



The John Turner Archive:

Baldia Soakpit Project, Karachi. Pakistani women lead a low-cost sanitation project.

Building Community: a third world case book, Ed. Bertha Turner, Building Community Books, London, 1988

Pakistani women lead a low-cost sanitation project

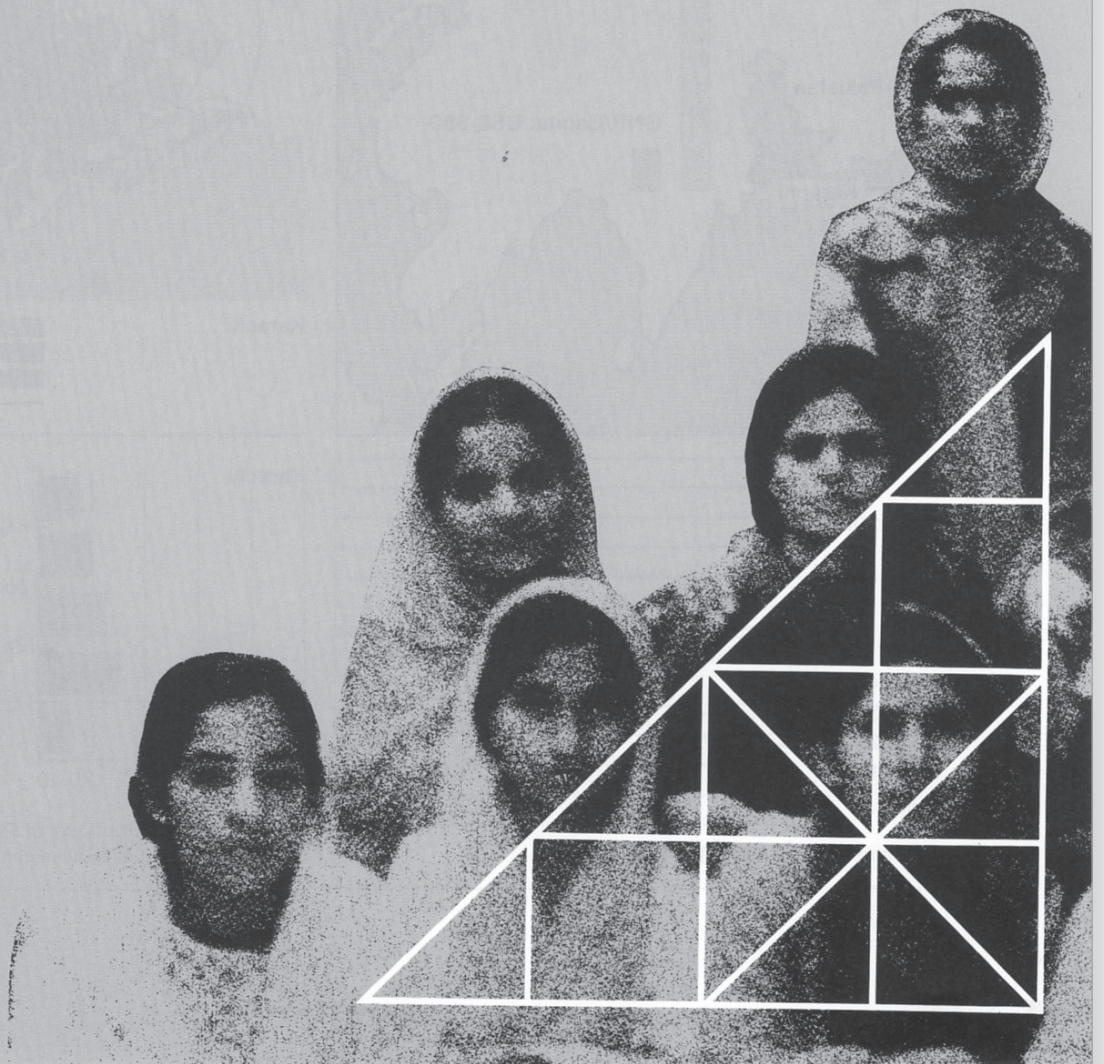
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Baldia

Sponsor:
Planning Committee for
NGO Activities: World
Conference on UN
Decade for Women
USA.

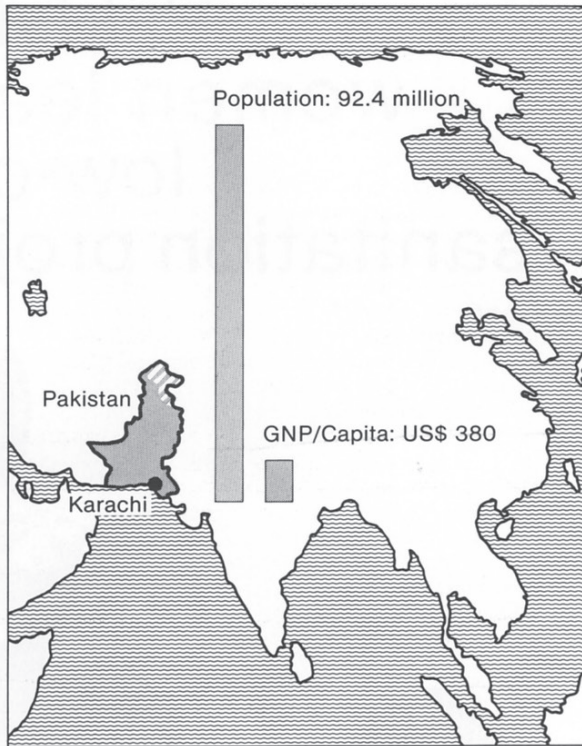
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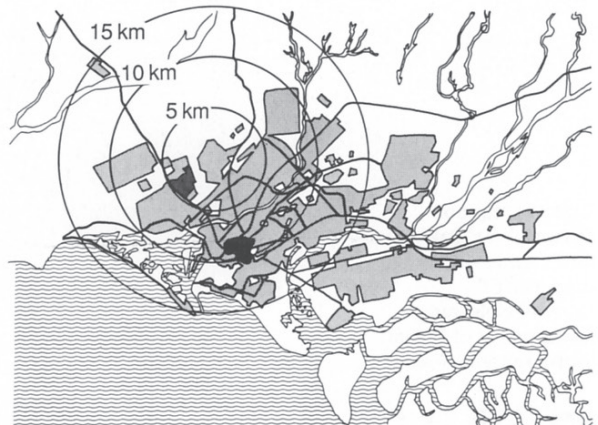




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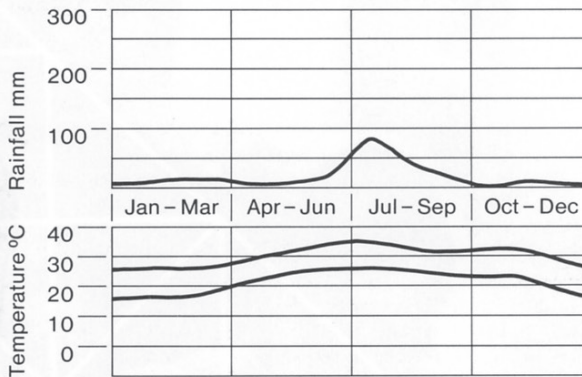


Population Karachi (1985) 6.2 million
Population Baldia (1985) 200,000

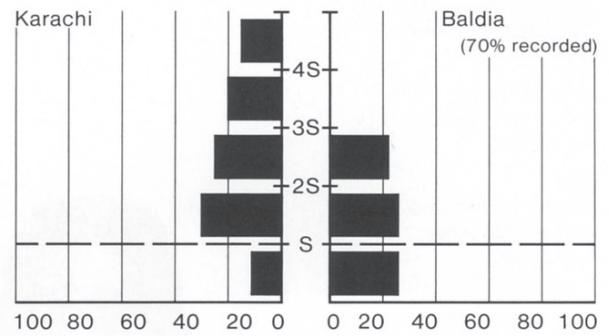


Karachi

- Built-up Area
- Baldia
- City Centre
- Main Traffic Routes



Climate Graph Karachi (4m)



Percentage Distributions of Population by Income Level
S=when 85% of household income must be spent on food



Abbreviations:

- BSPP Baldia Soakpit Pilot Project
- KMC Karachi Metropolitan Corporation
- PHC Primary Health Care

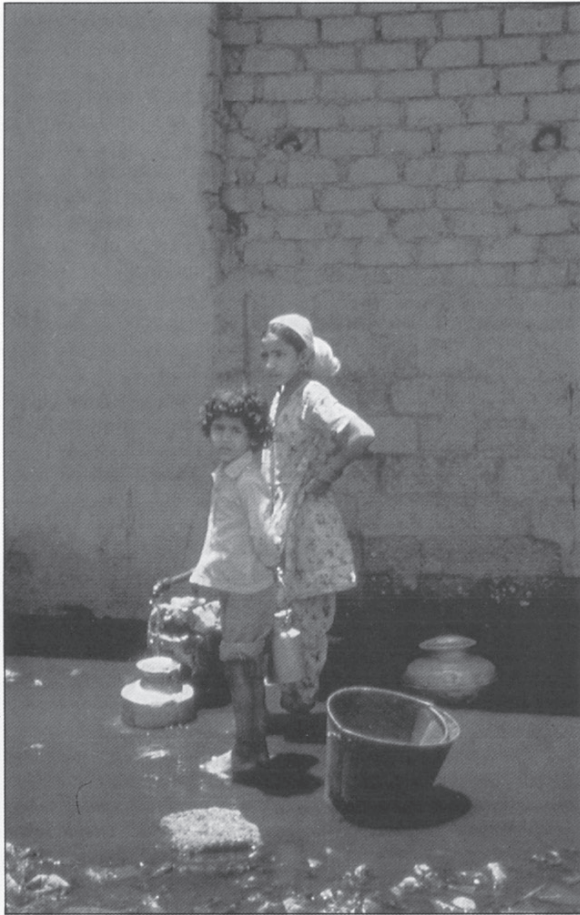


PHOTO: DR. LAIQUE AZAM, KARACHI, PAKISTAN

Before BSPP – lack of sanitation and health information meant high child mortality and endemic diseases.

The Baldia Soakpit Pilot Project (BSPP) is one of two major community based sanitation projects in Karachi, the other is the Orangi Pilot Project. Both have generated remarkable social development but use different technical solutions to problems of sanitation, education and health. In the case of Baldia, the role of women was exceptional.

Baldia: an improving self-built settlement

Baldia Town's 28,000 households comprising 200,000 people are spread over 430 hectares. They migrated directly from rural villages to cluster in the 3 planned and 29 unauthorized 'katchi abadis' (self-built settlements). About two-thirds of Karachi's population live in this type of settlement, drawn together by kinship, tribal, village, ethnic, cultural or occupational ties. Baldia Town's first settlers arrived in 1947, others were relocated by the Karachi Municipal Corporation (KMC) in 1954, and refugees from the India/Pakistan war arrived in 1965. Like most of Karachi's people, they have built their own houses on land illegally occupied from materials obtained locally, and mainly on credit. Over a 25-year period, about 87 per cent of houses were upgraded from mud to concrete block walls. Water, once available for only 1 hour every 2 days, now flows for 2 hours a day, via KMC standpipes.

Karachi's average household income is about Rs1,500. Baldia's people work mainly in low-paid jobs as unskilled labourers or in industry. The average Baldia household income is just Rs700, the combined income of 2 earners to support the average 9 person household. About 25 per cent in Baldia Town earn less than the subsistence wage of Rs500, compared to 10 per cent in Karachi as a whole.

One child in nine dies before age 5

Before the project began in 1979, bucket latrines were used, discharging excreta through holes in the house's outside wall, for irregular removal by sweepers. Urine and waste water ran off into the unpaved street.

Lack of sanitation and of health information resulted in child deaths and endemic diseases. In 1979, BSPP introduced the idea of low-cost, long-life soakpits which need emptying only every 10 to 25 years. People's rural origins made them suspicious of having such disposal systems inside their homes. Involving local people, through their own organizations, in constructing soakpits was expected to bring other physical and social improvements to benefit children. The boost to women's status was an unexpected bonus.

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What is a soakpit?

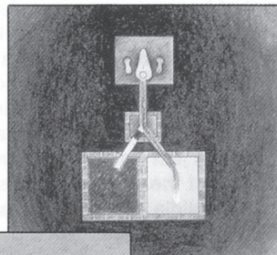
The idea of soakpit latrines is not new, but the type used in Baldia had distinctive design improvements. The pan could be flushed using a bucket of water, and the pit and pit-lining were deeper and built to last.

The soakpit is 14 feet deep and 6 feet across. It can be used by the average family of 9 for about 25 years before it needs to be emptied. Local stone, concrete blocks or a combination of both line the pit, to prevent collapse. To allow liquid to seep out, a tiny gap is left between each block. The pit tapers toward the top to reduce the size of the covering slab needed.

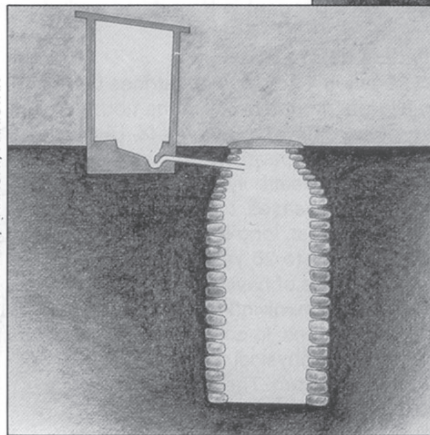
At the house floor level, the top is closed with a latrine pan set in a concrete slab. Care must be taken that the U-shaped bend of the pan always contains water which then ensures a seal between the above- and below-ground areas, thus reducing smells and flies.

The design can be varied by digging the pit to one side and connecting the pan to the pit using a length of pipe.

Cross section and plan of a soakpit.



Building a double pit. It can be used for 25 years before it needs to be emptied.



PHOTOS: DR LAIQUE AZAM, KARACHI, PAKISTAN

Four times more at lower cost

By January 1984, 200 pit latrines and 3,060 soakpits were built: 430 by UNICEF trainees at Rs1,300 each. Design modifications enabled residents to cut costs down to Rs600 each in the 2,630 soakpits they later built themselves. By 1985, 26 of Baldia Town's 29 'mohallas' (neighbourhoods) had been organized to do their own sanitation. Health and education projects followed, directly improving life for 80,000 people. Building over 1,000 demonstration soakpits with UNICEF funds inspired more than 4,000 soakpit latrines built by the community at an average cost of Rs800 each. Training for 60 masons and 100 families was provided by BSPP. Their methods were adopted spontaneously by 3 'mohallas' outside Baldia, producing 50 additional soakpits. KMC was persuaded to surface roads, streets and pavements and to provide a better water supply and street-lighting and power in 1984.

Breaking down cultural barriers

Build upon existing structures

Technology alone does not solve problems. The project team spent the first year going from house to house on foot. They had no office or vehicle. They explained the soakpit plan, asked for help, identified leaders and organizations and built up a relationship with the community. They built their project on the structure of existing community organizations. It was no accident that BSPP took 18 months to organize the first sanitation committee to build the soakpits. They planned to concentrate on a small area, and let people's enthusiasm take over. Once the idea had taken root, it spread to 20 other communities of over 40,000 people over the following 3 years. Over 2,000 pit latrines were constructed by 12 existing community organizations. Seven new sanitation committees were created, who then persuaded Karachi's Mayor to visit Baldia and to increase the water supply, and to provide roads and electricity. Small-scale demonstration projects ensured understanding of basic principles and produced large-scale results once the ideas were finally understood and accepted.

Home Schools for girls

Female education is discouraged in Pakistan: girls stay at home until marriage. Illiteracy is 78 per cent for women but is also a high 59 per cent among male household heads. Young community women were trained as teachers

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to operate 107 Home Schools: literally schools in their own homes. They have 2,200 students, 80 per cent of whom are girls and young women who were not allowed to attend other schools. By 1985, 3,000 children were enrolled in Home Schools: half in Baldia, half in 3 other areas. Teachers are paid by the community and have registered their 'Women's Organization of Home School Teachers' with the Government. A Skills Training Centre which is self-managed and controlled, was set up by an NGO with places for 120 girls. The former students, in their turn, teach their skills to others, producing a multiplier effect. A school for 180 children was also set up in a mosque.

Primary Health Care

Twelve Primary Health Care Centres opened and trained 13 Home School teachers as health workers. They immunized about 1,500 children. Over 1,000 mothers registered and one-third were trained to care for infants dehydrated by dysentery through a simple oral rehydration

procedure. Growth monitoring has raised 400 children above malnutrition level. Treatment for 20 disabled children was arranged by an NGO. Three family planning centres were set up by the government and an NGO, and now serve 50 mothers referred by PHC workers. A maternity home was also built.

Widening women's horizons

Women, the major clients of BSPP, have an extremely high level of involvement which was not anticipated. Women are both implementors and users of the Home School and PHC. They are learning about health, hygiene and how to use and maintain their own sanitary disposal systems. It took two years of meetings with men's groups to persuade them to give BSPP female workers access to the women of the community. Young women whose tradition allowed them only domestic work and who were not allowed out, now have schools in their homes and conduct adult literacy and other classes outside Baldia.



The involvement of women in the BSPP reached a level which was not anticipated. Traditionally engaged only in domestic work, they have now become involved in community matters. Women run their own home schools and health care centres.

BALDIA



A woman field worker's conclusions

The woman community organizer who has been involved with the Baldia project since the beginning has first-hand experience of the problems and potential of Baldia. She therefore deserves to have the last word on lessons to be learned from the experience.

1. Baldia's people have shown their potential to improve their lives through their own home improvements and their many community organizations.
2. When community social and technical solutions break down, local groups lose confidence in their ability to provide sanitation.
3. Strengthening and improving existing community organizations develops trust and confidence. Working through them ensures acceptance of social and technical aspects, which then take root in the community.
4. Small demonstration models reach and teach more people than lectures and leaflets, generating cost-saving construction by local people. The cumulative effect of a series of small projects will over time become large-scale development.
5. Meet people face to face, in their own places, giving them as much information as possible, and in ways they understand. This creates mutual trust.
6. Women as managers, organizers and users have laid the project's foundations. A woman community organizer motivated both men and women, helping to involve women in the project and related activities.
7. Agencies should enter communities humbly. BSPP started with one community organizer and one part-time engineer. For two years it had no office or vehicle. As work expands, such facilities can then be acquired, responding to community demands.
8. Project funds are better spent on community and human resource development than on subsidized construction or administrative expenses. Most pressing are needs for technical advice, social support and community-based demonstration models.
9. Affordability, usefulness and cost effectiveness must always be kept in mind.

With sanitation as the starting point, the people of Baldia have experienced a fundamental change in the relationships between men and women. The limited relaxation of rigid customs allows men to accept and to benefit from women's newly discovered capabilities. Women feel more fulfilled and confident. Through this changed relationship, their children too will benefit.

External Organizations Involved:

Funds and Overheads for Pilot Phase of the Demonstration Soakpits:

UNICEF, funded by the Dutch Government.

Community Organizer:

Department of Social Work, Karachi University.

Construction Supervision and Training of Masons:

University of Karachi, Pakistan Junior Chamber of Commerce (Jaycees).

Infrastructures:

Karachi Metropolitan Corporation, Umbrella Support of Slum Improvement Committee.

Technical Assistance:

Central Government Agencies and Dutch Advisory Mission (plus additional finance). Water and Waste in Developing Countries, Loughborough University of Technology, UK.

Financial Contributions to the Project 1979-85 in US\$

UNICEF, funded by the Dutch Government:		250,000
NGO Contribution, Habib Bank Trust:		
Mosque School	2,500	
Industrial Home	4,500	
Primary Health Care	5,500	
		12,500
TOTAL EXTERNAL CONTRIBUTION		\$ 262,500 (17%)
Community of Baldia:		
Sanitation	413,500	
PHC	16,250	
Education	281,125	
Family planning, maternity homes, Home School Teachers, Welfare combined	552,400	
Community of Baldia Total:		\$ 1,263,275 (83%)
TOTAL		\$ 1,525,775 (100%)
Complementary infra-structural improvements by the government		\$ 84,040,625

BALDIA