Answer: Many canisters

Question: With the public tank system, what are the water availability problems?

Answer: There is usually no problem, but sometimes the timing of deliveries is a problem.

Question: How many days do you have to wait for water?

Answer: There is no regular timing. Sometimes after one day, sometimes after a week, or in some cases only after 15 days. The pipeline is there, but there is no water in it.

Question: What is the history of the public tank system?

Answer: First the water was provided to Mosques, and then to the people. In the system many people had problem, so to overcome the problem this public tank system was introduced.

Question: In your area, what is the size and number of these public tanks?

Answer: Not known.

Question: What are the other resources?

Answer: Only a public tank.

Question: What should the supply system comprise?

Answer: Supply should be announced through loudspeakers or some other means.

Question: What are the problems of public tank system and how they should be solved?

Answer: No problems.

Question: Has water availability improved in the area?

Answer: Water availability is inadequate for our needs, and the main reason for this is the timing of the tankers. Sometimes the tankers come at regular intervals and bring a good quantity of water.

Question: In your opinion, is the agency responsible for service?

Answer: This was the responsibility of KMC, but the Rangers are efficient.

Question: In your opinion, how should the water problem be solved?

Answer: A piped water supply would improve the system.

Question: Is there any charge for the water from the public tank system?

Answer: No, the water is free.

Question: In your opinion, how does the supply system work?

Answer: Not very well. Sometimes unhygienic water has been delivered mixed with diesel.

Question: Why is the water supply system inefficient?

Answer: The people purchase one tanker at the rate of Rs.250-300, which is a lot of money for a poor man. Piped water supply is the only option for improvement.

Question: What are the responsibilities of the people who benefit from the public tank?

Answer: It is their responsibility to think about the cleanliness of the system. Avoid the personal disputes, and do not waste water in useless activities.

Name: Mulvi Aamir Khan and other area residents

Occupation: Retired

Address: Gulshan-e-Zia

Question: How much water do you need each time?

Answer: About 150-200 canisters.

Question: What are the water availability problems of your public tank system?

Answer: There is no problem.

Question: How often is the water supplied?

Answer: There is no regular timing. Sometimes every day, sometime every three or four days, sometime only after a week or 15 days.

Question: What is the history of the public tank?

Answer: There is a scarcity of water. Poor people are purchasing water from tankers, and in summer it costs about Rs.400-500. These are the main reasons behind the establishment of the public tank system.

Question: In your area how many tanks are there and of what size?

Answer: In the area there are about six tanks of the same size, and they have been working for the last 10-12 years.

Question: Who is responsible for its cleanliness, inspection, and maintenance?

Answer: All these works are done by the Mohalla community. But sometimes diesel is mixed in with the water, which is hazardous for health.

Question: How is the supply system?

Answer: The tank is open all day. Everyone takes water according to his consumption and need.

Question: What are the problems of the public tank system, and how these are to be solved?

Answer: A larger tank is the prime need. Sometimes the tanker cannot unload its full capacity because our tanks are too small.

ANNEX 3: CONDENSED ENGLISH TRANSLATIONS

Name: Nayaz Ahmed and other area residents

Occupation: PTCL Employee

Address: House No. 559-B, Gulshan-e-Zia, Sector 11½, Orangi Town, Karachi.

Question: How much water do you receive each time?

Answer: About 250-300 canisters. The private tankers bring smaller amounts, while the Rangers' tanker brings about 600 gallon.

Question: What are the problems facing the public water tank?

Answer: There is no problem, but you have to spend about two or three hours in a line up for the water.

Question: How often are you selling water?

Answer: There is no regular timing. Sometimes after two days, sometimes daily, and sometimes weekly.

Question: What are the other resources for water?

Answer: Only public tank is the only source, otherwise water is purchased from tankers, which cost Rs. 200-300 in winter and Rs.400-500 in summer. The pipeline is there, but there is no water in it.

Question: What is the history of the public tank?

Answer: As the community is poor and unable to purchase water, the Mohalla community applied to the Rangers, who came and inspected the situation and approved five public tanks.

Question: How many tanks are there in Gulshan-e-Zia and how big are they?

Answer: There are about five of the same size.

Question: What other sources of water are there?

Answer: The public tank is the only source. These tanks have been working for the last 12-15 years.

Question: Who is responsible for supervising these tanks?

Answer: Nayaz Ahmed is responsible for that.

Question: How is the water supply?

Answer: Everyone is allowed to have as much as they need.

Question: What are the problems with the public tank and how should these be solved?

Answer: There is no problem with the system. The piped water supply is good, but the the water supply pipes are often blocked, and that creates problems over the roads and affects the sewage system.

Question: In your opinion, who is responsible for water supply?

Answer: Karachi Metropolitan Corporation.

Question: Who is the owner of the tank?

Answer: Mr Hawaldar Khan is the owner of the tank.

Question: What are the problems with water availability and what is the solution?

Answer: Diesel mixed with the water is a common problem, and a pipeline would definitely improve the situation.

Question: In the public tank system, who collects the money?

Answer: The water is free to users, and the tanker's cost will be paid by Nayaz Sahab.

Question: Who is responsible for cleanliness and maintenance?

Answer: Mohalla community through combined efforts.

Question: In Gulshan-e-Zia?

Answer: Agencies are responsible for it.

Question: What is the role of the valve operator?

Answer: No role at all.

Question: For the system to work efficiently, what responsibilities should the respective agencies have?

Answer: In my opinion Rangers are the best option. The community struggled a lot to get piped water. They paid to excavate various sites, and undertook some maintenance measures, but the ultimate results are nil.

Question: What are the responsibilities of the people who have benefited from these public tanks?

Answer: Discipline and cleanliness mainly, so that no one finds a reason to complain.

Question: What is your opinion about the role of private agencies?

Answer: It will be unfair, especially for poor.

Question: Is there is any possibility business becoming involved in water supply?

Answer: So far, there has been no such commercial set-up. A few people have tried, but the Rangers took strict action against them.

Name: Mohammad Aslam and other area residents

Occupation: Garments

Address: Mustafa Masjid, Gulshan-e-Zia, Sector-11½, Orangi Town, Karachi.

Question: How much do you get at one time?

Answer: About 200-250 canisters.

Question: What are the problems in supplying the public water tanks?

Answer: Previously the system was good, but the contractor made every effort to ensure the failure of the system. They provide water only to the tank that is nearest their house.

Question: What are the other resources except public tank system?

Answer: Public tank is the only source, or people purchase water from tankers.

Question: What is the history of the public tank?

Answer: Previously the government response was very discouraging. It is not only water, but also electricity and gas that are problems here. There was a water shortage and it was also too expensive. That is why the public tank system was introduced.

Question: How many tanks are there in Gulshan-e-Zia and how big are they?

Answer: There are six water tanks of the same size.

Question: What are the other sources of water?

Answer: Apart from the public tank, only purchasing from private tankers.

Question: Why was the tank established?

Answer: Water was scarce. The tank was built 10 or 11 years ago and it was funded through contribution, that is why it is the property of Mohalla community.

Question: Who is responsible for operation?

Answer: Mohammad Aslam is responsible for operation.

Question: In what measures should the water be supplied?

Answer: People take what they need.

Question: What are the problems with regard to the public tank, and what is the solution?

Answer: Getting a larger tank should be the priority. A piped water supply would decrease the problems.

Question: Who is responsible for water supply?

Answer: Karachi Metropolitan Corporation.

A CASE REPORT 3: KARACHI

Name: Anwar and other area residents

Occupation: Textile Mills Employee

Address: House No. 508, Tank No. 2, Yaqoobabad, Orangi Town, Karachi.

Question: How much water do you get each time?

Answer: About 500 gallons.

Question: What are the problems with the public tank?

Answer: Shortage of water and tankers' availability are the main problems.

Question: How often do you get water?

Answer: Every two or three days.

Question: What is the history behind the establishment of the public tank?

Answer: The tanks were established because of poverty.

Question: How many tanks are there in your locality and how big are they?

Answer: There are two tanks of the same size.

Question: What are the other sources of water?

Answer: Private tankers.

Question: What is the history behind the establishment of this particular tank?

Answer: It was established by OPP seven or eight years ago.

Question: Who is responsible for operation?

Answer: Anwar Sahab and Masood Sahab are jointly responsible for it.

Question: What is the procedure for supply?

Answer: People are free. There is no restriction of time and quantity.

Question: What are the problems of public, and what should be its solution?

Answer: Proper availability, and mixing of diesel are the main problems with water.

Question: How should the water supply be improved?

Answer: A pipeline would be the best solution. The previous water supply line was taken away by the people.

Question: Who is responsible for water supply?

Answer: Karachi Water and Sewerage Board.

Question: What are your water supply problems?

Answer: No problems, but a piped water supply would be the best solution.

Question: Who collects the money for the public tank?

Answer: There is no charge for using the public tank.

Question: How well does the water supply system work?

Answer: It is good, but a piped supply would be the best solution.

Question: Who is responsible for supervision, cleanliness, and maintenance?

Answer: Mohalla Community.

Question: Why is the water supply system so inappropriate?

Answer: Government inefficiency.

Question: What is the role of the valve operator?

Answer: They will not provide water through the pipelines.

Question: What should the agency be responsible for providing?

Answer: Clean and hygienic water should be provided in the desired quantity and at the right time.

Question: What are the responsibilities of the people who get water from the public tank?

Answer: The people of the area are good and cooperative.

Question: Are you in favour of a private group or agency getting involved in water supply?

Answer: This would not be appropriate.

Question: Can water be supplied by a business?

Answer: Here the water is supplied free, although in cases of scarcity the poor pay Rs.400-500 per tanker.

Name: Syed Ghazanfar Ali s/o. Syed Hadayat Ali and other area residents

Occupation: Tailor

Address: House No. 19, Mansoor Nagar, Orangi Town, Karachi.

Question: How much water do you receive?

Answer: About 6000 gallons.

Question: What are the problems regarding the public tank?

Answer: Nothing, the people are happy.

Question: How often is the water available?

Answer: Generally every two or three days.

Question: What is the history behind the public tank?

Answer: Due to the high cost of water, which the poor could not afford, these public tanks were established.

Question: How many tanks are there and how big are they?

Answer: Three tanks of different sizes.

Question: What are the other water resources?

Answer: Tanker service, and each tanker costs Rs.350-400.

Question: When this tank was established?

Answer: 10 or 15 years ago.

Question: Who is responsible for its operation?

Answer: Syed Hadayat Ali Kazmi.

Question: How do the people get the water?

Answer: People take responsibility for their own.

Question: What are the problems with the public tank, and how should they be solved?

Answer: We need a daily supply, and a piped water supply should be provided as soon as possible.

Question: In your opinion, who is responsible for water supply?

Answer: Karachi Water and Sewerage Board.

Question: Who is the owner of the tank?

Answer: Mohalla community.

Question: What are the problems with water supply?

Answer: Only urgent repairs are carried out on the pipe.

Question: How does the public tank work?

Answer: Good.

Question: Who is responsible for supervision, cleanliness, and maintenance?

Answer: Syed Hadayat is responsible for supervision, and community for cleanliness.

Question: Why are there water supply problems?

Answer: Government inefficiency.

Question: What is the role of the valve man?

Answer: There is no water available through the pipeline.

Question: What are the responsibilities of the agency?

Answer: Amount and timing should be the priority of the agency.

Question: What are the responsibilities of the people who get water from the public tank?

Answer: The people are good, and well aware of their responsibilities.

Question: What is your opinion about privatization?

Answer: It would be unsuitable.

A CASE REPORT 3: KARACHI

Name: Mohammad Sharif and other area residents

Occupation: Labour

Address: Mansoor Nagar, Orangi Town, Karachi.

Question: How much water do you get each time?

Answer: About 3000-4000 gallons.

Question: What are the supply problems?

Answer: Nothing.

Question: How often do you receive supplies?

Answer: Every two or three days.

Question: What is the history behind public tank?

Answer: There is a scarcity of water in the Hub dam. Tanker supply is often about Rs.800-1000, which is too expensive. This system was developed by the government and demand by the people.

Question: What are the number and size of public tank?

Answer: Only one tank is available.

Question: What are the other water supply resources?

Answer: Only purchasing water.

Question: When was this tank established?

Answer: Nine or 10 years ago.

Question: Who is responsible for operation?

Answer: Mohammad Sharif is responsible for operation.

Question: How the water is supplied?

Answer: People take responsibility for their own needs.

Question: What are the problems with the public tank, and how should they be solved?

Answer: There is no problem with the public tank, but if a piped water supply is possible in the near future, it would be better.

Question: Who will be responsible for water supply?

Answer: Karachi Water and Sewerage Board.

Question: Who is the owner of the tank?

Answer: Mr. Shah Alam is the owner of the tank.

Question: What are people's water supply problems?

Answer: There are no problems.

Question: Who collects the money for the water?

Answer: Water is provided free.

Question: What is the efficiency of the public tank?

Answer: This is temporary system. We need a permanent system of piped water.

Question: Who is responsible for cleanliness and supervision?

Answer: Mohalla community.

Question: What are the problems in the water supply system?

Answer: Government inefficiency.

Question: What should the agency's responsibilities be?

Answer: To provide enough water for the people's needs.

Question: Those people who gets their water from the public tank, what are their responsibilities?

Answer: They are good people, they are well aware of their responsibilities. They are also conscious about cleanliness.

Question: Could privatisation be a solution?

Answer: We are not in favour of privatisation.

Question: Could the water supply be run like a business?

Answer: No.

Name: Shabrati Mian and other area residents

Occupation: *Moazzan* in *Jamma Masjid Ghousia*

Address: Mansoor Nagar, Orangi Town, Karachi.

Question: How much water do you get each time?

Answer: About 6000 gallons.

Question: What are the problems with the public tank?

Answer: There is no problem.

Question: How often do you get water?

Answer: Once a week.

Question: What is the history of the public tank?

Answer: There was scarcity of water. Most of the poor do not have a private water tank. That is why this public tank system was introduced.

Question: In your area, how many public tanks are there and how big are they?

Answer: There is only one tank.

Question: When and how was this tank was established?

Answer: 14 years ago.

Question: Who is the owner and responsible for supervision?

Answer: This tank is the property of the Mosque.

Question: What is the procedure for supply?

Answer: Each house receives 20 canisters per week.

Question: What are the problems with the public tank, and how can they be solved?

Answer: Water should be provided to the people twice a week. The existing pipeline should be repaired.

Question: Who is responsible for water supply?

Answer: Karachi Water and Sewerage Board.

Question: What are people's water supply problems?

Answer: A larger tank should be built, otherwise the piped water should be supplied.

Question: Who collects the money for the water?

Answer: Water is provided free.

Question: How the system is working?

Answer: Reasonably.

Question: Who is responsible for cleanliness and supervision?

Answer: Masjid committee.

Question: Why are there problems with the water supply system?

Answer: It is political game, and inefficiency of the respective agency.

Question: Regarding water supply, what are the responsibilities of the agency?

Answer: The public tank system is good, but a piped water supply should be ensured.

Question: What are the responsibilities of the people who benefit from the public tank system?

Answer: The people of the area are well aware of their responsibilities.

Question: Through this system, is privatisation possible?

Answer: We are not in favour of privatisation.

Question: Can the water supply system be run as a business?

Answer: Not possible.

A CASE REPORT 3: KARACHI

Name: Mohammad Saleem and other area residents

Occupation: Qari

Address: Gulshan-e-Zia, Sector-11½, Orangi Town, Karachi.

Question: How much water do you get each time?

Answer: About 6000 gallons.

Question: What are the problems with your public tank system?

Answer: There is no problem, water supply is on time.

Question: How often do you get water?

Answer: Every 15 days except in an emergency.

Question: Gave a brief history of public tank system.

Answer: There was a shortage of water. The poor were compelled to pay Rs.200-250 per tanker. Because the poor could not afford this, these public tanks were introduced.

Question: How many tanks are in your area and how big are they?

Answer: There are two tanks.

Question: When and how were these public tanks established?

Answer: 11 years ago due to shortage of water.

Question: Who is responsible for supervision?

Answer: Qari Mohammad Saleem.

Question: What is the procedure for supply?

Answer: People take what they need.

Question: What are the problems of the public tank system, and how could they be solved?

Answer: There is no problem. If supplies arrive weekly, it would definitely improve the situation.

Question: Who is responsible for water supply?

Answer: Karachi Water and Sewerage Board.

Question: Who is the owner of the tank?

Answer: It is the property of Madrasa.

Question: Who collect the money?

Answer: The water is free.

Question: Who is responsible for supervision, cleanliness and maintenance?

Answer: Madrasa committee.

Question: How the public tank system is working?

Answer: As a facility, it is working well.

Question: What are the problems with the water supply system?

Answer: No one care about his responsibilities. The pipelines are there, but there is no water in the system.

Question: What is the role of valve operator?

Answer: His role is negative.

Question: What should the agency's responsibility be?

Answer: Timing and a piped water supply would improve the condition.

Question: What are the responsibilities of the people who benefit from the system?

Answer: They should think about the co-ordination and cleanliness of the tank.

Question: Through this system, is there is any chance for privatisation?

Answer: Only with the co-operation of the people.

Question: Could water supply be run like a business?

Answer: Not possible.

A CASE REPORT 3: KARACHI

Name: Manzoor Ahmed and other area residents

Address: Gulshan-e-Zia, Orangi Town, Karachi.

Question: In your opinion, who is responsible for water supply?

Answer: Karachi Metropolitan Corporation.

Question: How owns this tank?

Answer: Jahangir Khan owns this tank.

Question: Regarding water availability, what are the problems?

Answer: There is a scarcity of water. Water should be provided through the pipeline.

Question: Who collects the money for the water?

Answer: The supply is free.

Question: Who is responsible for supervision, cleanliness, and maintenance?

Answer: Mohalla community is responsible for these works.

Question: Why is the supply so poor in Gulshan-e-Zia?

Answer: All because of personal interest and a political game.

Question: What is role of the valve operator?

Answer: His role is very negative. He is a briber. He demands money from people to open up the valve. His demand is 150 per month from each house.

Question: Through this system, is there is any chance for privatization?

Answer: If some private people or agencies want privatization, we will support them.

Question: Can the water supply be run like a business?

Answer: Except for the Rangers' role, the potential for a business is there.

ANNEX 3: CONDENSED ENGLISH TRANSLATIONS

Name: Abdul Haie

Occupation: Textile Worker

Address: Jama Masjid Siddiq-e-Akbar, Gulshan-e-Zia, Sector 11½,
Orangi Town, Karachi.

Question: How much water do you get each time?

Answer: About 6000 gallons.

Question: What are the problems with the public tank system?

Answer: No problems.

Question: How often do you get water?

Answer: Every 15 days.

Question: What is the history of the public tank system?

Answer: The tanks were established because of water scarcity.

Question: How many tanks are there in the area and how big are they?

Answer: There is only one tank.

Question: What are the other water resources?

Answer: Private tankers are the other resources, and in summer they cost about Rs.400-500. Additionally water is provided through the pipeline once a month.

Question: When and how was this tank established?

Answer: 20 or 21 years ago.

Question: Who is responsible for operation?

Answer: Masjid Committee.

Question: What is the procedure for supply?

Answer: People take what they need.

Question: What are the problems with the public tank and how should they be solved?

Answer: A pipeline and a larger water tank are needed.

Question: Who is responsible for the water supply?

Answer: Karachi Water and Sewerage Board.

Question: Who is the owner of the tank?

Answer: Masjid Committee.

Question: What are the problems with the public tank system?

Answer: There should be a fixed price, and the tankers should provide hygienic water. If this tanker is the only option, then 10 to 15 more public tanks should be built.

Question: For the existing supply of water, who collects the money?

Answer: Water is free.

Question: How is the public tank system working?

Answer: Good.

Question: Who is responsible for cleanliness and supervision?

Answer: Mohalla community.

Question: Why are there problems with water supply?

Answer: Karachi Water and Sewerage Board is responsible.

Question: Regarding water supply, what should be the role of the agency?

Answer: At present we are in urgent need of a new tank, but the response from the water board is nil.

Question: Through this system, is privatisation is possible?

Answer: If there is a case, we will definitely support them.

Question: In your opinion, can water supply work like a business?

Answer: No.

ANNEX 3: CONDENSED ENGLISH TRANSLATIONS

Name: Syed Ali Imam Al-Mansoor and other area residents

Occupation: Business

Address: Jama Masjid Batul Mamoor, Ghaziabad, Orangi Town, Karachi.

Question: How much water do you get each time?

Answer: About 4000 gallons.

Question: Regarding water, what are your problems?

Answer: Nothing.

Question: How often do you get water?

Answer: Once a week.

Question: Give a history of public tank system.

Answer: There was a scarcity of water. 10 years ago a pipeline was laid through World Bank aid, but the line has never worked. This is somewhat background history behind this public tank system.

Question: In this area how many tanks are there and how big are they?

Answer: There is no tank in the near vicinity.

Question: What are the other sources of water?

Answer: Private tankers, which cost about Rs.400-500 in summer.

Question: Who is the owner of tank, and when was it established?

Answer: It is the property of the mosque and was built 10 years ago.

Question: Who supervises the tank?

Answer: Masjid committee.

Question: How was the water supplied to the people?

Answer: People take responsibility for their own needs.

Question: In water supply, what problems do you face?

Answer: This is an ad hoc system. A piped water supply needs to be ensured.

Question: Who is responsible for water supply?

Answer: Karachi Water and Sewerage Board.

Question: What are the problems of the common man through these various water supply systems?

Answer: A piped water supply should be ensured, otherwise the capacity of the public tank should be increased.

Question: Who is responsible for collecting the money?

Answer: Water is supplied free.

Question: Who is responsible for cleanliness and maintenance?

Answer: Mohalla community.

Question: Why is the water supply not working?

Answer: A group is working against the urdu speakers. This group is against the urdu speaker in every field, like economic, political and educational. In my point of view all the government agencies are inefficient.

Question: What is role of valve operator?

Answer: He is not the government employee. He was appointed by the Mohalla community, and he does not have a definite salary. Water supply should have a definite timing. He is careless about his duties. A piped water supply should be made possible. The wall man transfer should be done on regular intervals.

Question: What should the role be of the agency?

Answer: They should be loyal towards their work. They should not be the bribers and should be well aware of their responsibilities.

Question: What should the responsibilities be of people who get water from the public tank system?

Answer: Do not consider it their own property. In this system their water should be shared amongst the poor people. The division of water should be fair.

Question: Through this is there is any possibility of privatisation?

Answer: Yes; privatisation will bring about some improvement.

Question: Could the water supply be run like a business?

Answer: Initially in Karachi, water is adopted as business.

ANNEX 3: CONDENSED ENGLISH TRANSLATIONS

Name: Ahmed Ali and other area residents

Occupation: Shopkeeper

Address: Jama Masjid Anwar, Muslim Maywati Colony, Sector 11½,
Ghaziabad, Orangi Town, Karachi.

Question: How much water do you get each time?

Answer: About 3000 gallons.

Question: What are the main problems with your supply?

Answer: Supply is not according to need. We regularly remind Karachi Water and Sewerage Board office about the problem.

Question: Give a history about the set-up of the public tank.

Answer: The shortage of water and inability of poor people to pay for water led to this option.

Question: How many tanks are there in your area and how big are they?

Answer: There are three large tanks.

Question: What are the other water resources?

Answer: Only the tankers.

Question: When was this tank built, and who owns it?

Answer: It is the property of the people, and was built two years ago.

Question: Who is responsible for supervision?

Answer: Masjid Committee and the Mohalla community.

Question: How the water is supplied?

Answer: It is the people's responsibility. They consume according to their need.

Question: What are the problems with the public tank water supply system, and how should they be solved?

Answer: Quantity of water should be improved. Tanker operator should obey the community.

Question: Who is responsible for water services?

Answer: I do not know.

Question: What are the problems faced by people through the public tank system?

Answer: Presently the pipeline water is completely unhygienic. The pipeline service should be improved according to standards.

Question: Who collects the water supply charges?

Answer: Supply is free.

Question: How is the public tank working?

Answer: Initially the efficiency was good, but now the timing and the need are the main problems.

Question: Who is responsible for supervision, cleanliness and maintenance?

Answer: Masjid committee and nearby residents.

Question: Why is the water supply system so inefficient?

Answer: Because of the agency's negative role.

Question: What is the role of the wall man?

Answer: His role is completely negative. In 20 to 25 days he provides water only for few minutes.

Question: In your opinion, what should be the responsibilities of respective water supply relegated agency?

Answer: Timing and need should remained the priority of water board.

Question: What should be the responsibilities of the people who benefit from the existing public tank service?

Answer: The people are cooperative.

Question: Will your present system lead towards privatisation?

Answer: It will be unsuitable.

Question: Can water supply be run as a business?

Answer: It is not possible.

Name: Khushi Mohammad

Occupation: Retired

Address: Gulshan-e-Zia, Near Grave Yard Sector 11½, Orangi Town, Karachi.

Question: How much water do you get each time?

Answer: About 6000 gallons.

Question: What are the problems with water availability?

Answer: Complaint is common, and there are often delays.

Question: How often do you get water?

Answer: Only once every 7 to 10 days.

Question: What is the background history of the public tank?

Answer: There was a shortage of water. A few government officials came and surveyed the area. A month after the survey, supply became possible.

Question: How many tanks are there in your area and how big are they?

Answer: Only four tanks of same size.

Question: When and how were these public tanks established?

Answer: Five or six year ago these tanks were established by the Mohalla community on self-help basis.

Question: Who is responsible for its working?

Answer: Khushi Mohammad Sahab.

Question: How is the water supplied to the general public?

Answer: There are about 20-25 houses. 10 canisters are supplied to each home.

Question: What are the problems with the public water supply tank, and how should they be solved?

Answer: Scarcity of water still exists. A piped water supply should be re-established.

Question: Who is responsible for water supply provision?

Answer: Government responsibility.

Question: Who owns this tank?

Answer: Community property.

Question: Public tank or tanker – which one is the problem, and what is your proposed solution?

Answer: There is no piped water supply. The pipeline is broken. The Karachi Water and Sewerage Board official has been asked to repair it, as that is beyond the range of a poor community.

Question: What is your opinion about the working of the public tank?

Answer: It is good, but not enough water is supplied.

Question: Who is responsible for cleanliness and maintenance?

Answer: Mohalla community is responsible for that work.

Question: In Gulshan-e-Zia, why are water problems so tense?

Answer: Government inefficiency.

Question: What is the role of the wall operator?

Answer: Because of political influence the wall man wants money for opening up the wall.

Question: What should be the responsibilities of the agency?

Answer: Proper availability of water on time. A piped water supply will further improve the situation.

Question: What are the responsibilities of the beneficiaries?

Answer: They are good people and take care about cleanliness. Avoid quarrelling, and through unity they performed all their activities.

Question: Through this system, is there is any chance of privatisation?

Answer: It is not possible in our community or Mohalla.

Question: Can water supply be run like a business?

Answer: It is not possible.

ANNEX 3: CONDENSED ENGLISH TRANSLATIONS

Name: Molvi Amir Hussain Khan and other area residents

Occupation: Retired person

Address: House No. CM-220, Gulshan-e-Zia, Orangi Town, Karachi.

Question: How much water do you get each time?

Answer: About 6000 gallons.

Question: What are the problems with your public tank?

Answer: Nothing.

Question: How often do you get water?

Answer: Once a week.

Question: Give a background history of the public tank.

Answer: There was shortage of water, so that tank was established in 1982.

Question: In Gulshan-e-Zia, how many tanks are there in your area and how big are they?

Answer: Three or four tanks of same size.

Question: What are the other sources of water?

Answer: Other source is private tankers, which costs about Rs.300-400 per tanker.

Question: When and how was this public tank constructed?

Answer: I built it personally in 1982.

Question: Who is responsible for its operation?

Answer: Molvi Amir Hussain Khan.

Question: How is the water supplied to the general public?

Answer: People take their own.

Question: What is the problem with the public tank, and how should it be solved?

Answer: One tanker is sufficient. We need to remind the Karachi Water and Sewerage Board office to send the tanker.

Question: Who is responsible for water supply in Karachi?

Answer: Karachi Water and Sewerage Board.

Question: Who is responsible for cleanliness?

Answer: Amir Hussain Khan is responsible for that work.

Question: How is the public tank working?

Answer: Working is good, and the good help of the poor people.

Question: Why are the water problems so tense in Gulshan-e-Zia?

Answer: Agency's inefficiency.

Question: What is the role of wall operator?

Answer: He demands money for opening up of the wall.

Question: What are the responsibilities of the people who benefit from the public tank system?

Answer: Good, cooperative, and well aware of their responsibilities.

Question: Through this system is there any chance of privatisation?

Answer: We are not able to privatise.

Question: Can water supply be run as a business in future?

Answer: No.

Name: Tahir Hussain and other area residents

Occupation: Salesman

Address: Noorani Masjid, Mujahid Colony, Ghaziabad, Orangi Town, Karachi.

Question: How much water do you get at a time?

Answer: About 18000 gallons.

Question: What are the problems you face in getting water to your awami tank?

Answer: There is no problem.

Question: How often do you get water?

Answer: Initially the water was supplied daily. Then the supply was disconnected. Now the water is available twice a week.

Question: Why were awami tanks established in the area?

Answer: The tankers' rates were increasing daily, and were beyond the reach of poor.

Question: How many tanks are there in your area and how big are they?

Answer: 8 tanks are working in the area.

Question: When and how were these awami tanks built?

Answer: 14 years ago, by the Masjid committee.

Question: What are the other sources of water?

Answer: Tanker is the only remaining option.

Question: Who is responsible for supervision?

Answer: Masjid committee is responsible for that work.

Question: How is the water supplied to the general public?

Answer: People take responsibility for their own supply. There about six canisters for each house.

Question: What are the problems of the awami tank and how should they be solved?

Answer: Timing and the need to remind water board official is common. A piped water supply should be ensured.

Question: Who is responsible for water supply?

Answer: Karachi Water and Sewerage Board.

Question: Awami tanks versus other resources – what problems do the people face?

Answer: The awami tank is a temporary option. Its is not good for the whole of the community, so a piped water supply should be ensured.

Question: Who collects the money for the water?

Answer: Supply of water is free.

Question: How does the awami tank work?

Answer: It works well.

Question: Who is responsible for cleanliness and maintenance?

Answer: Masjid committee and Mohalla community.

Question: Why are the water problems so prominent?

Answer: Negative government attitude.

Question: What is role of the wall operator?

Answer: He is not a government employee, that is why he demands money. Those who pay, he provides water every two days. Those who do not, he provides once every two months.

Question: What are the responsibilities of the agency?

Answer: The awami tank is a temporary system. A piped water supply should be ensured.

Question: What are the responsibilities of the people who benefit from the awami tank?

Answer: People are cooperative with each other.

Question: Through this systems is privatisation is possible?

Answer: Mohalla community will consider the situation .

Question: Can the water supply be run as a business?

Answer: It is already a business.

Name: Abdul Hafeez and other area residents

Occupation: Thallawala

Address: Muslim Maywati Colony

Question: How much water do you get from all your resources?

Answer: About 14,000 gallons.

Question: What problems do you face with your awami tank?

Answer: There are no problems. It is good system, especially for the poor.

Question: How often do you get water?

Answer: Usually every three or four days.

Question: What is the history of the awami tanks?

Answer: Because water is scarce, the cost of water from tanker's became very expensive so we needed an alternative. This was the government's positive response to help the poor in low-income settlements.

Question: How many tanks are there in your area and how big are they?

Answer: There are three or four awami tanks in the area. The other tanks are smaller.

Question: What are your other sources of water?

Answer: Commercial tankers.

Question: How and when were these awami tanks established?

Answer: They were due to shortage of water?

Question: Who is the chief patron of this service?

Answer: The combine efforts of the Mohalla community.

Question: How is the water supplied?

Answer: People collect their own water according to need.

Question: What are the problems with the awami tank and how should they be solved?

Answer: Water should be available every day, from either the tank or the pipeline.

Question: Who is responsible for water supply in Karachi?

Answer: Karachi Water and Sewerage Board.

Question: What are the responsibilities of the people who benefit from the a wami tank?

Answer: People are good, and well aware of their responsibilities.

Question: Who owns this awami tank?

Answer: It is government property.

Question: What type of problems do people face in getting water?

Answer: A piped water supply should be ensured.

Question: Who collects the money for water supplied?

Answer: The water is supplied free.

Question: Who is responsible for the cleanliness and maintenance of the awami tank?

Answer: The Mohalla community.

Question: How is the water supply system working?

Answer: The poor are paying in kind that is time .

Question: Why is the water supply system not working?

Answer: Administrative inefficiency. They do not really work for the poor, especially regarding water supply.

Question: What is the role of wall operator?

Answer: He has no role, because water is not provided to us through the pipeline.

Question: Using this system is there any chance of privatisation?

Answer: We are not in favour of privatisation.

Question: Can water supply be run as a business?

Answer: The water supply is already a business.

ANNEX 3: CONDENSED ENGLISH TRANSLATIONS

Name: Alder Faiz Masih and other area residents

Occupation: Shopkeeper

Address: Ghaziabad, Christian Colony, Sector 11½, Orangi Town, Karachi

Question: How much water do you get each time?

Answer: About 6,000 gallons.

Question: What are the water supply problems with your awami tank?

Answer: There are no problems.

Question: How often do you get water?

Answer: Three days a week.

Question: What is the history of your awami tank?

Answer: There was no proper arrangement for water. Water from the tanker was too expensive. It costs about Rs.1000 per month.

Question: How many tanks are there in your area and how big are they?

Answer: There are three or four different sizes of tank.

Question: What are the other sources of water?

Answer: Commercial tankers.

Question: When was this tank established, and who is responsible for its operation?

Answer: It was established more than a year ago and Alder Faiz Masih is responsible for operation.

Question: How is the water supplied?

Answer: People collect their own supplies.

Question: What are the problems with these tanks, and how should they be solved?

Answer: These tanks have some problems, but the solution is to restore supply through the pipeline.

Question: Who is responsible for water supply in Karachi?

Answer: Karachi Water and Sewerage Board.

Question: Who owns this tank?

Answer: I do not know.

Question: Whos collects the money for the water?

Answer: The water is free.

Question: What are your problems with these various supply methods?

Answer: Visit of Karachi Water and Sewerage Board is common for awami tank system. Water from the tankers is too expensive, so the government should ensure a piped water supply.

Question: How does the water supply system work?

Answer: On permanent basis it is good, otherwise the water should be supplied through pipelines.

Question: Who is responsible for maintenance, cleanliness and supervision?

Answer: The Mohalla community.

Question: Why is the water supply not working?

Answer: The administrators do not have the skills.

Question: What is the role of the wall operator?

Answer: He has no role.

Question: What are the responsibilities of the people who benefit from the awami tank system?

Answer: They should take care of cleanliness, and work cooperatively.

Question: Using this system, is there is any possibility of privatisation?

Answer: We will definitely support those agencies.

Question: Could the water supply be run as a business?

Answer: When the supply of water stops completely, then it will become a business.

ANNEX 3: CONDENSED ENGLISH TRANSLATIONS

Name: Fazal and Younus and other area residents

Occupation: Kabari

Address: Christian Colony, Ghaziabad, Sector 11½, Orangi Town, Karachi

Question: How much water do you get each time?

Answer: About 6000 gallons.

Question: What are your problems regarding water?

Answer: There are no problems.

Question: How often do you get water?

Answer: Three times a week.

Question: What is the history of your awami tank?

Answer: There was shortage of water. The poor were unable to pay for the tankers. That is why these awami tanks were established.

Question: How many tanks are there in your area and how big are they?

Answer: There are four tanks of different size.

Question: How and when this tank was established?

Answer: It was established ten years ago because of the shortage of water.

Question: How is the water supplied?

Answer: People collect their own.

Question: What are the problems with the awami tank and how should these be solved?

Answer: Complaints are common at the water board office, so a piped water supply should be ensured.

Question: Who is responsible for water supply?

Answer: Karachi Water and Sewerage Board.

Question: Who owns this tank?

Answer: The Mohalla community.

Question: Who collect the money for the water?

Answer: Water is supplied free. The government pays the tankers.

Question: How does the water supply system work?

Answer: It does not work well.

Question: Who is responsible for cleanliness, supervision and maintenance?

Answer: The Mohalla community.

Question: Why is the water supply system so inappropriate in your locality?

Answer: Administrative problems.

Question: What is the role of wall man?

Answer: He has no role.

Question: What are the responsibilities of the agencies regarding the awami tank system?

Answer: They provide water in at the right time.

Question: What are the responsibilities of the people regarding the awami tank system?

Answer: They work cooperatively and take care of cleanliness.

Question: Using this system is privatisation possible?

Answer: Privatisation is not possible.

Question: Could water supply be run as a business?

Answer: Private tankers are already businesses.

ANNEX 3: CONDENSED ENGLISH TRANSLATIONS

Name: Mohammad Iqbal and other area residents

Occupation: Tailor Master (Ladies)

Address: Yaqoobabad, Flat No. 2, Sector 11½, Orangi Town, Karachi.

Question: How much water do you get each time?

Answer: About 6000 gallons.

Question: What problems do you face with your awami tank?

Answer: The water only lasts about two to three hours.

Question: How often do you get water?

Answer: There is no proper timing for water, and we get it two or three a week.

Question: What is the history of your awami tank?

Answer: There is a shortage of water, and the high rate of the private tankers leads to this option.

Question: How many tanks are there in your area and how big are they?

Answer: There are about six or seven tanks.

Question: What are the other sources of water?

Answer: Private tankers.

Question: How and when was this particular awami tank established.

Answer: Due to scarcity of water, it was built three or four months ago.

Question: Who is responsible for the system?

Answer: Mohammad Iqbal and Ibrahim are responsible for it.

Question: How the water is to be supplied?

Answer: People collect their own water, but there is not enough for our needs.

Question: What are the problems with your awami tank, and how should they be solved?

Answer: We need about 3000 gallons daily or else an assured piped water supply.

Question: Who is responsible for water supply in Karachi?

Answer: Karachi Water and Sewerage Board.

Question: Who owns this tank?

Answer: Mr. Liaquat Ali Sahab.

Question: Regarding water supply, what are people's common problems and how should they be solved?

Answer: There is no problem, but piped water should be ensured?

Question: Who collects the money for water?

Answer: Supply is free. Remaining expenditure is paid from our own pockets.

Question: How is the water system working?

Answer: It is not good – an incomplete system on a temporary basis. A piped water supply should be ensured.

Question: Why is the service of water so inefficient?

Answer: Administrative inefficiency.

Question: What is role of valve operator?

Answer: Irresponsible

Question: Regarding water supply, what are the responsibilities of the agency?

Answer: Providing clear and hygienic water at the right time.

Question: What are the responsibilities of the people who benefit from the system?

Answer: The water quota is insufficient, that is why sometimes the situation gets tense.

Question: Using this system is there is any possibility of privatisation?

Answer: It is not possible.

Question: Could the water supply be run as a business?

Answer: With the awami tank system it is not possible.

Name: Abdul Haq

Occupation: Carpenter

Address: Yaqoobabad, Tanki No. 2, Sector 11½, Orangi Town, Karachi.

Question: How much water do you get each time?

Answer: About 3000-6000 gallons.

Question: Regarding the supply of water for the awami tank, what type of problems you are facing?

Answer: There are no problems.

Question: How often do you get water?

Answer: Once a week.

Question: Give a brief history of your awami tank?

Answer: Water shortages and the high cost of tankers lead to this option.

Question: How many tanks are there in your area and how big are they?

Answer: There are four or five different sized tanks.

Question: What are the other sources of water are there and when was this tank established?

Answer: Private tankers are the only other option. This tank was established six months ago.

Question: Who is responsible for supervision and running?

Answer: Mr. Abdul Haq is responsible for supervision and running.

Question: How is the water supplied?

Answer: It is announced through loudspeakers and the people collect water according to their needs.

Question: What are the problems of the awami tank and how should they be solved?

Answer: There is no problem with the awami tank. A piped water supply should be ensured.

Question: Who is responsible for water supply in Karachi?

Answer: Karachi Water and Sewerage Board.

Question: Who owns this tank?

Answer: It was established through the contribution of the Mohalla community, its committee is wholly responsible.

Question: What problems do the people commonly face?

Answer: Timing and quality are the main problems. Sometimes the tankers bring water at 2-3a.m., and create problems.

Question: Who collects the money for the water?

Answer: Water supply is free.

Question: What is the role of the wall operator?

Answer: The pipeline is there, but there is no water in it.

Question: How is the awami tank working?

Answer: It is good, at least through that facility the public is getting water.

Question: Who is responsible for maintenance and cleanliness?

Answer: Mohalla community.

Question: Why is the water service so inefficient?

Answer: Lack of administrative response.

Question: What should be the responsibilities of the agency regarding water supply?

Answer: The water board should supply hygienic water according to need at the proper time.

ANNEX 3: CONDENSED ENGLISH TRANSLATIONS

Name: Mohammad Yousuf

Occupation: Shopkeeper

Address: Jama Masjid Hazrat Ali, Muslim Colony, Ghaziabad, Sector 11½,
Orangi Town, Karachi.

Question: How much water do you get each time?

Answer: About 1600 gallons.

Question: What are your problems regarding the awami tank?

Answer: Water is not available according to need and permanent nature .

Question: How often do you get water?

Answer: Once a week.

Question: What is the history of your awami tank?

Answer: People were buying tankers when they needed to, but it was beyond the range of poor, that is why this tank was developed.

Question: How many tanks are there in your area and how big are they?

Answer: Only one tank.

Question: When was this tank established and who is responsible for its supervision?

Answer: It was established more than a year ago and the masjid committee is responsible for its supervision.

Question: How is the water supplied?

Answer: People collect what they need.

Question: What are the problems with the awami tank, and how should they be solved?

Answer: Water is not available on time and according to need. A piped water supply should be ensured.

Question: Who is responsible for water supply in Karachi?

Answer: Karachi Water and Sewerage Board.

Question: Who is responsible for this awami tank?

Answer: I do not know.

Question: Regarding water, what are the problems you are facing, and how should they be solved?

Answer: It is common that we have to remind the Karachi Water and Sewerage Board officials and this wastes two to three hours. Tanker supplies are expensive for the government, so the government should establish a proper pipeline supply.

Question: Who collects the money for water?

Answer: Water is free.

Question: How is the present tank working?

Answer: That it is working is the main thing, and best for us poor people.

Question: Who is responsible for cleanliness, maintenance and supervision?

Answer: The Mohalla community is responsible for that work.

Question: Why is the water service not working?

Answer: Poor locality, and the administrative response towards it is very poor.

Question: What is the role of the wall operator?

Answer: Our line is not connected to the main line.

Question: What should be the responsibilities of the related department?

Answer: Behaviour and response of the relevant department should be improved.

Question: What should be the responsibilities of the beneficiaries of the awami tank?

Answer: They should come at the proper time, do not disturb the other people, and take care about cleanliness.

Question: Using this system is privatisation possible?

Answer: Privatisation is possible.

Question: Can water supply be run as a business?

Answer: Presently it is a business and the people and related agency are the main actors.

Name: Mohammad Amin

Occupation: Driver

Address: Yaqoobabad, Sector 11½, Orangi Town, Karachi.

Question: How much water do you get each time?

Answer: About 3000 gallons.

Question: What are the problems with your awami tank?

Answer: Reminding the Karachi Water and Sewerage Board officials is common, otherwise water is provided very late.

Question: How often do you get water for your awami tank?

Answer: About every three days.

Question: What is the background history of your awami tank?

Answer: There is a shortage of water, and the tanker's water was too expensive. That is why the awami tank was established.

Question: How many tanks are there in your area and how big are they?

Answer: There are six tanks of the same size.

Question: What are the other sources of water?

Answer: Private tankers.

Question: When and how was this tank established?

Answer: It was established by the government more than a year ago.

Question: Who is responsible for the tank?

Answer: Mr. Mohammad Amin and Shaban Sahab.

Question: How is the water supplied?

Answer: People collect what they need.

Question: What are the problems with the awami tank and how should they be solved?

Answer: There are too many peoples, so adequate daily supply should be insured. A piped water supply would give better results.

Question: Who is responsible for water supply in Karachi?

Answer: Karachi Water and Sewerage Board.

Question: What are the supply-related problems and how should they be solved?

Answer: Taking water from the tank is difficult work for people. The previous six or seven year-old laid pipeline should be maintained and piped water should be ensured.

Question: Who is responsible for collecting money for water supply?

Answer: Supply is free.

Question: How is the awami tank system working?

Answer: Not good.

Question: Who is responsible for cleanliness and repair and supervision?

Answer: The Mohalla community.

Question: Why are the water problems so tense and aggravated in Yaqoobabad?

Answer: Administrative problems.

Question: What is the role of wall operator?

Answer: He never came here.

Question: What should be the responsibilities of the respective agency.

Answer: Water supply should be ensured at the proper time and according to need.

Question: What are the responsibilities of the people who benefit from the system?

Answer: They should take care about cooperation. Also take care about cleanliness and avoid wastage.

Question: Using this system is there any possibility of privatisation?

Answer: Not possible.

Question: Could water supply be run as a business?

Answer: Private tankers are already a type of business. But through the awami tank system the possibility will decrease.