



Water and Sanitation Program

An international partnership to help the poor gain sustained access to improved water supply and sanitation services

Good for business:

Women better customers of Urban Water Supply services

Water and Sanitation Program
for East Asia and the Pacific



THE WORLD BANK
RESIDENT STAFF IN INDONESIA

The World Bank has been involved in an ongoing effort to strengthen the case for mainstreaming gender in development work. This note briefly documents an experiment designed to show that increasing attention to women could improve the success of the project. It was carried out between March and December 1997 in Palu, Central Sulawesi.

Background

For over 20 years, the World Bank has been providing loans to support public water supply enterprises in Indonesia, originally through specific water supply projects and later through components of integrated urban development projects. The loans have been used to facilitate the provision of clean water to rapidly growing urban populations.

During preparation of the projects, projections of the expected demand for household connections were made, to determine long-term financial viability of the water supply enterprises. **However, the number of new connections actually made each year is consistently below the forecasted number.** Without the income from new connections, and with reduced regular income from monthly fees, the water enterprises are no longer financially viable and need to be subsidized.

In some cases, the reasons for failing to meet the targets for new connections are physical or technical. For example, new industries or irrigation may have reduced the supply of available water, or the decreasing water quality may have overstretched the capacity of water treatment plants.

In other cases, people are simply not choosing to apply for household connections. One reason is the perceived high cost of connections and the poor quality of service provided. To address these problems, investments through loans have aimed to

improve the quantity, quality and delivery of clean water. Meanwhile, water enterprises have begun to take a more customer-oriented approach to service provision. Amongst other things, many have introduced schemes to ease the initial cost of the water connection, for example by introducing payment by installments over a number of years.



Despite the heavy investments that have been made, an estimated 35% of 33.6 million urban dwellers still do not have access to a piped water supply.¹

Until now, the customer as viewed by the water enterprises, has been the household unit. No specific attention has been paid to the role of women in particular, as potential customers of water supply services, even though they are almost always responsible for managing the family's domestic water requirements.

It is also likely that:

- the lack of any demand from women within a family has considerable influence on the decision not to apply for a water connection. This is more likely in areas where there is an easily accessible supply of water from an alternative source
- the sources available, usually shallow or deep wells, are often below standard and contribute to environmental damage through depletion of groundwater resources

Location of trial

Palu provided a suitable location for testing the

¹ World Bank Social Indicators of Development, 1996

hypothesis, as only about 40% of the target number of household connections are actually made each year, despite the fact that the water enterprise (PDAM) offers a continuous and adequate supply of clean water. PDAM's present installed capacity of 127 liters/second is sufficient to serve 15,240 customers, but they have only 6000 customers - far below their target and service capacity. This is severely affecting the financial viability of the enterprise.

Reasons why potential customers are choosing not to connect:

- high cost of connection fee
- access to alternative sources of water (though these are not always safe and their uncontrolled use leads to depletion of the ground water resources)
- lack of promotion of PDAM products and services, and
- poor public image of the water utility.



PDAM: Monitoring water quantity

Palu
An Overview

Palu Municipality
Central Sulawesi, Indonesia

Area	:	45,279 hectares
Population	:	239,053
Women	:	49.8%
Men	:	50.2%

51,393 households, of which:

Piped tap water:
only about 10% of the households.

Ground water:
main source of clean water for 90% of the households.

Commonly used water sources in Palu are:

- shallow wells with buckets
- shallow wells with handpumps or small electric pumps
- deep artesian wells, drilled and used by groups of four to five households

For this experiment, two locations were selected and a marketing approach was developed. In Besusu Tengah, the marketing was targeted at women, and in Tatura, it was targeted at men. ***The hypothesis tested is that not paying special attention to women will reduce the potential success of the project.*** The results were measured in terms of the number of new connections applied for in each location, in the four months following the marketing activity.

Selection of two trial areas (kelurahan)

The main criteria for selection were that:

- both areas were covered by the distribution network system of PDAM;
- both areas were located in the same PDAM service zone;
- sufficient water capacity and continuous 24-hour flow was guaranteed;

- both areas had similar socio-economic characteristics (middle to upper income level).

Method

At the start of the experiment, a brief household survey was carried out in both areas to investigate the perceptions held by men and women regarding water sources, quality, and service provision by PDAM. The survey also aimed to explore what community members themselves felt would be the most appropriate route for clean water marketing. A marketing strategy was then developed with PDAM, and applied in the two areas.

Marketing strategy

The main component of the marketing strategy was to sell **family health and economic value of PDAM piped water** to the target communities in both areas. PDAM staff was involved throughout all of the marketing activities.

From the survey, and discussions with local resident groups and PDAM staff, the following key topics were identified for inclusion in the marketing approach:

- risk of water-borne diseases
- health advantages of using PDAM water
- long term costs per day of PDAM water supply compared to other sources
- steps that have been taken by PDAM in recent years to improve the quality of water, and quality of service provided

- how best to apply for a connection, group discounts, methods of payment
- environmental impact of over-abstraction of ground water
- contact information for follow-up.

Door-to-door marketing

Due to the low turnout of participants at the community meeting specifically arranged as the marketing vehicle, it was decided that water marketing activities would be carried out door-to-door.

Marketing assistants were recruited and trained to assist PDAM staff, and marketing teams visited 450 households in each area. In both subdistricts, priority was given to households with ready-to-be-operationalized facilities. These consisted of pipe networks pre-installed in the yards of the houses by PDAM (during the implementation of the Donggala-Palu Water Supply Development Project), which are already connected to the nearest distribution pipe. So that all PDAM had to do, was to install the water meter and activate the water flow.

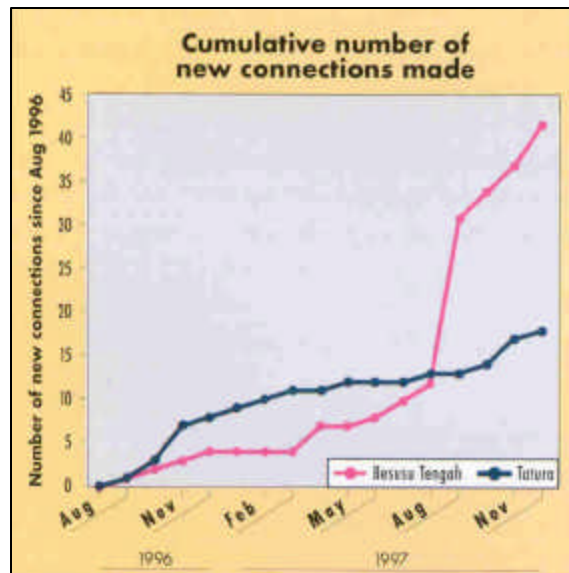
Over the next four months, the number of new connections applied for in each location was monitored. These figures were compared to the number of expected new applications per month for each location (average calculated from per month figures for the preceding 12 months).

Household connections made following marketing activity

	Besusu Tengah (women only)	Tatura (men only)
Expected no. of connections for the 4 months to December 10, 1997	4.3	4.6
Actual new connections in the 4 months, August 15 - December 10, 1997	30	5

Results

The main result of this experiment was that in the year before marketing, the average number of new connections per month were 1.08 in Besusu Tengah, and 1.16 in Tatura. In the four months after marketing, the average number of connections made per month rose to 7.5 in Besusu Tengah (where marketing focused only on women), and 1.25 in Tatura (where marketing focused only on men). **The increase in the number of connections in the area where marketing focused on women was substantially higher than the increase in the other location.** Further to this, when the addresses of the applications were compared with the addresses of the houses visited during the marketing, almost all of those applying for connections in Besusu Tengah had been visited during the marketing activity. In Tatura however none of the households visited during the marketing activity were amongst those that had applied for new connections.



Conclusion

It is evident from this experiment that women exert an influence on household decision-making regarding clean water supply; and that increasing direct access to information for women in potential-customer

households will increase the number of new water supply connections made.

It should be noted that these results are indicative; the sample size is small, and the number of connections is relatively small. To reach the target number of connections for 1997 as projected in the World Bank Staff Appraisal Report for the Sulawesi Urban Development Project, 9000 new connections need to be made.



PDAM water tanker

7% of the women visited proceeded to apply for connections. Applying this percentage to a scaled-up door-to-door marketing activity covering all the households in the city without existing connections, would result in about 3000 new connections, and would cost Rp 92,000,000. Clearly then, door-to-door marketing alone is not sufficient to bring the number of connections up to a level where PDAM becomes economically viable.

A more integrated approach needs to be developed that would combine the following:

- strategic gender-sensitive marketing and customer relations approaches
- strategies for policy changes regarding institutional responsibilities and the use of groundwater, and
- improved customer service from water supply enterprises.



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The World Bank is improving the quality of urban life in Indonesia by providing loans, technical and policy advice for improving urban and village infrastructure, for providing better sanitation and clean water, and for supporting development in other sectors.

The Water and Sanitation Program is a global initiative executed by the World Bank, with financing from a number of bilateral agencies and the UNDP, that helps poor people gain sustained access to improved water and sanitation services.



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