

Assessment of the Situation of Children and Women in the Tea Gardens of Bangladesh



Prepared for



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Executive Summary

Introduction

Tea garden workers in Bangladesh in general, and children and women in particular, have, long been a disadvantaged, deprived, under-served, exploited and alienated group. Among the tea workers, some thirty ethnic backgrounds have been identified and their well-being is highly dependent on the ownership and management arrangements of the tea gardens in which they live and work. Lack of safe water¹ and proper sanitation facilities heightens the risk of disease in already overcrowded conditions. In the absence of reliable data on the true extent of their deprivation, UNICEF Bangladesh launched an assessment to determine the actual situation of the children and women in the tea gardens in terms of their health, education and social protection. The study was conducted by Human Development Research Centre (HDRC), and the field survey was carried out between 9 October and 10 November 2009.

Methodology

A quantitative technique – modified 2009 Multiple Indicator Cluster Survey (MICS) questionnaires – was used to assess the situation of children and women in the tea garden population spread over five major tea-growing districts of Bangladesh: Chittagong, Habiganj, Moulvibazar, Panchagarh and Sylhet. The study examined tea gardens owned and managed by five different groups: Bangladesh Tea Board (BTB), Bangladesh Individual Proprietors (BIP) Bangladesh Private Limited Company (BPLC), Foreign Owned Sterling Companies (FOSC), National Tea Company (NTC), types of ownership and management. A random stratified sampling procedure was followed with the household being the primary sampling unit (PSU). Using a standard statistical formula as well as backward calculation, a total of 900 households were selected. These households were then distributed to 65 randomly selected tea gardens using probability proportionate to size (PPS) by number of people in the gardens.

Overall findings

The study confirms that the situation of children and women in the tea gardens of Bangladesh is considerably worse in some areas than for their peers in Bangladesh as a whole. It finds, for example, that the Infant Mortality Rate in the tea gardens is almost twice as high as the national average, and that levels of extreme poverty and of poor nutrition exceed the national norm. Taken together, the Study findings constitute a call to action on the part of policy makers, donors and others, to address more effectively the needs of a population that contributes so much to the economic health of the country.

Economic status: Food consumption, income and poverty

The study found that about 74 per cent of households in the tea gardens fall below the absolute poverty line, compared to the national average of 38.4 per cent, and about 50 per cent fall below the hardcore poverty line, compared to the national average of 19.5 per cent.

¹⁻² NGO Forum for drinking water supply and sanitation, September 2008.

The daily food intake of an average household member is 761.5 grams, which is lower than the minimum 934 grams required for balanced nutrition, and the average daily calorie intake per household member is 1,956.5 Kcal, which is close to the average level found among the hardcore poor (1,805 Kcal) and lower than the average level among the absolute poor (2,122 Kcal).

Pre-school and primary school attendance and gender parity

Only 5 per cent of children aged 36-59 months in the tea gardens are attending pre-school classes, while their overall net primary school attendance rate (aged 6-10 years) is just 62 per cent, compared to a national average of 81 per cent (MICS 2006). Gender parity at primary school level is 1.0, which indicates that there is no gender discrepancy regarding attendance in primary school between boys and girls.

Primary drop-out rate

The overall school drop-out from primary school among children in the tea gardens who attended school last year (2008) is 19 per cent, against a national average of 47 per cent in 2006 (DPE 2006). By gender, primary drop out is relatively higher among girls compared to the boys (19.4 per cent vs. 15.7 per cent). When assessed across the different kinds of garden managements, primary drop-out is more pronounced in those controlled by the Bangladesh Tea Board (BTB), at 23 per cent, and by Bangladesh Individual Proprietors (BIP) at 22 per cent.

Primary repetition and completion rate

The overall repetition rate at primary level in the tea gardens is 4.7 per cent, with the highest repetition rate in Grade One at 9.9 per cent. At this level, 8.3 per cent of all boys and 11.5 of all girls have been repeating their grades. Among the surveyed children, only 24 per cent have completed their full course of primary schooling in a given year and at the correct age for 1 graduation.

Adult literacy

Only 32 per cent of women aged 15-24 in the tea gardens are literate, compared to the national level of 70 per cent found in MICS 2006. However, their literacy rate varies according to the ownership and management of the gardens in which they live. The overall In general, the literacy rate increases with the rise of education level of the household head. Womens' literacy, in particular, is lowest, among the *Ohmias* and *Santals* in the tea gardens at just 12 per cent.

Infant mortality rate: The infant mortality rate (IMR) in the surveyed households is 83 per 1,000 live births, whereas the national average is 50 per 1,000 according to BDHS 2007, and 45 per 1,000 live births according to MICS 2009. The IMR is considerably higher among boys compared to girls (88/1,000 live births vs. 76/1,000 live births).

Under-five mortality rate: The under-five mortality rate (U5MR) in the surveyed households is 120 per 1,000 live births, far higher than the national averages of 65 per 1,000 according to BDHS 2007 and the 67 per 1,000 in MICS 2009. The U5MR is a little higher among boys compared to girls (129/1,000 live births vs. 109/1,000 live births).

Immunization

Full immunization coverage of children aged 12-23 months in the tea garden households surveyed is 59 per cent against a national rate of 84 per cent according to MICS 2006 and 82 per cent according to Bangladesh Demographic and Health Survey (BDHS) in 2007 – at least 20 per cent lower by either measure. In the tea gardens, the highest coverage (94 per cent) is reported for BCG and the lowest for measles (79 per cent). When it comes to vaccinations like DPT and polio, where multiple doses are recommended, coverage gradually declines for second and third doses. Similarly, coverage of Hepatitis-B vaccine for the tea gardens children aged 12-23 months ranges from 90 per cent for the first dose to 87 per cent for the second and 80 per cent for the third.

Under-five diarrhoea: Prevalence and care

About 13 per cent of children under the age of five in the tea gardens had diarrhoea in the two weeks preceding the survey, higher than the national figure of 9 per cent according to BDHS 2007 and 7 per cent in MICS 2006. The occurrence of diarrhoea is slightly higher for girls than for boys (13.5 per cent and 12.6 per cent respectively). Compared to other age groups, the incidence of diarrhoea is highest, (15.2 per cent) among children aged 6-11 months or during weaning.

Overall use of Oral Rehydration Therapy (ORT) in the tea gardens is 59 per cent, compared to the 70 per cent found nationally according to MICS 2006. About 7 per cent of children receive antibiotic treatment and 13 per cent have undergone home management of diarrhoea.

Under-five pneumonia: Prevalence and care

On average, 1.7 per cent of children under five in the tea gardens had symptoms of pneumonia in the two weeks preceding the survey, far lower than the national averages of 5.3 per cent reported by MICS 2006 or the 4.8 per cent reported by BDHS 2007. Compared to other tea gardens, the prevalence of symptoms of under-five pneumonia is higher, at 2.5 per cent, in the gardens of the National Tea Company and Bangladesh Tea Board. Of these children of suspected pneumonia, 38.5 per cent of them had treatment from appropriate medical providers, compared to national figures of 30 per cent (MICS 2006) and 37 per cent (BDHS 2007). A total of 30.8 per cent were treated with antibiotics, compared to a national average of 21.5 per cent (MICS 2006).

Use of solid fuel and place of cooking

Among the households surveyed, 98 per cent reported using solid fuels for cooking, compared to a national average of 88 per cent (MICS 2006). Regardless of garden ownership, education of the household head, household income or ethnic background, the use of solid fuels among the tea gardens households is uniform and ranges from 98 per cent to 100 per cent. It is observed that 94 per cent of the surveyed households cook their food inside the living space, a practice that has an inverse relation with the educational level of the household head and household income, declining as these rises.

Breastfeeding

In the tea gardens of Bangladesh, 70.5 per cent of children aged less than three months and 68.6 per cent of children aged less than five months are being exclusively breastfed. Although this level is comparable to MICS 2006, it is still considerably lower than the recommended level of 100 per cent. Of those aged 6-9 months, 51.6 receiving breast milk and solid or mushy food indicates that the initiation of complementary feeding practices is at a moderate level. At the ages of 12-15 months and 20-23 months respectively, 95.0 per cent and 92.6 per cent of children are still breastfed. Only 17 per cent of newborn babies are breastfed within one hour of birth, but this rises to 98.1 per cent within one day of birth. Surprisingly, none of the infants aged 6-8 and 9-11 months are adequately fed, and only 30.2 per cent of children aged 0-11 months are adequately fed in terms of both breastfeeding and complementary feeding, reflecting poor complementary feeding practices. In contrast to the MICS 2006 findings, this study shows that boys are slightly more likely to be adequately fed than girls, but that girls are more likely to be exclusively breastfed than boys at the ages of 0-3 and 0-5 months.

Child nutritional status

The overall prevalence of underweight (WAZWHO<-2.00), stunting (HAZWHO<-2.00) and wasting (WHZWHO<-2.00) in children aged 0-59 months was 61.4 per cent, 56.4 per cent and 29.3 per cent respectively. According to the Growth Reference Standards (GRS) for children developed in 2005 by the World Health Organization (WHO), the prevalence of underweight and stunting was “very high” and the prevalence of wasting indicated a “critical problem”, which is comparable to the national level (CMNSB). The rates of severe underweight, severe stunting and severe wasting among children aged 0-59 months are 27.4 per cent, 30.2 per cent and 8.7 per cent respectively. The prevalence of underweight and stunting increased between 24-35 months of age, while wasting increased between 18-23 months of age. However, the prevalence of underweight (72.7 per cent) and stunting (70.0 per cent) are highest in Panchagarh and lowest in Habiganj (48.2 per cent and 45.7 per cent). Wasting was highest in Sylhet, at 31.8 per cent, and lowest in Habiganj at 26.9 per cent. Gender differentials show girls are more wasted than boys. According to the type of tea garden management, the highest percentages of underweight (68.6 per cent), stunted (61 per cent) and wasted (31.1 per cent) children are found in the households of BIP tea gardens. Examining the nutritional status of children according to ethnic group, the study finds that 70 per cent of underweight and 40 per cent of wasted children are in Hindi speaking households (HH) and that 60 per cent of stunted children are in Tamil HHs. There seems to be no clear link between the education or economic status of the children's mothers/caretakers and economic status and the nutritional status of the children surveyed.

Water and sanitation

Most tea garden workers – 88 per cent – use improved water sources for drinking purpose, with 71 per cent using tube-wells (reportedly free of arsenic contamination), 9 per cent protected wells, and 6 per cent public taps or standpipes. This compares to a national average for the use of improved source of drinking water of 98 per cent (MICS 2006). When assessed according to the tea gardens' ownership and management, the use of improved water source for drinking is relatively less in the gardens of the Bangladesh Tea Board (BTB), at 75 per cent, compared to more than 95 per cent in the gardens of Foreign Sterling Companies (FOSC) and Bangladesh Private Limited Companies (BPLC).

Compared to the national average of 39 per cent found in MICS 2006, 35 per cent of the household members in the tea gardens use improved latrines. Some 39 per cent of household members defecate in the open, and another 25 per cent use a pit latrine without slab – a total of 64 per cent using unimproved sanitation. Across the different tea garden managements, the use of improved latrines is comparatively higher in the FOSC gardens (49 per cent) and National Tea Companies (NTC), at 41 per cent, than in the gardens owned by BIP (29 per cent) and BPLC (37 per cent).

Hygiene practice

Reportedly, 40 per cent of household members use soap (bar/powder) and 20 per cent use ash/soil during hand-washing. However, 39 per cent use only water. The use of soap during hand-washing is positively related to the education of household heads and to household income. Compared to other ethnic groups in the tea gardens, the use of soap during hand washing is lowest among the *Uria* community, at 32 per cent.

On average, 30 per cent of households in the tea gardens dispose of children's faeces safely into a latrine, higher than the national average of 22 per cent (MICS 2006). Another 30 per cent of households throw it either into the garbage or drain/ditch. In 36 per cent of households, children's faeces are not removed or disposed of from the original defecation place, with the stool remaining exposed to household members and domestic animals.

Birth registration

Birth registration certificates could be produced for only 13.7 per cent of children under the age of five in the tea gardens. Another 4.3 per cent of under-fives are reported to have birth registration certificates, but these could not be made available during the survey. Even if these were added to the available certificates, only 17.7 per cent of child births were registered in the tea gardens. According to MICS 2006, the national figure for birth registration is 36 per cent which has been increased to 53.6 per cent according to MICS 2009. It has been found that rate of birth registration increases with the level of mother's education. Among the richest portion of households, births of children are registered more frequently than among the lower income group. It has been found that the portion of registered births is the lowest in BIP tea gardens (12.5 per cent) and that there are wide variations in the proportion of children under five whose births have been registered when disaggregated by ethnic group.

Child labour

It has been found that 10.6 per cent of children aged five to 14 in the tea gardens of Bangladesh are involved in work, below the national level of 13 per cent found by MICS 2006. Around two-thirds of the child labourers in the tea gardens (65.5 per cent) work for some sort of compensation. More than four-fifths (83.9 per cent) of the mothers of child labourers have no education. A lower proportion of working children (20.7 per cent) had been attending school since January 2009 until the day of the survey. The proportion of working children is lowest in the BTC tea gardens, at 3.4 per cent, followed by those of FOSC (3.6 per cent). The proportion of working children varies significantly when disaggregated by ethnic group, and it has been found that 86 per cent of the working children are from the two lowest-income quintiles (first and second quintile).

Child marriage

An estimated 59.8 per cent of the women in the tea gardens of Bangladesh aged 15-49 are victims of child marriage (i.e., married before 18 years of age, the legal minimum age for girls). According to MICS 2006 for the country as a whole, 39 per cent of young women aged 15-19 years at the time of the survey were married, and 64 per cent of women aged 20-24 had been married before the legal age.

Assistance at, and place of, child delivery

Just over 2 per cent of mothers among tea garden worker households have reportedly received some assistance at delivery from doctors, 38 per cent from nurses/midwives, and 56 per cent from traditional birth attendants (TBAs). About 97 per cent of child deliveries in the two years preceding the survey occurred within the home and around 2 per cent in health facilities.

Knowledge on HIV

About 11 per cent of women aged 15-49 years in the tea gardens have comprehensive knowledge on HIV and AIDS. About 16 per cent of women aged 15-49 could correctly identify at least two inaccurate statements about HIV transmission, and 44 per cent knew at least two ways to prevent HIV infection. About 60 per cent of mothers reportedly knew that AIDS can be transmitted from mother to child.

An analytical overview: Deprivation score

Overall multiple deprivation score of the tea gardens is 0.541, which is 1.57 times higher than the composite national score. Higher degree of deprivation (> 0.5) is evident in poverty, hygiene practice, nutrition, and education. However, it is highest in poverty (0.741) followed by hygiene practice (0.625). By districts, extreme level of deprivation is evident in the gardens of Chittagong district (0.661) followed by Sylhet and Moulvibazar districts with deprivation scores of 0.538 and 0.530 respectively. In terms of ownership managements, households of almost all the gardens are badly deprived, and it is more pronounced in gardens of Bangladesh Individual Proprietors (BIP) (0.563) and Bangladesh Private Limited Companies (BPLC) (0.576). Evidently, almost all the tea gardens ethnic communities are badly deprived, however it is worst (0.611) with the community who lost their original identity followed by the *Hindustanis* (0.590). Primarily, they are either badly or extremely deprived in poverty, education, under-5 nutrition, and hygiene practice, where situation of poverty is very much awful and the deprivation scores range between 0.619 and 0.844.

Some key conclusions with policy implications

Based on the information obtained in this survey and estimation of deprivation scores for the households of the workers of the sample tea gardens, the following conclusions having policy implications deserve considerations:

- The overall deprivation status (composite deprivation score) of tea garden household is deplorable, as compared to the national average deprivation status. Therefore, in order to transform human deprivation in to human development – tea garden workers and their households should be targeted on a high priority basis. This should be seen as an integral part of the national poverty reduction strategy.

- In improving the livelihood of the tea garden workers and their family members, emphasis should be given on all the seven variables of deprivation. However, priority can be sequenced as poverty first, followed by (accompanied with) education, hygiene, water and sanitation, child protection, nutrition, and health.
- As regard to geographic targeting, tea gardens of Chittagong may be targeted first followed by Sylhet, Moulvibazar, Habiganj and Panchagarh.
- In terms of addressing the issue of transforming human deprivation of the tea garden workers and their families by type of garden ownership management, tea gardens owned by BIP should be targeted first, closely followed by BPLC, Bangladesh Tea Board (BTB), Foreign Owned Sterling Companies (FOSC) and then National Tea Company (NTC).
- The composite deprivation score of tea gardens workers and their families varies also by ethnicities. Priority wise, intervention should be started with the workers *who have lost their ethnic identity* followed by the *Hindustani, Santal, Uria, Bihari, Tamil, Ohmia*, and Bangalee.