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Analysis of the impact of WASH interventions on women and adolescent girls' well-being in the tea plantations of India: a comparative case study of Ghoronia and Singlijan Tea Estates in Dibrugarh, Assam.

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ACRONYMS

ABITA	Assam Branch of the Indian Tea Association
AGC	Adolescent Girls' Club
ASHA	Accredited Social Health Activists
CA	Capabilities Approach
GDI	Gender Development Index
GII	Gender Inequality Index
HDI	Human Development Index
IEC	Information Education Communication
IPC	Inter-personal Communication
JMP	Joint Monitoring Programme
MC	Mothers' Club
OD	Open Defecation
ODF	Open Defecation Free
PLA	Plantations Labour Act
SHG	Self-help Group
UNDP	United Nations Development Programme
UNICEF	United Nations International Children's Emergency Fund
WASH	Water, Sanitation and Hygiene
WHO	World Health Organisation

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1. ABSTRACT

The lack of access to adequate sanitation, along with unawareness of hygienic practices, is a serious issue among the population living and working in the tea plantations of Assam, in India, with important consequences to their quality of life. Their poor sanitary conditions not only impact the physical health of the community, but also have direct consequences on people's socio-psychological well-being, particularly for women, limiting their opportunities to lead the life they have reason to value.

To tackle the problem, the Assam Branch of the Indian Tea Association (ABITA), in partnership with UNICEF and the Indian Government, are implementing water, sanitation and hygiene (WASH) interventions in the tea gardens of Assam to improve the sanitation and hygiene conditions of the tea communities, commonly called the Tea Tribes.

In this work, we analyse the impact that the sanitation and hygiene interventions in the tea plantations of Dibrugarh district of Assam have had on women and adolescent girls' physical and socio-psychological well-being, using elements of Amartya Sen's Capabilities Approach.

For that purpose, a comparative qualitative study was carried out in two tea gardens of Dibrugarh: Ghoronia Tea Estate – without intervention- and Singlijan Tea Estate – where WASH interventions had been implemented for a considerable period of time.

Interviews with women and adolescent girls from the Tea Tribes were conducted to obtain a better understanding of what they value, and to explore to what extent the interventions had contributed to their well-being. We also examined the personal and social conversion factors that were determining their real opportunities to lead the life they had reasons to value, and influencing their preferences and effective elections.

The results of the study suggest that the interventions had improved people's physical and psychosocial well-being by contributing to expand some capabilities among the individuals from which they could choose valued functionings. Nevertheless, the interventions were not taking into consideration women's needs and interests and the gender constraints and social norms that determine the conversion of capabilities into actual functionings. As a consequence, women and adolescent girls were not able to achieve some of the functionings they valued and their well-being had not improved as much as men's.

Future WASH interventions in the tea gardens should be adjusted to promote fairness and incorporate strategies that contribute to equality of capabilities and social justice for women by addressing gender inequality.

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2. INTRODUCTION AND JUSTIFICATION

The work presented in this document is the result of the fieldwork that the author carried out for five months in the tea plantations of Dibrugarh district of Assam, in India, as part of her Master's Degree in International Development and Cooperation.

It is a comparative case study of research based on qualitative information collected during extensive field visits, from October to December 2016, in two tea plantations of Dibrugarh; Ghoronia Tea Estate and Singlijan Tea Estate.

Its purpose is to critically analyse the interventions that the Assam Branch of the Indian Tea Association (ABITA), in partnership with UNICEF and the Indian Government, are implementing in the tea gardens of Assam to improve the sanitation[1] and hygiene conditions of the communities that work and live in the tea gardens. More specifically, our interest was to evaluate the impact that the water, sanitation and hygiene (WASH) interventions had had on women and adolescent girls' quality of life; with a view to identify gaps and give recommendations for future interventions to the organisations involved, in order to contribute to a betterment of people's well-being and development.

The lack of access to adequate sanitation, particularly the absence of toilets, along with unawareness of hygienic practices, is a serious issue among the population living and working in the tea plantations of Assam, commonly called the Tea Tribes, with important repercussions on their quality of life. Sanitation is a basic need that enables people to live a healthy and dignified life. On the contrary, not having access to a toilet affects the individuals in many ways. Open defecation pollutes the soil and water sources, causing disease, and the lack of privacy affects people's self-esteem, depriving them of having a life worth to live. Indeed, the poor sanitary conditions in the tea gardens not only impact the physical health of the community, but also have direct consequences on people's socio-psychological well-being, limiting their opportunities to lead the kind of life they have reason to value. In the case of women and adolescent girls, their well-being and the opportunities to live a good life are even more compromised due to their female-specific particularities and diseases and the social dynamics in which the community is embedded.

To address these issues, the Assam Branch of the Indian Tea Association (ABITA), UNICEF and the Indian Government, are working together to ensure full coverage of toilets and water points in the tea gardens of Assam, and to provide the Tea Tribes with health and hygiene education.

In this work, we analyse the impact that the sanitation and hygiene interventions in the tea plantations of Dibrugarh district of Assam have had on women and adolescent girls' physical and socio-psychological well-being, using elements of Amartya Sen's Capabilities Approach.

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[1] According to the World Health Organisation (WHO), Sanitation generally refers to the provision of facilities and services for the safe disposal of human urine and faeces.

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The election of the Capabilities Approach as our theoretical framework obeys the fact that the end of development is human beings and their flourishing and the objective of development interventions is to improve people's quality of life. However, in many cases, development organisations adopt a technocratic approach to the evaluation of projects and are more focused on measurable indicators of the goods and services the communities have access to and on the 'value for money', than on the impact their interventions have on people's lives.

Our special focus on women and adolescent girls is due to the disadvantages faced by women all over the world compared to men and the fact that, too often, their needs and interests are not taken into consideration in the development interventions.

We hope this study will contribute to highlight a matter on which there is not much written and might lead to interventions that address these issues and change the underprivileged position women occupy in society. Indeed, we hardly could find any literature evaluating WASH interventions through the Capabilities Approach to assess women's quality of life.

2.1. Epistemologic position

Since our basic assumptions regarding the nature of the reality and what can be known frame and guide our research and practice (Sumner and Tribe, 2008:54), throughout the research process we assumed an interpretative/constructivist approach. Our perspective is that reality is not objective, it is constructed socially through the meanings each person gives to a particular situation and, therefore, there are multiple realities (Sumner and Tribe, 2008:63).

From this perspective, the researcher is "subjective and not independent of the researched" (Sumner and Tribe, 2008:59) and his/her task is to understand the complex world from the point of view of the people that are living a particular experience, through their meanings and interpretations. In that sense, we wanted to understand the state of women and adolescent girls' quality of life in both gardens through their experiences.

2.2. Ethical position

Although we tried to understand the reality through the meanings people gave to the particular situation they were living, we think it is ethically correct to recognise that it is not possible to know the truth as it is, due to a series of biases.

First of all, it is crucial to reflect on the personal bias we introduced in the research process, as no investigation is neutral or value-free. Our first interference was in the research design, which was framed by our previous assumptions, our expectations and our interests (Brydon, 2006:28), and which determined the selection of the paradigm and the theoretical framework, as well as the cases and the questions. Moreover, our interpretation of the information was probably distorted by our story, values, beliefs, preferences and prejudices (Batthyány, 2011:11).

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There are other biases introduced in the research process, due to our background and personal characteristics, which might have affected our relations with the community. Being a white foreign woman might have influenced the type of people we dealt with, the kind of information they gave us and what we were allowed to see (Chambers, 2008).

Some ethical questions we reflected on were the possible consequences of our research and the changes it could entrain. As Brydon states, "Incisive fieldwork […] may leave behind social chaos, breakdown and conflict in the field" (2006:25). Therefore, prior to the fieldwork we found out about the local ethical principles and we established what procedures were morally appropriate and inappropriate.

Once in the field, we were, at all times, clear about our intentions and communicated them to the participants in order to get their informed consent. We also reassured our informants on the anonymity and confidentiality of the information they provided, and we ensured we did not put anyone at risk for sharing information with us.

As information belongs to who produces it, we thought it was essential to verify our perceptions with the participants during the data analysis, allowing for any amendments. However, this only happened in one of the gardens. In the other garden, the Management did not seem at ease with our presence and, once the data collection stage finished, they did not allow us to visit the plantation again. We also shared with the organisations the results of the research in the form of a paper that included some recommendations for future interventions (see Annex 4). Although we had in mind to adapt the information in an easily understandable format for the Tea Tribes, such as a poster which could be explained in a workshop, time constraints did not allow for the materialisation of the idea.

The following section begins with a presentation of the context in which the study takes place and an introduction to the tea communities and WASH interventions that have been implemented in the tea gardens of Dibrugarh, as well as an overview of the implications of inadequate sanitation in people's lives, particularly for women. Section number 4 states the objectives and research question. Section number 5 will give a more detailed explanation of the Capabilities Approach and the implications for human development. Section number 6 explains the sampling process and the research approach and instruments utilised. Section number 7 explains the analysis carried out and the findings of the study, which are discussed, and provides information on the limitations and bias of our work. The conclusion gives some insights from our research. Finally, the document ends with some recommendations to the organisations to approach future sanitation interventions.

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3. BACKGROUND

In this section we explain the implications of inadequate sanitation for people's well-being, as well as describing the setting in which the WASH interventions evaluated take place and their broader geographical and social context. We also give an overview of the interventions themselves and the organisation in charge of implementing them.

3.1. Geographical context

The study takes place in India, a federal republic made up of 29 states and six union territories which got its independence from the British Crown in August 1947. The country has a parliamentary democracy which operates under the Constitution of 1950 (The Commonwealth, 2017).

The state of Assam is located in North Eastern India and bears India's major share of tea production and export. Dibrugarh, a district of upper Assam, with an area of 3381 km2 and a population of 1,327,748 (Census 2011), has the world's largest area covered by tea gardens (Gogoi, 2014) and is known as the ¨Tea City¨.

Figure 1: Location of Assam in India

Source: teabuddy.wordpress.com/2011/12/20/all-about-assam-tea/map-of-india-with-assam/

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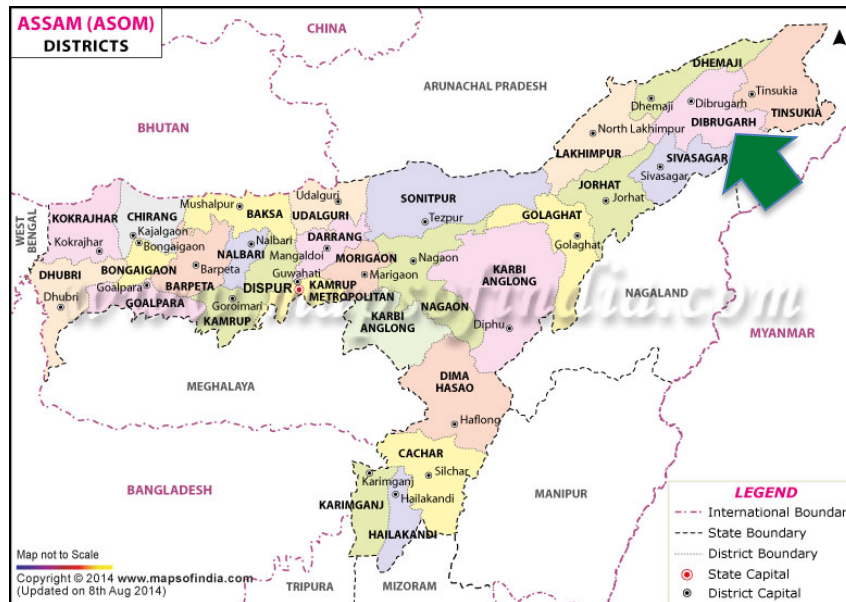
Figure 2: Districts of Assam

Source: www.mapsofindia.com/maps/assam/assam-district.htm

3.2. Study setting

The tea plantations studied were Ghoronia Tea Estate and Singlijan Tea Estate, in the Dibrugarh district of Assam.

- *Singlijan Tea Estate*

Singlijan Tea Estate, owned by the company M.K. Shah Export Ltd., is a plantation located in Dibrugarh district of Assam and was the first tea garden to be declared Open Defecation Free (ODF) in India, in 2015, under the Swacch Cha Bagan programme implemented by ABITA. The plantation covers an extension of 276.08 Hectares and hosts a total population of 1761 people. It has 306 households distributed in 3 labour lines. The total labour is 1262 workers, 560 of which are permanent and 702 casual (Tea garden Atlas, 2016).

Since 2007, ABITA, in partnership with UNICEF, has been implementing interventions which had a component of WASH and, nowadays, all garden residents have access to sanitary toilets and water points, and the water is chlorinated quarterly. Facilities for waste segregation into biodegradable and non-biodegradable can also be found. There is a Self-Help Group (SHG), a Mothers' Club (MC) and an Adolescent Girls' Club (AGC) that meet weekly, and recently a Boys' Club has been formed.

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Self-Help Groups are self-governed, peer controlled, informal groups of 10 to 20 people with the same socio-economic background and common purposes. Although their primary focus is to enhance the members' financial security, they also organise activities for area development, awareness raising, leadership, capacity building and infrastructure build up for the benefit of the entire community.

Mothers' Clubs are groups of volunteer women from a given tea garden that were formed in the late nineties with the objective to improve the quality of life of the tea workers and their children. Their actions aim at spreading information and education to promote good health practices, hygiene, family planning, mother and child care and schooling, and to raise awareness against alcoholism and child marriage. They also hold regular meetings in which members discuss day-to-day problems and those related to the community.

The AGCs endeavour to provide the adolescent girls with life skills that could enhance their self-confidence, as well as to encourage them to stay in school, to refuse early marriage and to challenge social taboos, such as menstruation and HIV protection. In their weekly meetings, they receive health and hygiene education which they, afterwards, spread amongst their families and peers.

- *Ghoronia Tea Estate*

Ghoronia Tea Estate is a privately owned garden, also located in Dibrugarh district of Assam, that hosts a total population of 726 people. It has 71 households distributed in 3 labour lines. The total labour is 630 people, 270 of which are permanent and 360 casual (Managerial records).

Although water sources are accessible to everyone, almost none of the residents have a sanitary toilet at home forcing them to defecate in the fields. Moreover, no WASH interventions have ever been implemented in the garden and no Adolescent Girls' Club, Mothers' Club or Self-help Group have ever been formed.

3.3. Social context

India is a country strongly marked by social inequalities and has a very complex social order characterized by multitude of ethnic, linguistic, religious and caste divisions.

The nation's caste system is among the world's oldest forms of social stratification. The system traditionally divides the population into rigid hierarchical groups and dictates their life since their birth: from their social status to the jobs they can do, and even who they can marry and who they cannot. The Dalits or untouchables are left out of the caste system and are considered impure (BBC, 2017).

Although the article 15 of the Indian Constitution banned discrimination on the grounds of religion, race, caste, sex or place of birth (Government of India, 2015) and the influence of caste has somewhat declined, the ideals and perceptions remain prevalent in many rural areas nowadays.

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India also has a long history of discrimination towards women and they are considered to have a lower status than men in society. This discrimination worsens as their caste is less considered socially. Even though the status of women has been raised in the eyes of law, in practice, they are still far from equal to men in every sphere of life. Shastri (2014:28) affirms that "Women in India face discrimination in every dimension, either it is social, economic or political […] Gender inequality prevails in work, education, allocation of food, health care and fertility choices". Indeed, according to the 2011 Census, 34.54% of the women are still illiterate in India. The female illiteracy rate in Assam is slightly lower: 33.63% (Census, 2011).

Inequalities are also reflected by India's Gender Development Index (GDI) and Gender Inequality Index (GII). The Gender Development Index[2] compares the human development achievements of women and men in three basic dimensions: health, education and income. India, which GDI was 0.819 in 2015, has been categorized by the United Nations Development Programme (UNDP) as a country with low equality in human development achievements between females and males (UNDP, 2016).

The Gender Inequality Index combines educational attainment, economic and political participation, and reproductive health issues to measure inequalities in opportunities among women and men. It ranges from 0 to 1, where higher values indicate higher inequalities and higher loss to human development. India, with a GII of 0.530, ranked 125th out of 159 countries in 2015 (UNDP, 2016).

3.4. Sanitary crisis and its consequences

Adequate sanitation, together with good hygiene and safe water are fundamental to good health. However, over 2 billion people worldwide do not have access to improved sanitation[3] and almost a billion have to defecate in the open (WHO/UNICEF, 2015).

According to the Joint Monitoring Program data (WHO/UNICEF, 2015), in India, 60% of the population does not have access to improved sanitation, and over 44% still defecate in the open.

Inadequate sanitation, unclean water and poor hygienic practices have serious consequences on health and are one of the most important contributors to diarrhoea, dysentery, intestinal worms and other excreta-related diseases and infections, often leading to malnutrition, stunting and reduced cognitive development in children, and high rates of morbidity and mortality in general (Strunz et. al, 2014; WaterAid, 2016; WaterAid, 2015).

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[2] The GDI of a country is the ratio of female Human Development Index (HDI) to male HDI (GDI = HDI f / HDI m). Then the country is classified in a group, based on absolute deviation from gender parity (=1).

[3] The Joint Monitoring Programme (JMP) defines improved sanitation facility as one that hygienically separates human excreta from human contact.

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Image 1: Skin infection due to poor sanitary conditions

Source: The author

In turn, this disease burden affects people's education opportunities as well as income, in terms of an increase in medical expenditure and loss of working days which results in reduced productivity (Mehta, 2014).

Poor sanitary conditions not only impact physical health, but have direct consequences on people's socio-psychological well-being: walking long distances to find a private space consumes time that could be, otherwise, spent on more productive activities or on leisure and the lack of privacy affects dignity and self-esteem (Mara et al., 2010).

Women and young girls face even more psychological stress and greater health risks: changes in dietary habits and delayed urination and defecation due to the shame of being seen or the fear of being victims of violence makes them prone to uro-genital tract infections and chronic constipation. Moreover, the lack of appropriate facilities to manage their menstrual hygiene results in school and work absenteeism (Roma and Pugh, 2012).

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3.5. The tea industry and the tea tribes

The tea industry started in Assam at the beginning of the nineteenth century with the colonial British Administration. Nowadays, the sector employs around 20% of the population of Assam, being Dibrugarh the district with the highest production of tea.

The tea labourers, which were low caste[4] or tribal people[5] recruited from states like Uttar Pradesh, Bihar, Jharkhand, Orissa and Andhra Pradesh (Gogoi et al., 2014; Centre for Workers' Management, 2015), lived and worked in the tea plantations in rather deplorable conditions, being one of the most marginalised and socially excluded communities in Assam (Hazarika, 2012).

Image 2: Women working in a tea plantation

Source: The author

After independence, the Plantation Labour Act 1951 (PLA) was enacted to regulate the working and living conditions of the people employed at the plantations in India, including tea gardens. The PLA specifies labour standards and requires the employers to provide the workers and their

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[4] At the time, unskilled workers.

[5] Tribal communities were those that constituted a distinct society of their own, they did not regard themselves as part of the larger society in India and they had a distinct and distinctive way of life, an individual dialect and their own socio-religious system (Hasneem, no date).

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dependants with housing accommodation, medical facilities, crèches[6], educational facilities for children between ages of 6 and 12, safe drinking water and sanitation; but this only applies to permanent labourers and it does not include temporary workers (Tea Board of India, 2016). Moreover, it has not been implemented in all the tea gardens and the quality of the services provided leaves much to be desired.

As a consequence, the tea communities, commonly called the Tea Tribes, continue to be amongst the most exploited and vulnerable workforce in Assam, with poor development indicators. Their working conditions are deplorable and their wages are among the lowest in the organised sector: around 127 rupees/working day (surveys). Their living conditions are also precarious: low socio-economic status, with high rates of illiteracy, alcohol abuse, malnutrition (Kashem, 2015) and a high prevalence of gastrointestinal and skin diseases due to the lack of or inadequate sanitation and unawareness of health and hygiene.

The Tea Tribes have their own culture, traditions and social norms, with a high incidence of child marriage and child labour, superstition and witchcraft, and very defined gender roles. Women and girls in tea plantations are the most vulnerable due to the highly patriarchal social system in which they live. Women, in addition to their paid work at the fields, are in charge of all the household duties and of taking care of the children. They have little participation in the household decision-making process and are often victims of domestic violence. Girls, from the age they start school, also participate in running the household. As adolescents, they are often responsible for taking care of the younger siblings and the sick, and some of them start working in the plantations to support the family economically, with no time for studies (Hazarika, 2012).

Image 3: Poor sanitary conditions around a water source - Ghoronia Tea Estate

Source: The author

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[6] Day nursery

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3.6. ABITA interventions

To tackle the sanitary problem in the tea gardens, the Government of India, UNICEF and some tea associations have united efforts to put in place interventions to improve the sanitation and hygienic conditions of the tea tribes.

Tea Associations are bodies which were constituted hundred years ago by the association of several tea plantations, and work as intermediaries between the Tea Garden Management, the tea workers and the Government, in order to harmonise their particular interests. They are responsible for the implementation of Government regulations and policies to help develop the Indian tea industry, they protect the business interests of the Tea Garden Management and they look after the welfare of the garden labourers by facilitating the implementation of the PLA by the Tea Garden Management (ABITA, 2016).
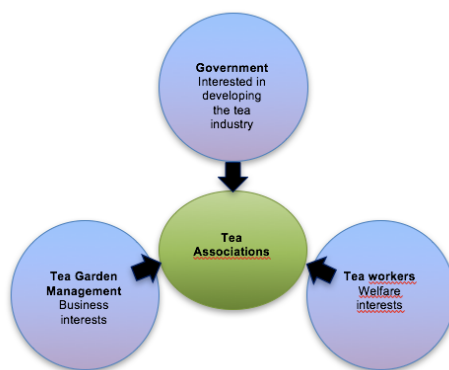

Figure 3: Confluence of interests and roles of the Tea Associations

Source: The author

The Assam Branch of the Indian Tea Association – ABITA-, of which are members 276 tea gardens in Assam, was established in 1989 "to watch over and safeguard the interest of its members and labour employed in member estates" and is divided into 16 circles grouped into three zones (Assam online portal, 2016).

ABITA Zone-1, in partnership with UNICEF since 2006 (UNICEF, 2012), is in charge of implementing WASH interventions in Dibrugarh at the tea garden level, particularly the Swacch Cha Bagan[7] project, in order to improve the sanitary and hygienic conditions of the Tea Tribes and relieve them from the burden of disease. The main objectives of the WASH programmes are to ensure full coverage of sanitary and water facilities for all workers and their families, and raise awareness on sanitation, hygiene and health, with a view to ensure its effective usage among the tea communities and create a healthy and safe environment. The activities carried out consist of

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[7] Swacch Cha Bagan means Clean Tea Garden in Hindi.

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capacity building and trainings at various levels, awareness campaigns, demonstration and advocacy initiatives. ABITA also promotes the formation of Adolescent Girls' Clubs and Mothers' Clubs in the plantations (ABITA, 2016; The Eastern Today, 2016 a and 2016 b).

The hardware dimension of the Swacch Cha Bagan project is mainly based on the construction of toilets by the tea garden management and by the Government, and the installation and repair of water points.

The software part of the programme is composed of:

- WASH awareness campaigns at the tea garden level to discuss WASH issues and sensitise the residents, the children, the teachers and the anganwadi[8] workers on the use of toilets, safe disposal of children's faeces, handwashing with soap after defecation and handling babies' faeces and before food, and safe storage and handling of drinking water. For this purpose, different Information Education Communication (IEC) materials are used.

- Orientation and training of tea garden, primary health centre and hospital doctors, as well as Anganwadi workers and Accredited Social Health Activists (ASHA) on WASH issues.

- Monthly meetings with the Mothers' Club (MC) members to sensitise and orient them in WASH issues so that they can spread the messages amongst their peers and the rest of the community.

- Safai Abhiyan[9] Programme (Cleanliness Campaign) which aims to create a habit of the garden residents, with the help of the garden management, to keep the surroundings clean.

- Inter-Personal Communication through household visits to promote amongst the tea communities the use and construction of sanitary toilets, the safe disposal of children's faeces, safe drinking water practices, the use of dustbins, the use of sleepers while using the toilets, hand washing with soap after defecation, before food and in critical times and cleanliness maintenance.

Although it is not a part of the Swacch Cha Bagan programme as such, the formation of Mothers' Clubs (MC) and Adolescent Girls' Clubs (AGC) plays an essential role in the WASH interventions. They regularly receive health and hygiene education which they, afterwards, spread amongst their families and peers.

Both Mothers' Clubs and Adolescent Girls' Club pursue to empower women and adolescent girls to act as agents of change for the development of their communities and, therefore, are crucial in the WASH strategies to bring about the desired change.

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[8] An Anganwadi is a rural government sponsored child-care and mother-care centre in India. It is a part of the Indian public health-care system and provides basic health care facilities as well as pre-school activities.

[9] Safai Abhiyan means Cleanliness Campaign in Hindi

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Hardware part of the Swacch Cha Bagan Programme	Objectives:	Ensure full coverage of sanitation facilities.
	Activities:	Construction and repair of toilets and water points.
	Responsibility:	Tea Garden Management Government
Software part of the Swacch Cha Bagan Programme	Objectives:	Raise awareness on sanitation, health and hygiene.
	Activities:	- WASH awareness campaigns in the tea gardens, on WASH issues - IPC to sensitise the community on WASH issues - Orientation and training of doctors, ASHA and Anganwadi workers - Safai Abhiyan Programme to keep the surroundings clean - Monthly meetings with MC and AGC for health and hygiene education
	Responsibility:	ABITA with UNICEF's support and guidance

Table 1: Swacch Cha Bagan Programme

Source: The author

4. GOALS AND RESEARCH QUESTION

WASH interventions seek to improve the sanitation and hygiene conditions of the communities through programmes that, generally, have a strong component of provision of facilities complemented by education activities to raise awareness on health and hygiene. However, to have attained access to improved WASH facilities and a better knowledge does not necessarily translate into achieving their well-being potential. Access to WASH services and products is only one part of the process to attain well-being, but should not be confused with well-being itself.

Moreover, the same goods and services do not always provide the same opportunities for women and men, which leads to well-being deprivations, as women face many disadvantages all over the world compared to men due to unequal power relations and the unjust current gender division of labour.

The main objective of this work is to analyse the impact that WASH interventions implemented by ABITA in the tea gardens of Assam, in partnership with UNICEF and the Indian Government, have on women and adolescent girls' well-being.

Our purpose is to identify gaps and areas for improvement, and give recommendations to the organisations involved, with a view to enhance the development practice and the lives of the communities, particularly the women.

Bearing all this in mind, the main question that guided our research was:

Analysis of the impact of WASH interventions on women and adolescent girls' well-being in the tea plantations of India: a comparative case study of Ghoronia and Singlijan Tea Estates in Dibrugarh, Assam.

"To what extent have the WASH interventions carried out by ABITA in the tea plantations of Dibrugarh, Assam, improved women and adolescent girls' well-being?"

In order to answer the main research question a division into the following sub-questions was made:

- What is the idea of and the aspirations for a good life of the women and adolescent girls of the tea plantations of Dibrugarh?

- What are they hindered to do and to be in absence of adequate sanitation?

- What are these women and adolescent girls able to be or to do to have a good life after the WASH interventions carried out by ABITA?

- Which factors are influencing their ability to seize the opportunities to have a good life?

5. THEORETICAL FRAMEWORK

5. 1. The Capabilities Approach and Human Development

To answer our research question we used some elements of the Capabilities Approach which, in our opinion, constitutes the most appropriate frame for evaluative exercises of well-being, for being people-centred and for taking into account personal, social and geographical aspects that influence people´s quality of life and that other approaches to well-being do not consider.

Historically, the approaches to people's well-being have focused on evaluating income, consumption, commodity bundles, basic needs, or even desire fulfilment (Robeyns, 2005:94; Fukuda-Parr, 2003:304). However, well-being includes other aspects of a person's life, such as physical health or psychological and social well-being beyond material achievements and, therefore, those approaches are not sufficient to measure people's quality of life.

Sen, in *Development as freedom* (1999), defines development as an expansion of people's real freedoms or opportunities to lead the kind of life they have reason to value and states that the purpose of development is "to improve people's lives by expanding the range of things that a person can be and do in her life" (Fukuda-Parr, 2003:303). His Capabilities Approach assesses people's quality of life in the space of capabilities -that is 'what people are able to be or do', rather than 'what they have' in terms of income or commodities-, by focusing on the real opportunities or freedom they have to achieve the functionings – or 'beings' and 'doings'- they value (Robeyns, 2003a:62; Robeyns 2003b:8).

The key components of the approach are 'capabilities' and 'functionings'.

Functionings are 'beings' and 'doings'. By 'valuable functionings' it is meant the various things a person may value doing or being which "[…] may vary from elementary ones, such as being adequately nourished and being free of avoidable disease, to very complex activities or personal

states, such as being able to take part in the life of the community and having self-respect" (Sen, 1999:75; Alkire, 2005:119). The particular valuable functionings a person has successfully achieved constitute her well-being (Alkire and Deneulin, 2009:8).

Capabilities are the real freedoms or opportunities a person has to achieve functionings that she values (Sen, 1999) or, to put it simply, what people are actually able to be and to do. The capability set represents the alternative combinations of functionings from which a person can choose (Alkire and Deneulin, 2009:8), "reflecting her freedom to lead one type of life or another" (Alkire, 2005:121).

From this perspective, resources (goods and services) are only the means for well-being as they have the potential to enable some capabilities and functionings (Robeyns, 2003a:63; Robeyns, 2003b:12).

In other words, functionings would be the person's achievements, capabilities the freedom to achieve, and resources would be the means to achieve; although Sen recognises that there are basic capabilities that can be considered as resources, as their lack would impede many other capabilities (Sen, 1999; Robeyns, 2003a:76).

However, the availability of goods and services does not necessarily translate into capability. There are a variety of factors that can affect the conversion of the resources into capabilities and functionings (Robeyns, 2003a:63) and, thus, the opportunity of a person to lead the kind of life she values. A key aspect of the approach is the conversion factors: personal (metabolism, physical condition, age, sex, reading skills, intelligence), social (public policies, social norms, discriminating practises, gender roles, societal hierarchies, power relations) and environmental (climate, geographical condition) aspects that can influence and restrict the freedoms that people can enjoy and which also shape individuals' preferences, which in turn will define personal choices of functionings (Robeyns, 2005:99) (see Figure 3).
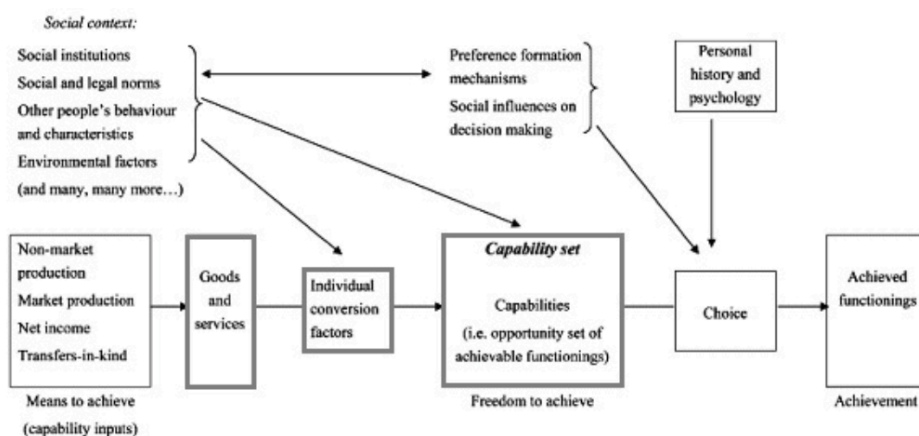

Figure 4: Relation between the elements of the Capabilities Approach

Source: Robeyns, 2005

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Indeed, some of these aspects matter particularly for women living in patriarchal societies as they restrict their real opportunities to lead the life they have reason to value and are crucial in gender-related evaluations. According to Sen "Inequality between women and men afflicts […] the lives of millions of women and, in different ways, severely restricts the substantive freedoms that women enjoy" (1999:15). On the one hand, personal characteristics such as sex and age determine which capabilities a person can enjoy. On the other hand, features of the society, particularly discriminatory practices, gender roles and power relations, constrain women's capabilities but also influence their preferences, aspirations and effective elections; affecting their well-being. As Martha Nussbaum states, "Women's current preferences often show distortions that are the result of unjust background conditions" (Agarwal et al., 2007: 40).

Another core aspect of the approach very closely connected to well-being is 'Agency', which is the ability of a person to pursue and realise goals that she has reason to value (Alkire and Deneulin, 2009:11). An agent is "someone who acts and brings about change" (Sen, 1999:19). According to Sen, women's agency can play an important role "in removing the iniquities that depress their well-being" (1999:191). He argues that some capabilities, such as literacy and employment, directly contribute to women's empowerment and, therefore, to their ability to promote social transformations (Sen, 1999:191).

5.2. Social justice

The Capabilities Approach sees inequality in terms of disparate freedoms to lead the kind of life people have reason to value (Sen, 1999:98) and advocates equity of capability sets of all individuals (Fukuda-Parr, 2003:314). Each and every person should have the same opportunities to achieve functionings they value. This aspect of the approach is crucial for the development and well-being of the marginalised segments of the population such as the poor, differently-abled, women, ethnic minorities, etc.

5.3. Evaluation of well-being. Capabilities or functionings?

Although Sen states that evaluations can be either on realised functionings or on capabilities depending on whether we want to measure outcomes or well-being freedom (Sen, 1999:75), some authors argue that, to assess well-being, the focus should be on capabilities and not on achieved functionings, as we are concerned with people´s actual opportunities to lead the kind of life they have reason to value (Robeyns, 2003a:61; Robeyns, 2003b:13). Indeed, achieved functionings imply an act of choice that is, too often, not free and socially constrained and/or influenced by prejudices, social norms, habits or traditions (Robeyns, 2003b:49). As Nussbaum affirms, "preferences […] have been shaped by a legacy of injustice and hierarchy" (2000b:241).

However, according to Robeyns, for group inequalities such as gender inequality, inequality in achieved functionings expresses inequality in capabilities (2003a:85).

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Other authors think that the Capabilities Approach works at two levels: the observed outcomes and the opportunities and, therefore, in the assessment of the well-being of a person, achieved functionings have to be combined with capabilities (Ootegem, 2010:387-388).

6. METHODOLOGY

In this section we present the approach and methods and tools used to collect the information needed, in order to give an answer to our research question: To what extent have the WASH interventions carried out by ABITA in the tea plantations of Dibrugarh, Assam, improved women and adolescent girls' well-being?

6. 1. Approach

There are many challenges in operationalising the Capabilities Approach to assess well-being, and many attempts have been made to build an index that could measure and "quantify" the relevant capabilities. However, the social world is constructed of symbols and meanings, and capturing the full complexity of the concept of quality of life in a single index seems difficult as "the range of human capabilities is infinite and the value that individuals assign to each one can vary from person to person" (Fukuda-Parr, 2003:305) and from one community to another. Additionally, using the Capabilities Approach entails knowing about people's contexts and backgrounds, and about power relations, social norms, etc. Therefore, assessing the interventions through the lens of capabilities, implies using a participatory qualitative approach. In this sense, the study was participatory in the stages of data collection and analysis, in order to capture the women and adolescent girls' experiences directly from them and to validate our interpretation of the information, as well as to obtain stronger results.

6.2. Methods

As our study was of interpretative nature, we looked for qualitative methods that could allow us to gather subjective information regarding the experiences, perceptions, feelings and thoughts of the women and adolescent girls belonging to the tea gardens. Employing qualitative methods also enabled us to deeply analyse and understand the reality through the meanings and definitions they gave to their particular situation (Mayoux, 2006:116-118).

For our purpose of context-specific in-depth analysis and understanding, the case study seemed to be the most appropriate form of study to gather important subjective information that cannot be captured through quantitative methods (Martinez, 2006:174-175). Indeed, the case study was chosen due to two main reasons. First, we were not interested in generalising the results of the study, but in having a profound comprehension of the quality of life of a few women and

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adolescent girls in the tea gardens of Dibrugarh, in relation to their sanitation situation. Second, well-being is a very personal and subjective concept that is better explored through people's perceptions.

More specifically, we carried out a comparative case study in two tea gardens of Dibrugarh with two opposite situations, one without intervention and one where WASH interventions had been implemented for a considerable period of time, in order to analyse and understand to what extent ABITA's WASH projects contribute to the expansion of the capabilities and improve women's well-being.

6.3. Sample selection

The first step to select our sample was to visit several plantations accompanied by an interpreter, to have an overview of the situation and better understand the context of each garden. ABITA gave us a list of all the Dibrugarh Tea Estates that belong to the Association, and shortlisted the ones that would be willing to receive us. From the second list, we chose the gardens that were close or had an easy access: Barbaruah, Ghorunia, Ida, Lepetkatta, Sessa, Singlijan, Mancotta, Maijan, Romai and Greenwood Tea Estates.

Ghoronia and Singlijan Tea Estates were selected purposively from the ten gardens visited. Ghoronia Tea Estate was chosen because, even though it is a member of ABITA, it had never had any WASH interventions and the lack of sanitation facilities among its residents was evident.

Singlijan Tea Estate was selected for having attained the Open Defecation Free (ODF) status with full coverage of latrines and water points among its residents and having had WASH interventions implemented by ABITA for a considerable period of time, long enough to see any achievements.

These two opposite situations would allow us to analyse and understand to what extent adequate sanitation facilities and hygienic behaviours contribute to women and adolescent girl's well-being through the expansion of their capabilities.

We also used purposive sampling to choose the participants in the study. The information was retrieved exclusively from women of all ages and adolescent girls mainly based on their willingness to share their specific experiences.

6.4. Techniques

During the field visits to Ghoronia and Singlijan Tea Estates, from October to December 2016, a combination of techniques was employed in order to collect enough data related to the study objectives and to triangulate the information. At all times the author was accompanied by an interpreter.

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A. Literature review relating to our subject area provided us with relevant information and helped us to identify and define the research problem.

The initial bibliographic search gave us a better idea of the historic, political and socio-cultural context of the tea gardens. Research papers, reports from organisations, journals and official websites were consulted in order to understand the social situation of the indian women and WASH-related issues in India and, more specifically, in the tea plantations of Assam. We also examined thoroughly the existing literature on the Capabilties Approach.

The extensive information review allowed us to reframe more precisely the research objectives and question.

B. Observation

Observation was important to witness people's behaviours, their relations and dynamics in their day-to-day living; as well as to identify any new events that had not been considered in the research design.

C. Informal talks with community members

Our visits to the tea gardens for observation and informal talks allowed us to get a better understanding of the social and cultural context of the plantations and to start building bonds of trust within the communities. At the same time, they gave us the criteria to select the study cases.

D. Workshops with the women and adolescent girls of the tea gardens

Once the two research tea gardens were selected, we held an ice-breaking workshop with a group of women and adolescent girls in each plantation. We carried out activities such as filling out a tasks clock and a time use board in order to find out about the gender roles attributed to men and women, girls and boys; and the division of labour within the household. Our goal was to strengthen the bonds with them, as well as to know about the social dynamics, gender roles and discriminatory practices.

E. Personal semi-structured interviews

The main study tool consisted of 20 personal semi-structured interviews, 10 in each garden, to women of all ages and adolescent girls looking for qualitative information, in order to capture their thoughts and feelings in relation to their sanitation status and their quality of life (see Annexes 1 and 2).

The interview questions were directed to obtain information about what they value, the commodities available (sanitation facilities), the capabilities and functionings limited by the lack

of adequate sanitation and the ones that had been expanded with the interventions. Questions related to power relations and roles division were also included to find out about the personal and social conversion factors, which shape their capabilities and can restrict the choices they have.

Image 4: Workshop with women - Ghoronia Tea Estate

Source: The author

Image 5: Interview to young woman - Singlijan Tea Estate

Source: The author

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F. Talks with key informants such as the welfare officer, the doctor and a teacher of each tea garden

Taking advantage of the meeting we had with some staff members in the selected tea gardens to carry out some questionnaires for a different study, we engaged in conversations with them regarding the well-being of the female labourers. Both the questionnaires and the informal talks allowed us to better understand how was the WASH situation in the plantations and the overall health and literacy condition among the resident women and adolescent girls, as well as to triangulate the information that had been provided previously.

G. Surveys

Although the study is qualitative, 30 households were surveyed in each garden to gather quantitative information. Even though the surveys were going to be used for a different study, we thought that they could be useful to complement the qualitative data and to verify some of the information provided by the interviewees. The surveys provided us with information on the WASH-related resources available to each surveyee and their sanitary and hygiene practices, but also on some capabilities we were interested in such as health, literacy and productive work (see Annex 3).

Primary data were collected from the garden through workshops and individual interviews with the women and adolescent girls, key informant talks, observation, informal talks and discussions and questionnaires. A translator and a mediator from the community provided the necessary support. Secondary data were obtained from reports from organisations, journals, research papers and official websites, as well as from medical and managerial records in the tea gardens.

During the visits, extensive **field notes** were written and a voice recorder was used to record the interviewees' opinions, with their permission, in order not to miss any information.

6.5. Coding

The data collected in the interviews were translated and transcribed. Afterwards, all the qualitative information, gathered through interviews and field notes, was organised using codes and then analysed and interpreted. According to Miles et al., codes are "labels that assign symbolic meaning to the descriptive or inferential information compiled during a study" and "[…] are primarily used to retrieve and categorise similar data chunks so the researcher can quickly find, pull out, and cluster the segments relating to a particular research question, hypothesis, construct or theme" (2014:71-72).

As the codes had to make sense to our research, the coding of the information was guided by our research questions and the key concepts of our theoretical framework and then applied to each of the tea gardens.

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The resultant codes were:

- Aspirations of the women and adolescent girls or what they value (ASP)

- Capabilities (CAP)

- Conversion factors (CF)

For a better organisation of the information and because the coding scheme seemed too broad, the categories ASP and CAP were divided into two sub-categories related to the quality of life: Physical well-being (PW) and Psycho-Social well-being (PSW), as can be seen in table 2.

Elements of the CA		Garden without intervention	Garden with intervention
ASP	ASP-PW		
	ASP-PSW		
CAP	CAP-PW		
	CAP-PSW		
CF			

Table 2: Coding of the qualitative information

Source: The author

6.6. Analysis process

What we wanted to find out with our research was what the women and adolescent girls of the tea gardens valued and what they had achieved, given the opportunities available.

The literature review allowed us to draw an initial list of relevant capabilities in relation to sanitation. But not all capabilities are relevant to every evaluation of quality of life, as well-being has to do with what people value. Moreover, what people understand for well-being is context-specific. Therefore, in order to explore the well-being of the women and adolescent girls of the tea gardens and shortlist the relevant capabilities, we first identified what they valued.

The valued aspects of life that emerged from the interviews and the context specificities allowed us to shortlist the relevant capabilities from the initial list. The resultant group of capabilities that

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were relevant to women and adolescent girls in the tea gardens is the one that was used to establish the comparison between the two gardens.

During the interpretation process, we assumed Robeyns position which says that for group inequalities, such as gender inequality, inequality in achieved functionings expresses inequality in capabilities. Therefore, the lack of a given functioning was equivalent to the absence of the correspondent capability.

7. FINDINGS AND DISCUSSION

7.1. Findings

Through the analysis and interpretation of the interviews conducted with women and adolescent girls, we intended to provide sufficient evidence to understand to what extent the WASH interventions had improved their well-being by expanding the capability set from which they could choose valuable functionings. For that purpose, we analysed their aspirations, capabilities and conversion factors in each garden, which allowed us to make a comparison.

7.1.1. Aspirations of women and adolescent girls

a) Ghoronia Tea Estate

Most of the aspects women and adolescent girls identified as valued had to do with the very elementary elements of human life.

- *Physical well-being*

Being healthy was the most important element for some of the interviewees, as can be seen in the following fragments of interviews:

> 'the things to have a good life are education… more education… good
> health and money […] According to me, firstly health is important'
>
> (Ghoronia, Interviewee 5)

> 'to have a good life… health should be good'
>
> (Ghoronia, Interviewee 9)

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- *Socio-psychological well-being*

Regarding the socio-psychological well-being, the interviews showed that **being educated** was the most valued aspect, as almost all the interviewees mentioned it. This can be reflected in statements such as:

> *'Sometimes I feel if I had studied at English medium school, I could have hoped a good life. If I had completed my bachelor degree, my life would be better than now'*
>
> *(Ghoronia, Interviewee 5)*
>
> *'I want to study and learn dance, and do something for the society'*
>
> *(Ghoronia, Interviewee 1, adolescent girl)*

> *'I want my children to study well. What I couldn't do, I want them to do it'*
>
> *(Ghoronia, Interviewee 6)*

> '*I think more education will make my life better'*
>
> *(Ghoronia, Interviewee 4)*

The interviewees found essential **having their basic needs satisfied** by means of a sufficient income. Examples of it are:

> *'The things that I don't like about my life is that I don't have a sustainable situation'*
>
> *(Ghoronia, Interviewee 6)*

> *'Some things that I want in my life are cultivation land, a property and money'*
>
> *(Ghoronia, Interviewee 2)*

> *'I would need good toilet facilities, a good house and good rooms… and good education for my children'*
>
> *(Ghoronia, Interviewee 6)*

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'because if I have money, then I can fulfil any of my needs'

(Ghoronia, Interviewee 9)

Many of them valued **being productive and earning money**. In general, having a job was seen as a means for an income, which was reflected in the next affirmations:

'What I need for a better life is a job. I am also attending interviews'

(Ghoronia, Interviewee 4)

'A job is very important in my life. I want a job. It is important'

(Ghoronia, Interviewee 10)

'If I could become a good singer, I would be able to solve all my problems'

(Ghoronia, Interviewee 5)

'I want them (my children) to study well and when they grow up they should get a good job'

(Ghoronia, Interviewee 6)

Some of the women also mentioned more complex dimensions of life such as **being happy** and **having a good lifestyle** or **having leisure time**:

'I want my parents to live happy, want my friends to be happy and I want to be happy'

(Ghoronia, Interviewee 4)

'I want a happy family'

(Ghoronia, Interviewee 5)

'I am happy with my life, but I want a happier life […] I want a better life''

(Ghoronia, Interviewee 6)

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> *'I want to progress and a better life […] I would ask (God) for a better life for me and my kids'*
>
> *(Ghoronia, Interviewee 3)*

> *'I want a good life'*
>
> *(Ghoronia, Interviewee 2)*

> *'I go to the tea garden and when I return I cook and do all the household works like sweeping the house, washing clothes and washing the cooking utensils. […] Yes, I feel bad (about working all day) but, what can I do?'*
>
> *(Ghoronia, Interviewee 6)*

b) Singlijan Tea Estate

The aspirations of the women and adolescent girls belonging to Singlijan Tea Estate were mainly related to basic aspects of life.

- *Physical well-being*

With regards to the physical well-being, **being healthy** and **well-nourished** was considered very important for them:

> *'It feels good to keep my house clean and it protects us from diseases. Nowadays diseases are increasing from dirty environment, so it is good for me if I take care'*
>
> *(Singlijan, Interviewee 5)*

> *'the things that are needed for a better life are good health, good education, good unity'*
>
> *(Singlijan, Interviewee 6)*

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> *'the things which make people's life bad are drinking habits and living in a dirty environment. That will spread diseases'*
>
> *(Singlijan, Interviewee 10, adolescent girl)*

> *'when I have children, I will try to give them good education, provide them with good food and also try to give them a good environment and make them be good people'*
>
> *(Singlijan, Interviewee 5)*

> *'Health should be good and for that we should take the required nutrients and cleanliness should be maintained […] I will try to give a good environment, good food and the things they need to my children'*
>
> *(Singlijan, Interviewee 7, adolescent girl)*

- *Socio-psychological well-being*

Being educated was considered a valued dimension of their well-being by almost all of them:

> *'I have not received lots of things in my life... I wanted to be a Bachelor of Art (B.A) Graduate, couldn't do it… I wanted to get a computer which also can't be done…'*
>
> *(Singlijan, Interviewee 1)*

> *'If I had studied well, I think such kind of situation will not have occurred'*
>
> *(Singlijan, Interviewee 3)*

> *'like my elder sister… she wanted to study further but she could not and quit her studies and started working, just because my mother had a problem. That should not happen to anyone… parents should allow their children to study no matter what is the problem'*
>
> *(Singlijan, Interviewee 9, adolescent girl)*

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Many participants mentioned **having their basic needs satisfied** as a crucial aspect of their quality of life, as show the following statements:

> *'We don't have many things in our home like bed, table and chairs and many more… and even no electricity facility is available in my house so my children are not able to study. It would be good if we had all these things'*
>
> *'If there is money available, then only I can think of starting something'*
>
> *(Singlijan, Interviewee 4)*

> *'I will try to fulfil their needs (my children) and try to give them good education so that they can be good men in society'*
>
> *(Singlijan, Interviewee 5)*

> *'I would like to fulfil their needs (my children) then they will go ahead in their life without any problem'*
>
> *(Singlijan, Interviewee 6)*

B**eing productive and earning money** were also very important elements of the well-being for some of the women. A job would mean economical resources to satisfy the most basic needs:

> *'What I value most is good food, water, my kids and my job [laugh] Because, if I work, then I can fill my stomach and my children's life'*
>
> *(Singlijan, Interviewee 5)*

> *'In my opinion, for a beautiful life we need a job and cultivation'*
>
> *(Singlijan, Interviewee 2)*

> *'Human beings should have enough money and also be educated so that we can get a job and be paid'*
>
> *(Singlijan, Interviewee 7)*

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More complex dimensions of well-being such as **being happy** and **having a good lifestyle** or **having leisure time**, were very valued as well by some of the women and adolescent girls:

> *'I would like to give them (my children) a good lifestyle'*
>
> *(Singlijan, Interviewee 1)*

> *'My children don't tell me how they feel… however, I want them to have a good life. I wish that they can live happily'*
>
> *(Singlijan, Interviewee 4)*

> *'When I have children, I would like them to be happy and will advise them to play good games'*
>
> *(Singlijan, Interviewee 8, adolescent girl)*

> *'I would like my children's life to be… Just not like my life. I should give them good education and time to do what they want and… what should I say? Just not like mine'*
>
> *(Singlijan, Interviewee 9, adolescent girl)*

The results showed that what women and adolescent girls of both tea gardens valued was quite similar. In both plantations, their aspirations had to do with the very elementary dimensions of human life such as health, education and basic material resources. However, some of them also had more complex aspirations such as happiness or leisure time.

7.1.2. Capabilities limited by the lack of adequate sanitation: Ghoronia Tea Estate

In the case of the women and adolescent girls that did not have access to sanitation facilities and had not had hygiene education, we explored how that was affecting their capabilities and, therefore, their quality of life. The results confirmed the information that had been drawn from the literature review.

- *Physical well-being*

The lack of sanitation was causing disease, leading to deprivation of a basic capability such as to be able to **live a healthy life** and, thus, was constraining their physical well-being:

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> *'As the environment is not clean, we get diseases'*
>
> *(Ghoronia, Interviewee 1, adolescent girl)*

> *'Our health would improve if the surroundings were neat and clean'*
>
> *(Ghoronia, Interviewee 6)*

- *Socio-psychological well-being*

Health is a basic capability which is a resource for other capabilities. Its absence can be reflected in failures such as the incapability **to be productive and earn money.** Indeed, for these women, being sick meant inability to attend their workplace and, therefore, not being paid.

> *'No, I do not stitch when I am sick'*
>
> *(Ghoronia, Interviewee 4)*

> *'When I am sick I don't go to work (…) No, why they will pay us when we don't work?'*
>
> *(Ghoronia, Interviewee 6)*

Disease also affected the opportunity **to receive education:**

> *'I look after my mother when she gets ill. If she is admitted to the hospital, I take leave from school and do the household works, and then I go to the hospital'.*
>
> *(Ghoronia, Interviewee 1, adolescent girl)*

Sanitation can be considered a basic need and not having access to the facilities was, therefore, not allowing the community to **have their basic needs satisfied** as prove the following statements:

> *'We face many problems for not having a toilet, especially at night, and not having a hand pump. When I have my periods I go to others' hand pump to wash. I feel shy to go others' home'*
>
> *(Ghoronia, Interviewee 3)*

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> *'I have no choice, I have to go to the garden (for defecation) [...] Children do it at the backyard of the house'*
>
> *(Ghoronia, Interviewee 2)*

> *'We don't have toilets at home, so we have to go to the garden'*
>
> *(Ghoronia, Interviewee 6)*

> *'We have no latrine, no hand pump or a bathroom. I bring water from my neighbour's house'*
>
> *(Ghoronia, Interviewee 3)*

> *'I would need a latrine with water facility, bathroom… to live a comfortable life. Now it's difficult'*
>
> *(Ghoronia, Interviewee 2)*

The ability of the women and adolescent girls to **organise their own time** was also limited, as they had to plan their time around the sanitation activities and walk long distances to find a private space to defecate:

> *'We don't have toilets at home, so we go to the garden for toilet at the early morning time. When to do it? People see us while going to the garden for toilet and we feel shy'*
>
> *(Ghoronia, Interviewee 6)*

> *'We have faced many problems for not having a toilet or bathroom. We have to go far away'*
>
> *(Ghoronia, Interviewee 8)*

> *'We go to work and they will not allow us to change (the sanitary pads) while working so, when we get a break for lunch, we come home and change them'*
>
> *(Ghoronia, Interviewee 6)*

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The lack of adequate facilities was restricting the capability of the women and adolescent girls of Ghoronia tea garden of **having a private sphere** and was forcing them to do their sanitation activities in the open. This, in turn, was affecting their self-esteem and psychological well-being, reflected in their inability to **have feelings of dignity**. Almost all the interviewees declared feeling embarrassment:

> *'We have to go to the garden for toilet… we feel shy. We have to do it hiding from others'*
>
> *(Ghoronia, Interviewee 8)*

> *'If we need to go to toilet at night, we go to someone's latrine'*
>
> *(Ghoronia, Interviewee 1, adolescent girl)*

> *'We face many problems for not having a toilet, especially at night, and for not having a hand pump. When I have my periods I go to others' hand pump to wash. I feel shy to go others' home'*
>
> *(Ghoronia, Interviewee 3)*

> *'I feel shy and scared to go into the garden for defecation (…) it's quite far'*
>
> *(Ghoronia, Interviewee 7)*

> *'It is difficult when a guest comes. We feel embarrassed for not having a toilet if they need it'.*
>
> *(Ghoronia, Interviewee 4)*

Finally, the ability **to feel safe** was affected as well. The psychological stress and fear of being attacked was evident in their discourses:

> *'We are scared of snakes (when going to the field to defecate)'*
>
> *(Ghoronia, Interviewee 8)*

> *'(Do you go to the garden alone for toilet?) No. How can I go alone? We go along with three or four people'*
>
> *(Ghoronia, Interviewee 9)*

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> *'Yes. I remember… long time ago, once, a woman went for toilet at the garden and she was bitten by a snake. That was before my marriage. She was taken to the hospital and after that she was saved'.*
>
> *(Ghoronia, Interviewee 10)*

7.1.3. Capabilities expanded by the Swacch Cha Bagan project: Singlijan Tea Estate

In the case of the women and adolescent girls of Singlijan Tea Estate, we explored the capabilities that had been expanded with the interventions, which mainly consisted of provision of sanitary facilities and education in hygiene practices to bring about behavioural changes. On the one hand, we explored the capabilities that had been expanded through having access to sanitation facilities and, on the other hand, the capabilities expanded through safer hygienic practices as a consequence of the education received.

a) Capabilities expanded by having sanitation facilities

- *Physical well-being*

The access to adequate sanitary facilities resulted in a cleaner environment which, in turn, led to an improvement on health and, thus, on physical well-being. The women and adolescent girls declared getting less excreta-related diseases, showing that the interventions had contributed to expand the capability to **live a healthy life**:

> *'we have latrine so we don't have to go outside. We do toilet in our house and, also, we don't get diseases'*
>
> *(Singlijan, Interviewee 1)*

> *'Now we don't fall sick. And before we used to have itching on our skin'*
>
> *(Singlijan, Interviewee 4)*

> *'(there are latrines at everyone's home) We get a clean environment. Diseases have decreased because of cleanliness […] and we are free from harmful diseases'.*
>
> *(Singlijan, Interviewee 7)*

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- *Socio-psychological well-being*

Acquiring the capability to live a healthy life is a resource to other capabilities such as to **be productive and earn money** and to **receive education**. Indeed, being free of disease was potentially allowing these women and adolescent girls to attend their work place and the school, giving them income-earning and literacy opportunities.

Having their own sanitary latrines, also resulted in an improvement of their psychological well-being. The lack of privacy for sanitation activities, in the context of the tea gardens, means exposure to the public and to animals and affects dignity and self-esteem, as well as safety. However, after getting their own latrines, women and adolescent girls were able to **have a private sphere**, to **have feelings of dignity** and to **feel safe**:

> *'(having a latrine) especially it's good for women and girls… no one can see us when we go to toilet'*
>
> *(Singlijan, Interviewee 1)*

> *'It is very helpful for a woman because if we go outside people may stare at us and at home it's safe and secure'*
>
> *(Singlijan, Interviewee 2)*

> *'If guests come, it is helpful for them'*
>
> *(Singlijan, Interviewee 4)*

The interventions had also expanded women's capability to **organise their own time**. They did not need to walk long distances to find a private space, resulting in saving time to realise productive or leisure activities. They also got free of the psychological stress of having to plan their time and habits around their sanitation activities:

> *'(having a toilet) It's helpful… like when we feel like going to toilet, we can go easily. It's close, no time barrier'*
>
> *(Singlijan, Interviewee 6)*

> *'we are not facing any problems at night… during daytime we can go to a far place to do toilet but at night it's not possible, so the latrine is very helpful, especially at night'*
>
> *(Singlijan, Interviewee 4)*

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> *'(having a hand pump) It's very helpful in our life as scarcity of water is big problem, but if you have a hand pump near house its helpful for eating and drinking, washing clothes…'*
>
> *(Singlijan, Interviewee 1)*

> *'Having our own toilet, we do not require to go here and there'*
>
> *(Singlijan, Interviewee 3)*

b) *Capabilities expanded through better hygienic practices*

The education received on WASH-related issues translated into knowledge, which resulted in better hygienic practices that contributed to the expansion of some capabilities such as to **live a healthy life** and to **receive education**.

Health benefits resulted from appropriate defecation practices and safer drinking water handling, as well as improved personal hygiene, as the following statements show:

> *'If we use a latrine we don't get affected from disease, and if we go for toilet outside we get affected from diseases like diarrhoea and many more diseases, like stomach pain'*
>
> *(Singlijan, Interviewee 1)*

> *'I have learnt many things (at the meetings) like how to wash our hands, we should drink filtered and boiled water... children are not getting disease by following these'*
>
> *(Singlijan, Interviewee 2)*

> *'I learned many things. Before, we did not wash our hands properly, but now we wash our hands properly after coming from toilet'*
>
> *(Singlijan, Interviewee 9, adolescent girl)*

> *'Things like urine and latrine doing here and there will make a person sick. Toilet and latrine should be neat and clean'*
>
> *(Singlijan, Interviewee 6)*

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> *'cleanliness leads to good health. I know these things and I also tell them (neighbours) to be neat and clean'*
>
> *(Singlijan, Interviewee 6)*

> *'I am also able to teach my younger brother and he is also free from disease'*
>
> *(Singlijan, Interviewee 8, adolescent girl)*

Reproductive health and the opportunities for education got enhanced as well through better management of the menstrual hygiene:

> *'we were using pads, we did not feel free to move, now we feel free and can do other works (…) now we use pads instead of cloths which is very comfortable (…) Before I used to stay at home during periods, I skipped the classes'*
>
> *(Singlijan, Interviewee 9, adolescent girl)*

> *'And also we know that if someone is using a cloth instead of pads, then they have to wash it properly with detergent and keep it in the sunshine, not in shadow'*
>
> *(Singlijan, Interviewee 8, adolescent girl)*

7.1.4. Social and personal conversion factors and exercise of capabilities

    a) <u>Social conversion factors</u>

As social constraints influence and restrict well-being, another group of elements we explored were the social conversion factors. We wanted to know to what extent social norms, discriminatory practices and gender roles were boosting or limiting the exercise of capabilities and functionings of the women and adolescent girls in the tea gardens.

All the interviewees declared being in charge of the household duties and their answers showed that mainly the females were responsible for taking care of the sick, apart from their paid work and education obligations. The social conversion factors were rather similar in both gardens.

The following fragments of interviews evidence the gender roles within the tea communities that clearly reflected double work shifts for the females and which impeded them to exercise the

valuable functioning of **having leisure time** and, thus, restricted their psychological and social well-being:

> *'I do all types of activities...like cooking, washing clothes, utensils, go to the garden (…) my husband does not co-operate'*
>
> *(Ghoronia, Interviewee 2)*

> *'I do all the household works like cooking, washing clothes, cleaning the campus… [Why don't they help you?] Because they are all boys'*
>
> *(Ghoronia, Interviewee 7)*

> *'Nothing is good at present for me. I have to clean my own house and one of my uncles has broken his hand and I have to take care of his house too'*
>
> *'Yes, I feel bad (about working all day) but, what can I do?'*
>
> *(Ghoronia, Interviewee 6)*

> *'I do all household duties. I cook before going to work'*
>
> *(Singlijan, Interviewee 6)*

> *'I cook early in the morning before going to school as my mother and father go to work and at night I cook early and then I study'*
>
> *(Singlijan, Interviewee 9, adolescent girl)*

Having the basic capability to be healthy was shown to be a resource for the capabilities of **education** and **productivity**. However, having the exclusive responsibility of caring for others, women and girls suffer a burden limiting their freedom to earn an income and receive education, even when they choose to care. In the case of many of the adolescent girls belonging to the AGC, even though the Club encouraged them not to drop out of school, their care duties were restricting, or even impeding, their attendance to school.

> *'I don't go to work when my children get ill. I take them to the hospital […] No, he (their father) doesn't go'*
>
> *(Ghoronia, Interviewee 3)*

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> *'I could not study because my mother was ill'*
>
> *(Singlijan, Interviewee 7, adolescent girl)*

> *'This year I am not enrolled in school because my sister in-law is sick'.*
>
> *(Singlijan, Interviewee 8, adolescent girl)*

The lack of real freedom to earn an income and receive education was restricting women's quality of life in a different way too. Being educated and productive were shown to empower women and contribute to their active agency to potentially rectify the inequalities that depress their well-being. Nevertheless, the absence of these valuable functionings limited women's agency and empowerment to pursue their aspirations, as well as to bring about social transformations of the gendered power structures in the tea garden.

b) *Personal conversion factors*

As explained previously, individual factors can also affect the conversion of the resources into capabilities and functionings and, thus, the opportunity of a person to lead the kind of life she values. The main particularities of the women that were found to influence and restrict the freedoms they could enjoy were age and sex.

Sex is a personal characteristic with which we are born, and it is considered an individual conversion factor. Gender roles are constructed socially and, therefore, considered a social conversion factor. However, for this study, the characteristic 'sex' was treated as a social conversion factor. The reason is that, after observation and the first interviews with women and adolescent girls, we realised that, in a highly patriarchal society such as the tea communities, each sex was attributed a very well defined gender role since childhood which was determining the real freedoms the individuals could enjoy.

> *'I learned how to do the household tasks in my childhood, from my mother […] my daughter helps me too'*
>
> *(Singlijan, Interviewee 5)*

> *'My mother does the household duties and I help her. I do every kind of house works and it's me who cooks'*
>
> *(Singlijan, Interviewee 7, adolescent girl)*

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> *'I do everything at home, I sweep, wash clothes, wash the dishes…'*
>
> *(Singlijan, Interviewee 10, adolescent girl)*

Regarding age, elderly women were found to be at disadvantage as compared to young women. The interventions in Singlijan Tea Estate, by keeping the community free of sanitation-related diseases, were a potential resource for the capability of **productivity**. However, in the tea gardens, women have to retire from their tea-plucking activities at the age of 45 or 50, limiting their freedom to be productive and earn an income even if their bodies are healthy. Their age was impeding them to exercise their capability of **productivity**.

An overview of the main research findings can be found in table 3.

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Elements of the CA		Garden without intervention	Garden with intervention
ASP	ASP-PW	- Being healthy	- Being healthy - Being well-nourished
	ASP-PSW	- Being educated - Having their basic needs satisfied - Being productive/earning money - Being happy - Having a good lifestyle - Having leisure time	- Being educated - Having their basic needs satisfied - Being productive/earning money - Being happy - Having a good lifestyle - Having leisure time
CAP	CAP-PW	*Limited capabilities* - Live a healthy life	*Enhanced capabilities* - Live a healthy life
	CAP-PSW	*Limited capabilities* - Be productive/earn money - Receive education - Have the basic needs satisfied - Organise own time - Have a private sphere - Have feelings of dignity - Feel safe	*Enhanced capabilities* - Be productive/earn money - Receive education - Organise own time - Have a private sphere - Have feelings of dignity - Feel safe
CF		• *Social* Gender roles: ⇒ Double work shifts → no leisure time ⎱ restrict well-being ⇒ restrict education opportunities ⎰ restrict agency ⇒ restrict paid work opportunities • *Personal* Sex = gender role Age (old) ⇒ restricts paid work opportunities ⎱ restricts W-B	

Table 3: Overview of the main study findings

Source: The author

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7.2. Discussion

The results of the study showed that many aspects of life are affected by sanitation and that sanitation influences some capabilities directly, and some other indirectly.

The analysis of the information showed that women and adolescent girls' aspirations of a good life were quite similar in both tea gardens. In both plantations, what they valued had to do with the very elementary dimensions of human life such as health, education, income earning opportunities and basic material resources. However, some of them also had more complex aspirations such as happiness or leisure time.

The lack of adequate sanitation facilities and practices affected women and young girls' quality of life in many ways. On the one hand, their physical well-being, as the incidence of water borne and sanitation-related diseases impeded them to achieve the elementary functioning of being healthy which, in turn, constrained their income earning and literacy opportunities. On the other hand, the lack of a private space led to the psychological stress of having to organise their time around sanitation activities and to feelings of shame and insecurity, seriously affecting their psychological and social well-being.

The results also demonstrated that the access to sanitation facilities and better awareness and hygiene practices, consequence of the education in WASH received, expanded certain capabilities in Singlijan Tea Estate, and therefore the opportunity to achieve valuable functionings which are constituent elements of well-being. Indeed, women perceived that, after the interventions, there was a lower incidence of water borne and sanitation-related illnesses, allowing the women and adolescent girls to achieve the valuable functioning of being healthy and, therefore, improved physical well-being. The study also made clear that freedom in one area fosters freedom in other areas. In this sense, the better health status was a potential resource to income generating and literacy capabilities. Having their own sanitary latrines, also resulted in a betterment of their psychosocial well-being: the Swacch Cha Bagan project expanded women and adolescent girls' capabilities to have a private sphere, to have feelings of dignity and self-esteem and to feel safe, as well as the capability to organise their own time.

There is no doubt that the interventions enhanced the physical well-being of the women and adolescent girls in Singlijan Tea Estate through contributing to the capability to live a healthy life, giving them the freedom to achieve their aspirations of being healthy. The project, by providing them with a private space for their sanitation activities, also contributed to their psychosocial well-being. Therefore, if we compare both gardens, we could conclude that the women in Singlijan had better quality of life than the women in Ghoronia due to the project, and that the interventions had had a positive impact on women and adolescent girls' well-being.

Nevertheless, some other capabilities acquired by the female population in Singlijan tea garden were not being put into practice to achieve the valuable functionings due to personal factors and social constraints, restricting their well-being. On the one hand, their role as care givers and the bearing of household responsibilities, associated since childhood to the female sex, were

constraining the exercise of capabilities derived from the capability of health, such as to be able to earn an income, to receive education or to have leisure time. The existing social norms and gender roles among the tea communities were limiting women and adolescent girls´ real freedom to make the choices that could satisfy their aspirations of a good life in two ways. First, by dictating what is the role of women in society and, second, by shaping their values and preferences and, thus, their personal choices of functionings. On the other hand, in the case of elderly women, age was also impeding them to put into practice the valuable functioning of being productive.

As discussed previously, equity is a central concern in the Capabilities Approach and social justice is regarded as equality in real opportunities or freedoms for all individuals. They should equally have access to the necessary positive resources but also be able to make choices that matter to them. Although the interventions were providing the same resources for both women and men, they did not succeed in providing the same real freedoms to women and men to achieve valuable functionings and lead the kind of life they valued. Differences in 'real freedoms to achieve' (to women's and disadvantage) translated in fewer opportunities for women than men, which led to less 'valued achievements' for women and, hence, a worse quality of life or well-being than men.

From a Capabilities Approach point of view, the goal of development interventions is increased well-being, justice and human development for all. Therefore, equality of capability sets from which a person can choose valuable functionings is crucial for the development and well-being of women, be elderly or young, in any development intervention.

The project, even though it had improved women's well-being to some extent, was not taking into consideration the specific needs and interests of women. By not having a strategy to tackle gender inequality, it failed to address the male-dominated power structures existing within the Tea Tribes that have been seen to hinder women in the realisation of the opportunities that the interventions provided, while men could fully benefit.

For the same reason, the interventions were also not contributing to women's empowerment and agency to pursue their aspirations. As explained before, the empowerment and active agency of women, resulting from literacy and employment, has the potential to rectify the inequalities that depress women's well-being. However, the existing social norms and gender roles, by limiting their real opportunities to earn an income, to receive education and to have leisure time, were restricting their agency too, and therefore the potential to bring about social transformations towards gender equality.

Although the AGC is a powerful tool to empower the adolescent girls through enhancing their self-confidence and keeping girls at school, in many cases, the socially constructed gender roles, which imposed them care and household duties, were restricting, or even impeding, their education opportunities and, therefore, their well-being and agency. Another criticism that we could make of the AGC is that their strategies were missing activities to raise awareness on gender equality. These two aspects clearly limit the potential of the adolescent girls to be agents of change towards a more just society that could offer the same opportunities to women and men lo lead the kind of life they have reason to value.

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7.3. Research limitations and bias

7.3.1. Time constraints

The fieldwork visits took place in what we consider to be a brief period of time (three months) and, thus, very limited to allow us to profoundly understand the reality. A longer time could have enabled us to build stronger relations with the communities and could have led to a more subtle and/or rich information.

7.3.2. Sample size and selection

We recognise that there is a spatial bias in the selection of the gardens visited, from which the sample was chosen, as we shortlisted the ones that were closer or had an easier access.

At all times, in one of the sample tea gardens, we were guided and escorted by the managerial staff and therefore, some bias might be present in the selection of the cases to answer the survey and participate in the interviews.

Also, the sample was small and all the respondents were selected purposively. As a consequence, we might not have gathered all the different points of view of the whole community. However, the results could be useful for other tea communities with similar characteristics.

7.3.3. Language barrier

Our inability to speak Assamese or the language spoken by the Tea Tribes impeded us to directly interact with the interviewees (which had to be done through translators) and fully understand and accurately interpret their responses. The interviews were, afterwards, transcribed and translated. This might have led to a translation bias, as before being translated, the interpreter had already filtered and interpreted the information and embedded his/her own positionality in it. Moreover, some translators and the person in charge of the transcription and translation of the recorded interviews were not familiar with some of the subtleties we needed to know from the interviews.

7.3.4. Accuracy and reliability of the answers

We realise the sensitivity of our subject and that taboo and shame in relation to sanitation and hygiene might have biased the answers given. We also realise that some interviewees might have changed their discourse to please us.

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7.3.5. Literacy level barrier

We recognise that well-being can be a very abstract concept. For some of the respondents some questions related to quality of life were difficult to understand and these had to be modified and adjusted to their level of understanding. Misunderstandings might also have biased the participants' answers.

8. CONCLUSIONS

The comparative study carried out in two tea gardens of Dibrugarh, using elements of the Capability Approach, allowed us to obtain a better understanding of what women and adolescent girls belonging to the Tea Tribes value, and to analyse the real impact that WASH interventions carried out by ABITA in the tea plantations had had on their well-being.

The results of the study enabled us to understand that the aspirations of a good life of the women and adolescent girls belonging to the tea communities of Assam had to do with the very elementary dimensions of human life such as health, education, income earning opportunities and basic material resources, but also with more complex aspects such as happiness or leisure time.

They also confirmed that the lack of adequate sanitation and hygienic practices affected many aspects of the lives of the women and young girls, impeding them to realise their aspirations and, thus, limiting their opportunities to lead the life they have reason to value. In this sense, WASH projects have an enormous potential for a real positive impact on the quality of life of women and their families.

However, as the analysis of ABITA's WASH interventions showed, to have attained access to improved WASH facilities and a better knowledge does not necessarily translate into achieving their well-being potential, due to personal and social factors that influence the conversion of resources into capabilities and functionings.

Indeed, although ABITA's interventions had improved people's quality of life by contributing to expand some capabilities from which they could choose valued functionings, women's well-being had not been bettered as much as men's. The Swacch Cha Bagan project did not take into consideration the specific needs and interests of women and was lacking a strategy to face the gender inequality existing within the Tea Tribes. As a consequence, it failed to address the unequal power relations between women and men that have been seen to hinder the former in the realisation of the opportunities that the interventions provided, while men could fully benefit.

Gender inequality is a barrier for development and it should be addressed in any development intervention. Water, sanitation and hygiene policies and strategies should not neglect the power structures of a given community. WASH programmes can have an impact on gender equality and

change the status of women and girls, if they go beyond women's practical needs and consider their strategic interests by challenging the gendered roles and the social norms.

From a Human Development perspective, human beings and their well-being are the ends of development. In this sense, any development intervention should focus on improving people's quality of life and on removing any obstacles to their development, so that individuals have the opportunity to live a good life.

As well-being is subjective and context-specific, WASH organisations should not ignore what a specific community value and have reason to value, in order to set the appropriate objectives for development interventions. Nevertheless, ABITA seems to have overlooked what are the aspirations of a good life of the women and adolescent girls of the Tea Tribes and its efforts have concentrated almost exclusively on their physical well-being, giving much less importance to the psychological and social aspects of well-being.

All aspects of development are interconnected and the interventions should not focus on one aspect of development, but see it as a whole. "There are many different interconnections between distinct instrumental freedoms. Their respective roles and their specific influences on one another are important aspects of the process of development" (Sen, 1999:43). However, the Swacch Cha Bagan programme, although it contributes to expand some other capabilities, is too focused on the health benefits of improved sanitation and better hygiene practices. WASH interventions, to maximise their contribution to people's development, should have a broader scope than health gains, and consider other aspects of development and well-being.

Although the Swacch Cha Bagan project has contributed to improve the lives of the women and girls belonging to the Tea Tribes of Assam, our analysis highlighted some areas for improvement that should be addressed by ABITA in future WASH interventions in the tea gardens, in order to maximise their impact on their well-being. Even though the research is context-specific and, thus, limited spatial and temporarily, organisations working on WASH could also learn from the results of the study.

9. RECOMMENDATIONS

This section will make suggestions for the design of future WASH strategies in order to enhance their contribution to people's well-being and development, particularly for women and girls.

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9.1. Recommendations for organisations working on WASH

A. WASH interventions should aim at improving people's well-being. In this sense:

• WASH interventions should take into consideration the cultural context and be tailored to people's understanding of well-being. A baseline study of the particular characteristics of the community and their interests and needs is recommended.

• Project planners and developers should make specific efforts to ensure that WASH projects result not just in the provision of water and sanitation, but that they improve people's physical (health, safety), psychological (stress, dignity) and social (leisure) well-being too.

• Evaluation of interventions should balance measurable success indicators of people's access to water and sanitation, with assessing individuals' enhanced well-being as a result of the program, by using quantitative (for example: "Time saved in caring for the sick by women and girls") and qualitative impact indicators (for example: "Perceptions of changes in safety and security associated with water and sanitation by women and girls").

B. WASH interventions should incorporate strategies to address gender inequality at all stages of the project cycle. In this sense:

• At the planning stage, consider the impact on the condition and position of women and men, and the relationships between them, by conducting a gender assessment to collect sex-disaggregated data on:

      ⇒ different roles of women and men

      ⇒ relationships and power dynamics between women and men

      ⇒ different needs and interests of women and men

• Incorporate strategies to tackle the underlying causes of inequality by:

  - Facilitating discussion activities to deepen community understanding on women's and girls' rights (education, productivity, etc.), power dynamics and the unequal division of labour, ensuring women's voices are heard.

  - Engaging men and women on gender awareness sensitizations, trainings and workshops.

  - Supporting the community to accomplish positive change towards gender equality.

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• Incorporate strategies to promote women's agency and empowerment to rectify the existing gender inequalities and discriminating structures by:

   - Creating an enabling environment for enhancing their literacy and income earning opportunities.

   - Providing training and support to women and girls to develop leadership skills.

• At the evaluation stage, evaluate the impact the project had on gender roles and power structures, and if the needs and interests of women and men have been met.

9.2. Recommendations for ABITA

The analysis of ABITA's interventions identified some areas for improvement, that the organisation should incorporate in order to enhance the Tea Tribes development and well-being, with a particular focus on women and adolescent girls:

A. Interventions redesign

• Tailor the Swacch Cha Bagan project to what the tea communities value and to the cultural context of the tea plantations of Assam by:

   - Conducting a participatory consultation on the needs and aspirations of the different community groups in the tea gardens.

   - Conducting a baseline study of the particular characteristics of the community.

• Consider all aspects of human development and aim at expanding other capabilities than health, such as education, productivity, etc.

• Incorporate qualitative impact indicators in the project design stage such as "Evidence of how the time saved providing health care is used in economic activities".

B. Evaluation

• Incorporate qualitative aspects in the evaluations in order to assess the impact of the WASH projects, in combination with measurable success indicators in terms of access to WASH products and services.

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• Develop specific qualitative indicators to measure psychological and social well-being.

C. Incorporate Gender

• Assess whether changes as a result of the project are equally positive for both women and men by:

   - Conducting a baseline study to collect sex-disaggregated data on:

      - the different roles of women and men in the tea communities.

      - the power relationships between them.

      - the different needs and interests of women and men.

  - Conducting an assessment to evaluate changes in the status and roles of women and men, and their relations, as a result of the interventions; and to verify if the fulfilment of their needs and interests has been met.

• Incorporate strategies to raise awareness against gender inequality by:

  - Organising gender equality trainings and workshops with men and women.

  - Incorporating sensitizations on women's rights in the WASH meetings with the community.

  - Incorporating gender equality messages in the weekly meetings with the Adolescent Girls' Clubs and Mothers' Clubs.

  - Facilitating debate on gender inequalities and discriminating structures between men and women, ensuring women's voices are heard.

• Incorporate strategies to promote women's agency and empowerment by:

  - Training the AGCs' leaders to spell out the importance of literacy and income earning activities.

  - Freeing up time for women to pursue their literacy and productivity aspirations by promoting task sharing between men and women and establishing childcare services.

  - Exploiting the potential that the Adolescent Girls' Clubs and Mothers' Clubs have to bring about change and strengthening their leadership skills.

  - Organising sensitizations and workshops with men to stop gender-based domestic violence.

  - Establishing surveillance committees and complaint mechanisms to report domestic violence.

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