

**ASSESSMENT OF  
SOCIO -ECONOMIC IMPROVEMENT IN THE LIFE OF  
TARGETED PEOPLE WITH SPECIAL FOCUS ON EXTREME  
POOR, WOMEN & GIRLS BECAUSE OF WATER, SANITATION  
AND HYGIENE INTERVENTION:  
*AN IMPACT STUDY***

Abul Barkat<sup>1></sup>  
G Mahiyuddin<sup>2></sup>, A Poddar<sup>3></sup>, N Sabina<sup>4></sup>, M Rahman<sup>5></sup>,  
B Zaman<sup>6></sup>, A Osman<sup>7></sup>, S Khan<sup>8></sup>



**Human Development Research Centre**

*Prepared for*



Dhaka: October 07, 2007

---

<sup>1></sup> Professor, Department of Economics, University of Dhaka and Chief Advisor (Hon.), Human Development Research Centre  
<sup>2></sup> <sup>3></sup> <sup>4></sup> <sup>5></sup> <sup>6></sup> <sup>7></sup> <sup>8></sup> Consultant, Human Development Research Centre

# EXECUTIVE SUMMARY

## OBJECTIVES

‘Advancing Sustainable Environmental Health’ (ASEH), a DFID supported project of WaterAid Bangladesh (WAB), is being implemented in partnerships with Non-Government Organizations (NGOs). The project emphasizes poor and the most vulnerable people, in particular women, girls and children in contributing to reduce poverty and improve livelihoods. Keeping this in view, this study has been conducted to assess the impacts of the project. The overall purpose was to assess the impact of ASEH in achieving the goal and purpose against specific verifiable indicators in comparison with base line information. The specific objectives of the study were: (i) to assess the level of inclusion of women, girls and extreme poor in relation to service deliveries (water, environment sanitation, hygiene education); (ii) to assess the level of participation of women and girls’ in CBOs/ management committees and their role in decision making; (iii) to measure the reduction of expenditure by households on water and sanitation related diseases due to ASEH services, (iv) to assess impact in increasing disposable income due to savings in household expenditure on curative medical treatment of water, sanitation and hygiene related diseases; (v) to assess extent of women and girls time savings due to water services; (vi) to assess impact in enhancing livelihood opportunity; and (vii) to assess impact in increasing the mobility of women and girls.

## METHODOLOGY

The present study belongs to the category of “*Impact Study against Baseline Information without Control Design*”. For assessing the socio-economic improvement status – the study used all relevant indicators of baseline survey (2004) along with some new indicators pertinent to ASEH service delivery for which the baseline data is not available in the *2004 Baseline Study*. For the latter indicators, the baseline for 2004 has been retrospectively constructed based on memory recall and keeping in mind the possibilities of memory recall bias.

A *three-staged random sampling procedure* has been adopted with Union as primary sampling unit (PSU) for rural universe, and slum as PSU for urban. *At the first stage, PSUs have been chosen, and one ASEH cluster from within selected sample union has been chosen at the second stage. The respondents were selected at the third stage. A representative sample size of PSUs has been determined to be  $n = 11$  for rural and 7 for urban.* The urban slum household was 120 and rural household sample size, 360. Thus, total sample size for household is 480 with equal number of female and male respondents. In addition, 120 adolescent girls (10-18 yrs) have been included in the sample. The required information has been collected through a range of 11 different data collection instruments. The data collection has been taken place during July 2007. The study outcomes are presented in four parts: *Background and Methodology (Part A), Rural Component (Part B), Urban Component (Part C), and Conclusions and Recommendations (Part D).*

## KEY FINDINGS

*The key findings are presented below for rural and urban areas, separately. This is done due mainly to two reasons: (1) the original baseline survey in 2004 was done separately for rural and urban (having separate Baseline Reports), and (2) the nature of ASEH intervention is also not the same for rural and urban areas (and rightly so due to differences in the kind of unmet need for water-sanitation-hygiene for rural and urban-poor locations). At the end of the executive summary, to ease understanding the key impacts, ASEH Fact Sheets are provided – also separately for rural and urban intervention areas.*

### A. RURAL COMPONENT

*The randomly drawn sample rural households constitute, both male headed and female-headed households (90% and 10% respectively, which is at par with national rural scenario); and absolute poor and non-poor households (48% vs. 52%). The higher share of absolute poor households than the rural national average (40%) implies that the project has been implemented in areas where poverty is more pronounced than average national.*

#### ***Socio-Economic Characteristics***

Most socio-economic characteristics of the sample households of the two studies (baseline study and impact assessment study) have been found mostly similar and thus the samples are comparable.

According to the *direct calorie intake (DCI)* method, about 48% surveyed rural households are absolute poor, which is about 8 percentage points higher than the average rural scenario. Furthermore, 20% of the households are hardcore poor and 28% are above hardcore poor. Estimation made using *cost of basic needs (CBN)* approach shows that about 80% households live below lower poverty line (national rural average is 37%) and 85% live below upper poverty line (national rural average is 53%).

*Almost all respondents (94%) are living in own houses, it was about 7 percentage points lower during baseline survey. The share of households having electricity connection has increased as compared to baseline. About 36% households have electric connections, which was 27% at the time of baseline. The increase in electricity connectivity is in line with the national rural electrification. Over 90% respondents are residing in the respective sample areas for more than 5 years. The average land ownership of households in the baseline was 99 decimal and that in the current survey is 49 decimal. The household assets ownership is somewhat higher than that during the baseline. The change is more pronounced for TV (black & white), almira/dressing table, and mobile phone.*

The average net monthly household income in the baseline was Tk. 3,786, which has gone up to Tk. 5,326 currently. The increase in income is most likely due to high inflation. Moreover, baseline income is not adjusted with consumer price index. The average net monthly income of male-headed household (Tk. 5,326) is higher compared to female headed (Tk. 5,022). The net average monthly incomes for absolute poor and non-poor households respectively are Tk. 4,846

and Tk. 5,727. The average monthly household expenditure during baseline survey was Tk. 3,506, which is currently Tk. 3,563. Overall current expenditure on food item is about 72% of the total average expenditure per household (baseline data not available).

As to the overall economic condition of the respondents, about 30% households currently are facing frequent shortfall/deficit and 21% are always in deficit. During the baseline, these categories were 15% and 6% respectively. The downward change in overall economic condition resembles the high inflation and price hike of food and consumer products in the country during last 3-4 years.

### ***Benefit Flow***

The benefits of ASEH as perceived by the respondents have been explored in terms of ten broad groups of benefit. The highest benefit reportedly accrued on *reduced incidences of diseases* (100%) followed by access to *sanitation* (98%) and *improved empowerment and linkage* (96%). About 95% households have reported of *improved hygiene knowledge and practice*, and 94% households have reported *financial and cost savings benefit*. About 88% households mentioned *benefits like environmental sanitation, and social and psychosocial benefit*.

### ***Inclusion***

Irrespective of socio-economic status, green marked tube well has been the mostly mentioned (54.4%) source of drinking water among the households while in baseline, unmarked tube wells were the highest reported source. Among female-headed households, use of deep TW/tara pump II has been increased by more than double (from 24% to 52%).

Overall, 63% households shared upto Tk. 100 as the cost of either installation or repair or renovation of water point. Mean household contribution is Tk. 114, which is less than 10% of the total cost.

Slightly over 92% females interviewed reported that their opinion was sought before installation of water point. Similarly, 94% females reported that their opinion being sought before selecting location of latrine. According to 91%, the site of latrine is convenient for women. More than half of the adolescent girls mention about using *pucca* sanitary latrine in educational institutions. None of the respondents report of defecation in open space or unhygienic latrine.

### ***Participation***

*While more than three-fourths of the households hold membership in any ASEH-Committee at present, it was only 2% who held membership in any similar project (s) three year's back. Overall, absolute poor households are almost at par with the non-poor households in terms of holding membership in any ASEH committees (75% vs. 78%). Poor households show better situation in terms of holding membership in Female/Adolescent Girls' Group, CBO/VDC/EDC, and Ward Sanitation Task Force. About 74% of female-headed households are represented in any ASEH committees. Membership holding by members of female-headed households is more pronounced in Children's Group (19 percentage points more than male-headed household),*

*Female/Adolescent Girls' Group (6 percentage points) and Union Sanitation Task Force (4 percentage points).*

Holding membership by poor households is more pronounced in CBO/VDC/EDC (13 percentage points more than non-poor households), followed by Female/ Adolescent Girls' Group (11 percentage points), and Ward Sanitation Task Force (2 percentage points). The female members usually participate in the meeting spontaneously, although still there are some instances of restrictions on them. They also play active role in giving decision regarding the location of tube wells and latrines. The members of the executive committees are selected on the basis of the candidates' relative competence. These imply that the project has impacted significantly in favor of poor and female-headed households by including them in policy making of the project.

### ***Water-borne Diseases and Medical Expenditure***

Around two-third of households reported at least one incidence of disease during three months preceding the survey (during May-July) and 19% of these are water-borne diseases. Compared to baseline, all *water-borne* diseases – diarrhea, dysentery, jaundice, skin disease – have been reduced, except typhoid. Mean duration of suffering from all diseases during the same period is around 12 days while the mean duration of suffering from *water-borne* disease is 7 days. An average household lost 3.5 work days<sup>1</sup> because of suffering from water-borne and hygiene related disease by household members. This burden is more on female-headed households as their average loss is 4.1 days. The mean medical expenditure for the quarter preceding survey has decreased by Tk. 374 compared to adjusted medical expenditure<sup>2</sup> of baseline survey [Tk. 1041 (adjusted baseline) -Tk. 677 (current)]. Mean disposable annual income gain per household is Tk. 1,572. Thus, assuming a total of 1,024,314 annual project beneficiaries<sup>3</sup> a total annual amount of Tk. 328,616,655<sup>4</sup> or \$4.7 million annually (US \$ 1=Bd. Tk. 70) has been saved by all rural beneficiary households of the ASEH project as a result of reduction in the incidences of *water-borne* diseases.

### ***Time saved***

As compared to before project, on average, a household in project's rural cluster daily saves about 1 hour and 11 minutes time for collecting drinking and cooking water. It implies that the time saved due to ASEH intervention per household is equivalent to one person-workday (8

<sup>1</sup> It is perhaps due to the fact that the timeframe of reporting illness for impact study was May - July, which is considered the peak period for getting attacked by *water-borne* diseases.

<sup>2</sup> Regarding consultation fee and drugs, the sum difference between 2004 and 2007 is Tk. 121. So the multiplier effect is 1.21.

<sup>3</sup> The number of project beneficiaries in 30 months (since January 2005-June 2007) in rural hygiene 25,60,785, rural water 5,78,020 and rural sanitation 2,120,609. Hygiene beneficiaries refer to those who have been given hygiene education through various motivational sessions. Water beneficiaries refer to those who have been given tube-well, received renovation services of tube wells, and received pond sand filter and CHT options (gravity systems, etc). Sanitation beneficiaries refer to those who have been given hygiene education and 220 community latrines and given linkage with the UPs. Considering the "face value" of hygiene education in reducing *water-borne* diseases among the beneficiaries, the hygiene beneficiaries have been taken as the ASEH-beneficiaries in this case. Therefore, the total annual ASEH beneficiaries are 10,24,314 (i.e., 25,60,785/30\*12).

<sup>4</sup> Assuming a household size of 4.9, the total number of rural beneficiary households is 209,044 (i.e., 1,024,314/4.9). Therefore, the total expenditure saving is 209,044 \*1572=32,86,16,655.

hours 17 minutes) per week. The yearly amount of time saved would be equivalent to 54 person-workdays.

About 28% of those who usually collect water for the rural households have reportedly can give more time in household chores and almost close proportion are - able to take more rest compared to before with the time saved. A few households (9%) are able to use the saved time in income generation activities.

### *Mobility*

The status of access to various social organizations by the women has been changed significantly during the two years time span of ASEH. ASEH has directly influenced them to go to tube well for safe water, to other villages for VDC meeting, district town (to NGO office); and indirectly, influenced the women participants to go to court, various health centers, business (buying and selling), NGOs, chairman of Union Parishad. Access to various social assembly by women and girls, namely in the Community Based Organizations (CBOs) and civil society participation has been increased markedly. The extent of mobility among the women has been widespread through many other factors in the given time span, but ASEH interventions have been instrumental in facilitating empowering process among the women which also has enhanced the positive effects of increased mobilization, like economic empowerment.

### *Livelihood*

The composite *livelihood opportunity score* for rural beneficiaries (measured using 9 WES related components) currently constitute 67 points compared to 43 points at the base. About 81% respondent households have hygienic latrines in their households, while in baseline it was 20%. Currently about 92 % respondents have water-points either in their own households or in close proximity to households, while, before the project, it was about 45% only. At the base, about 35% respondent households did not have sufficient quantity of water for their household needs, while currently 85% households have reported of using sufficient quantity of water. At present, only 7% households have reported of frequently spending time for caring sick household members from *water-borne* diseases. However, before ASEH it was a common phenomenon for more than one-third households. About tow-thirds households have reported of currently saving time for collection of water. About 28% of those who usually collect water for the households can give more time in household chores and almost similar proportions are able to take more rest compared to before. A few households (9%) are able to use the saved time in income generation activities.

## **B. URBAN COMPONENT**

*The randomly drawn sample urban households constitute both male headed and female-headed households (87% vs. 13%); and absolute poor and non-poor households (73% vs. 27%). The much higher share of poor households than the national urban average (44%) implies that the project has been able to reach the most poverty prawn urban areas.*

### Socio-Economic Characteristics

According to DCI method, about 73% of the surveyed urban households are absolute poor, which is about 29 percentage points higher than national urban average (national urban 44%). Furthermore, over one-in-two households are hardcore poor (52%) and over one-fifth households are *above hardcore poor* (22 %). Estimation made using CBN method shows that about 64% households live below lower poverty line (national urban average:19%) and 84% live below upper poverty line (national urban average: 37%). This implies that the project is working in urban slums where the concentration of poverty is much higher compared to the national average concentration of poverty in urban areas. It also indicates that the ASEH project has correctly targeted the disadvantaged and vulnerable urban settlements under the urban component.

*Currently, about 60% of the respondents are living in own houses build on others land (rented or otherwise occupied) whereas about 44% of the respondents have the same during baseline survey of which 24% lived in land owned by the government. Currently, all of that latter category have either been dispossessed by government eviction drive under the provisions of emergency of regulations<sup>5</sup> and/or have been compelled to shift to individually owned land. The share of households having electricity connection has declined as compared to baseline. About 90% of the dwelling houses were reported to have electric connection during baseline, which is 86% at present. Plausibly the recent drive for disconnecting un-authorized connections in urban areas under the emergency regulations has led to this situation. Almost two-thirds of the respondents reported that they are living in the respective sample areas for more than 5 years. The average land ownership of households in the baseline was 12.4 decimals (including 6 decimal of homestead) and that in the current study is 1.7 decimals (including 0.4 decimals of homestead). The household assets ownership of the current respondents is somewhat higher than that during the baseline. The change is more pronounced for TV (both color, and black & white), almira/dressing table, mobile phone and sewing machine.*

Average net monthly household income in baseline was Tk. 4,531, now it is Tk. 4,928. The baseline monthly household net income, if adjusted for inflation, will be higher than the current net income. The current monthly average household expenditure of Tk. 5,165 is higher than during baseline survey (Tk. 4,167). The higher amount of expenditure does not indicate higher purchasing power because of price hike of food and other consumer commodities.

Regarding overall economic condition of the respondents, although higher proportion of respondents have reported of having positive balance of income round the year compared to baseline (57% vs. 41%), about 26% households are reportedly having frequent economic hardship and/or hardship round the year while the same was reported by about 10% households in the baseline. This indicates that economic condition of a large number of urban poor is deteriorating over time due to various reasons, including price hike, eviction of housing settlements/shops/bazars, lay off in many production units, etc during past three years and especially after 11 January 2007.

---

<sup>5</sup> some of the ASEH slums like Sattala Bostee at Mohakhali, Chandmari Bostee at Naraynganj, etc. have been evicted after 11 January 2007, when the Emergency was declared.

### ***Benefit flow***

Most of the households (over 90%) reportedly have experienced at least eight categories of benefits out of ten broader categories of benefit used for exploring benefit streams of ASEH. Reported highest benefit is accrued on *reduced incidence of diseases (100%)*, followed by *improved empowerment and linkages*, and *social and psycho-social (99% each)*. *Education, and hygiene knowledge and practice* are at the combined third position according to achieved benefit status (with 95% each). Benefit in *environmental sanitation, and sanitation* has been reported by 93% households; 91% households reported economic, financial and cost savings benefits. However, around 80% households have stated of having benefit related to collection of safe and clean water.

### ***Inclusion***

The ASEH installed roadside supply water is main source of drinking water for 45% households while in baseline tube wells (37%) were the main source of water followed by piped water inside home (29%). Around one-fourth to one-third of households uses deep TW water for different household necessities. All female-headed households reported that they were consulted and their opinion was sought before installation of water point.

There is an enormous rise of users of *pucca* sanitary latrine as it increased from 11% to 95%. Most of these latrines are built by ASEH, and have separated specious chambers for women and girls. It is noteworthy that all female-headed households use *pucca* sanitary latrine and 94% of poor households use this type of latrine. None report of defecation in open space or using unhygienic latrine. Although one-fifth report separate latrine for girls in the slum, only 1.7% mention of girls-friendly latrine in the area. All female headed-households report of being sought opinion before selecting location of latrine.

### ***Participation***

About 60% of the households currently hold membership in any ASEH-Committee. During the baseline, participation in similar committees has been reported by less than 1% of the households.

A high level of participation in courtyard meetings is observed in ASEH project. All respondents from female-headed households and 97% poor households report of receiving hygiene education. Female/Adolescent Girls' Group ranks the highest in terms of participation of the beneficiaries in the project with one-third households (33 %) reporting about holding membership in these committees. A slight less than one-fifth of the households have reported holding membership in the CBO/VDC/EDC (18%). Out of a total of 91 members in 8 CBO/CMC committees, 42 members are male (46%) and 49 members are female (54 %). The female members usually participate in the meeting more regularly than the male members because the male members are often engaged in various professions outside the slums. The females are usually being elected in the higher posts in the CBO/CMCs because they are more active, more vocal, and devote more time to the development activities of the slum.

### *Water-borne Diseases and Medical Expenditure*

About 80% households reports at least one incidence of disease during past three months preceding data collection (July 2007) and 56% of these are water-borne disease. Currently, among all diseases, urban people suffer, 16% are *water-borne* diseases which is less than the same in baseline (25%). *Water-borne* disease as percent of total disease incidence has reduced by 9 percentage points from 25% in baseline to 16% at present<sup>6</sup>. Compared to baseline, the incidences of all water-borne diseases (diarrhea, dysentery, jaundice, skin diseases) have reduced (except typhoid). Mean duration of suffering from all diseases is 14 days. Poor households suffer 14.5 days from all diseases. Duration of sickness in water-hygiene related disease as percent of all diseases account for 98% with 13.9 days suffering in water-borne diseases.

Compared to baseline, the current overall mean medical expenditure during last three months preceding survey has reduced by Tk.1003 (69% of the baseline expenditure) per household (Tk.1454-Tk.451) instead of Tk.751 (Tk.1202-Tk.451). The household level expenditure savings due to less *water-borne* diseases is Tk. 295 per month or Tk. 3,543 per year. Thus, assuming a total number of annual project beneficiaries of 1,52,881<sup>7</sup>, the estimated annual saving in medical expenditure in urban areas would be Tk.<sup>8</sup> Tk.10, 22,01,378 or US \$ 1.5 million (US \$1=BD 70Tk.)

### *Time Saved*

On average an urban household in project cluster spends daily about 8 minutes and 6 minutes respectively for collecting drinking and cooking water. About three years back, the respective time was higher: 47 minutes and 42 minutes respectively. The total time saved respectively for collecting drinking water and cooking water is about 39 minutes and 36 minutes per day respectively. Therefore, on average a household in project's urban cluster daily saves about 1 hour and 15 minutes time compared to before for collecting drinking and cooking water. Thus, an average household in ASEH slum currently saves more than one person-workday (8 and 3/4<sup>th</sup> hours) per week. The annual amount of time saved would be equivalent to 57 person-workdays per household.

About 56% of those who usually collect water for the urban household spend the saved time for taking rest, and about 22 % have reported spending more time in household activities. However,

<sup>6</sup> In fact the reduction in the incidence of *water-borne* diseases would be much higher than 9 percentage points because the baseline survey was conducted during winter season (December 2004 when it is expected that the prevalence of *water-borne* diseases is low) and the impact study was conducted during rainy season (July-August 2007 when it is expected that the prevalence of *water-borne* diseases should be high).

<sup>7</sup> The number of project beneficiaries in 30 months (since January 2005-June 2007) in urban Hygiene 382,203, urban water 139,105 and urban sanitation 118,415. Hygiene beneficiaries refer to those who have been given hygiene education through various motivational sessions. Water beneficiaries refer to those who have been given tube-well, received renovation services of tube wells, and received pond sand filter and CHT options (gravity systems, etc). Sanitation beneficiaries refer to those who have been given hygiene education and 220 community latrines and given linkage with the UPs. Considering the "face value" of hygiene education in reducing *water-borne* diseases among the beneficiaries, the hygiene beneficiaries have been taken as the ASEH-beneficiaries in this case. Therefore, the total annual ASEH urban beneficiaries is 1,52,881 (i.e., 382,203/30\*12)

<sup>8</sup> Assuming a household size of 5.3, the total number of annual urban beneficiary households is 28,846 (i.e., 1,52,881/5.3). Therefore, the total expenditure saving is Tk.28, 846\*3,543=Tk.10, 22,01,378.

a few households (5%) have reported spending the saved time in income generating activities. Lesser proportion of households (4%) have reported that with spending less time in water collection, they can afford sending their girls to schools.

### *Mobility*

During the project period the nature of mobility among women and girls has changed and the extent of mobility in various forms has been increased significantly. Currently, women go to NGO office, outside home for work, garment, market place, commissioner office, roadside for paper picking, *bastee* (slum) meeting, construction site for brick-breaking. ASEH has directly influenced the women to go to: NGO office, commissioner office, and *bastee* meeting.

### *Livelihood*

The *composite livelihood opportunity score* for urban beneficiaries is about 67 points compared to 33 points at the base. Most of the slum dwellers (95%) had no or low access to hygiene education before the project. At present, 97% have moderate or high access. Currently, overall cleanliness status of about 92% households are found good or moderately good, while about three years back, 73% have been reported as bad. The ASEH interventions have remarkably helped the slum dwellers to attain higher availability of safe (clean and arsenic free) drinking water. Currently about two-thirds of them have ranked their availability of safe water as high, while about four-fifths have reported low availability of the same before. The proportion of households in project slums reporting of using sufficient water has increased by about 45 folds compared to before. About 71% households have reported that before the project, the water point was very far from their households. At present according to one-third respondents, the water point is close to their households and for 70% it is not close (but not far).

The incidences of *water-borne* diseases in the project slums have been reduced. As a part of urban intervention, ASEH has constructed hygienic community latrines (sanitation blocks) in the project slums, which in turn has made a rapid change in defecation practices and promotion of using hygienic latrines. About 93% project slum dwellers are using hygienic community latrines constructed by the project. Before the project, about 12% slum dwellers reportedly practiced open defecation and 77% used unhygienic latrines.

## **RECOMMENDATIONS**

In view of the analysis of the findings presented above, WAB along with all other stakeholders of ASEH (including the Government and DFID) may consider the following recommendations having high policy, programmatic, and future design implications:

- Considering substantial positive impact of ASEH on poor, marginalized, women, and female headed HH, project should be expanded – both in terms of replication in similar poverty prone areas as well as duration-wise.
- More emphasis needed for safe water supply.

- Provisioning of alternative source of safe-clean-arsenic free drinking water for female-headed and poor households who still use unmarked and red marked tube wells.
- Encourage CBOs in taking more pro-active initiative for operation and maintenance of water points and latrine.
- Revisit cost sharing strategy of partner NGOs (A number of poor and female-headed households report '*difficult to pay their installment*').
- Longer duration project is required to capture direct economic gain accrued from water and sanitation intervention.
- For better utilization of saved time, the Project may encourage IGA for beneficiaries by facilitating beneficiary's linkages and connectivity with relevant organizations in the government and NGOs.
- For more accurate assessment of reduced incidences of *water-borne* and improper sanitation related diseases, WAB may initiate a study covering the seasonal and spatial variations.
- WAB may initiate an in-depth study showing all possible benefit streams and their "true value" towards human development and relevant Millennium Development Goals (and targets) due to ASEH interventions.
- A Cost-Benefit Study may be initiated by WAB for in-depth understanding of economic and social benefits of their intervention.

**ASEH Fact Sheet: RURAL**

Indicators	Baseline (2004)	Impact (2007)
Average family size (number)	4.9	4.9
Average age (years)	43.3	44.4
Own house (%)	87.2	93.6
Average landownership (decimal)	99.4	49.3
Household monthly net income (Tk.)	3786	5297
Household monthly expenditure (Tk.)	3506	3563
Electricity Connection (% households)	26.8	35.8
Hard core poor (<=1805 k.calorie) (% households)	-	20.3
Absolute poor (<=2122 k.calorie) (% households)	-	48.3
Below lower poverty line (<=817 Tk.) (% households)	-	80.0
Below upper poverty line (<=867 Tk.) (% households)	-	85.3
Prevalence of any disease (% HH) (3 months)	48.1	65.0
<i>Water-borne</i> disease as a % of total disease incidence (%)	27.7	18.9
Duration of sickness (person-days, all diseases)	-	11.6
Duration of sickness (person-days, water hygiene related diseases)	-	7.0
Duration of sickness in water hygiene related diseases as % of all diseases	-	60.5
Mean medical expenditure (Tk.) (3 months)	868	677
Adjusted mean medical expenditure (Tk.) (3 months)	1041	677
Adjusted mean expenditure on water-borne disease (Tk.) (3 months)	657	264
Work days lost (in days, in all diseases)	19.7	5.9
Work days lost (in water hygiene related diseases)	-	3.5
Work days lost in water hygiene related diseases as % of all diseases	-	59.5
Time required for collection of drinking water (minutes/days)	60.9	24.03
Time required for collection of cooking water (minutes/days)	54.4	20.4
Time saved for collection of drinking water (minutes/days)	-	36.87
Time saved for collection of cooking water (minutes/days)	-	34.0
Time saved for collection of water (drinking + cooking, minutes/day)	-	70.87
Composite livelihood score	43	67
Access to hygienic latrine in own house (%)	21.4	81.7
Open defecation (% household reported)	31.1	1.7
Spend time frequently for caring HH members sick with <i>water-borne</i> diseases (% reported)	31.7	6.7
Spend time occasionally for caring HH members sick with <i>water-borne</i> diseases (% reported)	41.4	60.3

### ASEH Fact Sheet: URBAN

Indicators	Baseline (2004)	Impact (2007)
Average family size (number)	4.9	5.3
Average age (years)	37.7	37.3
Own house (%)	-	57.5
Average landownership (decimal)	12.4	1.7
Household monthly net income (Tk.)	4531	4928
Household monthly expenditure (Tk.)	4167	5165
Electricity Connection (% households)	90.4	85.8
Gas connection (% households)	5.4	4.2
Hard core poor (<=1805 k.calorie) (% households)	-	51.7
Absolute poor (<=2122 k.calorie) (% households)	-	73.3
Below lower poverty line (<=869 Tk.) (% households)	-	64.2
Below upper poverty line (<=1035 Tk.) (% households)	-	84.2
Prevalence of any disease (% HH) (3 months)	-	79.2
Water-borne disease as a % of total disease incidence (%)	-	16
Duration of sickness (person-days, all diseases)	-	14.4
Duration of sickness (person-days, water hygiene related diseases)	-	13.9
Duration of sickness in water hygiene related diseases as % of all diseases	-	98.2
Mean medical expenditure (Tk.) (3 months)	1202	451
Adjusted mean medical expenditure (Tk.) (3 months)	1454	451
Adjusted mean expenditure on water-borne disease (Tk.) (3 months)	1303	417
Time required for collection of drinking water (minutes/days)	47.2	7.8
Time required for collection of cooking water (minutes/days)	42.39	6.35
Time saved for collection of drinking water (minutes/days)	-	39.4
Time saved for collection of cooking water (minutes/days)	-	36.04
Time saved for collection of water (drinking + cooking, minutes/day)	-	75.4
Composite livelihood score	33	67
Access to safe drinking water (% households)	91	100
Access to hygienic latrine in own house (%)	4	43.3
Open defecation (% reported)	41	2.5