

**UNICEF
Sponsored Research Project**

**STATUS REPORT ON CHILDREN AND WOMEN
IN THE TEA GARDENS OF Assam Tea Corporation Limited
(ATCL)**

Submitted by:

**Department of Sociology
Tezpur University, Assam
Tezpur 784 028**

March 2014

Acknowledgements

We are extremely grateful to UNICEF Assam for providing us the opportunity to conduct this baseline survey and prepare the "Status Report on Children and Women in the Tea Gardens of Assam Tea Corporation Limited (ATCL)" in the seven districts of Assam. We are privileged to work under Ms. Jeroo Master and Dr. Tulshan Rane, successive Chiefs of UNICEF Assam at the time of the study. Mr. Soumen Ray, Mr. Rustav, and other Project Officers and Staff Members at UNICEF Assam deserve special mention for their valuable inputs and necessary support throughout the study. We are highly indebted to them.

We thank Assam Tea Corporation Limited (ATCL), especially Sri Harish Sonowal, the Vice-Chairman-cum-Managing Director, Board of Directors, Staff of Tea Board and Managers of ATCL for not only permitting us to carry the field survey but also providing us with necessary logistics. We thank the management staff of various estates, the tea estate community, and trade union leaders for their help during the field survey and for their cooperation with the field team during the course of data collection.

We also thank Dr. Joydeep Baruah, member of the faculty at OKDISCD, Guwahati for training the field investigators (research personnel) on technical aspects and for helping the team analyse the data.

We appreciate the academic inputs and feedback from our colleagues at the Department of Sociology, Tezpur University towards completion of this assignment. We are grateful to Ms. Jagritee Ghosh and Ms. Piyashi Dutta, research scholars of the department, who have been instrumental in writing the report. We salute the eight research personnel who very enthusiastically carried out the assignment and completed the data collection: Ms. Baby Paul, Mr. Jyotishmoy Baruah, Mr. Jatin Gogoi, Mr. Dibyajyoti Sarmah, Mr. Juman Das, Mr. Kalyan Sonowal, and Dr. Shashi Bhushan Singh.

We would like to dedicate this humble report to all those who have provided the information. Our thanks are due also to schools, Anganwadi Centres, and health sub-centres.

We hope the findings of the study will be useful in planning and policy intervention.

March 2014

Dr. Kedilezo Kikhi
Principal Investigator and Faculty
Department of Sociology, Tezpur University
Tezpur 784 028, Assam, India

List of Acronyms and Abbreviations

AHS	Annual Health Survey
AIDS	Acquired Immune Deficiency Syndrome
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activists
ATCL	Assam Tea Corporations Ltd.
AWC	Anganwadi Centre
AWW	Anganwadi Worker
AYUSH	Ayurveda, Yoga, Unani, Siddha and Homoeopathy
BPL	Below Poverty Line
CHC	Community Health Centres
COPD	Chronic Obstructive Pulmonary Disease
CTC	Cut Tear Curl
DH	Department of Health
DISE	District Information System of Education
EFA	Education for All
FGD	Focus Group Discussion
GER	Gross Enrolment Ratio
GoA	Government of Assam
GoI	Government of India
HSC	Health Sub-Centre
IAY	Indira Awaas Yojana
ICDS	Integrated Child Development Services
ILO	International Labour Organization
IMNCI	Integrated Management of Neonatal and Childhood Illness
IMR	Infant Mortality Rate
IYCS	Integrated Young Child Survival
JMP	Joint Monitoring Programme for Water Supply and Sanitation
JSSY	Janani-Shishu Suraksha Karyakram
JSY	Janani Suraksha Yojana
LPG	Liquefied Petroleum Gas

MCH	Maternal and Child Health
MDG	Millennium Development Goals
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MHW	Male Health Worker
MMR	Maternal Mortality Rate
MOBC	More Other Backward Classes
MoHFW	Ministry of Health and Family Welfare
NER	Net Enrolment Ratio
NDCP	National Disease Control Programme
NFHS	National Family Health Survey
NHED	Nutrition & Health Education
NMMR	Neonatal Mortality Rate
NRHM	National Rural Health Mission
NGO	Non-Governmental Organisation
OBC	Other Backward Classes
PHC	Primary Health Centre
PLA	Plantation Labour Act
PRoM	Premature Rupture of Membranes
PTA	Parent and Teacher Association
PTR	Pupil-Teacher Ratio
RCH	Reproductive and Child Health
RSBY	Rashtriya Swasthya Bima Yojana
RTE	Right to Education Act
SAEP	School AIDS Education programme
SC	Sub-Centre / Scheduled Caste
SMC	School Management Committee
SNP	Supplementary Nutrition Programme
SSA	Sarva Shiksha Abhiyan
ST	Scheduled Tribe
SRS	Sample Registration System
TB	Tuberculosis

TBA	Traditional Birth Attendant
TFR	Total Fertility Rate
TLM	Teaching Learning Materials
UIP	Universal Immunization Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
UNCRC	UN Convention of the Rights of the Child
UP	Upper Primary
U5MR	Under-5 Mortality Rate
VHSND	Village Health Sanitation & Nutrition Day
VIP	Ventilated Improved PitLatrine
WASH	Water Sanitation and Hygiene
WHO	World Health Organization

Introduction

There are around 765 tea estates and more than 100,000 smaller tea gardens in Assam. In the colonial period, tea garden labourers were brought from Odisha, Madhya Pradesh, Bihar, Andhra Pradesh, and West Bengal. These workers have been engaged since the last two centuries and consequently settled in Assam permanently. They are popularly known as tea garden labourers, tea garden tribes, ex-tea garden labourers, and ex-tea garden tribes, and recognised as Other Backward Classes by the government. About two million labourers rely on Assam's tea industry, which in turn is shaped by their toil, and comprise a sizable portion of the populace in the state. Tea tribe communities are based all over Assam, but primarily in the districts of Darrang, Sonitpur, Nagaon, Jorhat, Golaghat, Dibrugarh, Cachar, Hailakandi, Karimganj, and Tinsukia. Santhali speakers are also found in parts of Kokrajhar and Bongaigaon districts; some others are Munda, Orang, and Gonds. The tea tribes, being essentially labourers, live in villages, inside tea estates established by tea planters. These estates are located in interior places, and this adds to the backwardness of the labourers. Violence and tension of labourers against the administration is common. Illiteracy, poverty, and alcohol addiction among male members in the community and poor standard of living are the major problems.

The Plantations Labour Act (PLA) 1951, which regulates the conditions of service in plantations, defines 'plantation' as:

any land used or intended to be used for growing tea, coffee, rubber or cinchona which admeasures twenty five acres or more and whereon thirty or more persons are employed, or were employed on any day of the preceding twelve months, and in any other class of plantations, means also any land used or intended to be used for growing the plant mentioned in such notification and whereon 30 or more persons are employed, or were employed on any day of the preceding twelve months.

The Act does not apply to a factory on the premises to which the provisions of the Factories Act, 1948 apply. Tea garden managements are obligated to provide basic services such as health, housing, water and sanitation, crèche facility, and schooling to its permanent workers and their dependents. For every 300 or more workers one welfare officer is required. Any worker drawing

a salary of Rs. 750 per month is covered under this Act. The Act regulates working hours, leaves and holidays, and sickness and maternity benefits. However, the casual workers (estimated at nearly 50 percent of the total labour force in the tea gardens of Assam) are left out of the purview of these entitlements. One of the key challenges of the PLA, 1951 is also standardisation in the provision of quality basic services. The Act provides that no adult worker shall be employed for more than 48 hours a week, and that no adolescent or child shall be employed for more than 27 hours a week, and entitles every worker to a day of rest in every period of seven days. In every plantation covered under the Act, medical facilities for the workers and their families are to be made readily available. Also, it provides for setting up of canteens, crèches, recreational facilities, suitable accommodation and educational facilities for the benefit of plantation workers in and around workplaces in the plantation estate. Its amendment in 1981 provided for compulsory registration of plantations.

Assam Tea Corporation Limited (ATCL) is a public sector undertaking (PSU) wholly owned by the Government of Assam (GoA) and headquartered in Guwahati. It was established on 9 February 1972 under the Companies Act 1956. It comprises 15 tea estates spread over 13,000 hectares of prime land distributed over seven districts of the state of Assam. It is the only tea company established to protect the interest of workers. Keeping this objective in mind, it took over 15 sick gardens that were unable to be function. The prime objectives of ATCL are to

- protect and sustain the tea industry;
- shield the interest of workers and increase the employment potential of tea garden labourers;
- decentralise and avoid the concentration of ownership of tea estates in a few hands;
- organise transportation of ATCL goods;
- form subsidiaries of ATCL to transport its goods; and
- build associations with any person or company whose objects and business are similar to that of ATCL.

UNICEF Assam works with tea garden managements in the private sector. Since the GoA owns ATCL, the situation in its gardens is perceived to be different: there is a higher likelihood that the population in these tea gardens would be eligible for coverage under the existing government schemes (unlike those in the private sector). As part of its mandate of social inclusion, UNICEF Assam has entered into a partnership with ATCL to improve the status of children and women in

the ATCL tea gardens. It was proposed that a status report be prepared using both secondary and primary data as a first step towards understanding the situation of children and women in the ATCL tea gardens; the Department of Sociology, Tezpur University was tasked with the assignment.

The scope of this study is to prepare a report (based on both secondary and primary data) on women and children tea garden workers'

- status vis-à-vis health, education, nutrition, child protection, and water and sanitation;
- status as beneficiaries of various government welfare and development schemes, i.e. an assessment of implementation of the schemes among tea garden workers; and
- knowledge of existing government schemes in the above mentioned sectors.

This report is based on a four-month study in 15 tea gardens spread over seven districts of Assam: Cinnamara, Sycotta, and Naganijan in Jorhat district; Negheriting, Messamara, and Rungamati in Golaghat district; Rajabbarie and Deepling in Sivasagar district; Bholaguri in Sonitpur district; Amluckie, Loongsoong, and Dejoo Valley in Nagaon district; Longai and Isabheel in Karimganj district; and Bidyanagar in Hailakandi district.

The total households (HH) working in the 15 ATCL tea gardens are approximately 13,500. The proposed sample size of the HH is kept at 750 which have been systematically calculated on the basis of proportional size of each tea estate as shown below:

$$x_1 = x \cdot p_1$$

$$\Rightarrow x_1 = x \cdot t_n / T$$

Where a) x = total sample size

b) x_1 = total number of HH selected from tea garden 1

c) p_1 = represents the proportion of HH in tea garden 1 = t_n / T

d) t_n = total HH in tea garden 1

e) T = total HH in the 15 tea estates under ATCL

In each ATCL tea estate, a *multi-stage* sampling procedure was followed to select the respondents. At the first stage, the seven districts of Assam with 15 ATCL tea estates are selected. The sample size of households was kept at 750, which were sorted out for each tea estate on the basis of proportional representation. Then systematic sampling technique was used to select the households. The first HH is *randomly* selected followed by every n^{th} house till the

required number is achieved in the tea estate. But households without women or children have been *purposively* skipped.

Stages 1-4: Multi-Stage Sampling

Stage 1

Districts (Assam) = 7

= Jorhat + Golaghat + Sivasagar + Sonitpur + Nagaon + Karimganj + Hailakandi

Stage 2

ATCL Tea Estates = 15

Jorhat (3) = Cinnamar TE + Sycotta TE + Naganijan TE
 Golaghat (3) = Negheriting TE + Messamara TE + Rungamati TE
 Sivasagar (2) = Rajabarrie TE + Deepling TE
 Sonitpur (1) = Bholaguri TE
 Nagaon (3) = Amluckie TE + Loongsoong TE + Dejoo Valley TE
 Karimganj (2) = Longai TE + Isabheel TE
 Hailakandi (1) = Bidyanagar

Stage 3

Sampling Design: Systematically Calculated on the Basis of Proportional Size

$(x_1 = x \cdot p_1 = x \cdot tn/T)$

Cinnamara = 117 + Sycotta = 94 + Naganijan = 45 + Negheriting = 56 + Messamara = 40
 + Rungamati = 40 + Rajabarrie = 15 + Deepling = 47 + Bholaguri = 10 + Amluckie = 55
 + Loongsoong = 41 + Dejoo Valley = 27 + Longai = 82 + Isabheel = 55 + Bidyanagar = 26

Proposed Sample = 750 HH

Stage 4

Systematic Sampling Technique

The first HH is **randomly** selected followed by every n^{th} house.

But **purposively** skipping those houses without women or children and selects the next house with women or children.

The proposed sample across all the tea estates has been more or less achieved (718 against 750), except in Longai tea estate of Karimganj district, where the field team could cover only 50 HH against the proposed 82. The research personnel/field team could not make re-visits as the duration of the study was short.

The study was conceptualised and developed in August 2013. The project commenced as a baseline study, and project activities undertaken between September 2013 and January 2014. The

initial three-to-four weeks was set aside for collecting secondary sources and preparing tools for enquiry. A week's time was set aside for finalising the method, parameters, and the identification of key stakeholders and sampling. A three-day workshop was conducted to train and debrief investigators. Various data collection tools were administered in the field between October 2013 and January 2014; this took a month longer than planned. Data entry took about two weeks; scrutiny and validation of entered data took another two weeks. It took another six weeks to prepare the draft report and triangulation, share it, collect feedback from stakeholders, and finalise the report.

The study was carried out using both quantitative and qualitative research techniques. This involved household schedule and observation, focused group discussions and semi-structured interviews with selected stakeholders and documenting a few case studies of selected centres in the area. Thus, the study makes use of both secondary data and primary data.

Primary sources include data collected from the field study with the following operatives:

- *Household survey* (HH) with a focus on the five parameters namely, health, education, nutrition, water and sanitation and child protection. Household schedule is supplemented with in-depth *case studies* on schools offering formal education, sub-centres and Anganwadi Centres.
- *Key-informants interview* of tea garden management and welfare officer/s. Researchers talked to the tea garden manager, workers, AWC workers, PHC personnel, school teachers and so on.
- *Group discussions* with beneficiaries and other stakeholders (FGD) to document the current status of welfare and level of availability, utilisation, and perception of government welfare and development schemes.

The study attempts to triangulate data to identify critical gaps and suggest scope to improve the welfare status of the tea garden workers, if any.

FINDINGS

Population Profile of the Study

- The total sample population in 718 HH covered was 3458, out of which 1763 are males while 1695 are females, which gives a ratio of 961 females per 1000 males. This is even higher than the state figure of 954. As per distribution of sex in the sample, the female percentage is higher in seven tea estates, which are Messamara (53.3), Rungamati (51.2), Sycotta (52.2), Amluckie (50.5), Rajabarrie (53.1), and Bholaguri (51.1). If we convert the sex ratio of Messamara, it will show 1127 females per 1000 males as per the distribution of sex in the sample.

- The distribution of population in the sample shows that children between 0–6 years constitute about 18.5 per cent, while children between the age group of 7–18 years constitutes about 28.8 per cent. The data shows about 1.7 per cent of the respondents are 61 years old or older. These data indicate that very few live beyond 60 years in these tea estates. The average life expectancy among tea estate workers is very low compared to the all-India expectancy (68.9 years) and in Assam (65.3). The other half of the sample population belongs to the 19–60 age group.
- In the social category, the data show 91.8 per cent are Hindus, 5.8 per cent Muslims, 2.3 per cent Christians, and 0.1 per cent are in the 'others' category; there was no record of Buddhists or Sikhs. The data also show that 80 per cent belong to the OBC category, 8.8 per cent belong to the MOBC category, 6.1 per cent to the SC category, 4.5 per cent to the general category, and only 0.6 per cent belongs to the ST category. In four estates—Cinnamara in Jorhat district, Loongsoong in Nagaon, and Deepling and Rajabarrie in Sivasagar district—the entire sample population (100 per cent) belongs to the OBC category. Rungamati tea estate in Golaghat district has the least in the OBC category (40 per cent) and the highest in the SC category (37.5 per cent).
- In the employment category, the data shows that 0.2 per cent work as agriculturists and 0.9 per cent as related agriculture labourers. Agricultural activity was not reported in as many as nine tea estates. The tea workers belong to the low-income group and to unorganised sector. Many of these tea workers are daily wage earners. The survey reveals 18.4 per cent of the sample population belongs to the category of daily wage earners, and that the percentage is higher in some tea estates—26.3 per cent in Rajabarrie, 26.1 per cent in Deepling, 24.6 per cent in Bidyanagar, and 24.1 per cent in Rungamati.
- The data further shows 2.3 per cent of the sample population are self-employed while only a meagre 0.2 per cent is into trade or business. The study indicates about 17.6 per cent of the sample population have salaried regular jobs while 2.3 per cent are salaried but casual jobs. A meagre 0.6 per cent drew a pension at the time of the study. Students make up a large section of the sample. The survey shows about 4.5 per cent have indicated 'other work' as their employment activity, which is not listed in the schedule proforma. The data shows about 2.4 per cent are available for work or are unemployed at the time of the study.
- In the category of self-assessment on poverty, indebtedness, and wellbeing, a number of questions were asked to find out the current socio-economic status. The respondents were asked to assess themselves on the economic status of the family. The findings show that 45.9 per cent believed that their economic status has not improved or worsened but remained the same. About 32.6 per cent assessed their financial status has improved somewhat, while 1 per cent believes it has improved a lot. It has to be noted that about 20.5 per cent assessed their economic position has worsened, which is critical. Among all the tea estates, Rungamati shows the best self-assessment: 61.5 per cent feel their financial status has improved

somewhat, 7.7 per cent feel it has improved a lot, 23.1 per cent feel it has remained the same, and only 7.7 per cent show that their economic status has worsened.

- According to the data, 83.1 per cent neither borrowed any money during the past two years nor owe any money to any one, while about 16.9 per cent owe money; about 79.8 per cent did not stop medical treatment or education because of poverty, and 89.8 per cent did not stop education because of poverty.

Health

Frequent illnesses and inadequate nutrition can adversely affect the income of households and make them vulnerable. Good health not only increases an individual's productivity and earnings; it also improves the overall quality of life and the socio-economic development of the general population. Articles 38 (2) and 41 of the Indian Constitution stress the need to provide the sick and the underserved equitable access to healthcare and assistance, while Article 47 stresses the need to improve nutrition, the standard of living, and public health. Apart from the objective of promoting health, financial risk of indebtedness from health expenditure among poor households is a major concern in government health policy, which can be solved by providing subsidised and free health care facilities. Despite the provision of free or heavily subsidised health care, which the poor tend to use more, subsidies to the health sector are not well targeted as often the subsidised health care in public health facilities tend to benefit the rich at higher levels of health care.

In line with National Health Policy 2002, and recognising maternal and child health (MCH) as a critical concern, the Government of India launched the National Rural Health Mission (NRHM) in 2005. It integrates the existing major national-level health projects and programmes: Reproductive and Child Health II Project (RCH II), Universal Immunization Programme (UIP), the National Disease Control Programmes (NDCP) and AYUSH systems of Health (Ayurveda, Yoga, Unani, Siddha, and Homoeopathy). Three state-specific schemes have been implemented in Assam in addition to the NRHM: Mamoni, Majoni, and Morom.

We conducted a household survey with several indicators to understand and gain insight into the health status of tea garden women and children workers. The research questions cover a wide range of information on the worker's health status vis-à-vis daily activities, mother's and child's health status, awareness levels about related diseases and welfare measures, etc. Some of the key questions in this section include:

- Do you think your present physical health (if sick) restricts you from daily activities/performances?
- In case of illness, where do you seek treatment?
- Do you visit a health worker/ doctor for antenatal examination?
- What are the common causes of sickness and deaths in your area?
- Did you have your children immunised?
- What do you think of the quality of government health services in your village?
- Have you heard of anaemia or malnutrition?

Through this survey, we have tried to assess workers' health status and relate it to work. It is generally assumed that the nature of work in tea gardens is heavy, which thereby necessitates proper understanding of workers' physical and mental health, particularly working mothers'. We need to examine how workers carry on with their daily activities including the daily house chores even in cases of being sick or ill.

The survey shows that the health condition of about 83.7 per cent of workers is good, while 16.4 per cent of workers are not in good health. The most common diseases in tea gardens are tuberculosis, diarrhoea, joint pain, and common fever. Good health here denotes the absence of the above or other kinds of illness. We tried to understand whether workers' present physical health prevents them from carrying out their daily activities. Among the tea estates, Bholaguri, Cinnamara, Sycotta, Amluckie, and Rungamati tea estates have shown good health condition, with 50 per cent, 47 per cent, 46.2 per cent, 45.9 per cent and 45.2 per cent respectively, but the health status of Dejoo Valley and Isabheel was marked poor with 35.3 per cent and 33.3 per cent respectively. The study further shows that 84.2 per cent have no long-term physical or mental disability, while the rest 15.8 per cent suffers from either physical or mental long-term disability, which restricts their daily activities and performance. Messamara tea estate has no record of any member suffering from physical or mental disability.

While probing the issues of health service delivery and treatment, it was found that 70.8 per cent gets medical treatment at tea garden hospitals, 18.6 per cent consult doctors at the PHC while the rest avails ANM, local healers, medical college and other sources too which is not mentioned. Sycotta and Messamara tea estates are the two estates which avail facilities at medical college for treatment (with 13.2 and 2.5 per cent respectively). It also has to be noted that Bholaguri and Dejoo Valley tea estates solely rely on the garden hospital for treatment of any illness. It is interesting to note 1.5 per cent still rely on local healers for treatment.

For antenatal examination, the study reveals about 55.2 per cent visit a health worker or a doctor while the rest 44.8 per cent never visit health personnel. Perhaps these groups of villagers are not sufficiently educated about the necessity of regular antenatal check-ups. Out of the 55.2 per cent who goes for antenatal examination, the average number of check-ups stands at two times or at least two times for all the tea estates.

The study shows as high as 92.8 per cent timely immunize their children and seems to be thorough about the importance of their ward's health. Bholaguri tea estate recorded 100 per cent children vaccination. For vaccination these villagers takes their wards to different places on the basis of availability as well as accessibility like VHSND (20.5), tea garden hospital (58.7), HSC (0.5), PHC (10.7) and others (9.6) apart from these centres. On sickness and death, the study shows that the most common causes are TB (53.9 per cent), followed by diarrhea (16.2 per cent), fever (8.9 per cent), and accident (2.1 per cent) while 19 per cent marked others not mentioned.

Some of the welfare schemes on health operating in these tea estates are Majoni, Mamoni, Janani-Shishu Suraksha Karyakram (JSSK), RSBY and JSY, etc. The study attempts to find out the awareness level of the people on these schemes. None of the tea estates are aware of RSBY while only Rungamati tea estate is aware of JSSK and have been availing it. Except in Bidyanagar and Dejoo Valley tea estates Majoni scheme is the most common and popular. At Bholaguri, Cinnamara and Naganijan tea estates, people are 100 per cent aware of Majoni but are not aware of other schemes. Only next to Majoni scheme, about 32.5 per cent are aware of JSY scheme.

On the quality of health care services provided by the government, about 40 per cent has marked good category and 1.4 per cent has marked excellent health services. It should be noted that four tea estates viz. Amluckie (2.8), Cinnamara (2.6), Messamara (2.5) and Negheriting (1.8) tea estates has marked good health services. The study also shows about 39.2 per cent are satisfied with the health care facilities provided by the government. On the other hand, 19.4 per cent has rated poor health care services are being provided by the government. The study while exploring the reasons on poor health care facilities reveals that only 21.5 per cent of the villagers are satisfied with the quality of health care facilities, about 34.7 per cent are satisfied with the treatments, 37.7 per cent are satisfied with the available infrastructure, while 55.1 per cent stated that medicines are made available by the government health care services. Health care facilities at some of the tea estates like Dejoo Valley, Deepling, Isabheel, Longai, Loonsoong and Messamara are found to be relatively poor and unsatisfactory.

At any time of emergency, the villagers usually do not rely on private vehicles or even rely lesser on public vehicles for taking the sick to the hospital. About 44.2 per cent rely on call 108/102 for emergency cases at the time of severe sickness.

Safe deliveries, too, remain a challenge; as per the DLHS-3 data, 39.9% of deliveries are attended by trained attendants; the all India average is 52.7%. As for institutional births, Assam is at 64.4% (CES, 2009) which is lower than the national average of 72.9%. The study attempts to comprehend in the selected tea estates the complications attached to a pregnant mother. It is understood that many of these complications with timely measures can avoid maternal deaths. Therefore, this study explores the awareness levels of the villagers on the danger signs and timely treatments during pregnancy. Some of the common danger signs listed for the study purpose includes fever, pain > 12 hours, PROM, bleeding, fits, fainting, anemia, etc. On being asked, whether they are aware of these signs, 66.8 per cent do not seem to be aware of it which therefore demands proper awareness and training of the mother as well as the villagers. However about 33.2 per cent has marked that they are aware of the danger signs relating to pregnancy. The study indicates Bholaguri tea estate has least knowledge or no knowledge at all on pregnancy and its complications.

On the number of deaths and its causes in the last 12 months, the survey shows 19.4 per cent responded 'yes' to death of mother or a child. The causes of death of mother includes bleeding, fits, obstructed labour, etc, while the causes of death of child includes fever, diarrhea, fits, etc. On the question of receiving free medicine or subsidized medicine the survey shows 46 per cent receive free or subsidized medicines from the tea garden hospitals while the majority 53.4 per cent does not receive any subsidies or free medicines.

On pregnancy and childbirth in the last 5 years, the survey shows 24 childbirth deaths (5.9 per cent) out of the total 404 children recorded from 718 sample households. Negheriting tea estate shows the highest childbirth deaths with 11 (31.4 per cent) in the last 5 years out of the total 35 children born among the household surveyed. No childbirth deaths were recorded in tea estates which are Bholaguri, Bidyanagar, Cinnamara, Deepling, Isabheel, Loonsoong, Naganijan and

Rajabarrie. In other words, the risk of pregnancy and delivery was only 5.9 per cent while infant survival rate is 94.1 per cent in these tea estates. The main causes of these deaths was found out to be pneumonia and other respiratory problems (6 cases), diarrhea (4 cases), sepsis (1 case) while others not specified (11 cases). The survey shows that 19 deaths have taken place at home while 1 each at the hospital and outside home but not in the hospital. As the study has shown it should be noted that 52.9 per cent of childbirths have taken place at home, 4.4 per cent at home attended by a trained Dai and 25.3 per cent at home attended by TBA. About 15.9 per cent of the children were delivered at government hospitals while only 1.6 childbirths have taken place at private hospitals.

Problem Analysis

- Both survey and observation found that the health status of the tea garden workers and family members are not encouraging. Whatever initiatives and programmes are launched by the government, and supported by NGOs, international organisation not helping much as conditions are not improving. Even today, in the garden most of the diseases like TB, diarrhoea, fits, joint pain etc. is dealt by informal and untrained health workers.
- Though PHC and AWC are there in many of the ATCL teagardens. They are not able to perform their responsibilities according to the laid down norms as per expected plans. In many of the centres ANM are not appointed, in other tea gardens where ANM is appointed they live outside the garden area. From the survey it was found that most of the delivery cases in the gardens take place at home. This is because lack of facilities in the tea garden hospitals and only few ambulances are there for emergency cases, which are not sufficient for a large number of people. Another reason for the prevalence of home delivery is the lack of awareness and information. Because of delivery takes place at home maximum of women are deprived from the government health schemes such as Majoni, Mamoni etc.
- Information regarding casual and ex-tea garden labourers was found which is terrible. These people have to pay Rs. 300 for the ambulance service in the tea garden. As they are not permanent workers of the garden, they are also deprived of free medicines from tea garden hospital. Almost all hospitals lack doctors and other staff and therefore function improperly; this creates serious problems in terms of health service facilities for marginalised tea garden communities.
- Almost 40 per cent of the population in the gardens drink water from unprotected ponds and water bodies that they also use for cleaning utensils and other day-to-day activities. That is probably why most people suffer from stomach pain, skin disease, etc.
- Another frequent complaint in received by workers that the treatments by the doctors are not satisfactory. Generally, doctors prescribed medicines without proper examinations. They do not even touch the patients and without diagnosing much, they straight away write the

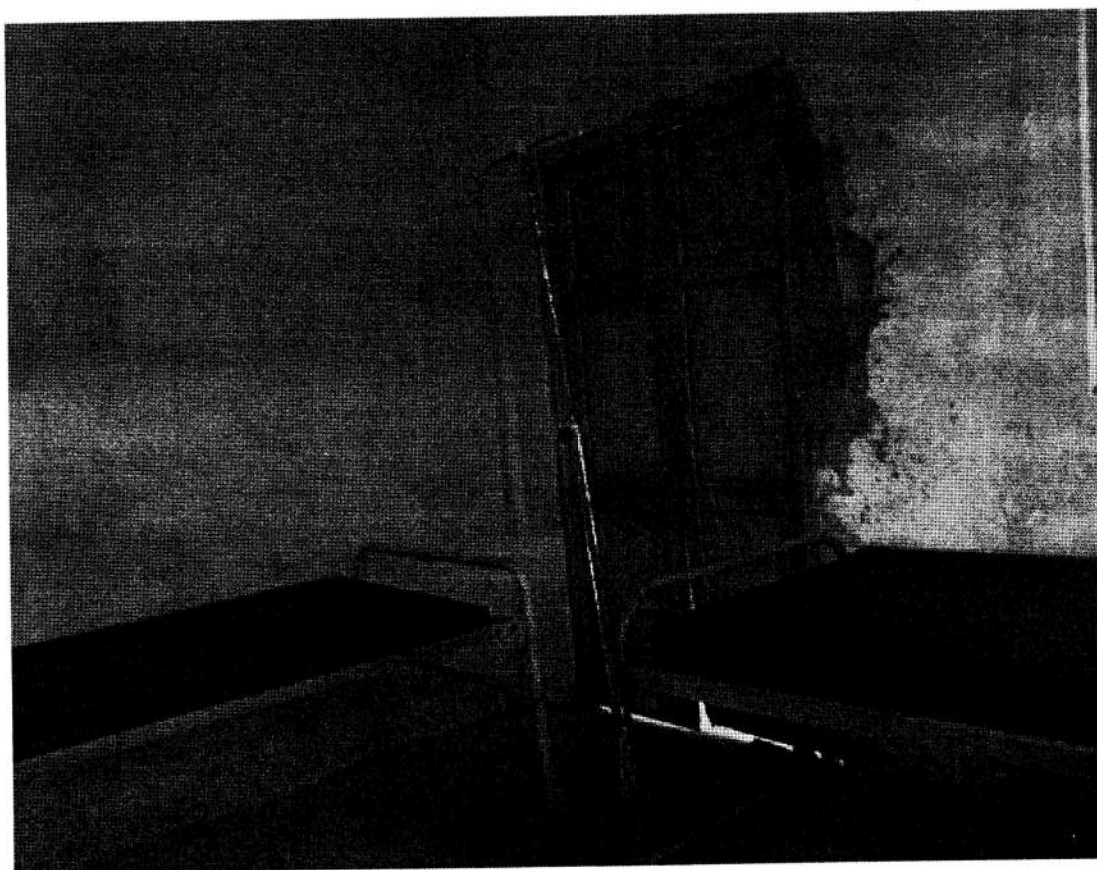
prescription. People also said that the result of medicines provided from hospitals is very poor. They are given almost the same kinds of medicine for different types of disease.

- People are unaware about the health schemes and benefits provided by government. The surroundings of maximum hospitals and ANM centres are unhygienic; unavailability of basic instruments for proper treatment creates serious problems in these areas. Illiteracy and ignorance of the tea garden workers add to the worry up to the some extent. Except Amluckie and Deepling tea estates, in all the other six gardens such as Bidyanagar, Dejoo Valley, Isabheel, Longai, Loongsoong and Rajabarrie there is no doctor appointed in the health centre. Bidyanagar and Longai Tea Estates, there is no dispensary or hospitals at all. Though all the gardens are spread over a vast area, still there is only one central dispensary for the six tea gardens, so the people are deprived of the basic health care in the gardens at the time of urgency.
- The garden hospitals are run under private-public partnership programme by NRHM, but it was reported that NRHM had stopped supporting the garden hospitals before years. In none of the garden hospitals, regular medicine is not available. No specialized employee is recruited except an ANM in a few hospitals. The hospital infrastructure is poor to provide health care for the people. In the two gardens in Sivasagar district, almost in every household there is a case of tuberculosis, which is really a matter of concern. There is hardly any awareness among the people about healthy environment and practices; rather the household environment is quite prone to diseases. Some workers are having the habit of taking drugs, alcohol and other tobacco products which affect a normal life and creates stress on their family members.

Recommendations

- For an effective health service delivery garden hospitals should be looked after by the government agencies or it should be managed by NRHM.
- There should be at least one regular doctor along with ANMs and pharmacist in each tea garden hospital.
- There should be regular health check-up camps and health campaign to make the people aware about various health problems. There should be awareness campaign against the ill habit of alcohol and substance abuse.
- Each garden should have the infrastructure including labour rooms, so that the delivery can take place in the garden hospitals in presence of the trained personnel including doctors and ANMs.
- Regular supply of medicine to each tea garden hospital should be ensured.
- School can play a major role in creating health awareness among the children.

- Screening movies, organising street play and continuous or documentary regarding health in these areas can be an important measure to solve the problems regarding health.
- It is important to provide sufficient free medicines and ambulance to these areas.



Beds in the hospital of Bholaguri Tea Estate

Education

The right to education has been interpreted as part of the Education for All (EFA) process in a way to recognise the significance of basic education as a fundamental human right. In recent years, provisions in constitutions and national legislations on education were adopted in various countries in the spirit of EFA.

In India, the flagship programme *Sarva Shiksha Abhiyan* (SSA) aims to provide universal access to elementary education for children 6-14 years old. The scheme envisages improving enrolment, retention, and the quality of education to enable children to achieve grade appropriate levels of learning. It also aims to eliminate gender differences and gaps between different social categories.

The Right to Education (RTE) Act was passed (in 2009) following the SSA, and entitles all children between the ages of 6-14 years to free and compulsory admission, attendance and completion of elementary education. 'Compulsory education' casts an obligation on the appropriate government to provide and ensure admission, attendance and completion of elementary education. 'Free education' means that—other than a child admitted by his or her parents to a school not supported by the appropriate government—no child will be liable to pay any kind of fee or charges or expenses which may prevent him or her from pursuing and completing elementary education. With the passage of the RTE, and to ensure that it was followed up on, a roadmap was recommended. It included the establishment of schools in all neighbourhoods or areas or limits prescribed as a neighbourhood within three years of the Act coming into force i.e. by 31st March, 2013;

- provision of infrastructure in all schools (i.e. all-weather school buildings, one classroom per teacher, an office-cum-store-cum-head teacher room, toilets and drinking water facilities, barrier free access, library, playground and fencing/boundary walls) by 31 March 2013;
- provision of teachers in all schools as per prescribed pupil-teacher ratios by 31 March 2013;
- training of all untrained teachers by 31 March 2015; and
- all other quality interventions and provisions needed to implement the Act (with immediate effect).

Under this background, the viable indicators of this section emphasise (among others) the educational details of children, quality of education, type of school, and reasons for dropping out of school. Some of the key questions in this section include:

- Is the child currently attending school? Has the child ever attended school?
- What type of school is the child attending (or has the child attended)?
- What are the reasons for never attending school or dropping out?
- What facilities does the school provide?
- Are parents satisfied with the quality of education at school?
- What is the plan/vision/wish for higher education of your children?

A data on the educational level of household members among the ATCL tea gardens shows that the total percentage of illiterates in the 15 tea gardens of the seven districts is 21 per cent. The highest illiteracy rate is seen in Dejo Valley TE with 33.3 per cent and Loongsoong TE with 28.8 per cent, both in Nagaon district while the least is observed in Rajabarrie TE of Sivasagar district with 9 per cent and Amluckie TE of Nagaon with 12.1 per cent. The study shows among the literates the highest concentration comes under primary category with 16.2 per cent, while 1.8 per cent are below primary, 12 per cent are middle level, 7.5 per cent are secondary and 1.9 per cent have completed higher secondary. It is interesting to find out that 1.8 per cent in these 15 tea gardens is literate without any formal schooling. There are hardly any graduate from these gardens with only 0.3 per cent which is indicative no or less interest for higher education. The tea gardens also reported that there are no technical diplomas except in Amluckie (1.2 per cent) and Loonsoong (0.6 per cent). The study reveals only 0.001 per cent post-graduates found in Naganijan TE of Jorhat. The total literacy rate of the 15 tea estates is 70.6 per cent. As per 2011 Census, Assam's literacy rate for population above 7 years of age is 73.18 per cent (an increase of nearly 10 per cent as compared to 2001). This, however, is lower than the national average of 74.04 per cent.

The age of children between 5 to 17 years is considered as the school going age. As per 2011 Census, the percentage of children (6-17 years) currently attending school was 88.1 per cent and the corresponding figures in the seven districts where the study is conducted were all above 80 per cent. Likewise the study shows that except in Dejo Valley TE of Nagaon (75 per cent), the percentage of children going to school in the rest of the gardens is above 80 per cent. It should be noted that Isabheel TE of Karimganj and Rungamati TE of Golaghat recorded 100 per cent of children going to school.

The data shows that 97.1 per cent of the school going children are enrolled in government aided schools while about 2.4 per cent attends schools run by NGOs and a merely 0.4 per cent goes to private schools. The study has recorded nil with regard to children going to government madrassa as well as private madrassa. The choice of school therefore is determined by the cost of expenditure as well as the quality of education. Many of these households cannot afford high tuition fees and other educational expenses whereby government aided schools become the ultimate choice even if the quality of education may be relatively poor. On the quality of education, about 56.3 per cent of the parents are satisfied while 10.5 per cent are not satisfied

with the quality of education and 33.2 per cent preferred cannot say as their comment. About 78.6 of the parents say classes are regular as against 14.5 per cent saying classes are not regular. It has to be noted that about 44 per cent in Longai TE responded that classes are irregular. But on the other hand Bholaguri TE, Dejoo Valley TE and Rungamati TE recorded 100 per cent for regular classes. The study has also shown that 62.1 per cent of the parents are aware of their ward's education and they regularly monitor the progress of their children in terms of learning and activities in the school.

The average percentage of children not attending school in the ATCL tea gardens where the study has been conducted is 8.77 per cent. This figure also includes those who have dropped out of school and those who discontinued their studies. There could be several reasons for never attending school or dropping out of school or discontinuing studies like say, the school is far away from homes and there is no transport available. In other cases, the school timing may not be convenient for different reasons. The study shows that 3.3 per cent of the children never attend school or dropout of school as they are busy in household chores. While the highest percentage in this category states that due to wage labour (33.3 per cent) the children never attended a school or dropout of school which has to be noted critically.

The study interestingly shows that about 26.7 per cent never attended school for they did not consider school important at all. On the other hand another 13.3 per cent states the children are not interested to go to school. There is also a possibility that the child may not want to go to school due to poor facilities and poor quality teaching or perhaps the teacher rarely comes to the school. The study shows about 13.3 per cent has other reasons than any of these. One of the other reasons could be that the rate of school dropouts is increasing due to lack of teachers who are afraid of attending schools as they are located in militancy-prone areas. As for instance, more than 30 state government-run schools, even the lower and upper primary ones, in Katlicherra in Hailakandi district have remained closed for the last 2 years as there are no teachers. These teachers have become the soft targets for the militants. It is further reported that nearly 800 teachers' posts have been lying vacant in these schools. Most of the teachers, appointed after qualifying Teachers Eligibility Test (TET) do not opt for these schools given the remoteness of the area. On the other hand the district authorities refused to acknowledge that militancy was the sole reason for which the schools were shut. In order to assess the quality of teaching and learning relating to school going child both in primary and upper primary level, the study has taken 'can child read' and 'can child write' as the two indicators. And the study reveals that 84.5 per cent can read while only 82.3 per cent can write. It is interesting to note that in Messamara TE only 71.9 per cent of the school going children can read while 40.6 per cent cannot write. Likewise in Rungamati TE, 46.7 per cent of the school going children can read and write but 53.3 per cent can neither read nor write. On the other hand, the study reveals that 100 per cent in Bidyanagar TE and Isabheel TE can both read and write while 100 per cent can read in Amluckie TE and 93.3 per cent can write.

Problem Analysis

- In matter of education, the overall condition of the tea gardens is pathetic in terms of infrastructural facility and availability of teachers in the schools. However, as compared to the gardens of Sivasagar district, the condition of both in Nagaon and Karimganj are more miserable. The schools in both the Nagaon and Karimganj districts are yet to be provincialised. They are still run by the garden authority with minimum infrastructure. On average, in a school run by the tea garden management, there is only one permanent teacher with a low salaried person assisting the teacher with two or three part time teachers.
- It is found that both from government side and parent side, children are hardly encouraged to go to school. The infrastructure in the tea garden schools are in very bad shape. For instance, in a primary school in Loongsoong Tea Estate and in a primary school in Amluckie Tea Estate, there are no basic infrastructure like proper building, desk and bench.
- There is a tendency of the parents in tea garden to send their children for work rather than to school. The wage in the garden is not enough for the family member to live in a bare minimum level of basic amenities. Hence they are compelled to send their children for wage labour. From the observation, it was found that due to lack of space in the house, and indulgence of male members in intoxication discourage children to study at home. Another problem is that workers are not aware about the free education in schools. They assume that they have to pay money, so they do not encourage their children to continue the education.
- The numbers of schools are also not sufficient in the tea gardens and it lacks trained teacher. There are very few numbers of high schools or colleges near to the tea garden areas for which the children of the garden area find it difficult of pursue education after class VIII. Lack of basic infrastructure in school is biggest challenge to retain children in the school. Most of the classes are held without desk and benches. It was observed that in some schools two or three classes are held in the same room without any partition.
- It was also observed that toilet conditions and drinking water facilities of the schools are below the average norms and standards. The school authority informed that from past some years the dropout rate of the schools are decreasing, but there are still dropouts cases found in these tea garden schools which are alarming. Dropout rate of girls drop are more than the boys. The teacher student ratios in most of the schools are not according to the provision. Many vacant teacher posts are not filled up.
- This is interesting to note that some teachers informed that the students are coming to the school for the MDM. They said due to any reason if MDM is not served, then the number of student attendance decreases drastically. It was found that in most of the family live under distress and do not have enough food to prepare; MDM is a ray of hope to many poor children. Most of the time children are busy in household works like cleaning utensils, sweeping etc. This is also one of the reasons that they stay away from the school.

- The children of the tea garden use *Adivasi* or Sadri as their mother tongue. They do not understand Assamese language very clearly. It was noticed that in the schools maximum teachers hail from Assamese community. The medium of instruction is also Assamese. So there is a big gap in the communication between teachers and students. It is also creating problems in the process of teaching and learning. Some of the parents lamented about the irregular presence of the teachers in the schools. During the survey it was noticed that teachers were not taking the classes. Instead they were gossiping outside the classrooms.
- In some tea gardens it was found that people were keeping their domestic animals in the school campuses as there were shortages of spaces in their houses. Animals make the school premises including class rooms filthy and unhygienic. It is seen that most of the kitchens in the schools where MDM is prepared were unhygienic.

Recommendations

- One of the primary tasks is to provincialise the garden schools and provide them with all the facilities and infrastructure as provided in government schools.
- To make people aware and conscious about the need for the education in life. Government agencies, civil society organisations and garden authorities can work together.
- High schools should be established near the garden areas to encourage children of the workers to continue their schooling.
- Economic condition should be improved, so that they will not send their children for wage work.
- Compulsory adult education for elder people will ameliorate their condition. Incentive should be given to enroll for adult education.
- In primary level use of mother tongue of the child will help to retain more students and it will reduce the dropout rate.
- MDM should not reduce the quality of teaching. It is observed that teachers are busy in managing food than teaching. It should be managed by SHG and teacher can invest their time in teaching.
- Proper toilet, urinals should be built with running water connection, it will reduce the girls dropout cases.
- School Education Committee should be functional which will monitor and evaluate the teaching learning process of the tea garden schools.
- Primary teacher should be appointed from tea garden community which will encourage children to come to schools and reduce the communication gap.



A lower primary school in Bidyanagar Tea Estate

Nutrition

Nutrition is the intake of food, considered in relation to the body's dietary needs. Good nutrition, an adequate, well balanced diet combined with regular physical activity is a cornerstone for survival, health and development. The well-nourished women face fewer risks during pregnancy and childbirth, and their children set off on a firmer developmental path. Well-nourished children perform better in school, grow into healthier adults and are able to give their own children a better start in life. Whereas poor nutrition can lead to reduced immunity, increased susceptibility to disease, impaired physical and mental development, and reduced productivity. Under-nourished children have lowered resistance to infection and are more likely to die from such common childhood ailments as diarrheal diseases and respiratory infections.

In all regions of the world, in the absence of determined public policies, people who live on low incomes tend to have worse diets than those who are better off. And people who lack adequate nutrition have to struggle harder to avoid or extricate themselves from poverty than healthier, well-nourished people. In India, Article 47 of the Directive Principles of a State Policy of the Constitution articulates that "the State shall regard raising the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties."

To fulfil the clauses in the Constitution, the ICDS, a centrally-sponsored scheme implemented through the State Governments/UT Administrations was launched on 2nd October 1975. The National Policy for Children 1974, provides the conceptual basis for an integrated approach to addressing issue and commits the state to provide adequate services to children, both before and after birth and through the period of growth - to ensure their full physical, mental and social development.

This section of the survey primarily dealt with nutrition related to newborn care. It explores on the knowledge-how of the villagers like breastfeeding, wrapping and cleaning of newborn children. It assesses the services on child care and child nutrition provided by programmes like ICDS. Some of the key questions in this section include:

- Has the child ever been breastfed?
- What was given to the child before initiating breastfeeding?
- Was the child given first breast milk (colostrum)?
- Are they aware of the ICDS programme (Anganwadi Centre)?
- What is their overall assessment of ICDS services?
- Does the AWW provide information on child food, child feeding, malnutrition etc.?

On breastfeeding, the survey shows that as high as 97.9 per cent has breastfed the first child while 99.3 per cent has breastfed the second child. Excepting Loongsoong Tea Estate, the rest of the estates have shown breastfeeding their newborn children. Majority of these estates shows 100

per cent breastfeeding both their first as well as their second child. The survey also insightfully enquires about the time of first breastfeeding to child; whether the child was given the mother's milk immediately after delivery or at least within 1 hour of birth or more. The data reveals about 73.3 per cent of the newborn child was breastfed either immediately or within an hour of delivery. About 12.2 per cent were breastfed after 1 hour but within 2 hours, about 2.6 per cent breastfed after 2 hours but on the same day, about 1.4 per cent of the kids were breastfed 1 to 3 days after birth while still 0.6 per cent was breastfed after 3 days of birth.

On being asked what was given to the child before initiating breastfeeding, the survey shows 58.2 per cent gave nothing to the child. 8.8 per cent gave sugar, 6.3 per cent gave water, 5.1 per cent gave honey, 1.7 per cent animal milk, and 0.6 per cent gave formula milk. It is interesting to note that in Loongsoong Tea Estate about 7.7 per cent were given *janamghutti* before initiating breastfeeding. At Bidyanagar tea estate the data shows about 20 per cent of the children were given some other feeds not listed in the options. Further on being asked whether the child was given first breast milk or colostrum, the study shows 56.2 per cent were given colostrum while only 1.5 per cent was not given the first breast milk. However it is important to note there were about 42.3 per cent who marked cannot say which may indicate that they do not want to reveal whether the child was given colostrum or not. Perhaps the child was never given colostrum which may be related to their cultural beliefs considering it unclean.

As envisaged in the above discussions, this section also attempted to assess the functioning and services of ICDS particularly Anganwadi Centres in relation to childcare and child nutrition. The survey shows about 97.8 per cent are aware of ICDS and its activities. This is also to find out the number of children enrolled in the Anganwadi Centres and if they are not enrolled what the reasons could be. Is it because the Anganwadi Centres are of poor quality or are non-functional? The study shows though 97.8 per cent are aware of AWC and also being enrolled; only about 73.9 per cent have visited the centres for the last 3 months while the remaining 26.1 have not visited any centre. Bholaguri and Dejoor Valley tea estates are the only two estates which have shown 100 per cent awareness of ICDS and 100 per cent visitation of AWC in the last 3 months. Anganwadi Centres are supposed to maintain growth charts and show or explain to parents. It should provide regular rations in terms of SNP, take-home rations, ready-to-eat food supplements or cooked food. On this accounts the study shows 51.5 per cent AWCs maintains growth charts to explain to the parents. About 90.4 per cent are in receipt of SNP or take-home rations or ready-to-eat food supplement or cooked food while 37.7 per cent states the AWCs are regular in supply of rations.

On the quality of food supplied at AWC, 38.2 per cent states the quality of food is good; another 38.2 per cent states food quality is of average while 7.8 per cent states the quality of food supplied at AWC is bad. Anganwadi Workers (AWW) operates at AWC or do home visits to provide information on child food, child feeding and cooking. It is also their duty to identify danger signs for diseases or under-nutrition. On this tally, 34.4 per cent states AWW provides information on child food, 28 per cent states AWW provides information on child feeding and

24.1 per cent on cooking. According to the survey, 26.3 per cent states AWW used to identify signs of malnutrition and other danger signs of diseases. The villagers when asks to give an overall rating of ICDS services, about 42.3 per cent stated it is good, 33 per cent rated average while 8.5 per cent rated the service of ICDS bad. About 16.2 per cent have no comment on the service quality of ICDS.

Problem Analysis

- It is difficult for tea garden women workers to breastfeed their children as most of them are busy in wage work. One woman respondent commented that, I have to go for work in the garden, so like me there are many mothers who try to stop breastfeeding as early as possible.
- Most of the women are not aware about the benefits of immediate breastfeeding and continuous breastfeeding. Many of the women are not aware about the word like 'Anemia' and 'Malnutrition'.
- Anganwadi centres in these tea gardens are not functioning in a satisfactory level. Almost all respondents informed that the supply of ration at AWC is irregular. Only rice and occasional fruits are supplied at the AWC. Respondents complained about corruption in AWC.
- Most of the surveyed AWC lack of facilities like toilet, drinking water etc. and run in an unhygienic condition.
- Most of the parents responded that they are hardly shown any growth charts, or get information from AWW regarding cooking and feeding or how to look after children's health.
- Unawareness of the people regarding health and nutrition are the major problems.
- Most of the families in the gardens are covered under BPL category. Many respondents said that they receive 25 KG rice per month which is not enough for two square meals for the whole month. Scarcity of drinking water and unhygienic condition add to the worries.
- The habit of alcohol and other tobacco product is a matter of concern. Though there is a concept of crèche in tea gardens, it is not functional.
- Regarding government supply of rice and other nutritious food in schools and Anganwadi Centres, respondents lamented about corruption. For instances, in the Bidyanagar Tea Estate of Karimganj district, the food supplies are controlled by the panchayat members. There is no regular supply of ration available in some tea gardens.

Recommendations

- Nutritional food should be supplied to the children of tea garden with a special scheme as these children are more vulnerable to malnutrition then others.

- Awareness camps regarding nutrition and better food practices can be organised on monthly basis.
- ASHA and AWC workers should be properly trained to deliver their services more effectively.
- Schools can take a major role in motivating students for good health practices.
- ATCL should initiate special drive to provide nutritional food to children under the age of 12 as they are more susceptible to diseases.
- The schools, Anganwadi Centres and other government services should be regularly monitored to avoid any kind of malpractice.
- The crèche facility should be implemented seriously. So that the workers can leave their children under the care of someone who can feed the kids regularly.
- Apart from the anganwadi service or other governmental schemes, the government should introduce some more schemes in reference to the local necessity.

Drinking Water and Sanitation

Water, sanitation and hygiene (WASH) are among the most basic human needs. Access to safe drinking water and to basic sanitation is measured by two indicators a) proportion of population using an improved drinking water source and b) proportion of population using an improved sanitation facility. Better WASH means higher levels of school achievement and greater productivity. WASH is also closely linked with dignity, and in 2010 the UN General Assembly recognised WASH as a basic human right, a decision echoed by the Human Rights Council later that year.

In developing countries like India, water quality is a growing concern. Drinking water sources are under increasing threat from contamination, with far-reaching consequences for the health of children and for the economic and social development of communities. Poor sanitation, unsafe water and unhygienic practices cause needless suffering from diseases. Water and sanitation related disease, despite being preventable, remains one of the most significant child health problems worldwide.

While the Eleventh Five Year Plan proposed to ensure sanitation facilities in rural areas with broader goal to eradicate the practice of open defecation, the Twelfth Five Year Plan has adopted habitation approach to sanitation and aims to institutionalise the integration of water supply with sanitation in each habitation. If we see the historical development, Government of India started the Central Rural Sanitation Programme (CRSP) in 1986 primarily with the objective of improving the quality of life of the rural people and to provide privacy and dignity to women. With this broader concept of sanitation, CRSP adopted a 'demand driven' approach with the name 'Total Sanitation Campaign' (TSC) with effect from 1999. The revised approach emphasized more on Information, Education and Communication (IEC), Human Resource Development, Capacity Development activities to increase awareness among the rural people and generation of demand for sanitary facilities. To give a fillip to the TSC, Government of India also launched the Nirmal Gram Puraskar (NGP) that sought to recognise the achievements and efforts made in ensuring full sanitation coverage. Encouraged by the success of NGP, the TSC is being renamed as "Nirmal Bharat Abhiyan" (NBA). The objective is to accelerate the sanitation coverage in the rural areas so as to comprehensively cover the rural community through renewed strategies and saturation approach.

As per Census 2011 (Household Amenities and Assets), 59.40 per cent of households have access to safe drinking water from hand pump/tube well/bore well and 10.50 per cent from the taps. With regard to the sanitation, 64.90 per cent of the household have access to sanitary latrines within their premises. Data also shows that 33.20 per cent of the household are still defecating in the open.

On this backdrop the field survey in this section comprise research questions to study the sources of drinking water, toilet arrangements and hand washing practices in the ATCL tea estates of Assam. The key indicative questions are:

- What is the main source of drinking water for the household?
- Where is the water source located?
- What kind of toilet facility do the household members use?
- How is the child's faeces disposed?
- Do they share the toilet facility with other households?
- How and when do the family members wash their hands?

The main source of drinking water was categorized into a) improved or safe drinking water and b) unimproved or unsafe drinking water. The improved or safe drinking water source includes piped water into dwelling yard or plot, public tap or stand pipe, tube well or bore well, hand pump, dug-well which is protected, spring which is protected and rain water harvesting. The unimproved or unsafe drinking water source includes unprotected spring, unprotected dug-well, cart with small tank or drum, tanker or truck, surface water or river or dam or lake or pond or canal and bottled water. The survey shows 79.3 per cent of the households avail improved or safe drinking water. It shows 5 tea estates viz. Messamara, Naganijan, Negheriting, Rajabarrie and Rungamati tea estates had 100 per cent source of safe or improved drinking water categorized above. Of the improved source of drinking water, the survey shows 49.4 per cent households has tube well or bore well, 32.2 per cent households has or avails public tap or stand post, 12.3 per cent households uses hand pump to draw drinking water, 4.5 per cent has piped water connected to the dwelling yard, 1.4 per cent households draws drinking water from protected dug-well while 0.2 per cent households rely on protected spring. There was no survey record of any household relying or harvesting rain water. Of the unimproved or unsafe source of drinking water 50 per cent households rely on surface water or river or dam or lake or pond or canal, 45.5 per cent households uses unprotected dug-well, about 3 per cent rely on unsafe tankers while 1.5 per cent households rely on unprotected spring.

The data shows 50.4 per cent of the households uses pit latrine with slab while on the other hand 27.2 per cent households uses composite toilets. About 17.9 per cent households uses flush or pour flush to pit latrines while 2.1 per cent households uses Ventilated Improved Pit(VIP) latrine. The data shows about 1.2 per cent each of the households either uses piped sewer system or septic tank. It is essential too to observe the toilet facility whether it is clean and functional? Is water available for ablution, cleaning of toilet and hand washing? On being ask how is the child's faeces disposed? The survey shows about 29.5 per cent disposed the child's faeces in toilet. On the other hand as many as 70.3 per cent of the households disposed it in the open while only a meagre 0.2 per cent covered the faeces which is disposed in the open. In is interesting to note at Dejoo Valley tea estate 100 per cent households disposed the child's faeces in open. On

the question of sharing the toilet facility with other households, 79.1 per cent do not share with others while 20.9 per cent shares toilet facility with other household members.

On the question of toilet facility, in Assam, as per Census 2011, the toilet facility within the premises has increased to 64.9 per cent from 29.1 per cent in Census 2001 and the growth registered is 123.0 percent. The toilet facility within the premises is recorded at 46.9 per cent in Census 2011 against 24.7 per cent recorded in Census 2001 in the country as a whole. The growth is registered as 89.9 per cent.

Problems

- Though there is a water supply system in Deepling Tea Estate which is managed by the department of public health and engineering, it is not useful because of long duration power cut. In Isabheel Tea Estate people take water from the Longai River which is very filthy and used for everything.
- Drinking water is a crisis in the Loongsoong Tea Estate where people need to carry drinking water from a distant of more than one kilometer. Similarly in the remote areas of Rongagara division of Amluckie Tea Estate, drinking water is a serious problem where people are taking water from unprotected and muddy well which is a cause for diarrhea in the area.
- Some people in the garden area use open space for defecation which creates various health problems. Regarding sanitation, the condition of the people is also same as drinking water. The government had provided the people with low cost latrine under *Anamay* scheme. But due to corruption, the low cost latrines are not usable after two to three months. Respondents said these latrines are becoming a burden in the household and has become disease box.
- Due to lack of water supply, the latrines are not cleaned. That is the reason why people prefer to go for defecation in the open space rather than using the latrines. Due to superstition and lack of awareness, people are not using sanitary latrines, for instance, even though there are people in the garden area who can afford the expenses of a sanitary latrine, yet, they prefer open space. A proper toilet facility is also not seen in the garden households. Due to overpopulation, the accommodation for a toilet and latrine within household premises has become almost impossible.
- It was observed that the drinking water source used by people is not clean and it has broken platform which allow unclean water to go inside the ground. It was asked about the uses of soap for hand washing, all of them answered positively, but most of the observance found unavailability of soaps in the area of hand washing. Unprotected drains in the garden areas are major reasons for some of the waterborne diseases.

Recommendations

- A specified and dedicated scheme is necessary to clean drinking water facility to the tea garden workers.

- Instead of low cost sanitary latrines, good toilet should be provided with running water facility. A proper awareness and incentive should be given to people to encourage them for using toilets.
- Open ponds and water bodies should be maintained properly by the tea garden authority.
- Open drainage should be covered and mud drain should be converted to proper drainage system.
- Old house should be renovated and restored in an emergency basis.

Child Protection

Child Protection is about protecting children from or against any perceived or real danger or risk to their life, their personhood and childhood. It is about reducing their vulnerability to any kind of harm and protecting them in harmful situations. Child Protection is about ensuring that no child falls out of the social security and safety net and, those who do, receive necessary care, protection and support so as to bring them back into the safety net. While protection is a right of every child, some children are more vulnerable than others and need special attention. The government recognises these children as 'children in difficult circumstances', characterized by their specific social, economic and geo-political situations. In addition to providing a safe environment for these children, it is imperative to ensure that all other children also remain protected. Child protection is integrally linked to every other right of the child.

India has adopted a number of laws and formulated a range of policies to ensure children's protection and improvement in their situation, however, these laws and policies promising respect for child rights, their protection and wellbeing have not resulted in much improvement in lives of millions of Indian children who continue to be deprived of their rights, abused, exploited and taken away from their families and communities. Scant attention and feeble commitment to resolving child protection problems have resulted in poor implementation of these laws and policies; meagre resources; minimal infrastructure; inadequate services in variety, quantity and quality; and inadequate monitoring and evaluation. Failure to ensure children's right to protection adversely affects all other rights of the child. Failure to protect children from issues such as violence in schools, child labour, harmful traditional practices, child marriage, child abuse, the absence of parental care and commercial sexual exploitation among others, means failure in fulfilling both the Constitutional and International commitments towards children.

Some of the other key questions for field survey in this section of child protection include:

- How many children till 14 years of age has migrated for work outside the tea garden?
- Are there any missing children?
- Do any children work outside for money? If so, what is the nature of the work?
- Is there any child involvement in wage labour activity?
- What was the age of the child during marriage?
- Are there any physical security measures from government or any NGOs towards children/women?

This section is an attempt to find out any information about children migration. It is an attempt to find out the reasons why these children (5-14 years) have migrated. Whether they have migrated for work or for any wage labour activity or for any other reasons? What could be the nature of the work and whether the income of the child is essential to run the family? Or where could they

be migrated and working? The survey shows in the 15 ATCL tea estates there are 20 cases of children who have migrated out of their homes; out of which two are with relatives, 5 with acquaintances, 12 with work agents while 1 did not specify. On being asked if there is any child who is missing or whose whereabouts is not known, the survey shows there are 76 such cases with Deepling and Longai tea estates with the highest numbers 16 and 13 respectively. However no missing child is reported in Bholaguri, Cinnamara, Messamara, Rajabarrie and Sycotta tea estates.

On the number of children working outside the home for money, the data recorded 101 cases while out of which 15 work on regular basis but 86 work on contractual or seasonal or casual or part time basis. However it should be noted that in Messamara, Negheriting and Rajabarrie tea estates not even a single case of such is reported. It is recorded in the survey that children not only work outside for money to support the family but help the family working within the household which is reported as 294 cases. This includes even those children who do not necessarily work outside their households. The survey also shows 66 cases of wage labour activity working as either daily wage labourers or domestic works in the tea garden itself. There are others who are engaged as wage labourers working at shops and at construction sites.

On the question of addiction, children are commonly addicted with alcohol habits, smoking, tobacco and even misuse of drugs. To this count, the survey shows 102 cases of addiction with alcohol addiction having the highest number 43, followed by tobacco habits having 37 and those who are into smoking habits are 22. However there was no case of drug addicts in the tea estates when the survey was carried out.

On being asked whether child marriage is practiced in their community? - About 94 per cent of the sample population has indicated there are no child marriages in their villages. In the case of the 15 ATCL tea estates the survey has shown that the median marriage age for both male and female was above the legal marriageable age standing at 24 and 19 years respectively. The average male marriage age at all tea estates was above the legal age of 21 except in Naganijan tea estate. In the case of women, the survey shows 4 tea estates viz. Dejuo Valley, Deepling, Naganijan and Sycotta tea estates have average marriageable age at 17 years which is below the legal age (18 years). It has to be noted that marriage age data could not be ascertained in Bholaguri, Messamara, Negheriting and Rungamati tea gardens.

Problems

- It was found that some children between the age group of 5 to 17 migrated from the garden area to elsewhere as wage labour. Most of the respondents agreed to the point that child income is helpful for the survival of the family. It is because of the poor economic condition of the family where children have to work as wage labour. Most of the children are engaged with household tasks because of absence of their parents for household work.

- It was found that few children between the age group of 5 to 17 have some kinds of addiction that is either to tobacco or alcohol. The drinking habit of the elders is also obstacle in child protection. Due to lack of education and impact of alcohol, the husbands are often become aggressive towards women even in pregnancy time for which both the child and the mother need to suffer. A similar kind of case was found in Amluckie Tea Estate where the pregnant woman was regularly beaten by the drunkard husband resulting in the birth of a dead child.
- Nutritious food including clean drinking water is hardly available for the people in the tea garden areas for which most of the children become ill or malnourished. Due to poverty, the children in very young age need to go for work which is creating havoc for the childhood. In more cases, young children are often sent to other places as housemaids in town or other places.
- The children in their own household never feel safe. It is because due to low wage and poverty the parents often become frustrated and drink alcohol or tobacco products. So their kids always live and brought up in a fearful environment. The present education scenario in the garden is not capable enough to make a better future for the kids. It is lack in infrastructure and all other facilities.

Recommendations

- Child protection is related to the parents. So economic condition of the parents should be secured and healthy environment in the locality should be promoted.
- Schools should be strengthened and empowered to devote quality time for the children.
- Awareness camps and consultation programmes should be initiated to discourage children and their parents from tobacco and alcohol addiction. Workshop, sports competition, dramas, plays can be organised to build awareness among the children.
- Scholarships can be provided to meritorious and promising students to encourage them for further studies.

CONCLUSIONS

Around 13,500 household are settled in 15 ATCL tea gardens spread of seven districts in Assam. It is the responsibility of ATCL to look after the tea garden workers and their dependents for a comfortable life. The study shows that the condition of tea garden labour has not changed substantially even in the post-colonial era. In the independent India, they live a life like living in a walled community. They have little interaction with the outside world. Upward mobility in case of these tea garden communities is very rare. Based on this the overall recommendations of the study are as follows:

- **Capacity Building** – government agencies, NGOs, ATCL should work in a synergetic manner to implement all types of social protection schemes more effectively, so that all marginalised households and vulnerable groups can have access to all sorts of services without hassles.
- **Knowledge Production and Management-** Volunteers from tea garden community and experts from civil society organisation should develop knowledge according to the local need. They should ensure how best it can be disseminated so that people can have a comfortable living.
- **Decentralised Involvement** - PRI member should be involved in the overall developmental projects in the tea gardens.
- **Creating Partnerships** - Stakeholders, government agencies, ATCL and civil society organisations should work in partnerships to develop policy and devise strategy. It is more productive than policy designed elsewhere and implemented somewhere else.
- **Empowerment of Communities-** Communities should be empowered to understand the gap between their culture, social and political setup with various developmental plan, so that they can adjust their behaviour towards more healthy practices.
- **Grievance Cell** - A cell should be created to receive grievances from the tea garden community members for better governance.
- **Fragility indicators-** With a creation of advocacy group various indicators should be developed with specific reference to a tea garden. Special emphasis should be given to improve on those problems.
- **Monitoring and Evaluation-** Developmental programmes should be monitored and evaluated in all ATCL tea gardens by a neutral agency to get more objective views.

Recommendations

Health

Issues	Suggestions
Home delivery due to lack of basic infrastructure in the health centres.	Each garden should have the infrastructure including labour rooms, so that the delivery can take place in the garden hospitals in presence of the trained personnel including doctors and ANMs.
Free ambulance, medicine services are mostly not available.	It is important to provide sufficient free medicines and ambulance to these areas.
Unsafe drinking water and health practices and lack of proper diagnosis by the doctors	For an effective health service delivery garden hospitals should be looked after by the government agencies or it should be managed by NRHM.
Illness behaviour by the workers and dilapidated condition of the hospitals.	School can play a major role in creating health awareness among the children. Screening movies, organising street play and continuous or documentary regarding health in these areas can be an important measure to solve the problems regarding health.

Education

Issues	Suggestions
Lack of basic infrastructure.	One of the primary tasks is to provincialise the garden schools and provide them with all the facilities and infrastructure as provided in government schools.
Drop outs cases in schools	To make people aware and conscious about the need for the education in life. Government agencies, civil society organisations and garden authorities can work together. Economic condition should be improved, so that they will not send their children for wage work.
Problem of medium of instruction/ language problem	In primary level use of mother tongue of the child will help to retain more students and it will reduce the dropout rate. Primary teacher should be appointed from tea garden community which will encourage children to come to schools and reduce the communication gap.

NUTRITION

Issues	Suggestions
Lack of breastfeeding due to the engagement of mothers in the work area. Lacking awareness about breastfeeding.	Awareness camps regarding nutrition and better food practices can be organised on monthly basis.
Anganwadi centres in these tea gardens are not functioning regularly.	ASHA and AWC workers should be regular and properly trained to deliver their services more effectively.
Unawareness of the people regarding health and nutrition are the major problems.	Schools can take a major role in motivating students for good health practices. Nutritional food should be supplied to the children of tea garden with a special scheme as these children are more vulnerable to malnutrition than others.
Corruption in PDS and government supply of rations.	PDS should be made more regular.

DRINKING WATER AND SANITATION

Issues	Suggestions
Lack of accessibility to safe drinking water.	A specified and dedicated scheme is necessary to clean drinking water facility to the tea garden workers.
Practice of open defecation.	Instead of low cost sanitary latrines, good toilet should be provided with running water facility. A proper awareness and incentive should be given to people to encourage them for using toilets.
Lack of water supply to the latrines and lack of space for a latrine in the compound.	Water supply should be made to the latrines and government sponsored latrine should be given to the tea garden workers.
Unprotected drains and polluted water supply.	Open ponds and water bodies should be maintained properly by the tea garden authority. Open drainage should be covered and mud drain should be converted to proper drainage system.

REFERENCES

- Annual Health Surveys, 2010-11, 2011-12.
- Census 2001, 2011, Government of India.
- Department of Electronics and Information Technology, Ministry of Communications and IT, Government of India.
- District Level Household & Facility Survey: Ministry of Health and Family Welfare, Government of India.
- <http://www.unicef.org/india>. Retrieved on 20.02.2014.
- IT News Bureau: *India Tea*. November 2, 2013.
- Kothari, C.R. *Research Methodology: Methods and Techniques*. New Age International, 2004.
- National Family Health Survey – 2, 1998-99.
- National Family Health Survey – 3, 2003-06.
- National Institute of Health & Family Welfare, Government of India.2009.
- *Our Women and Children – present Status – Assam*: Government of Assam.
- Sarma,Gadapani. *A Historical Background of Tea in Assam*, Volume-I, Issue-IV, April 2013, THE ECHO.
- *SRS Bulletin*, December 2010, 2011 & 2012.
- *The Times of India*, February 19, 2014.
- UNDP Index 2011.
- ‘Worry over High Rate of Child Marriage in Assam’ *The Times of India*. February 25, 2014.
- Young, P.V. *Scientific Social Surveys and Research*. (Fourth Edition). New Delhi: Prentice Hall of India.

BUDGET

Documentation and Awareness building among the Tea Communities in ATCL garden in Assam

Title:
Location:
Responsible Officer(s):
Implementing Partner:
Project Period:

Tezpur, Assam
 Dr. Kedliezo Kikhi
 Tezpur University R and D
 Sep to Dec 2013

Amount in Indian Rupees*

Programme Costs	No.	Items	Unit	Quantity	Unit cost	Total budgeted	Partner's contribution	Total UNICEF	UNICEF Contribution	
									Sep 13 to Nov 13 1st tranche	Dec-13 2nd tranche
									9	10
	1	Budget for Documentation and awareness generation among tea communities under ATCL								
	1.0	Personnel	persons	8	12,000	192,000.00	-	192,000.00	192,000.00	0
	1.1	Research Personnel for two months	persons	1	25,000	100,000.00	-	100,000.00	75,000.00	25,000
	1.2	Principal Researcher for four months	persons	1	25,000	100,000.00	-	100,000.00	75,000.00	25,000
	2.0	Local Travel	persons	8	13,500	108,000.00	-	108,000.00	108,000.00	
	2.1	Travel and staying of Research Personnel to districts	persons	8	13,500	108,000.00	-	108,000.00	108,000.00	
	2.2	Travel of Principal Researcher including one time travel to Guwahati	persons	1	15,000	15,000.00	-	15,000.00	15,000.00	
	3.0	Data Collection and Report Writing								
	3.1	Designing and photocopy of formats- 2000 formats	nos	10	2,000	20,000.00	-	20,000.00	20,000.00	
	3.2	Stationery for data collections @ Rs. 1500 per Research Personnel	nos	9	1,500	13,500.00	-	13,500.00	13,500.00	
	3.3	Data entry (around 2000 formats)	nos	2000	20	40,000.00	-	40,000.00	40,000.00	
	3.4	Report writing, layout, photography and designing	nos	1	20,000	20,000.00	-	20,000.00	20,000.00	
	4.0	Consultations (Two) to prepare roadmap and training of Research Personnel								
	4.1	Tea and Lunch for 15 persons for 2 consultations	persons	15	350	10,500.00	-	10,500.00	10,500.00	
	4.2	Stationery and logistics for Consultation	consultation	2	5,000	10,000.00	-	10,000.00	10,000.00	
	5.0	Dissemination Workshop								
	5.1	Workshop - forders for participants	persons	40	200	8,000.00	-	8,000.00	8,000.00	
	5.2	tea and Lunch for 15 persons	persons	50	350	17,500.00	-	17,500.00	17,500.00	
	5.3	Hiring charges for LCD and PA system	consultation	1	2,000	2,000.00	-	2,000.00	2,000.00	
	5.4	Logistics (Banner, documentation, photography, etc)	consultation	1	3,000	3,000.00	-	3,000.00	3,000.00	
	6.0	Recurring office expenses (Communication, stationary, photocopy, etc), technical support by Dept.								
	6.1	Recurring office expenses (Communication, stationary, photocopy, etc), technical support by Dept.	Month	4	7,500	30,000.00	-	30,000.00	22,500.00	7,500.00
		SubTotal				589,500.00		589,500.00	526,500.00	63,000.00

B
25/9/13

Tezpur University

Direct Programme Support Costs

No.	Items	Unit	Quantity	Unit cost	Total budgeted	Partner's contrib	UNICEF Contribution	UNICEF Contribution	
								MM-MM-YYYY 1st tranche	MM-MM-YYYY 2nd tranche
1	2	3	4	5	6	7	8	9	10
SubTotal									

Budget Summary

Budget Category	Total budgeted	Partner's contrib	Total UNICEF Contribution	UNICEF Contribution	
				MM-MM-YYYY 1st tranche	MM-MM-YYYY 2nd tranche
Programme Costs	589,500.00	-	589,500.00	526,500.00	63,000.00
Direct Programme Support Costs	-	-	-	-	-
Indirect Programme Support Costs (maximum upto 7%)	-	-	-	-	-
TOTAL BUDGET	589,500.00	-	589,500.00	526,500.00	63,000.00

Handwritten signature

Reference
Tezpur University

