

# Developing a Monitoring Framework for the Contribution of an NGO in the Global South towards the Sustainable Development Goals

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Case Study Obrobibini Peace Complex (OPC),  
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## **List of acronyms and abbreviations**

<b>AWMA</b>	Ahanta West Municipal Assembly
<b>BAC</b>	Business Advisory Center
<b>CC</b>	Climate Change
<b>CCA</b>	Common Country Assessment
<b>CSO</b>	Civil Society Organization
<b>CPESDP</b>	Coordinated Programme of Economic and Social Development Policies
<b>CRC</b>	Convention of the Rights of the Child
<b>CWSA</b>	Community Water and Sanitation Agency
<b>DHS</b>	Demographic and Health Survey
<b>ICCS</b>	International Classification of Crime for Statistical Purposes
<b>ICT</b>	Information and Communication Technology
<b>GES</b>	Ghana Educational Service
<b>GPS</b>	Ghana Police Service
<b>HDI</b>	Human Development Index
<b>JHS</b>	Junior High School
<b>JMP</b>	Joint Monitoring Programme for Water Supply, Sanitation and Hygiene
<b>LGBTIQ*</b>	Lesbian, Gay, Bisexual, Transgender/Transsexual, Intersex and Queer/Questioning
<b>LMIC</b>	Lower Middle-Income Country
<b>MDG</b>	Millennium Development Goal
<b>MICS</b>	Multiple Indicator Cluster Surveys
<b>MSLC</b>	Middle School Leaving Certificate
<b>MPCU</b>	Municipal Planning and Coordinating Unit
<b>NEET</b>	Youth not in employment, education or training
<b>NDPC</b>	National Development Planning Commission
<b>NGO</b>	Non- Governmental Organization
<b>OSAC</b>	Overseas Security Advisory Council
<b>OPC</b>	Obrobibini Peace Complex
<b>UN</b>	United Nations
<b>UNCG</b>	United Nations Communications Group
<b>UNODC</b>	United Nations Office on Drugs and Crime
<b>UNSDP</b>	UN Ghana Sustainable Development Partnership
<b>VNR</b>	Voluntary National Review

<b>SDG</b>	Sustainable Development Goal
<b>TVET</b>	Technical and Vocational Education and Training
<b>WHO</b>	World Health Organization

## Abstract

Global challenges related to poverty, inequality, climate, environmental degradation, prosperity, and peace and justice which affect and endanger all humans and the globe, press for effective, sustainable, peaceful and inclusive solutions. “Transforming our world: the 2030 Agenda for Sustainable Development” is the tool that the UN provides to address these issues and demands all states, the civil society and individuals to assume their global responsibility and undertake the task to contribute to sustainable development.

This thesis deals with the development of a monitoring framework towards the implementation of the Sustainable Development Goals (SDGs) in the Global South. Taking the NGO Obrobibini Peace Complex (OPC) as case study in Ghana, it aims to answer the primary question *how OPC can monitor the implementation of selected SDGs as well which indicators are necessary for the monitoring of the selected SDGs and what is the current state of the target group in respect to those indicators?* This thesis provides a tailored monitoring framework as well as a baseline on the socio-economic conditions of 242 community members in Busua. It serves as fundament for an impact assessment by OPC.

Results of the survey that included quantitative and qualitative questions shown need for action in the fields of water and sanitary, energy, employment, equality and technology. Particularly severe conditions were identified in child protection, access to non-formal education and training and employment for youth, especially for females. Poverty reduction and access to electricity are further critical challenges in this community.

This thesis concludes with general and specific recommendations for OPC which aim to help addressing of the identified problems and contributing to inclusive, peaceful and sustainable communities.

## 1. Introduction

In many countries, there are multifaceted problems that affect humans, animals and nature in a negative way. Ghana, a West African country, is a country where the majority of the population faces challenge living conditions. For example, despite the fact that “[t]argets such as halving extreme poverty (MDG<sup>1</sup> 1A), halving the proportion of people without access to safe drinking water (MDG 7B), universal primary education (MDG 2A) and gender parity in primary school (MDG 3) were attained” (UN Ghana n.d.), many challenges remain, such as: employment, gender equality, child and maternal mortality, sanitation and protection of natural resources. Also, reducing HIV, increasing the access to ICT and ending hunger pose urgent tasks for Ghana (cf. UN Ghana n.d.).

However, slow progress has been made towards the targets of achieving full and productive employment (MDG 1B), equal share of women in wage employment in non-agriculture sectors and women’s involvement in governance (MDG 3), reducing under-5 and child mortality (MDG 4), reducing maternal mortality (MDG 5), and reversing the loss of natural resources and improving sanitation (MDG 7).

Even though statistics on the Human Development Index (HDI) show a trend of improvement, Ghana continues to have a low index compared to industrial states<sup>2</sup>.

Deterioration of human and environmental health due to unsustainable agriculture, excessive use of non-renewable energy sources, unhealthy diets and lack of physical activity, incorrect and excessive use of Western medication, poor sanitation systems, lacking waste recycling solutions, and most importantly insufficient education and sensitization of local populations to these topics is witnessed throughout Ghana (cf. Andres 2018: 1).

Obrobibini Peace Complex (OPC),<sup>3</sup> a non- governmental organization, aims to tackle these issues in a small fishing village in the Western Region of Ghana. As a non-state actor the NGO is working towards implementing the Sustainable Development Goals (SDGs), goals which were designed

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<sup>1</sup> The Millennium Development Goals were adopted by 189 member states of the UN at the Millennium Summit in New York in September 2000. “The eight goals were set to encourage all countries, rich or poor, to focus on human development problems. The goals were about basic human rights – the rights of every woman, man and child to health, education, shelter and security as pledged in the Universal Declaration of Human Rights and the UN Millennium Declaration” (UN Ghana n.d.).

<sup>2</sup> The Human Development Index (HDI) is an indicator for measurement of affluence of states. Being published yearly by the United Nations since 1990, the Human Development Report informs about the several indicators such as health, schooling, the GDP etc. of each country (cf. UNDP 2018).

<sup>3</sup> “Obrobibini is a mix between two words in Twi (local language in Ghana): ‘Obroni’ means ‘white man’, ‘Obibini’ means ‘black man’. Obrobibini represents the union of people from all origins” Retrieved from: <http://obrobibini.org/> (12.12.18).



following the Millennium Development Goals (MDG) by the United Nations and came into effect in January 2016 (cf. UNDP 2019a).

The finding that many of OPC's objectives and their project activities address the SDGs motivated this research theme. Looking at both the existing problems and how OPC is planning to address these issues in the community, have led to the conclusion that OPC needs a monitoring framework to measure its contribution to specific SDGs. To achieve this, a multiple step process was necessary. First, there was the identification of relevant key indicators OPC has to measure. Because not all of the 17 SDGs and their subordinate goals comply with OPC's project activities, conforming goals were selected. Subsequently, only those indicators were included into the monitoring framework that OPC has the capacity to measure (due to limited scope of action). Moreover, the development of the framework required adaption to the local context to consider social and cultural differences so that realistic results can be obtained in the community of Busua.

The title of this research is "*Developing a Monitoring Framework for the Contribution of an NGO in the Global South towards the Sustainable Development Goals – Case Study Obrobibini Peace Complex (OPC), Busua, Ghana*". Besides providing a monitoring framework, this research also includes a baseline that comprises data on the current state of living conditions for the people living in the community of Busua. It has the potential to help OPC understand problems on the ground and the needs of the population. Moreover, the baseline will be used to measure the outcomes and impacts of the organization's activities within the frame of an impact assessment that will be conducted in about 5 years' time.

Thus, the primary research question is

1. *How can OPC monitor the implementation of selected SDGs?*

and the secondary research questions are as follows

2. *Which indicators are necessary to monitor the implementation of the SDGs?*
3. *What is the current state of the target group in respect to those indicators?*

This work is based on the notion that the implementation of the SDGs solely by state actors is fragmented; the involvement of civil society such as NGOs may increase the chance to bring about a sustainable change (cf. Khadka 2018: 3f). Identifying this, OPC functions as a bottom-up player that aims to contribute to sustainable development in the Busua community and its surroundings, starting on a micro (local) level. Considering the global relevance of the SDGs, the question arises how a small NGO can de-centralize the implementation of the SDGs and make an impact from a grass-roots perspective. Therefore, the goal of this research is to make a step towards answering this

question. The full answer to it cannot be given yet as the impacts of OPC's activities will only be measurable in the future. However, the baseline and monitoring framework will help to evaluate the extent to which an NGO in the Global South is able to contribute to the achievement of specific SDGs.

At the foundation of this study stand the descriptions of problems which provide insight into the existing challenges that the research question is dealing with in the specific context of the case study (chapter 2). Following, chapter 3 introduces the SDGs as a theoretical framework that underlies the research question. Looking at their history and background presents the base of current actions of international implementation, as well as implementation in a local context. Even though SDGs are predominantly objectives that states are obligated to uphold, the role of civil society is crucial for their implementation; thus, a section expands on this further. Next, chapter 4 on the case study organization, OPC, introduces their vision and mission as well as their (planned) project activities. A section of chapter 4 especially points out the compliances that exist between OPC and the SDGs which also clarifies the necessary narrowing of this research work. And chapter 5 then depicts the development of a monitoring framework for OPC, including a section on detailed definitions of the respective indicators. Chapter 6 explores the methodology that was used for conducting the baseline study for the impact assessment. Subsequently, results are shown using diagrams, charts and explanations for each indicator. At the end conclusions and recommendations are presented in chapter 7 and 8, followed by the list of references (chapter 9).

## **2. Descriptions of the problems**

In order to understand this research, it is important to understand the context of the case study. This chapter provides deeper information on selected issues, which include education, water and sanitation, energy, employment, equality, safety and technology. There are many fields that the SDGs focus on but due to the limitations of this research only the above issues are considered. A further explanation on the selection process of those issues is provided in chapter 4.2 Connection between the SDGs and OPC activities.

### ***A. Education***

“Education reduces inequalities, can break the cycle of poverty, foster tolerance, reach gender equality, and empower people to live more healthy lives and attain more productive livelihoods” (UNCG 2017). This statement shows that education has a high potential to address multiple, intertwined problems. Lack of education often is the root cause of multi-dimensional problems such

as gender inequality, discrimination, illiteracy and unemployment as well as child labor, child marriage and teenage pregnancy as experienced in Ghana (cf. Amnesty International 2018).

Gender inequality specifically poses a serious problem in Ghana, leading to deprivation of girls that has negative impacts for the rest of their lives. The Human Development Report of 2018 reveals that only 54.6% of females aged 25 and older completed secondary education, whereas at least 70.4% of males with the same age completed secondary education in Ghana (cf. UNDP 2018). The transition to secondary school is frequently reserved for males, while females are often left behind due to financial constraints, household work, pregnancy, lack of support, and lack / bad condition of water and sanitation facilities (cf. UNCG 2017).

Moreover, 28.5% of the children aged 5 to 17 in Ghana participate in economic activities, of which 21.8% of children are affected by child labor (cf. Ghana Statistical Service 2014). Thereby, children growing up in rural areas are more than twice as often affected by child labor compared to children living in urban areas (cf. *ibid.*).

Even though access and affordability of education has improved in Ghana, there is still a long way to go to reduce the problems that come along with lack of education. Therefore it requires a better quality of technical and vocational education and training (TVET) so that students can learn practical skills and find a workplace later on to ensure lifelong learning.

Moreover, quality education has to include learning about reproductive health and sex education whether in a formal or non-formal setting in order to tackle health problems, poverty and gender inequality (cf. UNCG 2017).

### ***B. Water and Sanitation***

The human right to water, sanitation and hygiene is not being met, causing health problems, gender inequality, malnutrition and economic problems. Billions worldwide face challenges due to water scarcity, contamination of water and lack of sanitation facilities. Availability and sustainability of water management is immensely important to help reduce the violation of other human rights. In Ghana, there has been an improvement in water supply but many people still do not have access to safe drinking water. Deficient provision or precarious conditions of sanitary facilities and water supply constitute a high risk of health as well as far-reaching risks for women and girls. Due to the specific need of using a toilet and water supply during menstruation, girls face challenges in educational institutions without adequate facilities and may feel forced to drop out of school (cf. UN-Water 2019).

Another aspect is the contamination of water caused by many factors, including unsanitary defecation practices (e.g. in the bush or at the beach) which may contribute to environmental pollution and faecal contamination of drinking water sources (cf. Andres 2018). Another problem is the dumping of refuse in water bodies which can lead to contamination. Also the alleged purification of water by adding chemicals into it can threaten health and harm the environment (cf. UNCG 2017).

### *C. Energy*

Lack of access to affordable, reliable, sustainable and modern energy services causes a variety of cross sectoral problems. It affects daily activities such as retrieving water, doing homework at night, and running businesses. Clinics and food shops face a serious problem of interrupted freezer chains, and educational institutions, agriculture, and communication and infrastructure all rely on adequate energy supply. All together energy plays an essential role in promoting development (cf. UNCG 2017).

Ghana has been dealing with irregular electricity supply for a long time but still households and businesses have problems with power cuts (ibid.). Additionally, the widespread use of solid fuels (such as firewood, charcoal, biomass) combined with inefficient technologies for cooking and heating causes environmental pollution and health problems.

*“The use of inefficient fuels for cooking alone is estimated to cause over 4 million deaths annually, mainly among women and children. This is more than TB, HIV and malaria combined” (UN 2016c).*

It is clear that lack of energy supply or insufficient energy sources overlap with many other sectors in life and contribute to underdeveloped living conditions which are harmful to humans and the environment.

### *D. Employment*

SDG 8 is strongly intertwined with *Goal 1 to end poverty in all its forms everywhere*. An unstable economy, poor working conditions and lack of training and work opportunities force people into a downward spiral of poverty. Vulnerable groups are more likely to face marginalization and exploitation, such as women who are globally affected by the gender pay gap or people with disabilities who experience discrimination and exclusion in school, at training and in the job market



(cf. UNCG 2017). Intersectionality<sup>4</sup> means an aggravation of access possibilities and equal treatment at work.

In Ghana, especially young people need proper training and stable employment so that they can lift themselves out of a poor living standard and contribute to economic growth in their country. “Women and girls must enjoy the same access to opportunities for employment as boys and men” (UNCG 2017), and entrepreneurship, creativity and innovation needs to be supported so that people can realize their ideas and fulfill their potential.

Looking at the agricultural sector, there is a strong decline of interest and participation of youth. Even though it is said to be the backbone of the Ghanaian economy as it is catalyzing economic growth and employment for youth, yet “[...] young people do not regard agriculture as a viable job option. Agriculture and farming in particular is perceived as an occupation for aged, illiterate and rural people” (Food & Business Knowledge Platform; INCLUDE; AgriProFocus 2016: 5). Agriculture is not only a less exploited potential for generating livelihood but also a working field that depends on well-trained employees who counteract climate change and protect soil, air, water and biodiversity from further degradation through harmful agricultural practices.

*“The effects of CC on agricultural productivity are devastating, threatening livelihoods and ecosystem health in general. Ultimately, they decrease the nutritional and health value of foods. Coupled with population growth, they also undermine food and nutrition security, especially among the poor” (Andres 2018).*

### **E. Equality**

All over the world humans experience discrimination based on their income, sex, age, disability, race, origin, ethnicity, religion or other status. In Ghana inequality is a pressing problem that effects social and economic development as it upholds exclusion of certain groups and individuals. People can lose their sense of fulfillment and self- worth which “[...] in turn, can breed social unrest, crime, disease and environmental degradation” (UNCG 2017).

Stigmatization and discrimination continue to grow if civil society and those with political power do not take a serious step to combat harmful attitudes and actions. Everyone has the right to participate in society and to access opportunities, services and the chance to create a better life. Irrespective of the status one holds, all humans deserve social, political and economic

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<sup>4</sup> Definition of intersectionality by Merriam Webster (2017): “The term was coined by legal scholar Kimberlé Crenshaw in a 1989 essay that asserts that antidiscrimination law, feminist theory, and antiracist politics all fail to address the experiences of black women because of how they each focus on only a single factor.” Intersectionality means “the complex, cumulative manner in which the effects of different forms of discrimination combine, overlap, or intersect”. The term no longer applies to only race and sexism but to all forms of discrimination.

empowerment because they are born free and equal in dignity and rights (cf. UN 1948).

Looking closer at economic inequality, Oxfam estimates that the wealthiest 10% of Ghanaians now share 32% of Ghana's total consumption – more than is consumed by the bottom 60% of the population combined, while the very poorest 10% of the population consumes only 2% (cf. Oxfam 2019). The Ghana Poverty and Inequality Report of 2016 confirms that wealthier groups benefit more from the country's increasing growth and that rural poverty is almost 4 times as high as urban poverty. Even though Ghana's poverty level reduced by more than 50% between 1992 and 2013 and thereby met *MDG 1 Eradicating extreme poverty and hunger*, the country faces an increasing gap between rural and urban poverty. Moreover, the majority of the population does not benefit from economic growth which consequently results in continued inequality (cf. UNICEF 2016: 1f).

### *F. Safety*

Violent attacks, insecurity and abuse of power are a worldwide problem and global threat to peace. The majority of victims are the most vulnerable groups, such as girls and women, people with disabilities, ethnic minorities and other disadvantaged and excluded groups (cf. UNCG 2017).

States often do not fulfill their responsibility to protect citizens and provide basic services as well as guarantee accountability of violations. "Lack of access to justice means that conflicts remain unresolved and people cannot obtain protection and redress" (UNCG 2017).

The Ghana Police Service (GPS) reports that street crime is a serious problem throughout the country but predominantly acute in large cities, especially in the capital, Accra. The GPS confirms that opportunistic and violent crimes are more likely to be targets based on perceived affluence and/or perceived vulnerability, not based on nationality (cf. OSAC 2019: 1).

Rape, sexual assault, and domestic violence is significantly underreported, the Ghana 2019 Crime and Safety Report states, explaining that the police lack capacities to investigate effectively on cases of rape and do not respond adequately to reports of domestic violence (which is a punishable crime) (cf. OSAC 2019: 3).

Looking closer at children as victims of violence, highlights the role of caregivers and teachers as perpetrators. In Ghana, the use of physical force or psychological aggression is a common method of discipline, not only in the domestic sphere but also in the public sphere such as school institutions. Half of Ghana's population aged 15 and above think that physical punishment is necessary to properly raise or educate children, UNICEF reported in 2017 referring to data from Demographic and Health Survey (DHS), Multiple Indicator Cluster Survey (MICS) and other

nationally representative surveys conducted between 2005 and 2016 (cf. UNICEF 2017).

*“Physical discipline and psychological aggression tend to overlap and frequently occur together, exacerbating the short-and long-term harm they inflict. The consequences of violent discipline range from immediate effects to long-term damage that children carry well into adulthood. Violent discipline is the most widespread, and socially accepted, type of violence against children” (UN 2019f).*

The Ghana Education Service (GES) understands the harmful practice of corporal punishment and just recently announced a ban on the practice of ‘caning’<sup>5</sup> in primary and secondary schools (cf. GhanaWeb 2019). Even though children now receive more protection by law, there is still a long way to go to eliminate the common practice of violation of children’s rights in both the domestic and institutional spheres.

Additionally, it is important not to ignore the massive damage that sexual violence against children causes. It brings about instant harm to the physical, psychological and emotional health of children but can also affect mental health and behavior into adulthood (cf. UN 2019g). Sexual abuse is one of the gravest forms of violence against children and can be found in Ghana, whereby current statistics do not provide meaningful data due to the heavy underreporting of cases (cf. OSAC 2019: 3).

### *G. Technology*

“The Agenda, with its 17 Sustainable Development Goals, is universal and calls for action by all countries, both developed countries and developing countries, to ensure no one is left behind” (UNCG 2017). Technology thus plays a meaningful part in enabling access to necessary resources for the global sustainable development. Besides financial resources and capacity building, information and communication technology (ICT) is required to promote partnership and fulfil commitments. Goal 17 expresses the need to improve progress in achieving the SDGs and therefore, depicts a tool for all stakeholders involved (cf. UNCG 2017).

Looking at the case study of OPC the description of the problem only relates to the indication of internet access at this time. “The Internet has become an increasingly important tool to access public information, which is a relevant means to protect fundamental freedoms” (UN 2016f). The United Nations view internet access as a development enabler as it allows people to educate themselves which can reduce poverty and health problems. The internet makes a significant impact on how people organize their private and working life. It depicts an extensive source of information

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<sup>5</sup> Caning, also called flogging or whipping is an act of punishment in which the human body is severely beaten. In Ghana, it is most commonly administered with a cane stick and therefore called “caning” (cf. Abbott, G. 2019).

and knowledge and a significant communication tool that holds up businesses and services (cf. UN 2016f).

Even though more and more people have access to internet in Ghana, still many people lack access to the potential benefits of the internet, especially girls and women. “Males are more likely to own mobile phones and use the internet than females irrespective of locality and region of residence” (Ghana Statistical Service 2012: 14). But also the geographic location influences the use of internet: “Urban dwellers are more likely to own mobile phones (63.4%) and use the internet (12.7%) than rural dwellers (29.6% and 2.1% respectively)”, the Ghana 2010 Population and Housing Census Report reveals and shows that inequalities persist also with regard to the use of ICT (ibid.).

### **3. Theoretical framework**

Now that the problems this research addresses have been outlined, this next chapter focuses on the underlying theory and provides the knowledge needed to understand the Sustainable Development Goals and how the United Nations are addressing these global issues. This chapter focuses on three sections, including: an explanation of the history and background of the SDGs, followed by a section on the topics and relevance of the SDGs, and finally by examining the role of civil society in implementing the SDGs (which is particularly important for understanding OPC – a civil society actor).

#### **3.1 Background and relevance of the Sustainable Development Goals**

On January first 2016, 192 world leaders committed to 17 goals to combat global problems in the following 15 years. The so-called Sustainable Development Goals (SDGs) were created to end extreme poverty, fight inequality and injustice and fix climate change globally and persistently (cf. UN 2019h).

The SDGs follow the Millennium Development Goals which were launched in the year 2000 as the target year by the United Nations. The term of the eight MDGs was 15 years but already in 2012 at Rio+20, the UN Conference on Sustainable Development, the participating member states realized that continued work was needed to address the development concerns and so an open working group began to developing the 17 SDGs. In August 2015, all 193 member states agreed on the new agenda “Transforming our World: The 2030 Agenda for Sustainable Development” (ibid.)

Global development problems are complex and intertwined. There are social, environmental and economic related challenges which are connected and cause multi-dimensional problems. The number of development goals increased from 8 to 17 with the SDGs, highlighting that more effort is



needed to combat global problems and to focus on all elements, the social, environmental and economic sphere. Thereby, a crucial motivation is to address the root causes of global challenges rather than fighting the symptoms. For this, the participation of multiple stakeholders is an important condition and by including the involvement of different perspectives and interests the SDGs became a broader and deeper catalog of goals, targets and indicators. The SDGs expand the MDGs to include economic growth and environmental protection as well as an extended target group. They demand contribution of every country irrespective of the location in the Global South or Global North, or of the wealth or poverty of a state. Based on the understanding that sustainable development is only achievable if all states work together and combat global problems with their respective means, the SDGs manifest a new definition of development. Development towards sustainability is not only for considered “developing countries” but also for s-called “industrial states” which are predominantly located in the Global North. Thus, the SDGs demand that both poor and rich states contribute to combatting global problems (ibid.).

The SDGs address issues that affect everyone which makes them globally relevant for countries in the Global North and Global South. They demand commitment from all states and they reaffirm the international solidarity and collaboration towards achieving sustainable development. The 2030 Agenda for Sustainable Development pledges to leave no one behind which means to especially consider the most vulnerable groups and to ensure their benefit from development (cf. UN 2015:1).

FIGURE 1: The 17 Sustainable Development Goals (IPA 2018)



Figure 1 shows that the SDGs include the objectives of the MDGs, specifically tackling of extreme poverty and hunger, preventing deadly diseases, and expanding primary education to all children, among other development priorities. Throughout the MDGs:

- More than 1 billion people have been lifted out of extreme poverty (since 1990)
- Child mortality dropped by more than half (since 1990)
- The number of out of school children has dropped by more than half (since 1990)
- HIV/AIDS infections fell by almost 40 percent (since 2000) (UNDP 2019b).

But nevertheless, there is an urgent need to continue the progress towards a safer, more equal and sustainable planet. The UN believes because the problems are correlated their eradication must be cohesive, stating: “Dealing with the threat of climate change impacts how we manage our fragile natural resources, achieving gender equality or better health helps eradicate poverty, and fostering peace and inclusive societies will reduce inequalities and help economies prosper” (ibid.).

The SDGs not only work as a serious reminder to continue to combat global problems, but also

function as an implementation tool by providing a detailed matrix of goals, targets and indicators that are outlined in chapter 5.1 OPC-SDG monitoring framework.

### *Terminology*

Two terms being used by the United Nations are disputed or ambiguous and therefore this brief explanation provides clarification to avoid misleading interpretations. The definitions of these terms apply to the entire research work and comply with the understanding of the case study organization, OPC.

#### *Developing countries vs. Global South*

As the title of this research shows, the term Global South has been explicitly used to designate the location of the case study. But the term does not predominantly name the geographical categorization rather highlighting the economic inequalities that relate to cartographic location, as Rigg argues (cf. Rigg 2015). He explains that:

*“[...] both North and South are, together, drawn into global processes rather than existing as separate slices of the world. Conditions in the Global South are only understandable when they are set against those in the Global North; global processes and structures make all countries part of an increasingly integrated world” (Rigg 2015).*

Looking at the predecessors “Developing Countries” or “Third World”, lets the term Global South appear less hegemonic and even adds an empowering aspect to it (cf. Duck; Mendez 2015). Nevertheless, Global South rigidifies the notion of a northern and southern division and thereby manifests geographical boundaries which are correlated to wealth and poverty (cf. Rigg; Dirlik 2015). Therefore, it is important to understand this term as a temporary alternative which is questionable in a number of ways but it can help understanding the devising context of globalization or global capitalism as Dirlik describes it (cf. Dirlik 2015). Moreover, the categorization of a large variety of countries and regions in one term is problematic, states Magallanes, and demands the consideration of power relations within and amongst countries (cf. Magallanes 2015).

#### *Sustainable Development*

By the UN, sustainable development has been defined as development “that meets the needs of the present without compromising the ability of future generations to meet their own needs” (UN Ukraine 2018). In the understanding of sustainable, the inclusion of all elements, economic growth, social inclusion and environmental protection, play a crucial role and only the

improvement of living condition in all these elements can lead to sustainable development. Moreover, the UN understands sustainable development as a mandate to act for all countries and demands for joint action towards building an inclusive, resilient and sustainable future for the next generations. In doing so, the eradication of poverty eradication is a key to sustainable development, the UN believes and therefore highlights the inevitable need to promote all issues that are intertwined with poverty which is a

*“[...] sustainable, inclusive and equitable economic growth, creating greater opportunities for all, reducing inequalities, raising basic standards of living, fostering equitable social development and inclusion, and promoting integrated and sustainable management of natural resources and ecosystems” (UN Ukraine 2018).*

### **3.2 National implementation in Ghana**

The Agenda 2030 demands global collaboration towards achieving the collective goals, however there is no legal binding of states towards the implementation. The governments are intended to take over responsibility and ownership throughout establishing national action plans for the implementation period. Moreover, the SDG implementation requires monitoring and evaluation to ensure quality and verifiability of the progress and the outcomes, as well as follow-up and review processes (cf. UN Ukraine 2018).

Ghana has significantly contributed to the development of the Agenda 2030 and therefore carries a strong modeling function towards the implementation of the SDGs. Together with the United Nations in Ghana the government of Ghana built a partnership towards the SDGs and published the “UN Ghana Sustainable Development Partnership Framework with Ghana 2018-2022” (UNSDP) in June 2018. The framework is based on the belief that the UN should support SDG attainment and help achieving sustainable economic and social development, peace, and human rights in Ghana (cf. UN Ghana 2018:1). It is also aligned to the Coordinated Programme of Economic and Social Development Policies (CPESDP), 2017-2024, which outlines national vision such as agricultural modernization and industrial diversification as well as youth employment. Moreover, it provides national strategies towards the implementation of the SDGs, especially on economic transformation and inclusive growth (cf. UN Ghana 2018) .It focusses on the four areas A. Shared prosperous economy; B. Social investment in people; C. Protected and safe environment; and D. Inclusive and accountable governance. Thereby, the Ghana national strategy priorities private sector development and job creation for young people which demands better conditions for innovation and industrialization (cf. UN Ghana 2018: 3). Thereby, the UNSDP highlights the crucial proposition of inclusiveness and sustainability of economic growth which leads to the question how all Ghanaians



can be able to benefit from economic growth (cf. UN Ghana 2018: 9). The 2016 Common Country Assessment (CCA) identified underlying challenges for Lower Middle-Income Country (LMIC) Ghana towards the achievement of sustainable development: persisting inequalities, low productivity, democratic dividend and environmental degradation are the challenges Ghana has to encounter and find solutions for (cf. UN Ghana 2018: 7f).

For the estimation of the current situation in the country, Ghana had commissioned the Indicator Baseline report which assesses 69 indicators and serves as tracking point in the implementation process. The report highlights the most pressing issues such as poverty in rural areas, low quality education in Primary level, the impacts of the NEET rate (Youth not in employment, education and training) as well as gender equality, violence and child marriages and inequality due to economic status (cf. NDPC 2018: 97f).

In order to help the acceleration of the SDG implementation process, Ghana launched a Voluntary National Review (VNR) which will be published in July 2019 to the UN at a High-Level Political Forum. It includes a review on the SDGs by a wide range of stakeholders, including the experiences and successes, challenges and learning processes. It also pays attention to the question how youth is being involved in the implementation of the SDGs, as well as the principle of the agenda 2030 to leave no one behind when achieving the SDGs (cf. Amankwa 2019).

### **3.3 Role of civil society**

Civil societies<sup>6</sup> play an important role towards the implementation of the SDGs. The kind of engagements and actions civil society contributes to the global sustainable development are to bring in their knowledge and experience that they gained throughout working closely with communities on a regional and local level. Also they are acting as catalysts to a critical national and global agenda by bringing in voices of the suppressed, marginalized and excluded groups. Moreover, civil societies often have a range of partners, drawing their power from networking on local, regional, national and even international levels. Many civil society groups join forces to pressure their governments and stand up for human rights and other fundamental values and principles. And also, they collect data and engage in monitoring and evaluation, provide feedback and help implementing SDGs (cf. Khadka 2018: 3f).

In Ghana, civil society organizations (CSOs) were included in the development process of the SDGs and were able to share their interests. The CSOs joined to create a Platform in 2016 in which

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<sup>6</sup> The term “civil society” includes many different historic and modern understandings whose detailed examination has to be neglected in this research. Nevertheless, it is important to note that a continuous discourse on the notion has to critically consider Western theories of civil society and open up for re-definition of civil society in the African context by African scholars (cf. Obadare E. 2004: 13ff).

some 140 CSOs (by 2017) work together towards the SDGs. Now that the SDGs are ongoing, their contribution focusses on social mobilization for SDGs and governance accountability. Working groups organize themselves each SDG and raise awareness on them as well as mobilize community engagement in all 216 districts in Ghana.

Together with the UN Communications Group (UNCG) in Ghana, the CSO Platform on SDGs developed a publication of the SDGs in Ghana, answering the questions “why they matter?” and “how we can help?” which provides suggestions for individuals on how they can contribute to the achievement of the SDGs. It aims to promote the importance of local ownership and strengthening the pledge to leave no one behind (cf. UNDP 2017).

*“At the national level, civil societies play a crucial role in translating 2030 Agenda into national priorities, working through themselves, their networks and members working at the grassroots. They play a triggering role ensuring inclusion of local needs and priorities into national priorities and strategies.” (Khadka 2018: 4)*

Not always civil societies have space to engage themselves and therefore it is important to claim a political and legal environment (cf. Khadka 2018) which is – with Gramsci’s words – the fight over the hegemonic power (cf. Gramsci 1992) in a sphere of many competing actors.

## **4 Case study Obrobibini Peace Complex (OPC)**

This chapter provides information on the case study OPC, including the NGO’s background, their objectives and project activities (4.1). Section 4.2 connects to the theory which was discussed in the previous chapter, looking closer which SDGs and targets OPC is actually meeting. This outline depicts an intermediate stage towards the development of the monitoring framework which is presented in the following chapter (5).

### **4.1 About OPC**

Obrobibini Peace Complex (OPC) is a charitable tax-exempted association based in Switzerland that attempts to address socio-economic and environmental problems through a centre of learning in Busua, Ghana (cf. Andres 2018).

OPC’s goal is to improve the living conditions of socioeconomically underprivileged people in the Busua community and contribute to sustainable living in peace and harmony (cf. OPC 2018a). The NGO especially focusses on marginalized children and youth and wants to support their health and environment mainly through practical education about holistic living so that they can unfold their full potential (ibid.). Moreover, OPC aims to influence public discourse and policy by networking with local decision-makers. Spreading the knowledge and experience of the NGO can also benefit

other organizations and help to replicate the project's outcomes in other countries socio-economic conditions similar to Ghana (cf. Andres 2018).

OPC has run construction, workshops and educational activities since January 1<sup>st</sup>, 2019. In the learning centers, OPC will offer courses on sustainable agriculture, healthy diet and physical activity, herbal medicine, natural sanitation, waste recycling and renewable energy (cf. OPC 2018a). Throughout their activities, the NGO aims to “ensure knowledge transfer and local ownership by including locals in the process from the beginning to the end of the project, and by holding workshops with community members about the different topics at each structure” (Andres 2018).

OPC pursues a holistic approach that aims to tackle the problem of degenerating environmental and human health relative to other initiatives and thereby simultaneously address interconnected issues.

## 4.2 Connection between the SDGs and OPC activities

This section provides a deeper understanding of the connection between the SDGs and OPC activities on which this research is based. Even though OPC has not been showing a list of objectives that complies with the SDGs there are similarities in the overarching goals which many of the OPC activities meet. Therefore, this section aims to point out where a connection exists and how OPC is addressing the respective SDG and target.

The first line of each goal discusses the SDGs (in total 7 out of 17), followed by the respective targets (in total 10 out of 169) and finally, a description of addressing OPC activities<sup>7</sup>. Throughout this section the selection process is described, making clear the reasoning behind each selection. Currently, some of the activities have already begun while others are still in the planning process.

<b>Goal 4</b>	<b>Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</b>
<b>Target 4.3</b>	By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
<b>OPC</b>	OPC aims to provide vocational training opportunities for people of all ages, irrespective of sex, disability, race, ethnicity, origin, religion or economic or other status. By providing an educational center, the organization aims to promote learning about a sustainable and holistic life. The educational center is driven by an inclusive approach with the goal of enhancing the wellbeing of community members and organisations who are interested in participating in the learning programs. OPC focuses specifically on

<sup>7</sup> For better readability the citing of SDGs, targets and indicators is done without reference. SDGs and respective targets and indicators are all retrieved from the same source, the UN metadata Repository which is available under: <https://unstats.un.org/sdgs/metadata/?Text=&Goal=14&Target=14.5> (27.06.2019)

socioeconomically underprivileged people who lack access to resources and therefore have limited or no access to quality education and lifelong learning opportunities. OPC aims counteract this inequality and imbalance by helping people to realise their ideas and potential (cf. Andres 2018: 6).

The trainees/apprentices will get the chance to increase their knowledge about their field of interest and practice theoretical inputs through engagement in various workshops. Conducting regular exams and feedback rounds at the end of a training unit will help monitor the learning progress and refine learning experiences (ibid.).

Goal 6	Ensure availability and sustainable management of water and sanitation for all
Target 6.1	By 2030, achieve universal and equitable access to safe and affordable drinking water for all
OPC	<p>OPC wants to equip their location in Ghana with waste recycling stations and build natural sawdust toilets. The objective is to raise community awareness and counteract environmental pollution which includes water contamination. Improved management of water and sanitation by teaching about alternatives to public dumping of municipal solid waste in a designated area is a key objective of this initiative. To ensure clean drinking water OPC wants to teach and facilitate the usage of organic means (moringa) instead of chemicals, by which the safety of drinking water will be improved.</p> <p>Workshops on ‘upcycling’ invaluable inorganic waste into valuable goods, such as tubes for channelling rainwater made from empty plastic bottles, will also be conducted with the potential to result in reduced littering and better drainage of wastewater (cf. Andres 2018: 5f)</p>

Goal 7	Ensure access to affordable, reliable, sustainable and modern energy for all
Target 7.1	By 2030, ensure universal access to affordable, reliable and modern energy services
OPC	<p>OPC aims to introduce a photovoltaic-biogas hybrid plant for independent production and storage of electricity and biogas at their site and thereby demonstrate a sustainable alternative to the common practice of relying on fluctuating state-provided electricity. Also the organization aims to reduce harmful emissions caused by the use of firewood and charcoal for cooking by educating about clean fuels and technologies (Andres</p>



Goal 8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Target 8.3	Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
Target 8.5	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value
Target 8.6	By 2020, substantially reduce the proportion of youth not in employment, education or training
OPC	As mentioned under goal 4, OPC wants to offer vocational training in their education center to provide non-formal learning opportunities for marginalized people. Their working fields are in organic farming, herbal medicine and herbal healing, healthy nutrition and cooking, drum-making, arts, carpeting, tailoring and possibly other workshops. The objective of this activity is to improve living conditions by increasing job opportunities that will help the community to sustainably enhance their socio-economic living conditions. OPC especially wants to support vulnerable groups such as children, girls and women, people with disabilities and other minorities but also empowering youth to enrol in training, education or employment so that they can fulfil their potential and realize their ideas (cf. Andres 2018: 6).

Goal 10	Reduce inequality within and among countries
Target 10.2	By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status
OPC	As mentioned in previous description of OPC activities, a main goal of the organization is to improve the living conditions of community members by offering training opportunities and thus increasing employment and income of people experiencing poverty. OPC aims to combat poverty and inequality at a micro level, seeking to expand their activities to other regions with similar socio-economic

conditions, whether in Ghana or elsewhere. The empowerment of marginalized, underprivileged and discriminated people is a core objective of OPC and therefore goes hand in hand with SDG 10.

<b>Goal 16</b>	<b>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</b>
<b>Target 16.1</b>	Significantly reduce all forms of violence and related death rates everywhere
<b>Target 16.2</b>	End abuse, exploitation, trafficking and all forms of violence against and torture of children
<b>OPC</b>	<p>The empowerment of vulnerable groups in the community of Busua not only refers to better future prospects in terms of schooling and employment but also creating peace amongst community members and within the human body, resulting in increased safety and harmony.</p> <p>OPC follows a double-edged strategy. One objective is, to help implement the existing policies for child protection and use political and institutional structures to increase the safety and protection of people in the community. The other approach is to simultaneously reduce inner unrest, aggression and mental stress through relaxation techniques such as yoga and meditation which shall lead to more inner peace and harmonious communities (cf. Ross, Thomas 2010; Lee et.al. 2012).</p>

<b>Goal 17</b>	<b>Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development</b>
<b>Target 17.8</b>	Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology
<b>OPC</b>	<p>OPC is using different technologies for their learning center and thus want to enable poor people to access their facilities and use internet technologies. Knowledge transfer should happen predominantly in personal learning settings but adding web-based training is highly likely as it not only provides valuable sources of information but can also enhance IT skills and “promote the progress of society as a whole”, says former Special Rapporteur Frank La Rue and points out that internet has an unique and transformative nature which not only enables “individuals to exercise their right to</p>

freedom of opinion and expression, but also a range of other human rights” (UN 2011: 1).

## **5 Framework for the monitoring of selected SDGs**

In total, there are 17 SDGs, 169 targets and 232 indicators (cf. UN 2019a). Not all of them are relevant for this case study as OPC does not address all of the SDGs and targets. Some SDGs and targets are not objectives of OPC and therefore not included into this monitoring framework. Additionally, some SDGs and targets are not relevant for OPC at the current stage of project development. Even though the organization aims to achieve more of the SDGs and targets, some had to be excluded from this monitoring framework because the NGO is still in its initial phases. As such, OPC needs to set priorities and focus on some targets later on, to mitigate the risk of having too broad of a focus minimize their ability to implement any of the SDGs. Finally, several SDGs and targets may not be achievable by OPC as they require state power to be achieved and the scope of action of an NGO is too limited to tackle such high-level targets. Although OPC tries to monitor their activities following the standard of the UN, in order for OPC to realistically measure certain SDGs and targets these goals would need to be broken down and indicators altered. To avoid extreme amendments to the SDGs, this monitoring framework focusses on targets and indicators which are within the power of this NGO and therefore constitute a realistic base for monitoring and achieving targets.

Consequently, this monitoring framework is not the complete monitoring framework that the United Nations provided for all 191 UN Member States that have agreed to work towards achieving the SDGs by the year 2030. This monitoring framework is processed to comply with the objectives and time management, the scope of action, the available resources and the power of an NGO from the Global South. The pre-selection for this monitoring framework corresponds to the SDGs, targets and indicators. From the 17 SDGs, 7 were selected for this monitoring framework and amongst these 7 SDGs, 10 targets are relevant for OPC. The UN metadata provides respective indicators for each target which also went through a pre-selection process and were narrowed down from overall 232 indicators to 13 relevant indicators for this research work.

Following this section, the term “OPC-SDG monitoring framework” refers to this tailored version which frames the SDGs according to the monitoring capacities of OPC.

## 5.1 OPC-SDG monitoring framework

Goal 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Target 4.3	By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
Indicator 4.3.1	Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex

Goal 6	Ensure availability and sustainable management of water and sanitation for all
Target 6.1	By 2030, achieve universal and equitable access to safe and affordable drinking water for all
Indicator 6.1.1	Proportion of population using safely managed drinking water services

Goal 7	Ensure access to affordable, reliable, sustainable and modern energy for all
Target 7.1	By 2030, ensure universal access to affordable, reliable and modern energy services
Indicator 7.1.1	Proportion of population with access to electricity
Indicator 7.1.2	Proportion of population with primary reliance on clean fuels and technology



Goal 8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Target 8.3	Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
Indicator 8.3.1	Proportion of informal employment in non-agriculture employment, by sex
Target 8.5	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value
Indicator 8.5.1	Average hourly earnings of female and male employees, by occupation, age and persons with disabilities
Target 8.6	By 2020, substantially reduce the proportion of youth not in employment, education or training
Indicator 8.6.1	Proportion of youth (aged 15-24 years) not in education, employment or training

Goal 10	Reduce inequality within and among countries
Target 10.2	By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status
Indicator 10.2.1	Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities

Goal 16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Target 16.1	Significantly reduce all forms of violence and related death rates everywhere
Indicator 16.1.3	Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months
Indicator 16.1.4	Proportion of population that feel safe walking alone around the area they live
Target 16.2	End abuse, exploitation, trafficking and all forms of violence against and torture of children
Indicator 16.2.1	Proportion of children aged 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month
Indicator 16.2.3	Proportion of young women and men aged 18 - 29 years who experienced sexual violence by age 18

Goal 17	Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development
Target 17.8	Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology
Indicator 17.8.1	Proportion of individuals using the Internet

## 5.2 Definitions and further explanations of indicators

This chapter provides definitions of each indicator in order to clarify and differentiate the content they are dealing with. As some terms and expressions have multiple meanings or there is a very

specific meaning behind it, it is necessary to know what the United Nations exactly intend to measure with the respective indicator.

Moreover, further explanations that refer to the local context explain the amendments of the monitoring framework that were necessary to adapt to local realities. This mainly includes the use of different terms which are synonyms to those that the United Nations used to describe the indicators. The consideration of the cultural factor is an inevitable condition to gather the information which is required for this research. If respondents do not understand a certain term because it is not a common expression in their local area, it might result in inaccurate or missing data. Therefore the following definitions not only include an in-depth understanding of the United Nations indicators, but also a reference to the local context in order to make the development of the questionnaire comprehensible.

#### **Indicator 4.3.1      Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex**

##### *Definition by the UN*

According to the UN, this indicator measures the percentage of youths and adults participating in any form of formal or non-formal education. Formal education means the education that is provided by institutions such as schools, colleges and universities in a full-time and continuous setting. Therefore, the questionnaire included a question about which educational level the respondent had attained, starting at “no education” up to “tertiary education” as possible answers.

Non-formal education includes “any organized and sustained learning activities that do not correspond exactly to the above definition of formal education” (UN 2016a) and manifest in the form of seminars, workshops or short-courses which “take place both within and outside educational institutions and cater to people of all ages” (ibid.). The aims of non-formal education include adult literacy, improving life- and work-skills and learning about culture more generally (cf. UN 2016a).

Important to consider is that the measurement of this indicator only takes into account the specific time period of the past 12 months that a person has been participating in formal or non-formal education and training. Moreover, this indicator requires dividing participants into age groups. A high value indicates a large share of the population in the relevant age group is participating in formal and non-formal education and training. A limitation of this indicator is that it does not capture the quality or intensity of the education provided and also the outcomes of the education and training are not measurable (ibid.).

##### *Adaption to the local reality*

With regard to the possible answers of the status of formal education, an adjustment to the expression Middle School Leaving Certificate (MSLC) was necessary. Local people of the research area do not use that expression and therefore people were less familiar with it. Whereas the expression Junior High School is familiar to everyone, even more common is the abbreviation JHS. In respect to the question about non-formal education, the selection of workshops, seminars and short-courses – choices defined by the UN – is not as relevant to the local reality as “learning a trade” is. Therefore the interviewers initially asked whether the respondent has been learning a trade in the past 12 months. To make sure that other, more uncommon forms, like the seminars or short-courses were not disregarded, the interviewers still named the other choices. Subsequent to the collecting data on educational level, the OPC-SDG monitoring framework includes a qualitative question about the reason of lack of education. This aggregation is part of the questionnaire as it gives crucial knowledge about underlying reasons of lack of education which can help the NGO develop adequate solutions to this problem.

#### **Indicator 6.1.1      Proportion of population using safely managed drinking water services**

##### *Definition by the UN*

Since the data on drinking water safety is lacking in many developing countries, the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) brought out a new definition which refers to improved basic drinking water sources. It includes a broader understanding of “safely managed drinking water source” and considers the dimensions of accessibility, availability and quality.

The UN defines improved drinking water sources as piped water into dwelling, yards or plots, public taps and standpipes, boreholes or tube wells, protected dug wells, protected springs, packaged water and delivered water and rainwater. Accessibility refers to the point of collection that has to be within the dwelling, plot or yard to be indicated as a water source that is located on the premises.

Availability concerns the condition that a basic water source has to be available when needed and provide the required amount of water that is needed.

The quality of the basic drinking water source is considered as high if it is free of fecal and priority chemical contamination, whereas an improved drinking water source only requires data on the likeliness of water being free of fecal and chemical contamination (cf. UN 2017).

##### *Adaption to the local reality*

This indicator required adjustment to the local context in order to consider that some of the basic water sources being identified by the UN are not existent or uncommon in the research field.

Therefore, only pre-selected basic water sources are considered in the questionnaire in order to avoid confusion and misunderstanding amongst the respondents during the data collection.

Since the contamination of basic water sources with chemicals in the respective research area is common in the community, the questionnaire focusses on the community members' own appraisal, leaving out technical measurements of the water quality. Moreover, the OPC-SDG monitoring framework does not consider the industrially processed drinking water as the measurement of its quality is out of the scope of action of the NGO.

Thus, the focus is on the water source that respondents generally use in their households. Consequently, the question about contamination refers to a general water source which is not explicitly and exclusively the drinking water source. Nevertheless, locals report that they also drink water which is being retrieved for general use like washing, showering, cooking etc.. Therefore the improvement of the general water source would consequently affect the drinking water quality for those who use it as such.

### **Indicator 7.1.1      Proportion of population with access to electricity**

#### *Definition by the UN*

The UN estimates this indicator as key for sustainable development as it addresses major critical issues, as well as income generating activities, homework activities and household tasks. Access to electricity therefore addresses more dimensions than only the supply of a house with electricity, but also the quantity and quality of it. Other factors that constitute the adequacy of electricity are the duration and affordability of electricity.

Moreover, the UN recommends more refined measurement of energy access by reporting the type of electricity supply (grid or off-grid), the capacity of electricity supply provided (in Watts), the duration of service (daily hours and evening hours) and legality of service (cf. UN 2016b).

#### *Adaption to the local reality*

As the UN states, the role of electricity is critical which is also the case in the research field (cf. UN 2016b). For the measurement of this indicator the questionnaire included several dimensions of adequacy. The focus in the monitoring of electricity is on quantity, quality and duration. The selection of few, but not all dimensions is due to their pre-estimated measurability and relevance. Some dimensions are out of OPC's interest or scope of activity, like legality of service, and some dimensions create difficulties and limitations for the data collection.

Of importance is to communicate the dimensions of electricity measured in a comprehensible way. To measure quantity, quality and duration of electricity in this context, it is necessary to translate these terms in a relevant way by asking about the sufficiency of light bulbs and sockets in a



household. This also includes asking whether there is a source of light inside the house, outside the house or not at all. Moreover, collecting data about the quality of electricity requires asking about the voltage and frequency whereby using the term “dim” corresponds to the local parlance and appears easily comprehensible.

### **Indicator 7.1.2      Proportion of population with primary reliance on clean fuels and technology**

#### *Definition by the UN*

This indicator includes the number of people using clean fuels and technologies for cooking, heating and lighting, divided by the total population that uses this kind of household energy. The UN defines “clean” as the emission rate targets and specific fuel recommendations which were given by the WHO (i.e. WHO Guidelines for indoor air quality guidelines: household fuel combustion). These guidelines provide recommendations about clean combinations of fuel and technologies so that emissions may reduce and benefit the public health. Therefore current global data collection focuses on the differentiation between solid or non-solid fuels in order to measure the rate of pollution that fuels produce. Thus, solid fuels such as wood, charcoal and biomass are considered as polluting and non-modern, while non-solid fuels are considered clean. However, data about the instrument which is being used for cooking is also required so that the combination of fuel and technology provides information about its polluting characteristic (cf. UN 2016c).

The UN has identified challenges associated with measuring the indoor concentrations of criteria pollutants, such as carbon monoxide, as a potential limitation. Moreover, many households use more than one type of fuel and instrument for cooking which also depends on climatic and geographical conditions (ibid.).

#### *Adaption to the local reality*

As the UN already pointed out, the technical measurement of indoor concentration of pollutants seems difficult to achieve, therefore the OPC-SDG monitoring framework only includes the measurement of fuels and technologies being used by the population. Also, the questionnaire only considers those fuels and instruments which are generally available in the local area. In addition, there is no data collection about the cooking location as it is most common in the local area to do cooking outside. Nevertheless, data about pollution is still crucial as first, people have to move their stoves and coal pots inside if it rains and second, the reduction of emissions regardless of indoor or outdoor pollution a highly important target. Another adaption to the local context is the usage of the term “local gas” for an optional answer in the questionnaire. It includes liquefied petroleum gas but as well as kerosene.

### Indicator 8.3.1      Proportion of informal employment in non-agriculture employment, by sex

#### *Definition by the UN*

For this indicator the UN issued a concept that measures the informal employment rate of the population outside the agricultural sector. The reason behind this is to gather information about the quality of employment which is strongly dependent on the provision of social protection schemes such as an unemployment insurance and/or sufficient and guaranteed wages and pensions. As some individuals may have to take up informal employment to ensure their livelihoods, the UN suggests indicating not only the employment rate, but measuring the proportion of people who participate in informal activities (cf. UN 2019c).

In order to help differentiate formal and informal employment, the UN metadata provides a definition of the former as work which is done during a specific brief period, such as one week or one day, by people in a working age who in exchange for their work, receive payment or profit. Informal employment on the other hand, consists of a person who works in unspecific time periods and matches one of the following categories:

*“- Own-account workers, employers and members of producers’ cooperatives employed in their own informal sector enterprises (the characteristics of the enterprise determine the informal nature of their jobs);*

*- Own-account workers engaged in the production of goods exclusively for own final use by their household (e.g. subsistence farming);*

*- Contributing family workers, regardless of whether they work in formal or informal sector enterprises (they usually do not have explicit, written contracts of employment, and are not subject to labour legislation, social security regulations, collective agreements, etc., which determines the informal nature of their jobs);*

*- Employees holding informal jobs, whether employed by formal sector enterprises, informal sector enterprises, or as paid domestic workers by households (employees are considered to have informal job)” (UN 2019c)*

The UN also remarks on the scope of the indicator being limited to non-agricultural activities. For reasons of comparability, the UN recommends the improvement of statistics by including analysis about both agricultural and non-agricultural employment (cf. UN 2019c).

#### *Adaption to the local reality*

Even though, as the UN claims, it is necessary to improve this indicator, the current scope of it already covers the most important data for OPC. As the NGO predominantly aims to promote organic agriculture in the research field and improve the quality of employment, this indicator provides insight that is from high relevance for their project planning.

For the development of the questionnaire it was not necessary to include the exact definitions of formal and informal employment. After consultation with local assistants it was clear that the community has a similar understanding of formal and informal employment which corresponds to the above mentioned criteria given by the UN.

### **Indicator 8.5.1      Average hourly earnings of female and male employees, by occupation, age and persons with disabilities**

#### *Definition by the UN*

The scope of this indicator comprises data about the mean hourly earnings from paid employment and is disaggregated by the sex, occupation<sup>8</sup>, age and disability status of the persons interviewed. The reason behind this scope is to find out the extent to which pay equality is respected or achieved according to target 8.5: *By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.*

The concept of this indicator considers only the gross remuneration in cash or in kind paid to employees for time worked and the time not worked, but being paid, such as holidays. Moreover, it is crucial to take into account that employers' contributions, such as social security and pension schemes as well as severance and termination pay, have to be excluded from the payment.

Also, the indicator requires data on hourly earnings for the purpose of international comparability (cf. UN 2019d).

#### *Adaption to the local reality*

Indicator 8.5.1 requires collecting the aforementioned data which fails to comply with the local context with respect to measuring hourly income. Prior knowledge about the research field allows assuming that the majority of the population to be interviewed is neither in formal employment, nor making income on an hourly basis. More usual in the local area is informal employment and a daily income whereby the latter has many exemptions. Consequently, the OPC-SDG monitoring framework requires data about the daily income as well as the number of working hours per day. This allows a calculation of the hourly income which then meets the standard of the UN metadata for indicator 8.5.1. In the event of not having data about the number of daily working hours a calculation is required, for instance if a fisher man travels three days for work and gets payment for these three days his income has to be divided by day and by daily working hours to find out his hourly income.

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<sup>8</sup> Data for this aggregation is not available. More details in chapter 6.4.1 Research method

### **Indicator 8.6.1      Proportion of youth (aged 15-24 years) not in education, employment or training**

#### *Definition by the UN*

The measurement of the proportion of youth (aged 15-24 years) not in education, employment or training is also known as “the youth NEET rate” and was provided by the UN in order to access data about potential youth labor market entrants. The youth NEET is not only to measure youth unemployment, but also to include those who are discouraged workers and those who are excluded from the labor market due to disability or other discrimination or challenging living circumstances. What makes the NEET rate more specific is, that it considers youth who are outside the labor force but still in education or training, for instance to further train themselves and gaining new skills and qualifications. This is why the indicator requires having information on both labor market status and the participation rate in education and training. Consequently, the definitions of formal and non-formal education and training (indicator 4.3.1) and formal and informal employment (8.3.1) as elucidated above, apply to this indicator. The metadata of this indicator suggests not double counting youth simultaneously in employment and education or training should not be double counted when subtracted from the total number of youth during the data analysis (cf. UN 2019e).

#### *Adaption to the local reality*

Not necessary.

### **Indicator 10.2.1      Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities**

#### *Definition by the UN*

This indicator is a reference point for making assumptions on social inclusion, relative poverty and inequality within a country. It is mainly used in rich countries but also applicable in mid- and low-income countries. Comprising the share of population which is living below 50% of the national income/consumption distribution requires a two-step process that includes first, the estimation of 50% of Ghana’s GDP per capita and second, the collection of data about household income of respondents. Therefore the UN metadata recommends using the total household income or consumption divided by the total household size (cf. UN 2018).

“Data is collected with great heterogeneity and ex-post harmonization will always face limitations” (UN 2018), and so this indicators includes several challenges. First, the UN identifies differences in timing and sampling frames and the quality and training of interviewers which affect the international survey comparability. Second, there are price differences and differences in

importance of the consumption of nonmarket goods. Thus, in practice, the market value of kinds from own production are often excluded from the total consumption expenditure. The UN says that using valuation methods to capture the income from own production is a way to deal with this limitation (ibid.).

### *Adaption to the local reality*

Starting with the two-step process and converting the World Banks data about Ghana's GDP per capita in \$US, brings about the first necessary adaption. The local currency is Ghana Cedi (GHS) but the exchange rate causes significant value differences. Moreover, this indicator is dealing with a reference point that initially was created for rich countries and so the assessment of the median income is inevitably inaccurate. Nevertheless, a rough indication may allow assumptions on the local base and if required, used as far as possible for national and international survey comparison.

\$2.046,11 is the GDP of Ghana in 2017 in USD (cf. World Bank 2019). 50% of it is \$1.023,05 which is \$85,25 per month. As the exchange rate varies, there is a general inaccuracy given for indicators in the local context and so the determination was made that 500GHS is a rough guide for the simplification of the questionnaire.

In addition to limitations regarding the indicator, the data collection demands special attention. Interviewers and respondents might misunderstand the question and assume it is about the savings at the end of the month. As the indicator also has to consider the household size, it is appropriate to ask the respondent how much he/she has left after taking out the daily expenses for the family.

The UN strategy to calculate the required information by the monthly household income divided by the household size is less practicable in the research field and would lead to inaccurate data. The reason for this is that some respondents might live alone, such as young men, but still financially support their families. Or respondents cannot give accurate data on household income as it varies due to their irregular informal employment.

An additional way to approach potential misunderstanding is to ask follow-up questions. Based on the information provided on former surveys about brief working periods and daily income, a gross calculation of the monthly income can be made by the interviewers. If this preliminary invoice exceeds 500GHS even though the respondent lives below 500GHS per month, further demand is required. This can help identify whether the respondent actually lives below this reference point, due to irregular working periods or due to his/her household size. Based on this information, the survey can be completed correctly. Also, in this case a qualitative follow-up question can counteract limitations and clarify misunderstandings of this indicator.



### Indicator 16.1.3      Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months

#### *Definition by the UN*

This indicator comprises the total number of persons who have experienced victimization in a physical, psychological or sexual form in the previous 12 months, as a share of the total population. The UN points out that there are different forms of violence which need further clarification and there are some limitations that come along with this indicator (cf. UN 2016d).

To begin, it is important to be familiar with the wide range of the definition of physical violence in order to include every act of violence during the data collection. The International Classification of Crime for Statistical Purposes (ICCS) defines physical assault as “intentional or reckless application of physical force inflicted upon the body of a person” (Bisogno, Dawson-Faber, Jandl 2015: 539).

Moreover, there are differentiations between forms of serious and minor bodily injuries and serious and minor physical force which are exactly defined by the ICCS and identically named in the questionnaire. However, the definitions may exclude some forms of physical assault and therefore it is important to provide response options that allow other forms of serious and minor bodily injuries and serious and minor physical force to be identified (more on this later under “adaption to local reality”).

The ICCS defines sexual violence as an “[u]nwanted sexual act, attempt to obtain a sexual act, or contact or communication with unwanted sexual attention without valid consent or with consent as a result of intimidation, force, fraud, coercion, threat, deception, use of drugs or alcohol, or abuse of power or of a position of vulnerability” (UNODC 2015: 50).

For psychological violence there is no international definition and also the methodology for this indicator is still in development. However, at the current state, it is possible to limit psychological violence to threatening behavior in order to make a statement on at least one form of psychological harm (cf. UN 2016d).

#### *Adaption to the local reality*

As indicated above, crime victimization surveys are able to capture experiences of violence suffered by respondents, but it is likely that not all experiences of violence are duly covered by these surveys. In the local context this includes **caning** (a local term for flogging) which is a common practice in schools in the research field. This involves hitting and beating with a cane, which is considered as a punishment and fairly accepted by the society but legally forbidden (cf. Larnyoh 2019). Therefore, the researcher and assistants decided to include this form of physical violence in the OPC-SDG monitoring framework and to collect the related data under the answer option “other applications of force with the potential to cause minor bodily injury” and “other severe or critical injuries”.

In order to disaggregate by the UN standard, it is necessary to set an age limit for adults (from 15 or 18 onwards) since the respective data was collected from all population including children.

The indication does not apply to the time limit the UN gives and so the data includes all forms of physical, sexual and psychological violence in the entire lifetime.<sup>9</sup>

#### **Indicator 16.1.4      Proportion of population that feel safe walking alone around the area they live**

##### *Definition by the UN*

This indicator is about “fear of crime” which is separated from the actual prevalence of crime. Nevertheless, the feeling of fear can negatively influence well-being and social participation. This indicator requires a perception of crime which is in connection with public discussion, media and personal circumstances in the living area (cf. UN 2016e). According to the local context this geographical limitation has different expressions, such as “neighborhood” or “your area” etc.

Moreover, it is important to include “walking in the night” into the measurement in order to get a larger image of the populations’ perceptions of safety or danger. At the same time this indicator is limiting as it only focusses on walking alone; therefore, it is being further developed by UNODOC and victimization experts (ibid.)

##### *Adaption to the local reality*

Regarding the content, this indicator is well adjusted to the local context. For the data collection, it is preferable to use the expression “feel free” instead of “very safe” and “fairly safe” as it is common local parlance.

#### **Indicator 16.2.1      Proportion of children aged 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month**

##### *Definition by the UN*

“Violent discipline is the most widespread, and socially accepted, type of violence against children” (UN 2019f). The harmful practice has not only immediate effects in the form of minor or severe bodily injuries and emotional suffering but also long-term damages that effect an individual into adulthood (cf. UN 2019f).

As the indicator title says, it targets the measurement of children who experienced physical punishment either separate or in combination with psychological aggression. The Multiple Indicator Cluster Surveys (MICS) provide standards on child discipline which define psychological

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<sup>9</sup> Change of indication. More details in chapter 6.4.1 Research method

aggression as actions of shouting, yelling or screaming at a child and calling a child offensive names, such as “lazy” or “dumb”. It is an action intended to cause physical pain or discomfort, but not injuries (cf. UNICEF; 2019: 7).

Physical punishment includes “shaking the child, hitting or slapping him/her on the hand/arm/leg, hitting him/her on the bottom or elsewhere on the body with a hard object, spanking or hitting him/her on the bottom with a bare hand, hitting or slapping him/her on the face, head or ears, and beating him/her over and over as hard as possible” (UNICEF 2019: 7)

### *Adoption to the local reality*

For data collection all definitions were included in the questionnaire. Even though for this research it is not relevant which form of physical punishment and/or psychological aggression a child experienced, still identifying these definitions impacts the comprehensibility of the question and possible answers.

Unexpectedly, the interviewers’ initial assumption that it would be difficult to collect data from children - with caregivers given the possibility of listening in on the interview - proved to be false in many cases. It turned out that caregivers often responded to the question and confirmed the physical punishment and psychological aggression towards their child. Additionally many caregivers gave justification for their punishment in saying that their child behaved stubbornly. A possible explanation for disclosing their action could be the widespread social acceptance of violence against children in the research area. Consequently, it is practical to collect data for this indication even if caregivers are sitting nearby and listening. Another situation demonstrates the adequacy and advantage of talking to children in the presence of their caregivers: interviewing children alone could lead to wrong information as some children have the intention to protect their caregivers. For these challenging cases there is no proof by the interviewers but looking at the overall goal to tackle violence against children by caregivers, it seems reasonable to support an open and public dialog and take advantage of the fact that caregivers do not hide their violent disciplinary methods towards their children.

### **Indicator 16.2.3      Proportion of young women and men aged 18 - 29 years who experienced sexual violence by age 18**

#### *Definition by the UN*

The Convention of the Rights of the Child (CRC) defines sexual violence as “any sexual activities imposed by an adult on a child against which the child is entitled to protection by criminal law” (CRC 2011: 10) which includes

*“(a) The inducement or coercion of a child to engage in any unlawful or psychologically harmful sexual activity; (b) The use of children in commercial sexual exploitation; and (c) The use of children in audio or visual images of child sexual abuse; (d) Child prostitution, sexual slavery, sexual exploitation in travel and tourism, trafficking (within and between countries) and sale of children for sexual purposes and forced marriage. Many children experience sexual victimization which is not accompanied by physical force or restraint but which is nonetheless psychologically intrusive, exploitive and traumatic” (CRC 2011: 10).*

Moreover, sexual abuse includes sexual activities between children if a significant older offender uses power, threat or other means of pressure to force a child to abuse the other (cf. UN 2019g).

As the age of consent is 16 in Ghana, any sexual activities of children below this age is considered as sexual abuse (cf. UNESCO 1998).

A limitation for this indicator is the challenge of underreporting in this field, with special regard to experiences of sexual violence of males (cf. UN 2019g).

#### *Adaption to the local reality*

Explanations regarding the disclosure of abusive experiences as mentioned above (see indicator 16.2.1) apply to this indicator as well. Respondents were open to share their experiences of sexual abuse which unburdens the data collection in the research are. Again, unexpectedly respondents reported about their experiences in the presence of family and community members which fosters the monitoring of this indicator and possibly constitutes an advantageous starting position for interventions.

### **Indicator 17.8.1      Proportion of individuals using the Internet**

#### *Definition of the UN*

This indicator comprises the share of population which has been using the internet from any location in the past three month. The criterion “from any location” implies not restricting the device being used to access data, so it could be a phone, computer, tablet, digital TV etc.

The suggested methodology for this indicator includes disaggregation by region (geographic and/or urban/rural), by sex, by age group, by educational level, by labor force status, and by occupation if data allows (cf. UN 2016f).

#### *Adaption to local reality*

Not necessary.

## **6. The study process and methodology**

This chapter lays out the research procedure and shows the different methods that were used for this

study. It begins with a rationale (6.1), continues with the objectives of the study (6.2), and elaborates on the study area and target group and (6.3). Section 6.4 presents the methodology of this research and the last section (6.5) explains the analysis of data.

## 6.1 Rationale for the study

Chapter 2 showed that there are multi-faceted problems associated with different issues, such as education and employment, water and sanitation, energy and technology and safety and equality in Ghana and in the specific research field.

OPC aims to bring about positive change and improve the living conditions of the community of Busua and therefore the NGO developed project activities which address the identified issues. Together with the theoretical framework that the Sustainable Development Goals provides, OPC wants to achieve selected targets and follow the indicators of the United Nation to monitor their activities and assess the impact of their work. This research work provides the necessary monitoring framework that is especially tailored to the scope of action and the local conditions OPC is operating within.

Additionally, the baseline of this study will help OPC understand the problems on the ground and adapt their activities according to the needs of the community. The baseline provides data on the respective issues and considers the international indicators outlined by the UN which allows comparability and validity of the impact assessment. Moreover, it has the potential to help to pave a way for replicating the project's outcomes in other countries with socio-economic conditions similar to Ghana.

## 6.2 Objectives of the study

The study seeks to answer the primary research question

- *“How can OPC monitor the implementation of selected SDGs?”*

As well as two secondary research questions

- *“Which indicators are necessary to monitor the implementation of the SDGs”*
- *“What is the current state of the target group in respect to those indicators?”*

The objectives of the study are to:

- provide a specified monitoring framework for the purpose of an impact assessment for the case study of OPC;
- present a baseline according to the OPC-SDG monitoring framework that provides information on the socio-economic living conditions of the community of Busua;



- highlight the current state of particularly severe socio-economic problems in the community and
- offer recommendations for OPC to implement the selected SDGs.

### 6.3 Study areas and target group

The research procedure followed a two-step process. In the beginning, inductive research on the institutional level took place at Municipal Assembly of Agona – Nkwanta which is the capital of the Ahanta West District. In order to understand the process of data collection in the study area, it was useful to become familiar with the competent authorities of the respective research area and learn about the communication channels and management of community affairs. Therefore, the researcher, together with an assistant and the president of OPC visited the head office of the Municipal Assembly and spoke to the individual in charge who advised the public relations officer to provide the necessary information for the research team.

After getting familiar with the institutional backgrounds in the district, the research team visited the study area, the community of Busua, in order to conduct a baseline study. Busua has a total population of 2.243 of which the research team interviewed 242 people based on a sample size calculation that considers the following factors:

TABLE 1: Factors of sample size calculation

Factor	Percentage
Threshold Value	5%
Confidence Interval	90%
Distribution	50%
Population	2.243
<b>Sample Size</b>	<b>242</b>

The target group included the whole community, amongst which children and youth were especially considered. As, the children and youth belong to the most vulnerable and marginalized group, they are OPC's main target group. Moreover, the study considered total balance of males and females to facilitate gender comparison.

### 6.4 Methodology of data collection

The last section of chapter 6 provides insight into the research method (6.4.1) and a positionality statement of the researcher (6.4.2) which considers underlying biases of this study.

### 6.4.1 Research method

The researcher along with two assistants from the community of Busua undertook the task of collecting evidence and facts, including information from the Municipal Assembly Agona – Nkwanta, and data acquired through media sources, in order to gain a broader understanding of the problems in the region and making comparisons between the situation in Busua and in the Municipal Assembly. Moreover, the visit enabled the researchers to get familiar with the authorities of the region and understand the institutional structures and communication channels. After this investigation, the team of researchers visited the community of Busua to conduct the baseline study.

The standardized questionnaire for the study was designed by the main researcher and uses the metadata for the SDGs provided by the UN (cf. UN 2019b). It includes predominantly quantitative questions and a few semi- structured qualitative questions. The mixture of both methods was necessary in order to obtain the data needed to measure the respective SDG indicators. Also, a qualitative question provided crucial information about the reasons behind the lack of education in the area which is necessary for OPC's project planning.

The study used a sample size of 242 respondents from Busua. The random sampling method was used to identify and interview members of the community. The research team also ensured that citizens at different periods of time were included in the sample to ensure a comprehensive and accurate data collection.

The research team comprised of the researcher and two enumerators from the community of Busua who were exclusively trained for the purpose of conducting door-to- door household surveys. The preparation period involved revisions of the questionnaire and preliminary interviews (role plays) in order to train correct sense and tone of voice during the interview situation. Moreover, the research team prepared for possible challenges and potential situations that might come along with interviewing minors and asking very personal questions about experiences of physical, psychological and sexual abuse.

For the data collection the research team used the program EpiCollect5 on their smartphones. Besides the data about social, economic and infrastructural living conditions, phone numbers or photos were collected so that respondents can be found in five years' time to be invited to participate in the impact assessment.

The questionnaire includes instructions for enumerators on their introduction, reminders for the interviewing and short explanations of questions to avoid misunderstandings.

In addition to the briefing meetings with enumerators, feedback meetings were held to address problems that occurred during the interviewing and make improvements.

Despite this, changes to specific indicators needed to be considered so that necessary improvements and amendments can be identified for the future impact assessment.

1. Indicator 8.5.1: The scope of this indicator comprises data about the mean hourly earnings from paid employment and is disaggregated by the sex, occupation, age and disability status of the persons interviewed. For this indicator the feature “occupation” cannot be considered as the respective data is missing.

Remark: The data collection of respondents’ occupation can take place in the second round of surveying, in five years’ time. If respondents changed their occupation during the past five years or were employed for the first time, enumerators have to document these changes. The researcher can analyze this feature in the future in a manner that is relevant for OPC.

2. A change is also needed for indicator 16.1.3 *Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months* as there is a change of the given time limit. The collected data refers to experiences of physical, psychological and sexual violence of the entire lifetime and not in the previous 12 months.

Remark: A belated adjustment to the UN standard is impossible and therefore the future data collection has to relate to the already used indicator (*entire lifetime* instead of *past 12 months*).

#### 6.4.2 Positionality Statement

##### *Self-reflection of researcher*

There are many biases playing an important role during the interaction of the interviewer and respondent, which can influence the research. This section looks at the roles of the interviewers of this case study and discusses how their background characteristics, their experiences and interests shaped the research.

One of the first responsibilities of a researcher before conducting an interview, is to bear in mind one’s own biases and to be open to deconstruct stereotypes on age, race, class, sex, ethnicity, disability, religion and other statuses. This not only applies to negative perceptions but also to positive biases, which both need examined and potential solutions identified (cf. Rubin; Rubin 2012: 72).

As a white European woman, the researcher of this study holds a very privileged and powerful position. Her background and status allowed her to access several opportunities which enabled her to initiate this research. But the adaption of westernized ideas and elaborations on sustainable development in the Global South, specifically in Ghana, is generally a difficult and questionable

task. First of all, the researcher had to justify the reason for doing this research and second, she had to implement it in a way that considers the different underlying conditions, such as a different cultural environment and different socio-economic and status-based conditions. In the end, the research work was completely dependent on the help of the community and local assistants who were willing to share their expertise and compensate for the researcher's lack of expertise. Metaphorically speaking, the local assistants were a key to a closed door that the foreign researcher was standing in front of. But the assistants' backgrounds, their special expertise and language skills made them to key persons who were able to access the information that the researcher required. Because the assistants were able to fill the cultural and social gaps of the researcher and provide a way to the community in which they guided the researcher, the cooperation of both played a significant role for the research.

There are advantages for both insiders and outsiders of a research field and so the composition of the foreign researcher with her local assistants combined to make use of these advantages. The role of an insider can be helpful because he/she belongs to the group and knows the rules (cf. Rubin/Rubin 2012: 76). Because the insider can understand more easily and does not hurt or criticize the group, he/she is less threatening to the respondents (ibid.). The assistants of this survey were especially suited for the interviewing task as they are respected, trustworthy and reasonably recognized community members. Both are not originally from Busua but lived there for quite some time and both are working closely with students, caring for children and other vulnerable community members like elderly, poor and sick persons.

The foreign researcher has stayed multiple times in the community and got familiar with the culture over several months, so she did not need to ask basic questions about the general context of the area (ibid.). Also, being a known face in a community can lead people to participate in the survey as they might feel connected to the interviewer (ibid.) which applied to this survey.

Also the perception of the researcher towards the interviewed population and inversely is an influential factor. Primarily, there is lack of cultural knowledge/ experience and native behavior, especially with regard to language and communication. But there are also additional biases and lacking experiences underlying this research simply because the researcher does not belong to the following: there is lack of experience of being black, and especially being a black woman. There is lack of experience of belonging to a lower class or being disabled, being uneducated or chronically sick, being from a Southern or Eastern country, having no living place, belonging to an ethnic minority or to LGBTIQ\* and other categories. Most of the categories that the researcher does not assign to are discriminated identities. This fact demonstrates that automatically prejudices, power relations and privileges go hand in hand with different realities and also shape these realities. Consequently, a research that was community-led would not have raised these biases and avoided

exposure to power relations that are caused by white supremacy<sup>10</sup> and western view. Therefore it is desirable to conduct the impact assessment whether by a researcher from the community or from Ghana or to conduct it in a team of Ghanaian and foreign researchers. This suggestion also refers to the proposals of further case studies in the research field which are presented in chapter 8 Conclusion and recommendations.

### *Meeting with respondents*

Another responsibility of a researcher during conversations is to specifically explain herself to the respondents, otherwise they might make interpretations and associations which can cause barriers (cf. Rubin; Rubin 2012: 74). Hence, the research team introduced themselves and gave further explanations on their work. Knowing background information and understanding the context of the interview situation could help the respondents to feel more confident and trust the research team. Therefore in this case, an assistant mentioned the name of the NGO that the research team was collaborating with in order to bring about a recognition effect. As OPC is becoming more and more known in the community, the assistants' approach worked out well in many cases and respondents could associate the interviewers with the NGO. For those respondents, who were not familiar with the organization, the assistant enquired whether they had noticed the construction of an access road to the NGO headquarters at the village entrance which was going on at the time the survey was conducted. Based on this information, respondents were able to recognize the correlation of the road construction and the NGO working in Busua which encouraged them to trust the researchers.

As the study was initiated for OPC to understand the current state of problems in the community and based on that, designing project activities that make a positive change for the future, it was important to clarify this double-sided interest. The agreement of community members to participate in the survey because of its' beneficial aspect, transformed a one-sided interview situation into an indirect collaboration. Hence, the research team had to make the community understand their motivation to conduct this survey so that both, the research team and the respondents could acknowledge their contribution to this collaboration. Understanding as a community member that the research team came not only for vested interests helped to cleave the way for their willingness to participate in the survey.

Nevertheless, there are different motivations of people to participate in a survey. The researcher had to take into account that diverse motivations exist and she had to react respectfully no matter if a person demanded compensation for his/her contribution or if a person showed gratitude to be part of the survey.

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<sup>10</sup> For more explanation on white supremacy see Toni Morrison's brief talk:  
<https://www.youtube.com/watch?v=6S7zGgLSuw> (25.06.2019)

### *Interview Situation*

The same applied to the whole interview process. A positive, respectful and empathic encounter with the respondents contributes to a meaningful pillar of the NGO's work which is positive, constructive and fruitful community work in Busua. Working closely with the community, OPC carries an ethic responsibility which the research team sensed during their survey. Showing respect, transparency and keeping promises is important to not harm the NGOs integrity, while these conditions are also crucial to avoid doing harm against the respondents.

As trust is foundational for a successful survey, it was very important to maintain confidentiality of data and let the respondents know about this main principle. Interviewing about sensitive topics and asking the respondents to expose personal experiences might put them into a vulnerable situation which the interviewers had to react to and show their understanding (cf. Rubin; Rubin 2012: 73). Because this situation applied to every survey conducted, the interviewers had to empathically react to the answers given by the respondents and sense how to continue with the next question. For instance, many respondents were ashamed of their lack of education while others confidently named financial constraints or disinterest as reasons of a low educational level.

Although at some points respondents may have felt shy, ashamed or afraid to share information, in most cases people felt confident talking about themselves and liked the sociability. The research team perceived that respondents often felt recognized by the survey request and as though they had accomplished something by being part of the survey (cf. Rubin/Rubin 2012: 78). This became very obvious when the research team had to ask for phone numbers. Respondents immediately dictated their phone numbers and if they did not have a phone they proudly viewed the photo that the researcher had taken from them.

As the concluding meeting with assistants showed, assistants and researcher were content with the work they did and how they tried to fulfill the demands of conducting the survey. The self-reflection and critical observation of the whole interview procedure depicted crucial elements of the methodological approach of this research work. Apart from this, discussing about the survey contents; exchanging experiences and learning from the confrontation of social and cultural gaps between the foreign researchers, the local assistants and respondents turned into meaningful personal and professional learning outcomes.



## 6.5 Data analysis

Due to the mixture of research methods, both quantitative and qualitative data were used in the analysis. Both methods require different analysis as quantitative data typically involves numbers, rates scores, percentages, whereas qualitative data involves explanations, interpretations and quotations.

For the quantitative data, the researcher used Python program to process the data and prepare it for regression analysis in order to bring the different variables into relation. Descriptive statistical analysis and charts and diagrams that systematically show the data make it easy to understand and reuse the results.

Qualitative data was collected only for one indicator (4.3.1), specifically additional information on reasons for lack of education. It provides crucial knowledge about the roots of lack of education which can help the NGO to develop adequate solutions for this problem. For the analysis both, quantitative and qualitative data were analyzed using pre-given categories and statements of respondents. The statements of respondents were translated by the assistant and directly typed in English into the online survey by the researcher. Because the research team mainly focused on respondents' further elaborations and a variety of statements, the available data does not fulfill a representative function, rather it gives respondents a voice and adds personal expressions to the large number of de-individualized data. The qualitative data is used for underlining and complementing quantitative data based on the category it corresponds with.

Appendix II shows a chart that depicts the disaggregation which the UN metadata provides for each indicator which is necessary for the computation method (cf. UN2 2019b). The chart also informs about the associated survey questions and provides remarks on the computation method which are important - for example - to avoid double counting.

## 7. Results and discussion

This chapter provides descriptive statistical analysis of data for each indicator analyzed. Additionally, national or regional data is provided throughout for comparison purposes (see green boxes<sup>11</sup>).

Indicator 4.3.1 includes a special analysis of qualitative data which was additionally collected to understand root causes of lack of education in the community of Busua. This is presented under

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<sup>11</sup> The Ahanta West Municipal Assembly authority kindly provided a composition of data that was available for the given indicators and refers to the district of the research area (AWMA). As the authority retrieved it from internal documents a precise reference of the data in the green boxes is not possible. Nevertheless, the quoted references provide detailed statistics on national and regional data in Ghana which are recommended for a further insight into the topic.

section A. Education.

The disaggregation of rural location applies to all indicators as the survey was conducted in a rural community only.

The interpretation of results is focusing on most significant findings. In the case of having a low total number of respondents the interpretation may be less significant and therefore the descriptive analysis is giving less consideration to such cases.

#### *A. Education*

*Indicator 4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex*

TABLE 2: Participation rate of children, youths and adults in formal and non-formal education and training in the previous 12 months, by sex and income level

Age	Sex	Income level	Total	Participation rate
0-14	Female	>500GHC per month	1/2	50%
		<500GHC per month	34/38	89,47%
	Male	>500GHC per month	2/2	100%
		<500GHC per month	22/22	100%
15-24	Female	>500GHC per month	1/1	100%
		<500GHC per month	19/36	51,35%
	Male	>500GHC per month	4/7	57,14%
		<500GHC per month	19/45	42,22%
25 and above	Female	>500GHC per month	0	NaN
		<500GHC per month	1/39	2,56%
	Male	>500GHC per month	0	NaN
		<500GHC per month	3/37	8,1%

**FIGURE 2: Participation rate of children, youths and adults in formal and non-formal education and training in the previous 12 months, by sex and income level**

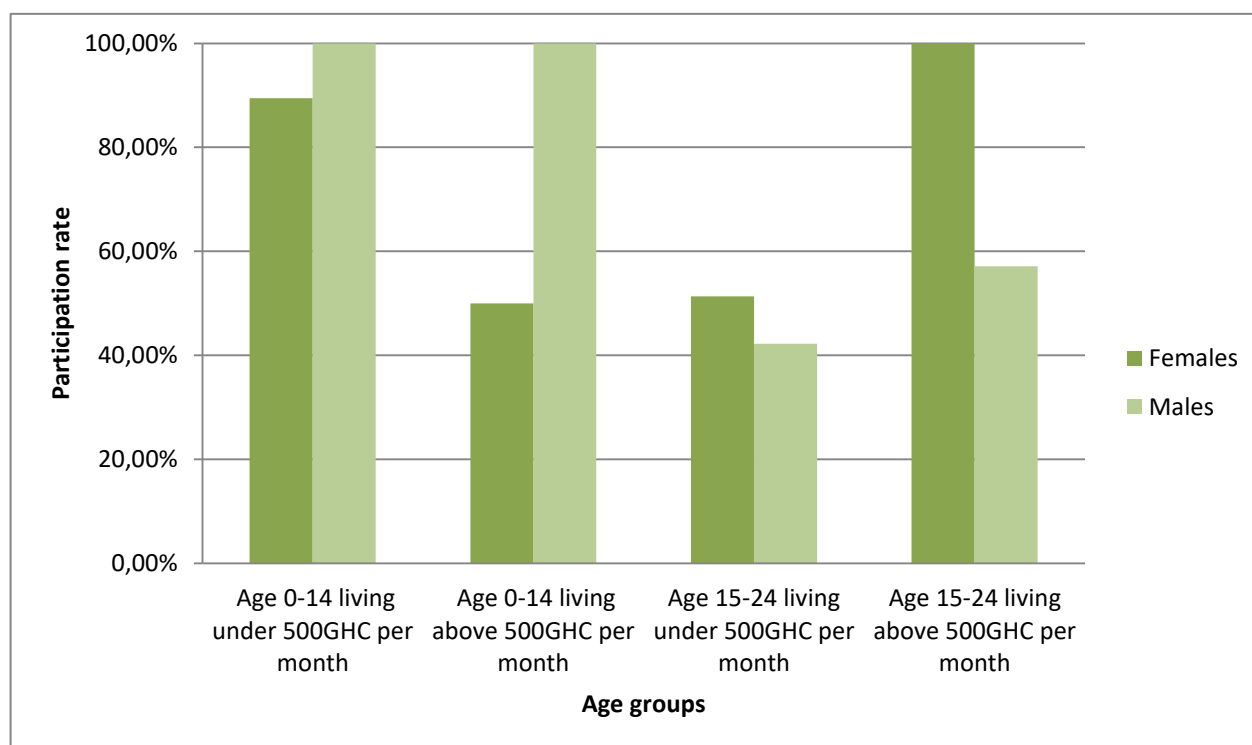


Table 2 and figure 2 show age disparities: The rate of males aged 0-14 years participating in formal and non-formal education and training is 100%, whereas older males (15-25 years) have more or less half participation. In comparison to females the percentage of 0-14 year old girls participating in formal and non-formal education and training is 89.47% if the household is living on less than 500GHC per month. The number of older females (15-24 years) participating in formal and non-formal education and training decreases to 51.35% which leads to the final conclusion that increasing age is accompanied with less education for females and males whereby the decline of females' participation is stronger.

Looking at the disaggregation of income shows that the few people with more income have preponderantly a higher participation rate in formal and non-formal education and training in age groups 0-14 years and 15-24 years.

**Data by Business Advisory Center Department (BAC), Non-formal Education Department and Education Department of Ahanta West Municipal Assembly (AWMA) 2018**

The total population for AWMA is 106.215 and 138.881 as projected population for 2018.

Types	Total	Percentage
Number of people in training	396/138.881	0,29%
Number of people in formal education	40.395/138.881	29,1%
Number of people in non-formal education and training	410/138.881	0,3%

A total participation rate of 38.84% in formal education in the community of Busua is surpassing the average participation rate of the AWMA, the comparison to the above standing data shows. In respect to non-formal education and training the same finding applies, as Busua shows a participation rate of 9.1% and the AWMA only 0.3%.

*Reasons of lack of education*

The survey also includes a qualitative question on the reason<sup>12</sup> why a respondent lacks education. Answers were prepared by categories but also personal statements were occasionally documented. The statements of respondents show that multiple reasons affected their formal education. Most respondents replied that financial constraints hindered them from going to school or continuing their education like 23 year old Christina A. experiences: *“I am now looking for money to continue.”*

Also social problems<sup>13</sup> cause lack of education, as the stories of Dorcas Y. (44) and Abigail A. (24) show:

*“Before I was living with my grandparents and they didn’t have sense for education” (Dorcas Y., 44),*

*“My dad was rich enough to take me to school but he never did” (Abigail A., 24)*

In almost all cases the reason of financial constraints was combined with the experience of respondents’ social challenges; this combination led to lack of education. For example, many respondents stated that they had experienced early loss of their caregivers which impacted their

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<sup>12</sup>Remark of the researcher: The use of the term “reason” is misleading. More appropriate would be “trigger” as being orphan or having a disability are not reasons of lack of education. Rather disadvantageous societal and political structures can be understood as reasons which are triggered by certain states.

<sup>13</sup>Remark of the researcher: The term “social issues” includes reasons that refer to social (family) relationships but not economic and political structures in this context.

financial situation and forced them to drop out of school:

*“Ever since I was young my mother and father died so I never went to school” Mary K., 68*

*“I lost my mother and so there was no financial support anymore. My sister came to take me and I stopped school” Margaret K., 47*

*“My father passed away and left me with my blinded grandmother so because of financial constraints I couldn’t continue” Philip K., 18*

*“My mom and dad were dead so I had no one to care for my education” Dorcas A., 43*

*“My dad passed away and my mom couldn’t afford the school fees anymore” Augustin Q., 25*

Another reason for lack of education is health and disability, which Edbert A. (47) experienced:

*“Due to my disability I couldn’t concentrate well and therefore not continue to university” Edbert A., 47*

## **B. Water & Sanitation**

*Indicator 6.1.1 Proportion of population using safely managed drinking water services*

All respondents stated that they had access to a basic water source whereby the majority used boreholes (total 196), followed by those who used piped drinking water on their premises (total 28). Irrespective of the water source used, 57 people stated that they had clean water whereas 185 reported that their water source was chemically contaminated.

TABLE 3: Total number of population accessing a contaminated water source

FIGURE 3: Share of population accessing a contaminated water source

Contaminated water source	Total
Borehole	176/196
Multiple	4/11
Piped drinking water on premise	4/28
Rainwater	1/5

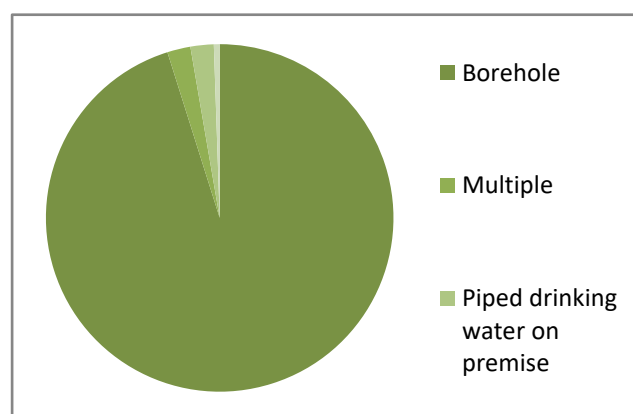


Table 3 and figure 3 show that the majority of people using a contaminated water source retrieved their water from a borehole. Amongst those who stated they had a clean water source, the majority

used piped drinking water (total 24).

### Data by Community Water & Sanitation Agency (CWSA) Ahanta West Municipal Assembly 2018

There exist 142 water points (BH - borehole, HDW - hand-dug wells and PIPE - piped drinking water) serving 95,206 people (89.6 % coverage).

### C. Energy

*Indicator 7.1.1 Proportion of population with access to electricity*

*Indicator 7.1.2 Proportion of population with primary reliance on clean fuels and technology*

*Indicator 7.1.1 Proportion of population with access to electricity*

Amongst all respondents (total 242) 74.8% had access to electricity of which 60.7% estimated that the quantity of their electricity was good and 56.4% reported that the quality of their electricity was good. 90.1% often or very often had power interruptions.

TABLE 4: Assessment of quantity, quality and duration of electricity by people accessing electricity

Variable	“Good”	“Bad”	Total	Remark
Quantity	110	71	181	Quantity comprises the adequacy of light sources and sockets in a household
Quality	102	79	181	Quality refers to the voltage and frequency of electricity
Duration	18 (rarely/ never interruptions)	163 (often/ very often interruptions)	181	Duration implies the frequency of power interruptions



FIGURE 4: Assessment of quantity, quality and duration of electricity by people using electricity

The MPCU reported that 97.8% of the Ahanta West Municipal Assembly had access to electricity which is one and a half times larger than the results for the case



study community Busua.

### Data from Municipal Planning Coordinating Unit (MPCU) 2018

97.8 % of the population of the AWMA has access to electricity (135768/138881)

#### Indicator 7.1.2 Proportion of population with primary reliance on clean fuels and technology

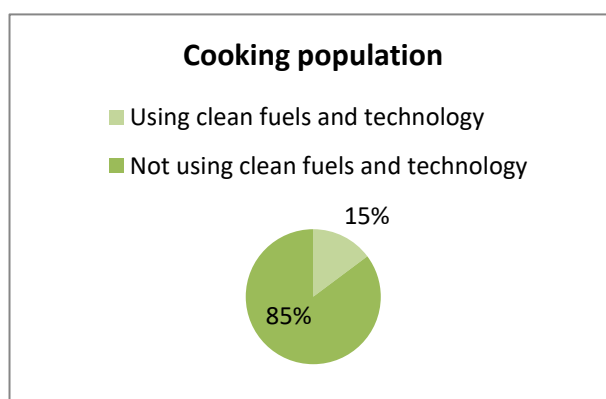
Of 231 respondents who stated that they cooked for themselves the majority used open fire as cooking instrument (46%). Next are coal pots (brazier) which were used by 42% of the respondents who cook themselves. In third place is the stove with 15%. Only 8 respondents stated that they used petroleum for their stove and the remaining 27 people who used a stove for cooking used natural gas as fuel. As mentioned in section 5.2 “Definitions and further explanations of indicators”, the term “local gas” implies liquefied petroleum gas but also kerosene. As kerosene is not a clean fuel it is vague to assume that 15% of the cooking population primarily relied on clean fuels and technologies.

Looking at the disaggregation of economic status and sex, the results were as follows: Amongst those who cooked and lived above 50% of the median income of Ghana, 36% used a stove whereas only 12.9% of people living under 500GHC per month used a stove for cooking. Concluding, the income level is in strong correlation with the use of clean fuels and technologies whereby poor people predominantly used fire wood and coal pot and people with more income used a stove.

TABLE 5: Income and sex of population using clean fuels and technologies

FIGURE 5: Proportion of cooking population using clean fuels and technologies

Income level	Sex	Total	Percentage
>500GHC per month	Female	3/7	42,86%
	Male	5/15	33,33%
<500GHC per month	Female	10/113	8,77%
	Male	17/95	17,89%



Gender disparities exist both above and below the income threshold, as table 5 shows. There is no strong significance of the disparity as the number of people using a stove for cooking and living from more than 500GHC per month was only 8. Still, it becomes clear that there were more females

accessing clean fuels and technologies if living above the median income level. In contrary, more than twice as often, males used clean fuels and technologies compared to women if living below the median income level.

#### ***D. Employment***

<i>Indicator 8.3.1</i>	<i>Proportion of informal employment in non-agriculture employment, by sex</i>
<i>Indicator 8.5.1</i>	<i>Average hourly earnings of female and male employees, by occupation, age and persons with disabilities</i>
<i>Indicator 8.6.1</i>	<i>Proportion of youth (aged 15-24 years) not in education, employment or training</i>

*Indicator 8.3.1      Proportion of informal employment in non-agriculture employment, by sex*

52% of the population was employed in the formal or informal sector, excluding agricultural activities. Amongst this group 97% were working in the informal sector which is the vast majority of working population.

Comparing this result to the data of the AWMA it becomes clear that the percentage of people with informal employment in non-agricultural activities in the community of Busua is almost three times higher than the average regional data. Some additional information on the employment status in the district can be found in the following.

## Data by Ghana Statistical Service, 2010 Population Housing Census

38.1 % of the population of the AWMA has informal employment in non-agricultural activities (52,914/138,881).

Table 1.24 Economically Active Population

Population 15 Years and Older by Activity Status and Sex

Activity status	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	62,201	100.0	28,842	100.0	33,359	100.0
<b>Economically active</b>	<b>46,815</b>	<b>75.3</b>	<b>21,707</b>	<b>75.3</b>	<b>25,108</b>	<b>75.3</b>
<b>Employed</b>	<b>44,029</b>	<b>94.0</b>	<b>20,394</b>	<b>94.0</b>	<b>23,635</b>	<b>94.1</b>
<i>Worked</i>	42,178	95.8	19,611	96.2	22,567	95.5
<i>Did not work but had job to go back to</i>	1,769	4.0	739	3.6	1,030	4.4
<i>Did voluntary work without pay</i>	82	0.2	44	0.2	38	0.2
<b>Unemployed</b>	<b>2,786</b>	<b>6.0</b>	<b>1,313</b>	<b>6.0</b>	<b>1,473</b>	<b>5.9</b>
<i>Worked before, seeking work and available</i>	1,069	38.4	500	38.1	569	38.6
<i>Seeking work for the first time and available</i>	1,717	61.6	813	61.9	904	61.4
<b>Economically not active</b>	<b>15,386</b>	<b>24.7</b>	<b>7,135</b>	<b>24.7</b>	<b>8,251</b>	<b>24.7</b>
Did home duties (household chore)	2,862	18.6	894	12.5	1,968	23.9
Full time education	7,389	48.0	4,149	58.1	3,240	39.3
Pensioner/Retired	458	3.0	348	4.9	110	1.3
Disabled/Sick	893	5.8	355	5.0	538	6.5
Too old/young	2,628	17.1	842	11.8	1,786	21.6

*Indicator 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities*

TABLE 6: Average hourly earnings of female and male employees, by age

FIGURE 6: Average hourly earnings of female and male employees by age

Average hourly earnings		
Age group	Female	Male
0-14	0.83GHC	2.93GHC
15-24	1.56GHC	4.33GHC
25 and above	8.96GHC	6.09GHC

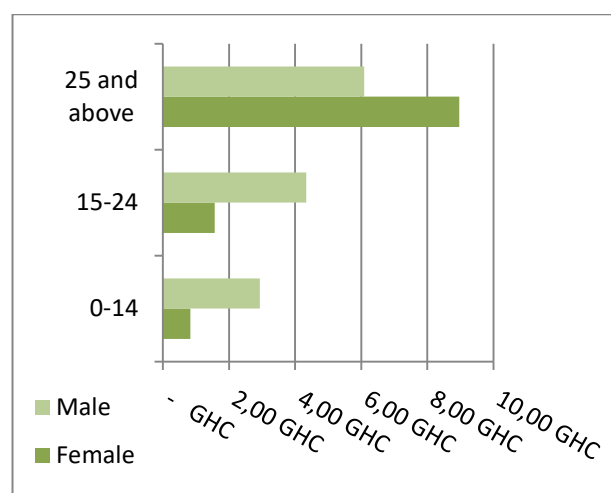


Table 6 and figure 6 show that the younger employees were the lower hourly earnings. With

increasing age the hourly income increased for both females and males. Striking is the fact that females earned three times less than males in the age group 0-14 years and still 2,5 times less as youths (15-24 years). Opposite to that, females aged 25 and above earned more than males in the same age group.

TABLE 7: Daily working hours of female and male employees

	count	mean	std	min	25%	50%	75%	max
Female	50.0	8.77	4.81	1.0	5.0	9.0	13.0	19.0
Male	78.0	8.97	4.78	1.0	6.0	8.0	12.0	24.0

Table 7 shows that the mean value for males and females is almost equal and that also the standard deviation (std) is almost equal. That leads to the assumption that females and males worked same amount of hours per day.

TABLE 8: Hourly earnings of female and male employees, in GHC

	count	mean	std	min	25%	50%	75%	max
Female	50.0	6.21	14.25	0	0.8	1.63	4.79	75
Male	78.0	4.97	5.0	0	1.67	3.75	6.67	27.5

Table 8 provides values on the hourly wage disaggregated by sex and it shows a significant gender disparity. Even though the mean of females is higher than males, the standard deviation of females is three times as high as the standard deviation of males. Also it is visible that 50% of males earned twice as double as females and only very few females got a high wage.

TABLE 9: Average daily earnings of female and male employees, in GHC

	count	mean	std	min	25%	50%	75%	max
Female	50.0	35.38	62.3	0	6.6	15.0	28.75	300.0
Male	78.0	36.11	41.05	0	10.5	30.0	45.00	250.0

The average daily income of females and males appears to be equal but looking closer at the standard deviation shows that few females must had an outstanding daily income but 50% of females were earning only half as much as males do. Even 75% of females earned 28.75GHC per day whereby 75% of males earned 45GHC per day.

TABLE 10: Average hourly earnings of female and male employees, by disability

FIGURE 7: Average hourly earnings of female and male employees, by disability

Sex	Disability	Total	Hourly wage
Female	No	49	6.27GHC
	Yes	1	3.33GHC
Male	No	73	4.89GHC
	Yes	8	5.68GHC

Category	Hourly wage (GHC)
Females with disability	3.33
Males with disability	5.68
Females without disability	6.27
Males without disability	4.89

Table 10 shows that amongst employed females just one female had a disability, and that she earned only half of the hourly wage compared to the other females. Amongst the males this interpretation does not apply as males with a disability earned 5.7GHC per hour and males without disability 4.9GHC. Gender disparities existed irrespectively of disability. Females without disability earned more than males without disability whereas females with a disability earned 1.7 times less than males with a disability. Also the significance on the disaggregation “disability” is weak as the total of respondents with disability was very small.

#### *Indicator 8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training*

The so-called NEET rate (Youth not in employment, education or training) was 7% in total in Busua.

Looking at the disaggregation of age and sex shows that the NEET rate for females (36.36%) was significantly higher than for males (3.33%) in the age group 15-19 years. This trend continues in the age group of 20-24 years-old whereby the values converge. For females the trend was positive as the NEET rate dropped by 10%, in contrary to males’ NEET rate which increased 3 times at a higher age.

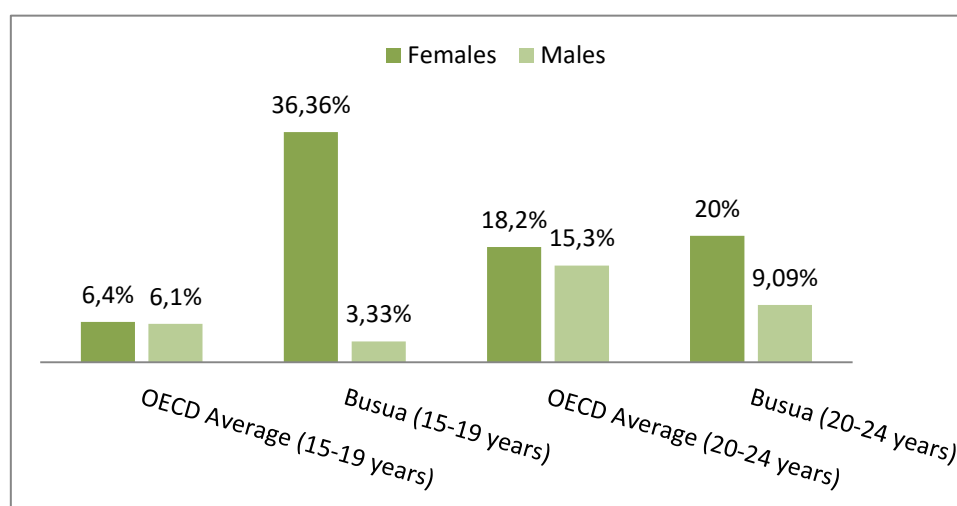
The OECD average values show that there is no gender disparity in age group 15-19 years and only a slightly higher NEET rate for females at a higher age. In comparison to the community of Busua this shows a pressing need for development. Positive is that males in Busua had an outstanding low NEET rate as youth. Nevertheless, the high NEET for adult males and females that is visible in OECD countries as well as in Busua is alarming.

TABLE 11: NEET rate of Busua in comparison to OECD average (cf. OECD 2019), by sex and age

OECD Average	15-19 years old	20-24 years old
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Female	6,4%	18,2%
Male	6,1%	15,3%
Community of Busua	15-19 years old	20-24 years old
Female	36,36% (8/22)	20% (3/15)
Male	3,33% (1/30)	9,09% (2/22)

FIGURE 8: NEET rate of Busua in comparison to OECD average (cf. OECD 2019), by sex and age



### E. Equality

**Indicator 10.2.1** *Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities*

Amongst all respondents (total 242) more than 90% stated to live below 500GHC per month. The disaggregation of sex shows that the majority of both females and males lived under this limit (females: 94%, males: 86%)

TABLE 12: Proportion of people living below and above 50 per cent of median income, by sex and persons with disabilities

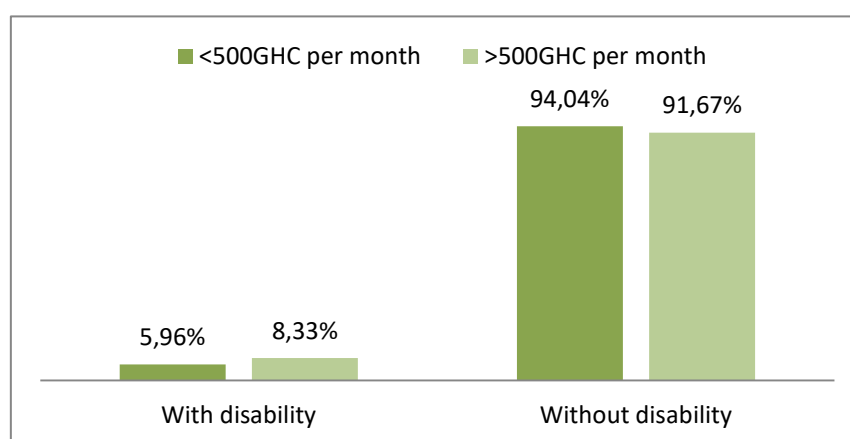
Income	With disability	Without disability
<500GHC per month	5,96% (13/218)	94,04% (205/218)



>500GHC per month	8,33% (2/24)	91,67% (22/24)
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The disaggregation of disability (see table12) shows that amongst all people with disability the percentage of people living of more than 500GHC per month was slightly higher (8.33%) than those living below 500GHC per month (5.96%). In contrary, people without disability were more often living below 500GHC per month (94.04%) than people without disability living above this limit (91.67%).

**FIGURE 9: Proportion of people living below and above 50 per cent of median income, by sex and persons with disabilities**



### ***F. Safety***

- Indicator 16.1.3*      *Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months*
- Indicator 16.1.4*      *Proportion of population that feel safe walking alone around the area they live*
- Indicator 16.2.1*      *Proportion of children aged 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month*
- Indicator 16.2.3*      *Proportion of young women and men aged 18 - 29 years who experienced sexual violence by age 18*

*Indicator 16.1.3*      *Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months*

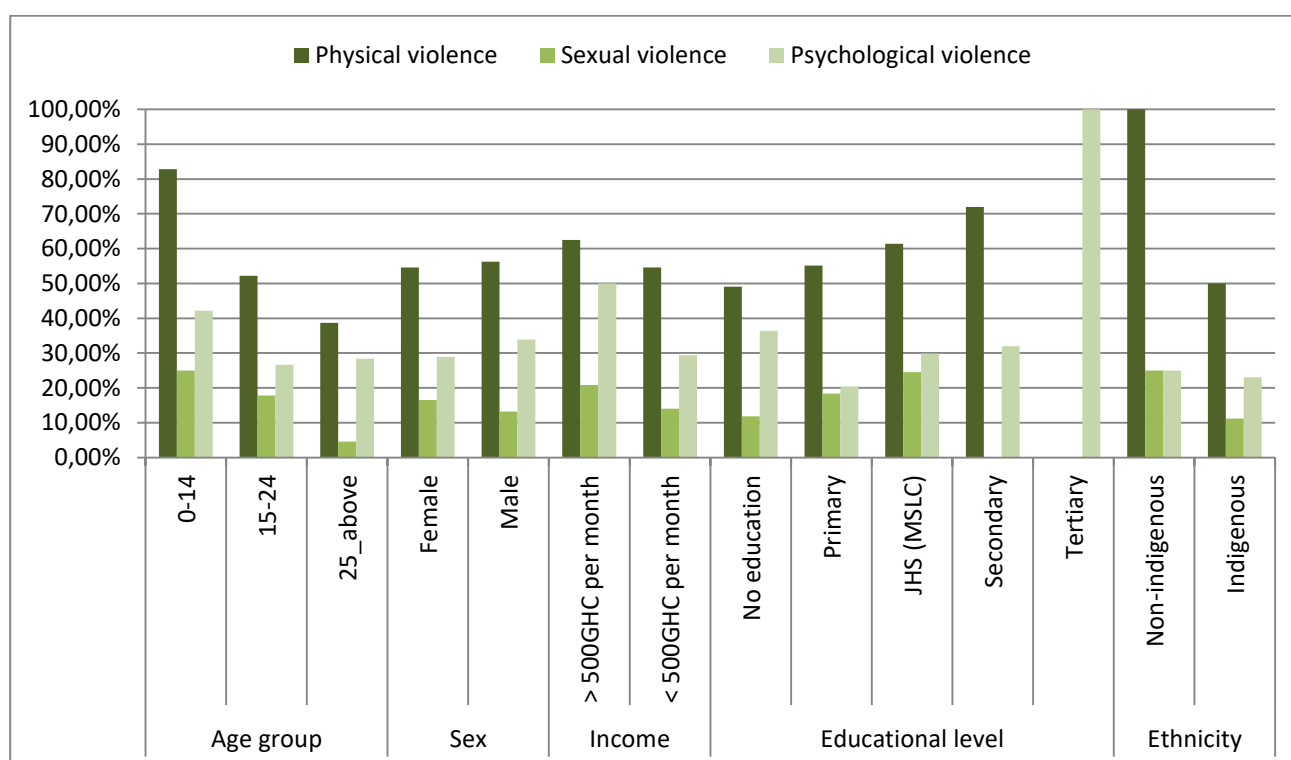
Amongst all respondents (242), 55.37% had experienced physical violence and 14.88% had experienced sexual violence. 31.4% have experienced threats which is the only internationally

measurable form of psychological violence at this time.

TABLE 13: Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months, by age, sex, income, education and ethnicity

Disaggregation	Physical violence	Sexual violence	Psychological violence
<b>Age group</b>			
0-14	82,81% (53/64)	25% (16/64)	42,19% (27/64)
15-24	51,69% (46/89)	17,98% (16/89)	26,67%(23/89)
25_above	38,64% (34/88)	4,55% (4/88)	28,4% (25/88)
<b>Sex</b>			
Female	54,56% (66/121)	16,53% (20/121)	28,93% (35/121)
Male	56,2% (68/121)	13,22% (16/121)	33,88% (41/121)
<b>Income</b>			
>500GHC per month	62,5% (15/24)	20,8% (5/24)	50% (12/24)
<500GHC per month	54,59% (119/218)	14% (30/218)	29,36% (86/218)
<b>Educational level</b>			
No education	49,09% (54/110)	11,82% (13/110)	36,36% (7/110)
Primary	55,1% (26/48)	18,37% (9/48)	20,41% (10/48)
JHS (MSLC)	61,4% (35/57)	24,56% (14/57)	29,82% (17/57)
Secondary	72% (18/25)	NaN	32% (8/25)
Tertiary	NaN	NaN	100% (1/1)
<b>Ethnicity</b>			
Non-indigenous	100% (4/4)	25% (1/4)	25% (1/4)
Indigenous	54,62% (130/238)	14,71% (35/238)	31,51% (75/238)

**FIGURE 10: Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months, by age, sex, income, education and ethnicity**



Beginning with physical violence and the disaggregation of age, table 13 shows that the younger respondents were the more often they experienced physical violence. The prevalence of experiences of physical violence of 0-14-year-olds is twice as high as for the 25-year-olds and above. It is the most common form of violence in the community.

Every second male and female experienced physical violence. However, the number of females living from less than 500GHC per month was slightly higher (62.5%) than the percentage of males (54.59%).

In respect to education the values show that in all levels more than 50% experienced physical violence, even with a rising tendency towards a higher educational level. People without education were also affected by physical violence by a prevalence of almost 50%.

The disaggregation of indigenous status shows every non-indigenous person experienced physical violence whereby indigenous people were affected only half as often.

The findings of experiences of sexual violence are as follows: Every fourth child experienced sexual violence. Less youth and adults experienced sexual violence. The disaggregation of sex and income show that slightly more females were affected than males and that people with more income were more often survivors of sexual violence. With respect to educational level it becomes clear that the likelihood of experiencing sexual violence is highest at JHS level which corresponds to the age disaggregation.

Non-indigenous people experienced sexual violence more often than indigenous people.

The prevalence of sexual violence was generally less than physical violence and this applies to all disaggregation categories.

Finally, the proportion of people subjected to psychological violence was 42.19% in the age group 0-14. It drops by higher age and is approximately equally prevalent amongst males and females with more or less 30%. Again, the prevalence of sexual violence was higher amongst people living from more than 500GHC per month than people living below this limit.

The disaggregation of educational level shows that people without education (36.36%) were more affected than those in school education (average 27.41% in primary, JHS and secondary school).

The value of tertiary education has to be ignored as it relates back to only one respondent.

The prevalence of experiences of sexual violence was almost equal amongst indigenous and non-indigenous people.

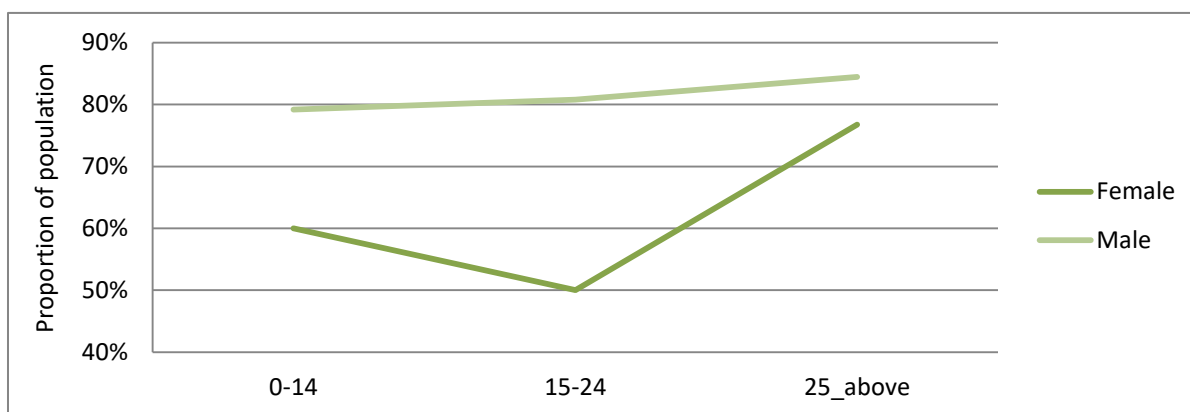
*Indicator 16.1.4 Proportion of population that feel safe walking alone around the area they live*

The proportion of population that stated to feel safe walking alone around the area they live is 72.31% in Busua. Females felt less safe (62.81%) than males (81.81%) whereby adult males felt most safe (84.44%) and females between 15 and 24 ages felt least safe in Busua (50%).

TABLE 14: Proportion of population that feel safe walking alone around the area they live, by age and sex

Age	Total	Percentage	Sex	Total	Proportion
0-14	43/64	67.19%	Female	24/40	60%
			Male	19/24	79,17%
15-24	60/89	67.78%	Female	18/36	50%
			Male	42/52	80,77%
25_above	71/88	80.68%	Female	33/43	76,74%
			Male	38/45	84,44%

FIGURE 11: Proportion of population that feel safe walking alone around the area they live, by age and sex



*Indicator 16.2.1 Proportion of children aged 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month*

27.27% of children under age 18 experienced physical punishment and/or psychological aggression by their caregivers in the past month.

**TABLE 15: Proportion of children aged 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month, by sex, income and origin**

Disaggregation		Proportion	Total
Sex	Female	70,91%	39/55
	Male	72,97%	27/37
Income level	>500GHC per month	100%	6/6
	<500GHC per month	69,77%	60/86
Origin	Native	64,29%	36/56
	Migrant	83,33%	30/36

**FIGURE 12: Proportion of children aged 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month, by sex, income and origin**

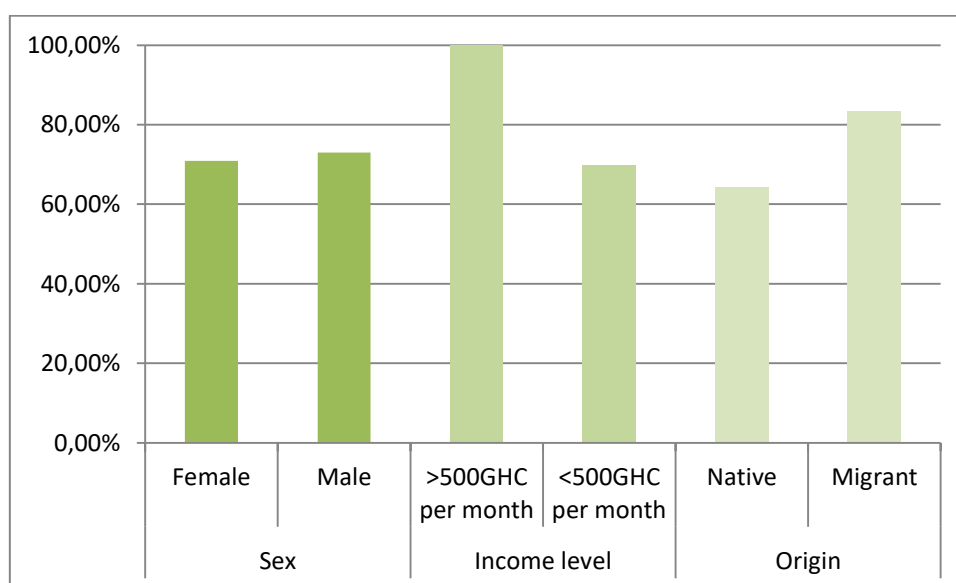


Table 15 and figure 12 show that amongst males and females of this age group more than 70% were subjected to physical punishment and/or psychological aggression by their caregivers. That means that it was equally contributed amongst the females and males. But looking at the income level it becomes clear that the prevalence is higher if a child is living above 500GHC per month. The prevalence of migrated children being subjected to physical punishment and/or psychological aggression by their caregivers is higher than the prevalence of native children.

*Indicator 16.2.3 Proportion of young women and men aged 18-29 years who experienced sexual violence by age 18*

Only one respondent who is between 18-29 years old stated that he/she was subjected to sexual violence by age 18. The comparison to the down standing data about the prevalence of experiences of sexual violence by age 18 also shows a very low value.

More data on experiences of sexual violence of minors in the community of Busua are available in the analysis of indicator 16.1.3.

**Data by police service Ahanta West Municipal Assembly (AWMA) 2018**

5/138,888 = 0.004% of the population of AWMA experienced sexual violence by age 18.



## *G. Technology*

### *Indicator 17.8.1      Proportion of individuals using the Internet*

The percentage of people using the internet was 36.78% in the community of Busua which is in accordance to the data of the International Telecommunication Union as it states that approximately 38% of the population in Ghana used the internet in 2017 (cf. US Department of State 2018: 10).

**TABLE 16: Proportion of individuals using the internet, by age, sex, income and origin**

Use of internet		Yes		No	
Percentage		36,78%		63,22%	
Total		89		153	
Age	0-14	40,63%	26	59,38%	38
	15-24	47,78%	43	52,22%	47
	25_above	22,73%	20	77,27%	68
Sex	Female	28,1%	34	71,9%	87
	Male	45,46%	55	54,55%	66
Income Level	>500GHC per month	41,67%	10	58,33%	14
	<500GHC per month	36,24%	79	63,71%	139
Origin	Native	36,54%	57	63,46%	99
	Migrant	37,21%	32	62,79%	54

FIGURE 13: Proportion of individuals using the internet, by age, sex, income and origin

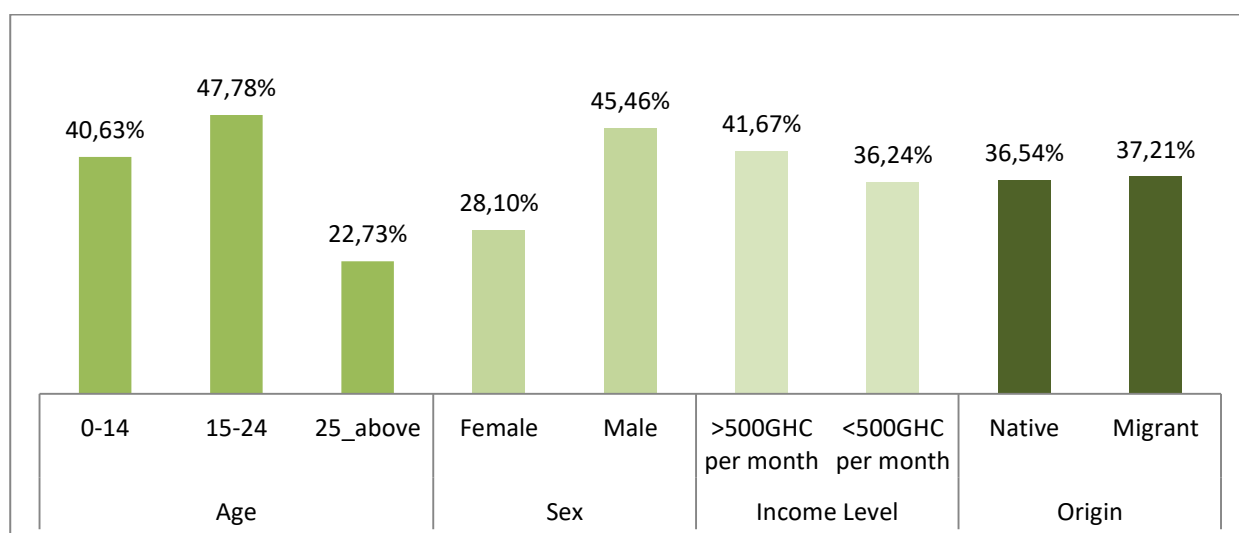


Table 16 and figure 13 show that values of 25 year-olds and above diverge to the most in comparison to the proportions of other age groups. Only 22.73% of people aged 25 and above used the internet whereas youth and children make more than 40% of the population who used the internet.

The disaggregation of sex shows that only 28.2% of the female population was using the internet, contrary to males as their proportion is almost equally distributed.

Looking at income level as disaggregate shows that people living of more than 500GHC per month were more likely to use internet than those living below this limit.

## Data by Ghana Statistical Service, 2010 Population Housing Census

### Use of internet Facility

The table shows household population using internet facilities. Out of the total population of persons aged 12 years and older (69,784), 2,342 - representing about 3 percent - used internet facilities. As in the case of ownership of mobile phones, there was a higher proportion of males (68.1%) with access to internet facilities as compared to females (31.9%)

**Population 12 Years and Older by Mobile Phone Ownership, Internet Facility Usage and Sex**

ICT Indicators	Number	Percent	Number	Percent	Number	Percent
Population 12 years and older			Population having mobile phone		Population using internet facility	
Total	69,784	100.0	27,935	100.0	2,342	100.0
Male	32,688	46.8	15,673	56.1	1,596	68.1
Female	37,096	53.2	12,262	43.9	746	31.9
Percentage of Population 12 years and older having mobile phone			40.0			
Percentage of Population 12 years and older using internet facility			3.4			

### Household Ownership of Desktop or Laptop Computer

Table 5.2 shows that 3.8 percent of the total households (26,095) in the district have a desktop or laptop computer. According to the Table there is also variations in the proportion of households with a desktop or laptop by sex. Whereas approximately 76 percent of males had desktops or laptops, only about 24 percent of females had access to such ICT facility.

**Table 42: Households having Desktop/laptop Computers, Fixed Telephone Lines and Sex of Head**

	Number	Percent	Number	Percent	Number	Percent
<u>Number of households</u>			Households having desktop/laptop computers		Households having fixed telephone lines	
Total	26,095	100.0	983	100.0	153	100.0
Male	16,196	62.1	746	75.9	108	70.6
Female	9,899	37.9	237	24.1	45	29.4
Percentage of households having desktop/laptop computers			3.8			
Percentages of households having fixed telephone lines			0.6			

## 8. Conclusion and recommendations

### *Conclusion and concept proposals for further research:*

This research work has dealt with the question how an NGO in the Global South can monitor the implementation of the SDGs. In order to answer this research question, one of the first chapters dealt with the SDGs as theoretical framework and discussed their global relevance as well as the national implementation of and conditions that are necessary to understand and address the several existing problems. It became clear that those challenges are intertwining and therefore complicate addressing these problems, both in a global but also in a local context. Therefore, the solidarity and commitment of all states is needed, as well as the contribution of civil society and academia as they help reviewing the progress toward achieving SDGs and press for accountability of governance (cf. TransparencyInternational 2018).

Also in Ghana, the government and the UN emphasize the role of the civil society, arguing that the support of all stakeholders is a necessary condition for meeting the SDGs (cf. UNDP 2018: i). The potential promotion governmental accountability by civil society is a crucial factor for the sustainability of development. That the recognition and scope of action of civil society has been growing in the past in Ghana is also a welcomed factor that has the potential to positively contribute to the shaping of democratic and inclusive governance and society and diminishing inequalities, war and violence (cf. Eberlei 2014: 35f). For OPC, other NGOs and civil society members this means a good precondition for their work towards the contribution to the implementation of the SDGs.

This research work aims to promote the contribution of a civil society organization in the process of SDG implementation. Even though this research work is only focusing on a small fisher community in Ghana, still it may be informative as piloting project, whether it is for this case study or for monitoring of SDGs by an NGO in a region with similar socio-economic conditions as found in Busua.

Besides the technical tools and results that this research provides, it hopefully also raises the awareness of the importance of an NGO to involve in the implementation of SDGs. OPC might not have state power but it can understand the problems in their community and initiate community-led projects for decentralized empowerment towards sustainable development.

For the intervention period which is just getting in full swing this year, it is to be hoped that OPC is finding this research work helpful to identify, develop and amend their project activities towards the achievement of sustainable and holistic living in Busua.

Due to the prioritization of SDGs for this research work, a number of goals and targets had to be

excluded even though they may be pressing issues in the community of Busua. According to the pledge of the UN to leave no one behind, following concept proposals for case studies could be relevant for OPC to learn about other problems and needs in the community and in a second step, for addressing those issues with adequate interventions.

- a. The number of people with disabilities that were interviewed throughout this research was very little therefore a study that concentrates only on this group should be taken into consideration. As people with disabilities have special needs and face discrimination in many spheres of life (cf. CBM 2018: 4ff), a case study on the living conditions and experiences of people with disabilities highly important as it will help OPC to learn more about their situation in the community of Busua as well as understanding how inclusion can take place in this community. An exemplary study took place in Tamale, Northern Ghana about the “identification and removal of barriers to the inclusion of persons with disabilities in mainstream society” (Naami 2014: 21). Researcher Augustina Naami confirmed in her study that the social model which problematizes the disabling environment and not the individual applies to Ghana (cf. Naami 2014: 37). A similar study could provide valuable information on the situation in Busua.
- b. A case study on the prevalence of undernourishment (indicator 2.1.1) would provide important information that can help OPC to meet target 2.1: *By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round* in the community of Busua and by that contributing to SDG 2. *End hunger, achieve food security and improved nutrition and promote sustainable agriculture.*
- c. Another case study that would be relevant to addressing SDG 2, focusses on the volume of production per labour unit by classes of farming/pastoral/forestry enterprise size (indicator 2.3.1) and the average income of small-scale food producers, by sex and indigenous status (indicator 2.3.2). A case study on both indicators could help OPC gaining data on the problems on the ground and based on that developing activities that meet the respective target 2.3: *By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.*

- d. SDG 3 *Ensure healthy lives and promote well-being for all at all ages* has been excluded from this research, yet it is very relevant for OPC as it is one of the NGO's core objectives. Achieving the elimination of epidemics, especially Malaria is a widespread disease in Ghana and therefore further research on the incidences and treatments might help to figure out effective, affordable and sustainable solutions, like drug supply or special measurements for under-5 year old sufferers in the community of Busua (cf. WHO 2018: 80).
- e. Another target of SDG 3 plays an important role for OPC: *Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol* (target 3.5) is an issue that OPC probably needs to do a case study on, as drug and alcohol abuse is a visible issue in the community but precise prevalence as well as the reasons for the abuses are unknown. For this case study, OPC could also learn on the socio-economic conditions of the persons affected in order to analyze correlations and address the issue holistically.
- f. Even though OPC is predominantly working in the field of non-formal education, still it aims to contribute to better quality of formal education. For the monitoring of their objectives, OPC might use the indication of target 4a *Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all* which requires the measurement of the *proportion of schools with access to: (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions)*. Meeting this indication and creating sustainable learning environments in their own educational center but also promoting it in the educational institutions, will lead OPC to *ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*, just as SDG 4 states.
- g. OPC aims to achieve gender equality and empower all women and girls, according to SDG 5. Therefore the NGO has to ensure that women work in managerial positions to *ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life* (target 5.5). A commissioner for gender equality could take over a case study on this issue that could provide data on the current situation and figure out needs for action to ensure the accomplishment of SDG 5.



- h. OPC is planning to address goal 9. *Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation*, and specifically target 9.3: *Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets* by offering a micro-credit scheme or partnering with such an institution in future. A case study which assesses the impacts on people who received a loan or line of credit would be helpful to evaluate and improve the services.
- i. OPC's overall objective corresponds to target 12.8 of the UN to *ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature*. The indicator (12.8.1) that the UN provides for this target refers to (i) global citizenship education and (ii) education for sustainable development (including climate change education) in formal education. Although, OPC's focus is on non-formal education, still this indication can help the NGO to monitor their programs as education for sustainable development is very important for the progress of the implementation of the SDGs throughout the empowerment of individuals to change their thinking and behaving towards a better world (cf. UNESCO 2019a). Global citizenship is also called Peace and Human Rights Education and it is based on the constitution of the UNESCO that aims to build peace in the minds of men and women (cf. UNESCO 2019b). OPC can refer to these elements of education and make use of available materials, such as (critical) literature on international/ African perspectives as well as learning from the methodology that is provided for these elements.

At the end of this research work, recommendations are given to OPC with the aim to help the organization with their future work on the implementation and monitoring of the selected SDGs. In the following, a chart on those SDGs provides concluding interpretations of the study findings and highlights the most pressing issues of focus. Based on that, short recommendations are given for possible interventions as well as information on aspects to be considered. Afterwards, general recommendations are given to OPC for deeper examination with the research topic and networking with other stakeholders in this field.

TABLE 17. Concluding interpretation and recommendation for action

Selected SDG	Recommendation
<p><b>Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</b></p> <p>Target 4.3: By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university</p> <p><i>Indicator 4.3.1: Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex</i></p>	<p>The results of indicator 4.3.1 shows that the participation rate of youth and adults aged 15-24 years who are living below 500GHC per month was only around 50% for both males and females. OPC's focus on the promotion of non-formal education and training for children and youth is addressing this issue in the community of Busua. Thereby it should be considered that people above this age group may also get the change to educate themselves and by that increasing their chances to lift themselves out of poverty. A special focus on women aged 25 and above might help to reduce the gender imbalance.</p> <p>The qualitative data about reasons of lack of education shows that loss of caregivers severely affected the education of children and youth and therefore orphans need special attention and intervention to ensure that they are not left behind when it comes to education. Moreover, financial constraints that cause school drop-out also need to be addressed as well as the challenges that children and youth with health impacts or disabilities have to face. OPC has to identify these vulnerable children in the community. A community-led support system may ensure that these children do not fall through the crack rather than being supported by a collective that safes funds for the case that a child is not able to attend school. Also self-sustained opportunities for youth to participate in training are needed to promote life learning opportunities and better chances to find employment.</p>
<p><b>Goal 6: Ensure availability and sustainable management of water and sanitation for all</b></p> <p>Target 6.1: By 2030, achieve universal and equitable</p>	<p>The results show that all community members had access to a basic water source and the vast majority used borehole as their primary water source. In almost every case there was a chemical contamination of the borehole which leads to the assumption that the majority of the population</p>

<p>access to safe and affordable drinking water for all</p> <p><i>Indicator 6.1.1: Proportion of population using safely managed drinking water services</i></p>	<p>does not have access to safely managed drinking water services. Due to the fact that people not only use the water for cooking, washing and cleaning but also drink contaminated water there is a need for action.</p> <p>First, a further research on the risk of contamination is needed in order to find out about the possible health risks. Second, based on this information alternative water fertilization methods may be introduced to minimize the health impacts and protect the environment. If this case is given, OPC may contribute to the introduction and distribution of alternatives which have to come along with raising awareness on this issue in a cultural-sensitive and thoughtful way.</p>
<p><b>Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all</b></p> <p>Target 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services</p> <p><i>Indicator 7.1.1: Proportion of population with access to electricity</i></p> <p><i>Indicator 7.1.2: Proportion of population with primary reliance on clean fuels and technology</i></p>	<p>Indicator 7.1.1: Results show that only a third of the population had access to electricity of which 40% stated that the quantity and quality of their electricity was bad and 90% reported to have weekly and daily power interruptions Thus, a need of action appears in three ways: First, one third of the population living without electricity in Busua need to get access to it. Second, the quantity and quality has to improve and third, power interruptions must reduce.</p> <p>As OPC's scope of action may be limited for solving these problems a joint intervention with other NGO's and community stakeholders may be helpful to confront authorities with this problem and highlighting that Busua is left behind in the regional comparison.</p> <p>Indicator 7.1.2: The data analysis shows that only 15% of the people cooking themselves used a stove which is considered as clean technology if not being used with kerosene. The vast majority relies on open fire and coal pot, therefore the proportion of population using a stove for cooking in combination with a clean fuel has to be increased so that health risks reduce and other positive side effects may be achieved (such as time-saving cooking and less physical effort). It has to be considered that the use of stove correlates to a higher income (above 500GHC per month) and so</p>

	<p>people living below 500GHC per month may need financial support in form of micro credits or loans so that they can afford a stove. Also collective investment schemes may be introduced to support the investment of stoves by groups. Besides that, OPC's role and responsibility is to educate the community about the advantages of using clean fuels and technologies so that people understand the importance of doing this investment. OPC must also research on high quality technologies and clean fuels that are affordable and accessible for people living in Busua.</p>
<p><b>Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</b></p> <p>Target 8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services</p> <p><i>Indicator 8.3.1: Proportion of informal employment in non-agriculture employment, by sex</i></p>	<p>Indicator 8.3.1: 50% of the whole population is working of which 97% is employed in the informal sector which means that the vast majority of working people may be exposed to poor working conditions such as lack of unemployment insurance and/or sufficient and guaranteed wages and pensions as furtherly explained in chapter 5.2 "Definitions and further explanations of indicators". Moreover, the results show that only few people were involved in agricultural activities. OPC is addressing this issue already and focusing on creating training and job opportunities in the agricultural sector. In order to meet target 8.3, OPC may provide internal policies as well as functioning as role model by guaranteeing social protection schemes and qualitative working conditions. The introduction of strict policies that ensure full and decent work for the trainees and employees might not only have positive impact on their lifes but also spread a desirable practice of an employer and raise awareness on the importance of this issue.</p>

<p>Target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.</p> <p><i>8.5.1: Average hourly earnings of female and male employees, by occupation, age and persons with disabilities</i></p> <p>Target 8.6: By 2020, substantially reduce the proportion of youth not in employment, education or training</p> <p><i>Indicator 8.6.1: Proportion of youth (aged 15-24 years) not in education, employment or training</i></p>	<p>Indicator 8.5.1: The results of this indicator show that children earned least and that wage increased at a higher age. The results also show a significant gender disparity whereby youth males earned three times more than youth females. Even though, males and females have equal working hours, their daily income differs up to 50% whereby males earned more and females less. Due to lack of data about occupation a gender pay gap cannot be identified. Therefore the impact assessment has to consider this disaggregation. Nevertheless, OPC can contribute to increasing well-paid job opportunities for females and raising awareness on the importance of equal treatment of females and males as well as people with disabilities.</p> <p>Indicator 8.6.1.: The data of the research shows that the NEET rate for females in the age group 15-19 years was extremely high whereby the NEET rate for males in that age category was under the OECD average. With increasing age the NEET rate of females reduced but continued to be exceedingly high. The same trend applies to males whereby their NEET rate continued to be below the females' rate and near to the OECD average. Consequent, a pressing need of action is the increase of females aged 15-19 who are in employment, education or training. Furthermore, the NEET rate of 20-24 years-old males and females need to be reduced by supporting these young adults with training opportunities, employment and non-formal education. The goal is not to adhere to the OECD average rate, rather creating equal and inclusive opportunities for youth and adults in the community of Busua.</p>
<p><b>Goal 10: Reduce inequality within and among countries</b></p> <p>Target 10.2: By 2030, empower and promote the</p>	<p>The values of this indicator show that more than 90% of the population of Busua lived below 500GHC per month which leads to the conclusion that poverty reduction is an urgent issue. It equally affects females and males in Busua. OPC may contribute to poverty reduction by</p>

<p>social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status</p> <p><i>Indicator 10.2.1: Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities</i></p>	<p>providing fair payment and introducing micro credit schemes and loans to the community that may lead to job creation and development of businesses whereby such opportunities have to be accessible for all and especially supporting vulnerable groups.</p>
<p><b>Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</b></p> <p>Target 16.1: Significantly reduce all forms of violence and related death rates everywhere</p> <p><i>Indicator 16.1.3: Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months</i></p> <p><i>Indicator 16.1.4: Proportion of population that feel safe walking alone around the area they live</i></p> <p>Target 16.2: End abuse, exploitation, trafficking and all forms of violence against and torture of children</p>	<p>Indicator 16.1.3: Over 50% of the population experienced physical violence, over 30% experienced psychological violence and almost 15% were survivors of sexual violence.</p> <p>Children and youths were most likely to experience physical violence which is especially grave as children are most vulnerable and need special protection. Children and youth participating in formal education were even more likely to experience physical violence which can lead back to physical violence by teachers, the so-called <i>canning</i>. OPC needs to intervene and protect children from physical violence in the private but also in the institutional sphere. The consulting of experts of the social welfare such as social workers and child protection specialist may help to address the issue. Also the involvement of stakeholders in the community (and in Ghana) who support the implementation of national child protection in schools and in the homes should be included in the process. For the volunteer program that OPC runs, local students and social workers should be preferred to foreign volunteers as they have better knowledge of the culture and national policies. Ghanaian students who have to conduct their National Service may be asked to facilitate the experts.</p>

<p><i>Indicator 16.2.1: Proportion of children aged 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month</i></p> <p><i>Indicator 16.2.3: Proportion of young women and men aged 18 - 29 years who experienced sexual violence by age 18</i></p>	<p>Looking at experiences of sexual violence, again, children were most likely to be affected and therefore they need special protection and intervention. Raising public awareness on this issue may help to increase the safety of the public space and mobilize the community to protect the children. Heavy underreporting is a problem that also minimizes the psychological barrier of offenders. Therefore, OPC must also contribute to the safety of people by encouraging and supporting survivors of sexual violence to report it to the police and help to call offenders to account.</p> <p>OPC also has to consider that the proportion of non-indigenous people who experienced physical and sexual violence is higher than it is of indigenous people. OPC may address this issue by doing further research on this proportional distribution and understanding possible conflicts or underlying power relations. Based on that, the NGO together with indigenous and non-indigenous stakeholders may develop interventions to address this issue.</p> <p>Indicator 16.1.4: There is a need of action to increase the safety feeling for females. Every second 15-24 years old female was feeling unsafe walking alone in her area. OPC may contribute to less fear by raising awareness on this issue. A technical solution may be to provide a service for females that is always available, possibly throughout providing a hotline that can be contacted in situations of fear. Also further investigations on places and sources of fear may help to identify existing dangers in the area and based on that, developing interventions towards a safer environment and a safer feeling when walking alone in the neighborhood.</p> <p>Indicator 16.2.1: The results of this indicator show that almost every third child experienced physical punishment and/or psychological aggression by their caregivers in the past month</p>
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	<p>whereby migrated children and children living of more than 500GHC per month were more likely to be affected. Similar as indicator 16.1.3 this issue requires professional intervention and the help of experts who are familiar with domestic violence. As physical punishment and psychological aggression were widespread practices in the research area, the need of action lays in raising awareness on the lasting damages that this practice causes and providing alternative disciplining methods. Social workers, child protection specialists and other experts in Ghana may have materials, methods and further recommendations on how OPC can contribute to minimizing the number of affected children.</p> <p>Indicator 16.2.3: N/A due to insignificant values.</p>
<p><b>Goal 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development</b></p> <p>Target 17.8: Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology</p> <p><i>Indicator 17.8.1: Proportion of individuals using the Internet</i></p>	<p>The recommendation for this indicator is to increase the use of internet and promote a responsible handling with internet by providing a public internet access and teaching interested people on how to use it for specific reasons. Collaboration with respective NGO's in the community is to be considered. Workshops on accessing websites with educational contents may also tackle other issues and help to develop professional and life skills as well as contributing to the achievement of other improvements that the UN correlates to the enhancement of ICT.</p>

*General recommendations for OPC:*

- i. Get in touch with the CSO Platform Ghana which brings together civil society groups in Ghana and plans, coordinates and develops strategies to include the civil society initiatives into the implementation process of the SDGs. The CSO Platform Ghana may provides opportunities for OPC to learn more about SDG implementation and networking with other civil society groups.
- ii. Get familiar with their joint publication “Sustainable Development Goals (SDGs) in Ghana: Why they matter & how we can help” (cf. UNDP 2017) and share it with the organization’s members, community stakeholders and partners of OPC to spread awareness on the role of civil society and individuals towards the achievement of the SDGs as well as mobilizing community engagement.
- iii. Also the NGO Youth Advocates Ghana (YAG) is showing strong commitment to contribution to the achievement of the SDGs and started the “African Youth SDGs Summit in 2017 in Ghana as an annual Pan-African country rotational initiative to mobilize and activate the power of young people to drive the implementation of the Sustainable Development Goals (SDGs) in Africa” (UNSDGActionCampaign 2019). Getting in touch with YAG and participating in the SDG summit may be very inspirational and constructive.
- iv. Moreover, Ghana is going to launch the Voluntary National Review (VNR) Report at the United Nations in July 2019 during the High-Level Political Forum on the Sustainable Development Goals (SDGs) which is a relevant report that OPC should be familiar with. It highlights some achievements of governments and CSOs in relation to the SDGs implementation as well as capturing the engagement of the youth in the SDGs and the concept of “Leave no one behind” (cf. UN Ghana n.d.).
- v. Use the approach of the theory of change for the implementation of the SDGs as it is more appropriate for the issues that were dealt with in this study. In comparison to the log frame, it works as instrument for the solution of complex social problems and it was especially developed for community change progresses. Therefore it can be used as a project- planning tool which will help OPC to develop and adapt their interventions so that they can make a long-lasting impact (cf. Anderson 2006: 3ff). The UNSDP Framework provides a *Theory of Change Schematic Summary* which gives an overview on the national outcomes and UN outputs that can be used for deeper understanding. (cf. UN Ghana 2018: 36f).

- vi. Support people with disabilities and women to engage in OPC activities, minimize discriminative practices and promote gender equality within OPC. For the leading positions, the project activities and even this impact assessment, OPC can act as role model and empower vulnerable groups by putting them into positions of power which allows them to have a voice and represent their interests.<sup>14</sup> As NGO which aims to promote education and improve associated policies, OPC carries a responsibility to engage in eliminating labels towards people with disability that are uphold by socio-cultural and traditional values in the Ghana society. It may be a mission of OPC to contribute to the reduction of segregation and work towards an inclusive community that sees the talents and potentials of persons with disabilities (cf. Agbenyega 2012).

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<sup>14</sup> The Community Development, Gender Equality and Children Section, Division of International Protection, UNHCR Geneva published a non-exhaustive reference list of organizations working with and for persons with disabilities world-wide which names five organizations and agencies in Ghana which can be interesting for OPC to expand their partnerships. The document “NGOs & UN Agencies Assisting Persons with Disabilities” is available under: <https://www.unhcr.org/4ec3c78c6.pdf>

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## 10. Declaration of authorship

Hereby I, *Joana Loreen Keller*, Matr. No 768749, confirm that this assignment is my own work and that I have only sought and used mentioned tools. I have clearly referenced in the text and the bibliography all sources used in the work (printed sources, internet or any other source), including verbatim citations or paraphrases. I am aware of the fact that plagiarism is an attempt to deceive which, in case of recurrence, can result in a loss of test authorization. Furthermore, I confirm that neither this work nor parts of it have been previously, or concurrently, used as an exam work neither for other courses nor within other exam processes.

Place and date: Dillenburg, 03.07.2019

Signature: 

## 11. Appendixes

- I. Questionnaire of baseline survey
- II. Instruction for computational analysis
- III. Computational analysis

### I. Appendix: Questionnaire of baseline survey

Dear interviewer,

1. *Introduce yourself*
2. *Explain your work*
3. *Ask for consent to conduct the survey*
4. *Explain that this interview is confidential*
5. *If appropriate mention the duration of the survey*
6. *Create a safe environment with your respondents so he/she feels confident to share*

1. First name and surname:

2. Age

3. Sex

☐ Male ☐ Female ☐ Other

4. Marital status

☐ Single ☐ Married ☐ Divorced/ widowed ☐ Other

5. Do you have any form of disability?

☐ Yes ☐ No

6. What is your household size?

7. In which area are you living?

☐ Rural ☐ Urban

8. Did you migrate from another region to where you live now?

☐ No (Native) ☐ Yes (Migrant) (Jump to question 10)

9. Are you original /indigenous settler of the region you live in?

☐ No ☐ Yes ☐ Other ethnic group: .....

10. Have you been using the internet from any location in the past three months irrespective of the device being used?

☐ No ☐ Yes

11. Which educational level did you complete?

☐ No education ☐ Primary ☐ JHS (MSLC) ☐ Secondary ☐ Tertiary ☐ Other

**12. If the interviewee lacks education what is/are the cause/s for it?**

- ☐ Financial challenges    ☐ Social problems    ☐ Religious beliefs    ☐ Gender issues    ☐  
Health/ Disability    ☐ Free decision    ☐ Other reasons    ☐ None

**12.1** Use this space to note down further explanations that refer to his/her lack of education. Please write in English and in direct speech.

**13. Have you been participating formal education in the past 12 months?**

- ☐ Yes    ☐ No

**14. Which non-formal education and training have you been participating in the past 12 months?**

- ☐ Learning a trade    ☐ Short- course    ☐ Workshop    ☐ Seminar    ☐ Others    ☐  
None

**15. Do you perform work for others in exchange for pay or profit?**

- ☐ Yes    ☐ No

**16. Are you employed in the informal sector?**

- ☐ Yes    ☐ No

**16.1** Do you have employment in agricultural activities?

- ☐ No    ☐ Yes

**17. During which specific brief period are you working?**

- ☐ Less than one to two hours work    ☐ Less than five hours work    ☐ One day work    ☐  
Continuous work

**18. How many hours are you working per day?**

**19. What is your average daily income excluding the contributions of your employer?**

**20. Are you living below 500GHC per month?**

- ☐ Yes    ☐ No

**21. Which of the basic water sources do you use?**

- ☐ Piped drinking water supply on premise  
☐ Public tap/stand post  
☐ Borehole  
☐ Rainwater  
☐ Bottled water/ sachet

**22. Is your drinking water protected from outside contamination?**

- ☐ Yes  
☐ No, it is contaminated with fecal matters  
☐ No, it is contaminated with chemical matters  
☐ I don't know if it is safe

**23. Do you have access to electricity?**

- ☐ Yes    ☐ No (Jump to question 27)

**24. Is the quantity of power sources sufficient?**

☐ Yes      ☐ No

**25. How is the quality of the energy source in terms of voltage and frequency?**

☐ Very good      ☐ Good      ☐ Neutral      ☐ Bad      ☐ Very bad

**26. How often do you have interruptions of power?**

☐ Every day (very often)      ☐ Every week (often)      ☐ Every month (rarely)      ☐ Never

**27. Which instrument are you primarily using for cooking?**

- ☐ Stove
- ☐ Coal Pot (brazier)
- ☐ Open fire
- ☐ Other
- ☐ None

**28. Which fuels are you using for your energy source?**

- ☐ Coal
- ☐ Wood
- ☐ Paper
- ☐ Natural gas
- ☐ Petroleum (gasoline or diesel fuel)

*Dear interviewer, please explain that now some very sensitive questions will be asked. Remind your interviewee that the information will be held confidential. All questions about physical, psychological and sexual violence refer to victimization, meaning it is being inflicted on a body of a person by someone else.*

**29. Have you ever experienced serious and/ or minor bodily injuries?**

- ☐ Gunshot or bullet wounds
- ☐ Knife or stab wounds
- ☐ Severed limbs
- ☐ Broken bones
- ☐ Teeth knocked out
- ☐ Internal injuries
- ☐ Being knocked unconscious
- ☐ Other severe or critical injuries
- ☐ Cuts
- ☐ Scratches
- ☐ Chipped teeth
- ☐ Swelling
- ☐ Black eye
- ☐ Other minor injuries

**30. Have you ever experienced serious and/ or minor physical force?**

- ☐ Being shot
- ☐ Being stabbed or cut
- ☐ Hit by an object

- ☐ Hit by a thrown object
- ☐ Poisoning and other applications of force with potential to cause serious bodily injury
- ☐ Hitting
- ☐ Slapping
- ☐ Pushing
- ☐ Tripping
- ☐ Knocking down
- ☐ Other applications of force with the potential to cause minor bodily injury

**31. Have you ever experienced sexual violence?**

- ☐ Unwanted sexual act
- ☐ Attempt to obtain a sexual act
- ☐ Contact or communication with unwanted sexual attention without valid consent as a result of intimidation
- ☐ Force
- ☐ Fraud
- ☐ Coercion
- ☐ Threat
- ☐ Deception
- ☐ Use of drugs, alcohol or abuse of power of a position of vulnerability (including rape and other forms of sexual assault)
- ☐ None

**32. Have you ever experienced threatening behavior which causes fear of injury or harm?**

- ☐ Yes     ☐ No

**33. How safe do you feel walking alone in your area/neighborhood?**

- ☐ Very Safe     ☐ Fairly safe     ☐ Bit unsafe     ☐ Very unsafe     ☐ I never walk alone after dark     ☐ I don't know

**34. Only ask if person is aged 0-17. Have you experienced physical punishment by your caregivers in the past month?**

- ☐ Being shaken
- ☐ Being hit or slapped on the hand/arm/leg
- ☐ Being hit on the bottom or elsewhere with a hard object
- ☐ Being spanked or hit on the bottom with a bare hand
- ☐ Being hit or slapped in the face, head or ears
- ☐ Being beaten over and over as hard as possible
- ☐ None

**35. Only ask, if person is aged 0-17. Have you experienced psychological aggression by your caregivers in the past month?**

- ☐ Shouting, yelling or screaming
- ☐ Being called offensive names (i.e. "dumb", "lazy")
- ☐ Any action that was intended to cause physical pain or discomfort, but no injuries



**36. Only ask if person is aged 18-29. Have you experienced sexual violence by age 18? (meaning 0-17)**

- ☐ Being induced or coerced to engage in any unlawful or psychologically harmful sexual activity
- ☐ Being used in commercial sexual exploitation
- ☐ Being used in audio or visual images of child sexual abuse
- ☐ Child prostitution
- ☐ Sexual slavery
- ☐ Sexual exploitation in travel and tourism
- ☐ Trafficking for purpose of sexual exploitation (within and between countries)
- ☐ Sale for sexual purposes
- ☐ Forced marriage
- ☐ Being sexually abused by another child whereas the offender was significantly older than me and the other child (or the offender used power, threat or other means of pressure)

**37. What is your phone number?**

Take a photo if the respondent cannot provide a phone number.

*This is the end of the questionnaire. Express your gratitude towards the interviewee for participating in this survey.*

## II. Appendix: Instruction for computational analysis

Number	Description	Disaggregation	Question	Remark
Indicator 4.3.1	Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex	Participation in formal & non-formal education in the past 12 months	13	Avoid double counting: Amongst those who are not in formal education in the past 12 months (“no”), count those who are in non-formal education and training in the past 12 months (“yes”).
		Youths and adults	2	Form age groups: AG1 (0-14); AG2 (15-24); AG3 (25 and above)
		Sex	3	
		Economic status	20	>/< 500 GHC per month
Indicator 6.1.1	Proportion of population using safely managed drinking water services	Drinking water service	21 and 22	Amongst those who state to access at least one drinking water source (21), count those who state “yes” in question 22 (drinking water source is clean). Additionally calculate how many respondents state to have chemical and fecal contamination (as additional information).
		Gender <sup>15</sup>	3	
		Disability	5	
		Economic status	20	>/< 500GHC p.m.
Indicator	Proportion of population	Access to electricity	23	Count all who state “yes”.

<sup>15</sup> For indicators 6.1.1 and 7.1.2 the UN metadata demands disaggregation of gender. For this research only data on sex was collected, therefore the disaggregation for indicators 6.1.1 and 7.1.2 refer to sex as well. The descriptive analysis of data in chapter 7.1 **Fehler! Verweisquelle konnte nicht gefunden werden.**, whereas will consider existing gender disparities.

7.1.1	with access to electricity	Quantity	24	Amongst those who have access to electricity (23), count those who state to have good quantity (“yes”).
		Quality	25	Amongst those who have access to electricity (23), count those who state to have “very good/good/neutral” quality
		Duration	26	Amongst those who have access to electricity (23), count those who have “never” power interruptions”. Additionally analyze how often (“every day/every week/every month”) people have power interruptions.
Indicator 7.1.2	Proportion of population with primary reliance on clean fuels and technology	Access to clean fuels and technology	27 and 28	Amongst those who use any form of cooking instrument “stove, coal pot, open fire, other” (27), count those who use “stove” (27) in combination with “natural gas” or “petroleum” (28). Only this combination applies to the indication.
		Gender	3	
Indicator 8.3.1	Proportion of informal employment in non-agriculture employment, by sex	Formal/ informal employment	15 and 16	Avoid double counting: Amongst all those who have formal (“yes” of question 15) or informal employment (“yes” of question 16) in non-agricultural activities (“no” of question 16.1), calculate the percentage of people in informal employment in non-agricultural activities.
		Agricultural activities	16.1	
		Sex	3	
Indicator 8.5.1	Average hourly earnings of female and male employees,	Employment (formal and informal)	15 and 16	Avoid double counting: All those who have formal employment (15) and all those who do not have formal

	by occupation, age and persons with disabilities			employment but informal employment (16) = total employment.
		Hourly earnings	18 and 19	Calculate hourly earnings though dividing daily income (18) by daily working hours (19).
		Sex	3	
		Age	2	Form age groups: AG1 (0-14), AG2 (15-24), AG3 (25 and above).
		Disability		
Indicator 8.6.1	Proportion of youth (aged 15-24 years) not in education, employment or training	Age	2	15- 24 (including)
		Not in employment, education or training	15 and 16 13 and 14	<p>a. Youth in formal/ informal employment (“yes” of questions 15 and 16, avoid double counting)</p> <p>b. Additionally, youth not in employment but in education or training: Count those who said “yes” in question 13 and those who said “no” but do any form of training (question 14)</p> <p>c. Calculate the indicated proportion by subtracting a. and b. from all youth in the given age limit.</p>
Indicator 10.2.1	Proportion of people living below 50 per cent of median income , by sex, age and persons with disabilities	Below 500GHC per month	20	Calculate the percentage of those who state “yes” in question 20, amongst all respondents.
		Sex	3	
		Age	2	Form age groups: AG1 (0-14), AG2 (15-24), AG3 (25-64), AG4 (65 and above).

		Disability	5	
Indicator 16.1.3	Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months	Physical violence	29 and 30	From all the associated questions at least one answer counts for the indication. The indication of physical violence requires at least one answer of question 29 or 30.  Additional to the total number of physical, psychological and sexual violence, an analysis of the prevalence of each single form of violence is recommended.
		Psychological violence	32	
		Sexual violence	31	
		Age	2	Form age groups: AG1 (0-14), AG2 (15-24), AG3 (25-64), AG4 (65 and above)
		Sex	3	
		Economic status	20	
		Educational status	11	Requires a combination with age groups in order to consider schooling students without completion.
		Citizenship		N/A
		Ethnicity	9	All those who state “yes/other” apply to indigenous status
Indicator 16.1.4	Proportion of population that feel safe walking alone around the area they live	Safety feeling	33	Divide number of people who state “very safe” and “fairly safe” by the total of respondents of question 33.
		Age	2	Form age groups: AG1 (0-14), AG2 (15-24), AG3 (25-64), AG4 (65 and above)
		Sex	3	
Indicator 16.2.1	Proportion of children aged 1-17 years who experienced	Children aged 1-17 who experienced physical	34 and 35	Avoid double counting

	any physical punishment and/or psychological aggression by caregivers in the past month	punishment and/or psychological aggression		
		Sex	3	
		Age	2	
		Educational status	20	
		Place of residence	8	Disaggregation lapses as all respondents reside in Busua.
		Geographical location	7	Disaggregation lapses as all respondents live in a rural area.
Indicator 16.2.3	Proportion of young women and men aged 18 - 29 years who experienced sexual violence by age 18	Experience of sexual violence by age 18	36	Divide the number of 18-29 year old population who experienced sexual violence (by age 18) by the total number of young men and women aged 18-29. Any form of sexual violence applies.
		Sex	3	
		Age	2	
		Economic status	20	
		Place of residence	8	Disaggregation lapses as all respondents reside in Busua.
		Geographical location	7	Disaggregation lapses as all respondents live in a rural area.
		Marital status	4	
		Education	11	
Indicator 17.8.1	Proportion of individuals using the Internet	Individuals using the internet in the past months	10	All those who state “yes” count.
		Region	7	Disaggregation lapses as all respondents live in a rural area.
		Sex	3	

		Age	2	Form age groups: AG1 (0-14), AG2 (15-24), AG3 (25-64), AG4 (65 and above).
		Education	11	
		Labor force status		Opposite percentage of NEET rate (indicator 8.6.1: not in employment, education or training).

### III. Appendix: Computational Analysis

Due to better readability the computational analysis is available as html document under:

[file:///D:/Daten\\_Joana/Dropbox/MA%20OPC/Final%20Data%20Analysis.html](file:///D:/Daten_Joana/Dropbox/MA%20OPC/Final%20Data%20Analysis.html)