INDIGENOUS PEOPLE, POVERTY AND COMMUNITY BASED HEALTH INSURANCE (CBHI) IN RWANDA

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Françoise HATEGEKIMANA
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Members of the Examining Committee:

Dr. Matthias Rieger
Dr. Natascha Wagner

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Inquiries:

Postal address:
Institute of Social Studies
P.O. Box 29776
2502 LT The Hague
The Netherlands

Location:
Kortenaerkade 12
2518 AX The Hague
The Netherlands

Telephone: +31 70 426 0460
Fax: +31 70 426 0799
Contents

List of Tables \( v \)
List of Figures \( v \)
List of Maps \( v \)
List of Appendices \( vi \)
List of Acronyms \( vii \)
Acknowledgements \( viii \)
Dedication \( ix \)
Abstract \( x \)

Chapter 1 Introduction \( 1 \)
1.1 Background Information \( 1 \)
1.2 Statement of the Research Problem \( 2 \)
1.3 General Objective \( 3 \)
1.3.1 Specific objectives \( 4 \)
1.4 Research Questions \( 4 \)
1.4.1 Sub questions \( 4 \)
1.5 Justification of the Research Topic \( 4 \)
1.6 Structure of the Paper \( 5 \)

Chapter 2 Literature Review \( 6 \)
2.1 Understanding the Batwa People in Rwanda \( 6 \)
2.2 Community-based Health Insurance in Africa \( 8 \)
2.3 Community Based Health Insurance Approach in Rwanda \( 9 \)
2.4 Conceptualization of Indigenous People Access to Health Care \( 11 \)
2.5 Conceptual Framework \( 12 \)
2.5.1 Social Exclusion or Social Marginalization \( 12 \)
2.5.2 Poverty \( 14 \)

Chapter 3 The Data and Methodology \( 16 \)
3.1 Data Collection \( 16 \)
3.1.1 Data Collection Methodological Approach \( 16 \)
3.1.2 Data Collection Tools \( 17 \)
3.1.3 Sample size and selection \( 18 \)
3.1.4 Process of Data Collection \( 21 \)
3.2 Methodology \( 23 \)

Chapter 4 Research Findings and Data Analysis \( 25 \)
4.1 Perception of the Batwa on CBHI 25
4.2 Barriers and Constraints 30
   4.2.1 Education 30
   4.2.2 Employment 32
   4.2.3 Wealth category rating 33
   4.2.4 Poverty rating 34
   4.2.5 Monthly income 35
4.3 Relationship between participation in CBHI and health/economic status of Batwa 38
4.6 Expectation of Batwa Community from Government 43
   4.6.1 Waiver of any form of Payment and Reclassification of Wealth Categories to include household size 43
   4.6.2 Education 45
   4.6.3 Expansion of Medical Coverage of CBHI 46

Chapter 5 Conclusion and Recommendations 48
5.1 Conclusion and Summary 48
5.2 Recommendations 52
5.3 Limitation of the Study and Suggestion for Areas of Future Research 52
5.4 Appraisal of Jehoel-Gijsbers and Vrooman (2007) theory 53

List of Appendices 54
References 65
List of Tables

Table 4.1 A cross tabulation of respondents by group and enrolment for the CBHI 26
Table 4.2 Rating of CBHI services by group status 27
Table 4.3 Rating of Happiness with the CBHI Program by Group 27
Table 4.4 Rating of Perceived Helpfulness by Group 28
Table 4.5 Crosstabulation of Educational Qualification by Group 30
Table 4.6 Cross tabulation of educational level and enrollment rate 31
Table 4.7 Cross tabulation of employment status by group 32
Table 4.8 Cross tabulation of wealth category by group 34
Table 4.9 Cross tabulation of Poverty rating by group 35
Table 4.10 Cross tabulation of income levels by group 36
Table 4.11 Rating of respondent’s health 38
Table 4.12 Cross tabulation of health status by Group 39
Table 4.13 Test of association between enrollment in CBHI and health status of respondents 39
Table 4.14 The effect of CBHI, IN and EDU on household’s health Status (Batwa and non- Batwa) 40
Table 4.15 The effect of CBHI enroll, IN and EDU on household status on Batwa 41
Table 4.16. Do you think that having access to CBHI has changed your life in terms of income? 42
Table 4.17 Cross tabulation of perceived impact by group status 42

List of Figures

Figure 2.1 Conceptual Framework 14
Figure 4.1 showing the monthly income of respondents 36

List of Maps

Map 3.1: Map of Huye district 20
Map 3.2: Map of Gicumbi district 20
List of Appendices

Appendix 1: Questionnaire and Interview guides  54
Appendix 2: Author Interviewing one of the respondents  62
Appendix 3: Respondents Random Picture  63
Appendix 4: Respondents’ neighborhood  63
Appendix 5: Authors interviewing the respondent  64
# List of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>CBHI</td>
<td>Community Based Health Insurance</td>
</tr>
<tr>
<td>COPORWA</td>
<td>Communaute des Potiers de Rwanda</td>
</tr>
<tr>
<td>COSYLI</td>
<td>Conseil National des Organisations Syndicales Libres</td>
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<tr>
<td>FAO</td>
<td>Food and Agriculture Organization</td>
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<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<tr>
<td>ISS</td>
<td>Institute of Social Studies</td>
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<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
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<td>NISR</td>
<td>National Institute of Statistics of Rwanda</td>
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<tr>
<td>OLS</td>
<td>Ordinary Least Square Rwanda</td>
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<tr>
<td>RWF</td>
<td>Rwandan Franc</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNPO</td>
<td>Unpresented Nations and Peoples Organizations</td>
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<td>WHO</td>
<td>World Health Organization</td>
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May Almighty God Bless You All.
Dedication

I dedicate this Research Paper to my mother, my sister, my brothers and My confidant Mrs Dona Kee who gave me courage and supported me throughout the period of my studies. A special feeling of gratitude goes to my loving children IRUTA Gregg Kenly and IRUTA Jessie Fidelia. You have made me stronger, better and more fulfilled than I could have ever imagined. I love you to the moon and back.
Abstract

Community Based Health Insurance (CBHI) is meant to help Rwandan citizens get access to quality healthcare services. However, access to this insurance is a challenge for marginalized and Indigenous communities. In order to understand these challenges and provide relevant recommendations, the current research addressed the topic of Indigenous people, poverty and CBHI in Rwanda, specifically in the districts of Gicumbi and Huye. There are three main objectives that were to be fulfilled in this study including: 1) to evaluate the extent that the Indigenous people (Batwa) in Rwanda have access to Community Based Health Insurance (CBHI), 2) to investigate the constraints/barriers for Batwa to access CBHI and 3) to examine the relationship between enrollment in CBHI and health/economic status of Batwa. In fulfilling the first research objective of the current study, the findings indicate that the Batwa community has low access to CBHI. While 100% of non-Batwa responded that they had enrolled for CBHI, only 70% of the Batwa respondents agreed to the enrolment. In accomplishing the second research objective, the barriers to access to CBHI led to the low-access to CBHI by the Batwa were found to be low household income, high rates of unemployment and low levels of education. Regarding education, 77.8% of Batwa’s with no education had enrolled for CBHI while 22.2% of them had not enrolled for the insurance. On the other hand, only 37.6% of respondents with no education were enrolled for CBHI while 61.7% of respondents with education had enrolled for the insurance. Concerning employment, Batwas had higher rates of temporary employment (35%) and other informal jobs (38.3%) but low rates of full-time employment (0%) as well as farming (26.7%) compare to the non-Batwa. When analysing monthly income, the study shows that 68.3% of Batwas belonged to category 1, which is composed of families with who cannot afford basic needs. In achieving the third research objective, the study reveals that enrolment in CBHI leads to improved health and economic status for those who enrol into the program. After enrolment for
CBHI, 27.1% of Batwa respondents admitted to having good health. Furthermore, 71.7% of the Batwa admitted that the CBHI changed their lives in terms of income because out of pocket expenditure on healthcare services reduced considerably. The main conclusion of the study is that the Batwas have low access to CBHI as a result of low income, lack of education and meagre household income even though CBHI has potential to improve their health and economic status. The recommendations of the study is that the government increase the capacity of the Batwa people for accessing CBHI by providing them with employment opportunities, standardized education and capital for starting profitable businesses.

**Relevance to Development Studies**

The Access to health services is a fundamental human need, according to Stephens et al. (2005:10) “Improving indigenous peoples’ health is a critical but complex challenge. In some regions, indigenous peoples are unrecognised and uncounted. When data do exist, indigenous peoples have worse health and social indicators than others in the same society”.

In Rwanda Batwa people are less educated, they have lower opportunity to jobs and less likely to enroll and access to CBHI. The CBHI program is meant to support the needy to help them to access health services. However, it was found that there are some who deserve that support and don’t have access to CBHI including batwa. In that respect, this research is meant to identify the living condition of Batwa people especially they socio economic indicators and its relationship to CBHI. It will be an opportunity to recommend some of the practical solutions on how to improve Batwa’s life which will inform their health status.

**Keywords**

Batwa, CBHI, Poverty
Chapter 1 Introduction

1.1 Background Information

Health is an important indicator of wellbeing. Societies can be measured based on the health status of the populations within the country. This is because different categories of the population are variously exposed to social protection from disadvantages which are tied to poor health (Marmot and Commission on Social Development, 2007:1153). This has necessitated the mandate of governments to provide affordable healthcare to the population of low and middle-income countries as a persistent development issue (Chemouni, 2018:87). This mandate falls short as universal health coverage has been difficult to achieve especially in developing countries worldwide (Davy et al., 2016:1). Most people therefore rely on money that may not be reimbursed to access healthcare. CBHI has been largely promoted in low income countries particularly in Sub-Saharan Africa as a major instrument to reduce the lack of financial means in accessing healthcare (Dror & Jacquier, 1999; Preker and Carrin, 2004). The World Health Organization (WHO) report had observed that out of pocket expenditure is a major obstacle to the access of healthcare. The sustainable approach to bridging access lies in the risk pooling power of health insurance.

CBHI schemes are an ingenious method of health risk sharing which relies on a central authority’s ability to pool funds and administer at the point when a member falls sick. However, there are contradicting results among the existing studies related to CBHI and access to health. Even though some authors claim that CBHI schemes are a potential tool of protection from the depriving effects of health expenditures for the poor populations (Dror & Jacquier, 1999:2-4), others oppose by claiming that the low-income population are excluded by CBHI [Gilson et al., 2000:291-294]. Other studies such as (Criel, 1998; Atim, 1998) argue that the risk appear to be small, by showing that there are issues of adverse selection, that the CBHI systems are heavily depend on subsidies, financial and mismanagement that makes CBHI schemes unsustainable and questionable. In particular, Indigenous people are largely excluded from accessing health insurance due to a number of barriers (Aspin et al., 2012:2-6).

These barriers include the high cost of health care that is not covered by the CBHI and discriminatory practices of healthcare providers among others constitute significant barriers to access (Pelcastre-Villafuerte et al., 2014: Aspin et al., 2012). The Indigenous populations
have been noted to be the most marginalized groups in the world, as these people are most likely to be marginalized as a result of lower educational outcomes and reduced access to health (Pelcastre-Villafuerte et al., 2014:2). Their situation is compounded by a precarious livelihood accompanied by the loss of land (Walker, 2013:68). Women are disproportionately disadvantaged with higher incidences of HIV infection contracted in episodes of rape or exchange of sexual favours for material needs. The ability to access care centres remains a challenge as they must pay for these services and contend with unsavoury attitudes of healthcare workers (Walker, 2013:68)

1.2 Statement of the Research Problem

With all the challenges associated with the effectiveness of CBHI to address the health concerns of the poor across most countries in the global south, Rwanda appears to have become the model of effectiveness of broad health care coverage with more than 81% of the population on the CBHI scheme and another 9% of the population on other forms of insurance scheme (Chemouni, 2018). However, In the post genocide perspective, talking about Indigenous peoples (in particular Batwa) rights is a very sensitive subject and prevents an open dialogue on the subject. Nevertheless, the Batwa community, counting for around 0.4% of Rwandan population, is nowadays socioeconomically less developed as well as under esteemed in relation to human rights. For instance, this community is impeded by insufficient access to food safety, health care, employment, education and faces discrimination (UNPO 2018).

This comprises a violation of the African Agreement which states “The right of equal access to the public services of one’s country the right to education, the right to medical care and attention”. Furthermore, they are also victimized by health service workers and seen as “backwards”. This can be considered from the interpretation of the President of an African nation who stated that, “How can you have a stone-age creature continuing to exist in the time of computers? If the Bushmen want to survive, they must change, otherwise, like the dodo they will perish” (UN 2016:13).

On the other hand, this misrepresentation is an issue. Indigenous people are not a particular part of population with health issues. They are methodically marginalized groups inside their own country. They hardly get a chance to express their own views and thoughts on their lives nor are they able to share their perspectives on measures that would improve them.
The commitment of Indigenous people and their rights to design their community’s study and regulation priorities needs research (Stephens, al 2005:12). The government’s duty is to offer resources and means to guarantee that the right to health service is for everyone, particularly the underprivileged or weak communities like Indigenous people, which is completely accomplished as proposed by General comment 14 (UN, Economic and Social Council, 2000).

However, Indigenous people in Rwanda are poor as statistically they live under the poverty line. As health insurance payments are due and the whole household has to pay at the same time, this may be a threat for some of them as they are not able to pay the required fee.

In the interview with the media, the president of ‘Conseil National des Organisations Syndicales Libres au Rwanda’ (COSYLI), emphasized that they are aware of Batwa who cannot afford the CBHI because they have been given a house by the government, meaning that they belong to a class of Ubudehe who must pay 3000 Rwandan Francs for the CBHI. He argues that there is a gap in policy making towards Batwa group, which still live under a chronic poverty (Umuryango.com 2017). The similar news was released by Igihe.com (2016) saying that some local authorities stress that fining people with jail is a way of motivating them to pay for CBHI, and the results are positive. They confirm that this approach coupled with mobilization to pay for CBHI will solve the problem. However, people’s poverty goes against this practice. Take for example, Hagumimana, a father of seven children was put into jail due to the inability to pay for CHBI for them. He has hardly managed to firstly pay for their school fees as they were chased from school.

Batwa groups are the poorest, least educated (or not educated at all), lack health insurance and are among the most discriminated by other peoples in Rwanda. This research hypothesizes that they are among the poorest, which hinder them to access on CBHI. Therefore, this study intends to analyze a clear situation about Batwa community and their access to CBHI.

1.3 General Objective

The focus of this study is to assess Indigenous people’s socio-economic situation and its relationship with Community Based Health Insurance (CBHI) in Rwanda.
1.3.1 Specific objectives

- To analyze Indigenous people households’ socioeconomic indicators (household income, level of education, employment)

- To review the present status of CBHI access and its use among Batwas community in Gicumbi and Huye districts.

1.4 Research Questions

1. To what extent do indigenous people have access to Community Based Health Insurance (CBHI)?

2. What are the constraints/barriers for Batwa to access CBHI?

3. What is the relationship between enrolment in CBHI and socio-economic indicators of Batwa?

1.4.1 Sub questions

- What is the understanding/perception of Indigenous peoples about CBHI?

- What changes in socio-economic indicators of the Batwa occur as a result of enrollment in CBHI?

- What are the expectations of the Batwa community from CBHI?

1.5 Justification of the Research Topic

According to Ohenjo et al. (2006), Indigenous people across the world are subjected to discrimination and marginalization that results in them systematically having poorer health as compared to majority categories of the population. “In sub-Saharan Africa, poor health in the general populace is usually acknowledged, but the unswervingly lower health situation and social status of indigenous individuals are seldom noted.” (Ohenjo, Nyang’ori, et al. 2006: 1937).

In Rwanda, CBHI was taken as an advancing approach for the development of monetary availability to health services in both the informal sector and rural locations. CBHI should particularly support the poor and most vulnerable (Indigenous peoples) of the population to be entirely included into the health insurance scheme, therefore assuring involvement of the entire society and preventing any marginalization. As CBHI is a system which focus on the
limitation of the segregation of the most impoverished group of the society from health amenities and facilities, CBHI needs to play an important role in developing and reinforcing the basics for the idea of fairness in access to different services provided by the health scheme (Ministry of health 2010:5).

In that regards, CBHI is a key to support the Batwa community development through providing good health care services equal to that of other Rwandans people. However, in Rwanda, it is unclear about the extent of those who use CBHI, how well they are treated by health care services providers and the way they perceive CBHI. Understanding this would help to provide recommendations and would allow the strengthening of the utilization of CBHI by their Batwa community as well as their socio-economic development.

1.6 Structure of the Paper

This paper is organized into five chapters. In the first chapter, the objectives of the study, research questions, problems and justification of the study have already been discussed. In the second chapter, the historical background of the Batwa social exclusion that push them into abject poverty is discussed and will detail the concepts of social exclusion and poverty. Also, I discuss the Rwanda CBHI program and the importance of CBHI. The third chapter focuses is on methodology that explains the process of data collection, sample size and selection and the process of data analysis as well as the challenges encountered in the field. In chapter four, I discuss the findings and the discussion follow the line of research questions while the last chapter focuses on conclusion and personal reflection of the study.
Chapter 2 Literature Review

2.1 Understanding the Batwa People in Rwanda

According to history, prior to the colonialism era Rwanda consisted of three ethnicities, Tutsis, Hutus and Batwa which were mainly clan-based and lived in peaceful harmony. Classes could change depending on the wealth as certain group achieved wealth, except for the Batwa class who were initially hunter-gatherers in the forests of Rwanda (Gutzwiller, 2016:1). The Batwa performed a particular function to the Umwami (the king). They worked as the voice of the people, suggesting to the Umwami of what his themes were saying, as well as providing essential symbols of monarchical authority from the forest such as leopard skins and ivory. The king’s power was entrenched in his capability “to bless and to curse”, and the Batwa assisted him in this task (Nick, 2011).

When German and Belgian colonizers came to Rwanda, they strengthened the divisions by use of the ‘divide and rule’ strategy where they emphasized ethnic differences and established this approach in the mindset of people. The colonial power gave the ruling power status to Tutsis which this created hate between Tutsis and Hutus and resulted in a genocide against the Tutsis in 1994 (Gutzwiller, 2016:2). More than two decades have passed since the terrors of the 1994 Rwandan genocide that killed more than a million of the Tutsi’s people. After the massacre, immense efforts have been made to rebuild and reunite a society that was torn apart, a devastation that was not simply material but was above all social, and in which the very fabric of communal life was destroyed.

Efforts to reconcile the Rwandan society have been focused on overcoming distinctions between communities and on forging a single Rwandan identity so as to prevent future conflicts. In addition, the government has invested heavily in pro-poor programming (EDPRS2, 2013); that is, it targets the poorest in Rwandan society to deliver social help and assistance. Despite these intensive efforts, a section of Rwandan society dominates those classified as impoverished. The Batwa community, generally referred to as Historically Marginalized Peoples (HMPs) in official terminology, remains marginalized in today’s Rwanda (IRDP, COPORWA 2017:3).

The right to self-determination among native persons gives them the right to own and hence govern own resources and territories. These people are also extensively involved in
making decisions that affect the community. This right is confirmed in Articles 3 as well as Articles 25-30 of the UN Declaration on Rights concerning native persons which was approved by the Human Rights Council in the year 2006. The Twa are put at a disadvantaged position by the divisionism law which prevents designating people in terms of their ethnicity (Rushton, 2016). The Batwa people are hence denied government assistance as they are categorized as ‘historically marginalized people’ and have now taken up measures to better the living conditions of this community as well as inspire their integration into society. Article 3 of the UN’s declaration on Indigenous people explains that these people should not be subjected to compulsory assimilation or disruption of their cultural practices. The problems faced by the Batwa if they do not acknowledge themselves pose a cultural risk to this community, and as such the government’s assimilation policy is seen to threaten the existence of the Batwa culture (Ndahinda, 2011). Categorizing people as Indigenous is considered divisive and the classification of historically marginalized people is ambiguous as other groups are also included in this category.

However, most of these people don’t want to be called HMPs. An example comes from Gatera, the President of the Community of Potters in Rwanda (COPORWA) who asked angrily “Why should the government name us ‘historically marginalized people?’ As far as I know, I am not historically marginalized. That is an insult. It is discrimination. People should stop calling us whatever they want. We are simply Batwa” (The East African 2014). The historically marginalized peoples are considered to be between 25000 and 30000 people from the total population of Rwanda that is around 12.000.000. The HMPs are the poorest peoples and they have poor social indicators (access to health care services, lack of education, food insecurity, et cetera) compared to the other groups of the population (MINALOC 2011:13).

The Batwa were moved to areas near the border while the creation of parks greatly reduced their resources. Their environmental deterioration and prior means of production were not paid through reparations in any way. Currently, numerous Batwa groups live a very insecure life. Traditionally they live off the production of pottery and economically this unsustainable manufacturing method cannot feed the whole community. In addition, a high number of this community today have a sedentary lifestyle living in small groups across the state and mostly in isolated and hard to reach places and on unproductive lands. Rwanda is among the most densely populated country in the world, as well as most among African countries. The scarcity of cultivable land directly results in the Batwa being lowered to the
highly vulnerable financial situation of irregular day workers. As an impact, the Batwa community is commonly the deprived and most vulnerable peoples when considering socio-economic indicators (Goodwin M. 2017:538).

2.2 Community-based Health Insurance in Africa

According to Shimeles (2010), many people living in Africa often encounter the difficult choice between paying for life-saving medical care and providing food for their families. Wronka (2016) explains that the struggle for universal health care and that for human rights are two different sides of the same coin. WHO reports that more than 100 million people are driven to poverty because of spending catastrophic amounts of money on health each year (Shimeles, 2010). Most of these people dwell in the poor settings of Sub Saharan Africa where there are poor healthcare systems with no proper health insurance schemes. In such areas, there is a high disease burden that poses a risk of promulgating a sickly and unproductive workforce. In most nations located in Sub Saharan Africa, formal and well-functioning health insurance schemes are used by the small proportion of people who are under employment in the formal sector (Shimeles, 2010). The majority of people in the population use their own money to pay for health care services resulting in suboptimal utilization of those services. Consequently, the expenditure on health care services in most African nations is substantially high with notable divergence across the income divide.

Abdulkareem et al. (2012) explain that households in poor nations generally spend the same amount of money on health care compared to people living in comparatively wealthy nations with the difference seen in health outcomes. One of the reasons for this could be the lack of a proper health insurance scheme to safeguard households against illness-related expenditure shocks. Instituting formal health insurance schemes for peasant farmers and other people who are self-employed is difficult for many reasons. In sub-Saharan African nations, the poor people bear the most significant burden of diseases (Fenny et al., 2018). These people experience high levels of catastrophic health expenditures. Social health insurance is regarded as one crucial mechanism that can be used to attain universal health care as it ensures financial protection. Social health insurance programmes enable the pooling of funds which allows cross-subsidization between the poor and the rich as well as the sick and the healthy. There are some countries in Africa that have introduced social healthcare schemes
as a way to deal with the outrageous fees charged by health care providers. The social health insurance schemes ensure access to all income groups and particularly the poor.

Various studies have explored community-based health insurance schemes as a reasonable alternative to formal health insurance schemes (Lagomarsino et al., 2012; Shimeles, 2010). Alan and Mahal (2014) explain that community-based health insurance can be used in a cost-sharing health care system where it would help in reducing illness-related expenditure shocks and lead to better use of health care services. Ultimately, the societies will have sustainable and well-functioning universal health care system. In some sections of Africa, traditional solidarity organizations are present to help people deal with health-related shocks. These organizations have offered the basis towards the adoption of community-based health insurance which is as a result of the failure of the government to provide those services. Shimeles (2010) reports that Senegal, Ghana, and Rwanda are the leading nations in adopting community-based health insurance schemes at the national level.

2.3 Community Based Health Insurance Approach in Rwanda

The relationship between poverty and health is so close, so the government can’t achieve its objective of reducing poverty if there is no functional national health policy that will financially assist the population to access health services. Therefore “the CBHI was identified as a privileged channel for the evolution of financial accessibility to health services in both rural settings and in the informal sector” (Rwanda Ministry of Health, CBHI Policy. 2010:5).

Rwanda initiated Community Based Health Insurance as a crucial way to attain the health MDGs and the long-term health goals of Rwanda’s Vision 2020, which is principally to ensure a proper standard of health care. This is crucial for human development in the nation (Rwanda Ministry of Health, CBHI Policy, 2010). In Rwanda, the term Mutuelle de Sante is commonly used to refer to community-based health insurance. It is essential and widely appreciated by people as they consider it the right step towards excellent health care systems which is hard to find in most developing nations. In these places, financial constraints act as a barrier to access to quality health care services. CBHI is seen as an emerging and capable concept which will help tackle the challenges faced in Rwanda’s health care system, especially in the rural areas (Jutting, 2004: 273). The CBHI scheme was formally launched in the year 2005 in Rwanda with the purpose of ensuring better accessibility to health care services among the poor (Hartwig et al., 2012: 6) and a recent demographic and
health survey carried out by Dawson and Martin (2015) in Rwanda reported that three-quarters of the Rwandese people are covered by health insurance.

Including the poor populace with meager financial capabilities in health care systems is seen as one of the most common challenges in most countries. In most cases, the poor people do not contribute anything to CBHI schemes and hence are excluded systematically. The proportion of people not included in CBHI schemes has a linear correlation to the cost of the premium. This means that the higher the cost, the less people are able to afford it. This is crucial if the purpose of CBHI schemes is to intensify resource mobilization in developing nations. A study carried out in Ghana and focusing on the “willingness to pay” determined that the highest revenue got for CBHI was attained when they applied a household premium of 25,000 Cedis (US$2.77). The proportion of the population that was willing to pay this amount was only 35% (Arhin-Tenkorang, 2004). This result is important for nonprofit organizations that intend to increase services for marginalized communities (Oster, 1999; Schmidt et al., 2004).

In Rwanda, a system of stratification has been made in place by dividing the whole population into 4 classes based on the Ubudehe criteria, also known as social classes. Ubudehe is “a community-based targeting mechanism that categorizes the Rwandan population according to their revenues and vulnerability” (Habiyonizeye 2013:8). The least contributing category will be placed in the first and second Ubudehe categories. The middle contributing category will be made of the third Ubudehe category, and the highest contribution category will consist of the fourth Ubudehe category. For CBHI contribution category 1, a yearly premium of RWF 2000 will be contributed. Because this category is made up of the poor and most vulnerable, it is expected that their contributions will be provided by a third party such as development partners or the government. Contribution category 2 will be likely to pay RWF 3000, and categories 3 and 4 will contribute RWF 7000. Supposing a yearly per capita price of health care of RWF 2900, the CBHI system will produce profits each year amounting to reserves of RWF 23,950 billion in 2014 (Ministry of Health 2010:10-11).

According to the Declaration of Alma-Ata (1978), health care is crucial to the development of a society in terms of promoting social justice. Still, in most countries including Rwanda, healthcare services are not free. This shows that a person needs to have financial capabilities in order to access quality health care. Nevertheless, the major challenge for people living in rural areas is to realize their right to proper health care because of poverty and
financial restrictions. According to the UN and WHO (2008), health and poverty are directly linked. A number of researches have explored the obstacles to suitable health care use that lead to the health inequalities between few sections and the bulk population. Indigenous persons across the globe share many features that add to health discrepancies and uneven access to health care (Marrone, 2007: 192).

2.4 Conceptualization of Indigenous People Access to Health Care

Stephens et al. (2006) defined Indigenous persons as communities, individuals or countries that have a historical continuity of pre-invasion and pre-colonial civilizations that were established on their territories. These groups regard themselves as distinct from other populations that are present in those areas. The Indigenous people form the existing non-dominant segments of the society and often intend to preserve, develop, and transfer their ancestral lands to their offspring. These group of people also have their own social institutions, cultural patterns as well as legal systems (Stephens et al., 2006: 2020).

It is generally known and in various circumstances properly cited that Indigenous persons are very poor when considering their income and the most marginalized in the society. The concept of Indigenous people is not a recent theory. Individuals, institutions and organizations have undergone different studies at the global level to tackle challenges that Indigenous peoples encounter in their lives.

In a study done in Latin America by Hall and Patrinos (2006), they realized that even if there have been programs to enhance access to education and health care, Indigenous individuals still unswervingly account for the uppermost poverty levels in the region (Hall and Patrinos, 2012:3). A very similar conclusion was reached by Eversole, et al (2013) who said that “in most nations, indigenous persons have minimal access to education as compared to other groups, and they are usually subjected to curricula intended for other cultural crowds with their own values, knowledge and histories”. Indigenous persons also have less access to proper medical care and public health systems, and hence often suffer nutritional complications if they are denied access to their ancestral lands.

underlines the link between health and aspects, like environmental deterioration, illiteracy, poverty, marginalization, and the absence of autonomy. These factors originated from colonization, and entirely result in the formation of indigenous societies, specifically Indigenous women and children who are exposed to meager health conditions. The consequence is that Indigenous persons encounter extremely high cases of maternal and infant mortality, tuberculosis, HIV/AIDS, malnutrition, malaria, and all other types of poor health, which include mental health issues. These people have insufficient access to public health systems and there is a remarkable lack of acknowledgment and assistance for their own health structures. Any effective plan to offer health care for these individuals should focus on intercultural health schemes where modern and aboriginal health systems are exercised with identical technological, human, and financial means and where Indigenous persons are involved in all decision-making procedures concerning their health as well as health care supplies.

On the other hand, Peredo et al (2004) have examined various perspectives of the course of development among Indigenous people and found that indigenous entrepreneurship is the response, as few of them are already engaged in business enterprise. For example, Anderson (1999) speculates that Indigenous entrepreneurship in Canada has typical characteristics, both in its objectives and its process. According to Anderson (1999), the goals are derived by means of generating and operating businesses that are able to contest profitably for the long periods in the international economy.

2.5 Conceptual Framework

2.5.1 Social Exclusion or Social Marginalization

One of the main concepts adopted for this study is social exclusion. The concept of social exclusion remains a key term of interest across the social disciplines. It has been defined by Silver (1994:531) as “a social disadvantage and relegation to the fringes of society of one group of society or individuals in that society of another group or individuals”. Silver (1994) definition of social exclusion accurately depict the present situation of the Batwa community in Rwanda. It is instructive that the definition identifies social exclusion as a relational term. It requires the agency of people against other people. Other definitions such as the Adler University’s Institute on Social Exclusion identifies that social exclusion is “systematic” in which there is a denial of “rights, opportunities and resources” (Adler University’s ISE). This
again highlights the relational nature as the denial of the rights and opportunities are not general. Such exclusion is done to a targeted group within a society.

In a review of the anthropological literature on social exclusion for the past 50 years, Pocock (1957:19) and Allman (2103:1) noted that the concept is deployed as a feature of social hierarchies. This concept became a popular concept to understand inequality which was preferred to the ambiguous concept of poverty (Rawal, 2008:191). As discussed earlier the Batwa people are extremely poor, and poverty was argued to be a consequence of social exclusion hence, it was considered an antecedent factor of greater consequence in understanding inequality in a given society (Rawal, 2008:191). This argument make the concept of social exclusion to be very germane for this study

The plight of the Batwa community in Rwanda can be better understood from the argument of Young (2000:35) and Silver (2007:15) that social exclusion is a process of progressive social dislocations, detachment of groups as well as individuals from beneficial social relations and institutions while at the same time preventing them from full engagement and participation in the social order of the society, they live in.

Models were developed by Silver (2007) and Jehoel-Gijsbers and Vrooman (2007), to account for the variety of factors which accounts for social exclusion aimed at simplifying the study of the concept. Silver’s (2007:15) model conceptualised social exclusion and inclusion based “on a continuum” for which exclusion and inclusion are at the extremes.

An alternative such as Jehoel-Gijsbers and Vrooman (2007:1) suggests that social exclusion is emergent at the individual’s level and at the group level based in four dimensions which correlates with social exclusion. “These are insufficient access to social rights, material deprivation, limited social participation, and a lack of normative integration”. These identified factors are moderated by personal risk factors such as age, race, gender and macro societal changes which includes demographic, economic and labour market developments, technological innovation and the changes in social norms. Government legislation and social policy, businesses and administrative organisations complete the list of influential factors (Vrooman & Hoff 2013:1261).
The above theory will inform this study as the assumption is that being enrolled and having access to CBHI among respondents will be influenced by people’s socio-economic background, political environment and also by the health system itself.

In light of the above figure, if the predisposing factors are favorable, they will interact with the enabling factors to produce a positive outcome and vice versa.

### 2.5.2 Poverty

The notion of poverty is largely contested in literature. It defies easy categorization with a plethora of definitions (Alcock, 1993; Alkire, 2004; Laderchi et al., 2003; Toye, 2007; Kamruzzaman, 2015). These different conceptualizations have important implications for the modes of intervention by intervening agencies on the targeted groups who are considered poor (Kamruzzaman, 2015: 3). The burden of conceptualizing poverty falls disproportionately in the outcomes of interventions as stakeholders who are in the field trying to alleviate poverty can meet with varying degrees of success because of the conceptualization of poverty.

Notions such as absolute poverty, relative poverty, chronic and extreme poverty, and rural and urban poverty are the products of an attempt to zero in on the essential elements due to situational factors that constitute poverty. Absolute poverty is considered an extreme case where the individual is unable to afford the necessities of wellbeing essential to his or her existence (Hulme et al., 2001; Hulme and Shepherd, 2003). Relative poverty on the other hand is used to denote reduced earning relative to the national poverty line benchmark (Hulme and Shepard, 2003; Hulme et al., 2001). Chronic poverty is the term that denotes an
extremity for those in a severe and protracted period of poverty; this term is mostly utilized for the indigent poor (Foster et al. 2013: 225). These definitions are largely dependent on situational circumstances. Designing government interventions must be sensitive to the context in order for interventions to be impactful (Glauben et al., 2012:785). The provision of social safety nets is a common intervention of which the agent has to be efficient in targeting those considered poor (Hulme and Shepard, 2003:4). Without a clear understanding of poverty, the Rwandan government will not only fail to address the social exclusion of the Batwa people from mainstream public services but also will most likely fail to address the need of the Batwa people of health care through CBHI because of their misconception of poverty.

In this chapter, I have been able to establish that the present-day social exclusion of the Batwa was deeply rooted in the history of Rwanda. The Batwa people’s poor condition is not of their own making but is the result of social exclusion from the mainstream society that deprived them access to land, health care and the destabilization of their habitat by the government. While the CBHI is widely accepted as a response to improve the access of Indigenous population access to health care, various factors also limit them from accessing the CBHI scheme.
Chapter 3 The Data and Methodology

3.1 Data Collection

The nitty-gritty of data collection for this study is deeply rooted in the primary data collection through the mixed method of quantitative and qualitative data collection approaches to answer the research questions. This chapter discusses in detail the process, the tools and the methods used in collecting and analyzing data for answering the above research questions, the justification for the choice of the research area as well as the methods of data collection deployed. The sample size is also discussed comprehensively accordingly in this chapter.

3.1.1 Data Collection Methodological Approach

Mixed method is a combination of two or more methods or best described as a hybrid methodology approach to research (Creswell and Plano Clark 2007: 6). However, the mixed method is beyond just deploying various forms of both quantitative and qualitative data collection tools. It is important for the researcher to be sure if it is necessary to combine qualitative and quantitative methods, what type of data is needed from both approach, which of the approaches will be given priority, how to implement the sequence of approach and at what stage of the study that integration of the data from both approaches will take place (Bulsara, 2014:7). The quantitative aspect of the research is accorded more importance and priority while the results are integrated during the process of the interpretation stage of the research. Although, the completion of the data collection entails one committing an extensive length of time to complete the two separate phases, and the disadvantage of this approach lies much in the reduction or manipulation of data in order to accommodate the combination of the two methods (Driscoll et al., 2007). Nonetheless, considering the outcome of the approach, the mixed method approach adopted was not only appropriate in the identification of indicators and barriers associated with accessing health care through the CBHI by the Batwa people in Rwanda, but it also helps explain why such barriers exist in the first place as well as creating a clear understanding of what needs to be done in addressing such barriers.

However, it is important to note that, there are different ways in which one can deploy the mixed method approach. Creswell et al (2003) identified four main approaches which include, 1) making use of qualitative data collection tool to develop quantitative tools and measures, 2) making use of the quantitative approaches to enhance a primarily qualitative
study, 3) making use of qualitative approaches to further elucidates on the outcomes of the quantitative study, and 4) making use of both quantitative and qualitative methods equally or at parallel to each other (Creswell et al., 2003:167). For the purpose of this study, the method adopted for data collection fall under category three where the quantitative method was first deployed which was followed up by the qualitative approach. This approach is known as the explanatory sequential model that prioritized quantitative data over the qualitative data collected. I decided to utilize the explanatory sequential model as opposed the sequentially and exploratory embedded model because it offers me the opportunity to keep up on the first phase of data collected as well as creating a platform whereby, I will be able to verify and augment the results from study findings from members of a specific population (Creswell et al. 2007:121).

3.1.2 Data Collection Tools

For the mixed method approach, I adopted interviewing as the qualitative tool of data collection and survey as the quantitative approach. While this might appear straightforward, interviewing as a tool of data collection can take several forms which include semi-structured, structured and unstructured typology that can be either be deployed formally or informally. For the purpose of this study, I adopted the open-ended or unstructured informal typology as each interview sessions lasted for a minimum of one hour and thirty minutes. The advantages of a semi-structured interview include allowing respondents to answer questions in detail and obtaining more valid information about the opinions, values and attitudes and respondents. However, only a small number of such interview’s can be conducted, and this research addressed this limitation by also using questionnaires to gather additional data. This is because it facilitates opening the lines of communication and gaining the trust of the respondents as close rapport was established (O’Leary, 2014:218). The adoption of this approach gives me the opportunity to “draw out information, opinions, attitude, and beliefs around the specific theme, ideas, and issues without predetermined questions” as posited by O’Leary (2014:218). My main objective of using this interview method is to obtain an all-encompassing data set through explanatory tête-à-tête the Batwa people living in Huye and Gicumbi districts of the country and learn of their perception about CBHI as well as understanding the hidden factors behind the obstacles that are hindering their access to health care despite having CBHI. Although this approach is time consuming and can generate large
amounts of unrelated data to the study that in turn make transcribing these interviews cumbersome, the benefit is the exposure to having deeper understanding of the challenges that the Batwa people are facing in regards to the CBHI as well as creating a space that will allow me to identify and understand the strengths and weaknesses in the Rwanda government policy responses towards the health care services available to the Batwa people.

Making use of the survey method is not as simple as it may appear, in fact, there are different forms of survey methods that can be deployed as a data collection tool. The type of survey that a researcher decided to adopt for data collection is influenced by the study objectives and goals. The survey can take the form of face to-face, explanatory, descriptive, cross-sectional, telephone and so on (O'Leary, 2014: 201-202). However, I opted for the face-face survey because it allows the researcher to establish rapport and trust with the respondents which are important for making any clarification to the questions on the questionnaires that the respondents did not understand. Although it is time consuming as well as costly, deploying a face-to-face survey as tool of data collection to understand the perception and challenges of Batwa people regarding CBHI is not out of place since it does not only give room for clarification, it also gives room for the reading of non-verbal cues (O'Leary, 2014:203). I used questionnaires with both closed and open-ended questions to collect data in the survey. Such questionnaires have the benefits of cost-efficiency, practicality, speedy results, scalability and covering all elements of topic. However, questionnaires have the disadvantages of differences in understanding and interpretation. This limitation was addressed in the research by including open-ended questions that allowed for further description of short answers to facilitate correct interpretation.

### 3.1.3 Sample size and selection

The first process in selecting the sample size was to first identify which household is for Batwa and which are non-Batwa in the study area. After the identification, the selection of the respondents for the survey was done through a random sample technique among the identified households while the respondents that contributed in the interview sessions from the Batwa people was done through the handpicked sampling approach. Sample random sampling involved choosing each individual who belonged in the sample randomly and completely by chance. This meant that each individual had the equal chance to be selected at any point of sampling process. The random selection of households was influenced by the assumption that CBHI has a wider coverage in the community since the objective is to test that
accessibility of CBHI among the Batwa population in comparison with the non-Batwa people living in the same community. Moreover, the random selection was deemed appropriate for the survey because of the assumption that not all households will be welcoming to a stranger. This was eventually proven to be true from my experience in the process of the administering of the questionnaire which I will discuss later. However, the adoption of the handpicked sample technique for the interviews sessions was influenced by the fact that I am deeply interested in acquiring specific detail in regard to the variables that contributed to identifying challenges affecting the Batwa people in enjoying adequate health care with their CBHI which are not captured by the survey study. Moreover, selecting the respondents purposely guaranteed detailed and specific data acquisition of information not covered by the questionnaires. The approach ensured that there was a balance between data collected from the survey and that of the interview.

For the survey, questionnaires were conducted among the Batwa people and the non-Batwa people living in the study areas. While 30 questionnaires were conducted for the Batwa in the Huye District, the southern part of Rwanda and an additional 30 in the Gicumbi district in the northern part of the country, 45 questionnaires were conducted for non-Batwa in Huye district and 46 questionnaires in Gicumbi districts.
The main reason for involving the non-Batwa is to help us have clear picture of the level of marginalization of the Batwa people in comparison to the non-Batwa living in the same community and if the government’s provision of CBHI addresses the inequality in accessing health care in both the Huye and Gicumbi districts.
In conducting the survey, the targeted respondents were the head of each household, which implies that only one questionnaire can be administered to each household regardless of the gender, age, and the size of the household. In total, there are 151 respondents to the instrument of data collection. Of this number, non-Batwa constitute 91 (60.3%) of the respondents as Batwa indigenes constitute 60 (39.7%) respondents. This implies that the larger proportion of sampled respondents is non Batwa indigenes. The sex distribution is comprised 48 (31.8%) females and 103 (68.2%) males for all respondents. Those who fall within the age interval of 30 to 39 years constitute largest group interval (43.7%) with 66 respondents. Those between the interval of 21 to 29 years account for 13.9% of the sample as those within the interval of 40 to 49 years account for 25.8% of the sample. 10.6% fall within the range of 50 to 59 years while those 60 years and above are 6% of the sample. 133 (88.1%) respondents are married, 4 (2.6%) are single, 7 (4.6%) are divorced while 6 (4%) are widows.

For the interview sessions, 10 Batwa people were selected, 5 each from the two districts that the study was conducted. They were identified during the process of face-to-face surveys and all of them yielded to the request to participate in the interview sessions. In addition to the Batwa people, the interview was also conducted for two Social Affairs also in charge of CBHI department in both district, two health workers in both districts, and one staff of COPORWA, the official body representing the interest of the Batwa people in Rwanda.

### 3.1.4 Process of Data Collection

Before going to the field, I first sent emails to the two district offices in order to get authorization to collect data in the respective sectors. The districts delayed responding, and I had to go there myself to meet the people in charge. It took me three days to get the signed authorization. After getting the authorization, the following day I had to take the authorization paper to the executive secretary of the Tumba sector in HUYE as they had to be informed about the data collection activities that were about to happen. After meeting the sector executive secretaries, they sent me to the personnel in charge of social affairs and CBHI. In Huye district, I have chosen to conduct interviews in Tumba sector because it was the nearest sector where I could find Batwa communities in large number. Unfortunately, the social affairs officer said that I could not conduct interviews without a document from the Embassy of Rwanda in the Netherlands recognizing me as a Rwandan student in the Netherlands. I had to change the sector because it was not easy to have the approval from the Rwanda embassy in The Netherlands in that short period of time that I had for data collection.
collection, especially because I was already in Rwanda. As a result of the unforeseen circumstances and challenges of getting approval, I decided to head to the Gishamvu district and the authorities were very cooperative.

I selected Gishamvu as the next option, as I had information that the sector had a large number of Batwa. After meeting the Executive Secretary of Gishamvu sector, he sent me to the Social Affairs Officer and also explained to her about my research and the people that I wanted to meet, and she gave me the go ahead. We made an appointment to meet her for an interview as one of the key informants that I had. The agreement was then to finish the data collection and at that point I should come to her for an interview. She gave me the telephone number of the village leader where there is a mass of Batwa population, I then contacted the leader to inform him that I will come to collect data. She also helped me to contact the healthcare worker in that same village, as I had to conduct an interview. The village leader helped me to know which households are within the Batwa community and which ones are not.

The next day I started the field work in Gishamvu sector in the HUYE District. After one week of data collection, I realized that with the short time that I had, I couldn’t finish the data collection alone in two districts. I hired a research assistant from a consultant company called Inclusive Business and Consultant (IB&C). During the weekend, we practiced the questionnaire together, and on Monday we went for data collection. He attended three household interviewers that I was doing and the fourth he started interviewing by himself and was subsequently successful with conducting the survey. The following days were better, and we could advance. A few of the respondents allowed us to record the conversation and others did not. The enumerator only collected data using questionnaire and not for keys informants. Overall, we didn’t meet many challenges in that sector, and the field work went well in Gishamvu. After I met the Social Affairs Officer for an interview the same day in the afternoon, I met the healthcare worker as well. In Gishamvu sector in the HUYE district, we conducted 30 interviews with the Batwa community, and 45 questionnaires were administered to the non-Batwa community. After we were through with the survey, I sat down with my research assistant to quickly go through the questionnaires at random and it was discovered that there is the need to follow up with a few respondents with unstructured interviews with the Batwa people. As a result, I conducted 5 unstructured interviews with selected heads of households.
After one week and a half, I headed to the Northern Province in the Gicumbi district for authorization to conduct interviews in that district. The mayor of Gicumbi received me in his office to ask me more details about my research and why I have chosen the district. We had a good conversation and he gave me the authorization letter that I brought the following day to the Executive Secretary of MIYOVE sector, the sector that I have chosen to conduct the interviews. I previously contacted the MIYOVE Executive, so he was aware that I was coming once I have the authorization from the District Bureau. That day, he gave me the contact number of the keys informants that I had to meet. The Social Affairs of the sector were not cooperative, but we finally talked, and he gave me some information that I needed. The next day, we started the field from the Batwa community with the help of the health community worker, who pointed for us the Batwa households. The Batwa community was very cooperative. The non-Batwa community was not cooperative and some of them didn’t want to respond, but as the sampling was random, we went to other households. We administered 30 questionnaires to the Batwa households and 46 non-Batwa households. The other challenge was the rural remote areas. Oftentimes it could take about 35 minutes by foot to reach another household. In the meantime, I had an appointment with the healthcare worker and the interview went well as planned. I also had an appointment with the President of COPORWA (Cooperative of Potters of Rwanda), who has an office in Kigali city. I went to his office in Kigali after finishing the data collection in the north. The interview went well, and he promised to give me any information that I would need in my research.

3.2 Methodology

After getting the appropriate data reflecting on the research objectives and answering research questions, the analysis of the quantitative data was done by deploying the descriptive statistics. I used also the ordinary least square regression (OLS) method to explain the relationship between the rate of health status and other explanatory variables. The simple OLS regression methods can be simply expressed as follows:

\[ Y_i = \alpha + \beta_1 CBHI + \beta_2 In + \beta_3 Edu + \epsilon_i \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots (1) \]

Where \( Y_i \) represents the self-rate of health status, CBHI denotes the community based health insurance, IN represents the household income, EDU represents the household educational level, \( \alpha \) is the constant that measures the average self-rate health status of the household when there is no CBHI, income and education and \( \beta_i \) represents how much the self-
rate health status is changed when the explanatory variables increase or decrease by one percent and \( \epsilon_i \) is the usual error term.

The sample size is considered adequate for predictive purpose (Knofczynski & Mundfrom, 2008, 437) although Knofczynski & Mundfrom (2008, 437) further argued that predictive ability is enhanced with a larger sample size. Notwithstanding, the predictive power of an OLS analysis lies in its ability to tell the strongest factors influencing the dependent variable which is the health status of respondents. The dependent variable is assumed to have a linear relationship with the independent variables which are; educational status, enrollment in CBHI, income level and self-rating of wealth. Hence there is the assumption that the independent variables correlate either positively or negatively with the dependent variable. This implies that a change in the direction of a dependent variable may correlate with a positive or negative change in the suspected factor. Where there is a closer co-linearity between an independent variable and the dependent variable, that independent variable can be judged to have a stronger effect on the dependent variable. Where there is no co-linearity, the independent variable is not considered influential. In this study, the health status of respondents formed the dependent variable which is an interval ranked variable consisting of the indicators; worse, not good, very good. This indicator is scored with relative weights as worse is low ranked (1), compared to not good (2) and very good (3). The dependent variables are thus hypothesized to be influenced by the following independent variables; 1) education, 2) enrolment in CBHI, 3) income per month, 4) self-rating of wealth. Central to the selection of factors lies in a theoretical perspective social marginalization and poverty (this has to do with the assumption that access to resources has a relationship to life outcomes). For the interview sessions, the data was transcribed and arranged into themes in line with the research questions most importantly along the line of the predictive indicators that determine the status of Batwa people regarding accessing health care through CBHI.
Chapter 4 Research Findings and Data Analysis

In this chapter, I am going to discuss the findings from the field in relation to the research questions that were proposed in chapter 1 of this study. There are three main questions that I intend to solve, 1) to understand the extent that the Indigenous people (Batwa) in Rwanda have access to Community Based Health Insurance (CBHI), 2) to investigate the constraints/barriers for Batwas to access CBHI? And 3) to examine the relationship between enrollment in CBHI and health/economic status of Batwas.

To achieve this, I decided to sectionalize this chapter into four main parts along the line of the research questions and sub-questions for the purpose of clarity. In the first part I will be discussing the level of understanding or perception of Batwa about CBHI while in the second part will focus on the discussion around the constraints or barriers that hinders the Batwas to access CBHI. In the third part of the chapter, I proceed to explore the changes in economic status and health that occurs in the Batwa lives as a result of their participation in CBHI and in the fourth part, my focus is on the discussion on the expectation that the Batwa community have as regards to CBHI. The last part is conclusion and my reflection on the Batwa access to health care through CBHI.

4.1 Perception of the Batwa on CBHI

Health insurance, especially in many African countries was meant to assist the neediest to access the health care service and to improve population health status in general (De Allegri et al, 2007). However, some studies in African countries have shown that limited understanding of the importance of CBHI and the quality of the health service are still a barrier to the achievement of the mission of CBHI. (Mulupi S, et al., 2013)

The findings of this study show that the idea that the Batwa did not understand the importance of CBHI is nothing short of an inherent prejudice against the Batwa community. For instance, when asked about the challenges that is hindering the success of CBHI in the district, the health care worker emphatically opinioned that.

“They don’t know yet the importance of having access to health care. We do mobilization often to see if one day it will change, the health care workers help others to do so.
We still have hope that they will understand and change their beliefs and understanding” (Health care worker, Gishamvu District, Interview 7<sup>th</sup> August 2018).

While both of the health and Social Affairs officials in Gishamvu district that I interviewed maintained that the Batwa community are not aware of the importance of CBHI compare to the non-Batwa, the findings from both survey and interviews conducted for the Batwa community contradicted the narrative of Batwa people don’t know the importance of having CBHI (in table 4.4).

It is also important to understand their perception about CBHI and to know how they feel about the CBHI. Therefore, questions on how happy they are with CBHI and how helpful the scheme has been to them were asked. First, I looked at the access to CBHI and out of one hundred and thirty-three respondents (133), which is 88.1% of the sample indicated that they are enrolled in the CBHI program, while 11.9% indicated that they are not enrolled. At the level of the household, 123 (81.5%) respondents indicated that everyone in their household is enrolled in the CBHI. The overwhelming majority of respondents are therefore enrolled in the CBHI.

Table 4.1 A cross tabulation of respondents by group and enrolment for the CBHI

<table>
<thead>
<tr>
<th>Are you enrolled in CBHI?</th>
<th>Non Batwa</th>
<th>Batwa</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>0.0%</td>
<td>39.6%</td>
<td>11.9%</td>
</tr>
<tr>
<td>YES</td>
<td>100.0%</td>
<td>79.0%</td>
<td>88.1%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Author’s data collection (July-August 2018)

X²=30.995 DF=1 P=.000

From the table above, there is a significant difference in the rate of access by group status. (X²=30.995) is significant at the 0.05 level. No non-Batwa in the sample indicated that they are not enrolled for the CBHI program. On the contrary, 30% respondents who indicated that they were not enrolled, were all Batwa people who are considered as Indigenous people in this study. This result confirms what I have observed while I was conducting this research that non-Batwa group appear to have more source of income and better living conditions compare to Batwa. This can be considered as one of the main reasons why they enroll
more in CBHI than Batwa do. In fact, Drod et al. (2016), in a systematic review of the academic database, they confirmed that household income and thus household wellbeing is positively associated with the uptake of CHBI.

We then look at the ratings of the CBHI in terms of effectiveness and usefulness to them

**Table 4.2 Rating of CBHI services by group status**

<table>
<thead>
<tr>
<th>Group</th>
<th>Extremely high</th>
<th>Very high</th>
<th>High</th>
<th>Low</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Batwa</td>
<td>8.80%</td>
<td>23.10%</td>
<td>63.70%</td>
<td>4.40%</td>
<td>100%</td>
</tr>
<tr>
<td>Batwa</td>
<td>3.30%</td>
<td>23.30%</td>
<td>63%</td>
<td>8.30%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Source: Author’s data collection (July-August 2018)*

$X^2=6.207$ Df=5, P=.287

There is no significant association between the status of group and rate on the CBHI services as the chi square calculated is not significant at the 0.05 level. Only 3 indigenous Batwa people out of the 60 that participated in this study from the two districts rated the CBHI service to low. In general, respondents were appreciating the services they get through CBHI even though there were few confirming that people using private health insurances are better taken care of. Then we look at if the respondents are happy with having CBHI.

**Table 4.3 Rating of Happiness with the CBHI Program by Group**

<table>
<thead>
<tr>
<th></th>
<th>extremely happy</th>
<th>very happy</th>
<th>moderately happy</th>
<th>not at all happy</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Batwa</td>
<td>28.6%</td>
<td>62.6%</td>
<td>8.8%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Batwa</td>
<td>33.3%</td>
<td>58.3%</td>
<td>6.7%</td>
<td>1.7%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Source: Author’s data collection (July-August 2018)*

$X^2=5.746$ DF=4, P=.219

There is no significant association between group status and happiness with the CBHI program as the chi square calculated is not significant at the 0.05 level. We can then look at how helpful the CBHI among both group of respondents. Most of the respondents were generally satisfied with CBHI package but the only and most important concern was on the process of enrollment because many of them were not happy about the
categories they were put in. Some were testifying of being put mistakenly in categories where they are considered to pay the insurance fully whereas they were considering themselves as being poor and thus expecting to get free CBHI.

Now we can look at how helpful CBHI among both groups of respondents.

Table 4.4 Rating of Perceived Helpfulness by Group

<table>
<thead>
<tr>
<th>Group</th>
<th>No</th>
<th>Extremely helpful</th>
<th>Very helpful</th>
<th>Moderately helpful</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Batwa</td>
<td>1.1%</td>
<td>41.8%</td>
<td>52.7%</td>
<td>4.4%</td>
<td>100%</td>
</tr>
<tr>
<td>Batwa</td>
<td>0%</td>
<td>21.7%</td>
<td>76.6%</td>
<td>1.7%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Author’s data collection (July-August 2018)

$X^2 = 9.117 \text{ df=3 } p = .028$

There is a significant association between the group status and the consideration of how helpful is the CBHI program as the chi square calculated is significant at the 0.05 level. More none indigenes considered the program extremely helpful when compared to the proportion of indigenes who considered the program extremely helpful. From the findings, the statistics above show that the Batwa people knows the importance of CBHI by rating the scheme high as well as considering the scheme to be very helpful which does not reflect the assumptions of the government officials. However, to be certain about the understanding of the Batwa community in relations to the importance of CBHI, we must consider the fact that 18 out of 60 respondents did not have access to CBHI and they equally rate the service high and feel happy about it. I probed further to ask how they can be certain that the CBHI service is very helpful and rate the service high when they themselves are not on CBHI scheme. It was gathered from the informal interview that I conducted from selected few among the Batwa people that all the Batwa people not on CHBI have previously benefited from CBHI but could not renew their CBHI due to a number of constraints. I will discuss these later but as result of not being within the CBHI they have to find alternatives medical care which are solely on herbs. One of the respondents not on CBHI elucidates further;

“I am not sure if there is any household in this community that you talk to will tell you that they have not benefited from CBHI before even if they are not on the scheme now. For example, I used to have CBHI until five years ago, and during those years that I am on CBHI I know the benefit and how helpful it was for me back then. So, if those that are not
on CBHI tell you that CBHI is very helpful to them, they are right because they are only talking from experience” (Anonymous 1, Batwa Respondent from Huye District, Interview session August 3rd, 2018)

The non-renewal of CBHI was corroborated by the Social Affairs officers I interviewed but refused to believe the Batwa people that he has interacted with on the reasons given for not renewing their CBHI. During the interview session with the Social Affairs Officer on the issue on the issue of renewal of CBHI, the officer suggests that the excuse of lack of money to renew CBHI is not plausible because the vast majority of Batwa falls under category 1 classification of wealth that don’t require any payment to be on the CBHI scheme. According to her;

“It is true that they don’t renew their CBHI regularly, because they say that they don’t have money to pay for it. But we don’t trust them because even some of those who have CBHI for free they don’t use it. Most of them are illiterate, their behaviors and understanding is still a problem that we face. Some would be sick and have CBHI of course, and would stay at home without going to the health center because they think that as the sickness came, it can cure also its self, or they would use herbs from the forest ” (Social Affairs Officer, Gishamvu District, Interview 6th, 2018)

The implication of the above statement is that the Rwanda government officials are unworried in their approach towards the Batwa people’s health related issues. Why wouldn’t the Batwa be believed on the constraint and challenges they faced in accessing CBHI? From the tone of the discussion I had with both the health officer and the Social Affairs Officer, the supposed answers lie in the mainstream population marginalization of the Batwa people and the negative perceptions about their way of the life. Nevertheless, there is a need to investigate these barriers and ascertain if truly the Batwa people are not been truthful as suggested by government officials on why they couldn’t register for CBHI or effectively make use of scheme peradventure they managed to register. Therefore, in the next section we are going to examine the identified barriers by both the government officials and Batwa community and if they are plausible enough to hinder access to health care.
4.2 Barriers and Constraints

4.2.1 Education

The assertion of the government officials as discussed in the previous section of this chapter on the main obstacle to the Batwa access to CBHI is the high level of illiteracy. We look at the level of education of Batwa people to verify the assertion of the government officials on the implication of lack of education on the enrollment and usage of CBHI by the Batwa people.

When comparing across group distribution, there is a significant difference in educational qualification (P=.000) as the table below indicates.

<table>
<thead>
<tr>
<th>Highest level of education</th>
<th>Non-Batwa</th>
<th>Batwa</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary education</td>
<td>1.1%</td>
<td>0.0%</td>
<td>0.7%</td>
</tr>
<tr>
<td>No education</td>
<td>26.4%</td>
<td>66.7%</td>
<td>42.4%</td>
</tr>
<tr>
<td>Primary education</td>
<td>72.5%</td>
<td>33.3%</td>
<td>57.0%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Author's data collection (July-August 2018)

$X^2=24.263$, df=2, P=.000

The distribution of educational qualification indicates that those without an educational qualification are proportionally more among Batwas (66.7%) when compared to non-batwas (26.4%). Just as those with a primary education are more in number among non-Batwas (72.5%) in comparison to Batwas (33.3%).

The 4th (latest) population and housing census done in Rwanda in 2012 has shown that 68% of Rwandan population aged 15 years and above were literate (NISR 2012). Even though the sample used by the NISR was large to be compared to the one used in this study, the broader image shows that literacy among the Batwa group is very low considering that the majority of Rwandese are literate. This was opined by Eversole, et al (2013) who said that in many
countries, Indigenous people have the least access to education compare to other group of people.

Some of the reasons that I received on why people are illiterate from the interviews include the long distance to get to school where they had to walk two hours to reach schools. They attested that even though the distance has decreased considerably (as new schools were built near them recently), that it is no longer their priority for them (parents) as now they have to work and take care of their families.

However, it is important to examine if lack of education have any significance in the non-enrollment in the CBHI scheme.

We can now look at education level and enrollment of the respondents

| Table 4.6 Cross tabulation of educational level and enrollment rate |
|---|---|---|
| Are you enrolled in CBHI? | No | Yes | Total |
| Secondary education | 0.0% | 0.8% | 0.7% |
| No education | 77.8% | 37.6% | 42.4% |
| Primary education | 22.2% | 61.7% | 57.0% |
| Total | 100.0% | 100.0% | 100.0% |

Source: Author's data collection (July-August 2018)

X²=10.504, df=2 P=0.005

There is a significant association between the educational level of respondents and the enrolment into the CBHI program, as the chi square calculated is significant at the 0.05 level. From the table above, 77.8% of those who are not enrolled in the CBHI have no education as indicated, while 61.7% of those who enrolled have a primary school education. While statistics shows that the assertion of the government officials might be right on the impact of education in enrolling in the CBHI scheme, it is too early to make definitive comment on the validity of such assertion without considering the factors identified by the Batwa people as their main constraint to access CBHI which includes employment, poverty, and low income.
4.2.2 Employment

The findings of this study corroborated previous empirical studies that revealed high unemployment rates among the Indigenous people not only in Rwanda but across the world as a factor that inhibit Indigenous people in accessing health care. In this particular study 16.6% of respondents indicated they are into pottery and other forms of informal employment such as street vendors, (56.3%) are farmers. 1 respondent is a full-time student as 26.5% respondents have a temporary job. When contrasted by Batwa and non-Batwa, the table below indicates that there is a significant difference in employment status across group.

Table 4.7 Cross tabulation of employment status by group

<table>
<thead>
<tr>
<th>Employment status</th>
<th>Non-Batwa</th>
<th>Batwa</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Others (Pottery, street vendors)</td>
<td>2.2%</td>
<td>38.3%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Farmer</td>
<td>75.8%</td>
<td>26.7%</td>
<td>56.3%</td>
</tr>
<tr>
<td>Full time student</td>
<td>1.1%</td>
<td>0.0%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Temporary job</td>
<td>20.9%</td>
<td>35.0%</td>
<td>26.5%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Author’s data collection (July-August 2018)

$X^2=47.422$, df=3, $P=0.000$

For respondents who indicated their status of employment, more non-indigenous are into farming (75.8%) when compared to 26.7% Batwa farmers. The full-time student is a non-Batwa. Just as more Batwa held a temporary job (35%) where non Batwa who held a temporary job were 20.9% at the time of the field work. This table shows that the majority of Batwa have low-paying jobs or temporal jobs and these results agree with previous results of Goodwin (2017) who noticed that Batwa are extremely vulnerable to the issue of low financial status as a result of only qualifying for part-time informal day jobs which offer lower income than full-time form jobs.
A number of them confirmed that they can’t get a better job as they have never been to school, and they don’t know how to read and write. They consider being uneducated as one of the barriers to get a better job.

Consequently, this affect the access and enrollment into CBHI because they can’t pay the membership for those put in the category where they are assumed to be able to pay for themselves. However, even though there are some who are being paid for the CBHI fully, our observation showed that being paid for does not change a lot regarding their daily life.

### 4.2.3 Wealth category rating

In 2014, the Local Administrative Entities Development Agency created new Ubudehe categories. Under the programme, households are put in categories depend social and economic position with regard to their factors of production such as land, labor, capital or other properties they own. Below is the classification of categories:

First Category consists households who do not possess their own house and can’t afford basic needs easily.

Second Category refers to households who possess their own home or they are able to rent however hardly to secure a permanent job.

Third Category consists households who have a full-time job and farmers who produce extra that can be even sold to the market. This includes those who are able provide jobs to other people through their small and medium enterprises.

Fourth Category refers to people who are employed in international organizations, multinational companies, working with government institutions as well as owners of large business.

The respondents were asked to do a self-rating of category of wealth, 39.7% respondents indicated that they fall under category 1, 48.3% indicated they belong to category 2, while 11.9% indicated that they are in category 3.
Table 4.8 Cross tabulation of wealth category by group

<table>
<thead>
<tr>
<th>Ubudehe category</th>
<th>non Batwa</th>
<th>Batwa</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>category 1</td>
<td>20.9%</td>
<td>68.3%</td>
<td>39.7%</td>
</tr>
<tr>
<td>category 2</td>
<td>60.4%</td>
<td>30.0%</td>
<td>48.3%</td>
</tr>
<tr>
<td>Category 3</td>
<td>18.7%</td>
<td>1.7%</td>
<td>11.9%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Author’s data collection (July-August 2018)

X²=36.204, df=2, P=.000

There is a significant association between group of respondents and the wealth category as the P value indicates (P=.000). More Batwa (68.3%) rated themselves in category 1 when compared with non-batwa (20.9%). None Batwa (60.4%) were more in proportion in category 2. Only 1 Twa is in category 3 when compared to non-Batwa 18.7% in category 3. Considering what I saw and got from the respondents, most of the Batwa are put in the category of the needy and thus they get the membership for free. Those put in the category that is assumed to be able to pay the membership themselves are not happy and are consistently claiming the injustice in assigning the categories of those supposed to be assisted or not.

4.2.4 Poverty rating

In the self-rating indicator of poverty, 60 (39.7%) indicated that they are extremely poor, while one respondent was indecisive.
Table 4.9 Cross tabulation of Poverty rating by group

<table>
<thead>
<tr>
<th>How do you rate yourself to others in terms of wealth</th>
<th>non Batwa</th>
<th>Batwa</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely poor</td>
<td>17.6%</td>
<td>73.3%</td>
<td>39.7%</td>
</tr>
<tr>
<td>Poor</td>
<td>59.3%</td>
<td>11.7%</td>
<td>40.4%</td>
</tr>
<tr>
<td>Not poor</td>
<td>22.0%</td>
<td>15.0%</td>
<td>19.2%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>1.1%</td>
<td>0.0%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Author’s data collection (July-August 2018)

$X^2=50.204, df=3, P=.000$

The distribution of respondents indicates that the larger majority of Batwa are extremely poor 73.3% when compared to none Batwa 17.6%. Just as Batwa who indicated that they are not poor account for just 15% when compared to 22% of non-Batwa. From what I observed when I was conducting the interviews, they consider themselves as the poorest because they said that they are the ones that don’t have land to grow food for their families and for the market. We found that their kids are not going to school and the main reason behind that was that they are unable to get soap to look clean for the school. They claim also not having any other properties to support them, compared to other people who are not Batwa. All these claims confirm the low self-esteem the Batwa community suffers from and this can affect the enrollment in CBHI and in the use of health services in general.

4.2.5 Monthly income

In the response for monthly income, 66 respondents (43.7%) held that their income is between 1000 to 5000 RWF from, 28 (18.50%) fall within the range of 6,000 to 10,000 RWF. Those whose incomes are within the range of 11,000 to 15,000 RWF are 24 (15.9%) respondents. Those within the range of 16,000 RWF and beyond are 32 (21.2%) respondents. Below is a graph showing the income distribution of respondents.
When disaggregating income levels by group status, the following statistics implicates that income levels are lower among Batwa when compared to non-Batwa.

**Table 4.10 Cross tabulation of income levels by group**

<table>
<thead>
<tr>
<th>What is your income per month?</th>
<th>non-Batwa</th>
<th>Batwa</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000-5000 RWF</td>
<td>23.1%</td>
<td>76.3%</td>
<td>44.0%</td>
</tr>
<tr>
<td>6000-10000 RWF</td>
<td>26.4%</td>
<td>5.8%</td>
<td>18.7%</td>
</tr>
<tr>
<td>11000-15000 RWF</td>
<td>24.2%</td>
<td>3.4%</td>
<td>15.0%</td>
</tr>
<tr>
<td>16000 RWF and beyond</td>
<td>26.4%</td>
<td>13.6%</td>
<td>21.3%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Author’s data collection (July-August 2018)

X²=42.801, df=3, P=.000

There is a significant association between income levels and group status of respondents as more Batwa (76.3%) have an income profile that falls in a range between 1,000 RWF to 5,000 RWF. While non-Batwa are almost evenly spread across the different income categories. In all indicators of poverty, Batwa respondents fall below the indices in comparison with Non-Batwa. This has implications for standard of living and access to basic resources necessary for living including having access CBHI.
The major reason cited by the respondents for not enrolling in CBHI scheme is the lack of funds. This is consistent with previous findings of Defourny et al. (2008) who explains that poverty-stricken households with low income only have enough funds to cater for basic needs such as food and shelter and are not able to cover the extra cost of paying for health insurance.

As demonstrated by the overall data on the barriers identified by the Batwa community, it is evident that poverty as a result of unemployment and low-income are valid reasons for Batwa people not able to access and make use of CBHI. Although, the health and social affairs officials maintained that majority of Batwa people fall into category 1 classification of wealth which is also evident from the data above don’t pay the premium fees for CBHI, all the 18 Batwa people that did not enrolled despite falling into category 1 indicated that the registration fee and the cost of passport is not affordable for them while those that are enrolled gave various reasons for not making use of the CBHI. This includes cost of transportation to the nearest hospital, cost of medicine, and most importantly the CBHI coverage did not include some medical treatment such as dental treatment, heart related diseases and a number of surgeries for several illness. As elucidated further by one of the respondents;

“I have a CBHI and I do go to the hospital regularly, but the challenge is that when on many occasions the drugs they prescribe for you to buy for your illness is cost more than the whole money I make in a month. So, when you are sick, and you realized that your CBHI did not cover the type of illness affecting you, why would you bother to go to the hospital, this have nothing to do with education because the local authority always comes here regularly to educate people” (Anonymous Batwa Respondents, Gicumbi District, August 4th Interview)

Further discussion with Batwa people revealed that although illiteracy is high among the community, this lack of education as suggested by government officials backed with data is not responsible for none enrollment in CBHI rather it was responsible for the Batwa inability to secure employment which further exacerbated their vulnerability. If we consider the fact that 40 out of 60 Batwa people that participated in this study have no level of education, only 18 of the total population of Batwa did not have CBHI, it is safe to argue that the Batwa people argument on other militating factors is more significant to the inability to access health care. One of the respondents justified the argument of the Batwa people that before one can get a job that pays around between 6,000 RWF and 16,000RWF you must at least have a primary school certificate. Unfortunately, as it is now the vast majority of the batwa
population that participated in the study are not educated and moreover, they all complained about the means of earning money that they are skilled in which is pottery is no more lucrative any longer due to the saturation of foreign pottery products in the Rwanda market.

### 4.3 Relationship between participation in CBHI and health/economic status of Batwa

A question was asked on the rating of Health at the time of data collection. Below is a graph depicting the self-ratings for health?

<table>
<thead>
<tr>
<th>Table 4.11 Rating of respondent’s health</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Bad</td>
</tr>
<tr>
<td>not good</td>
</tr>
<tr>
<td>very good</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

**Source:** Author’s data collection (July-August 2018)

In the Table 4.11 above, 20(13.2%) of the respondent indicated that their health status is bad. 95 respondents (62.9%) rated their health status as not good. While 36 respondents (23.8%) indicated that their health is very good. From the graph most respondents are not in very good health compared with those who reported to be in good health.
Table 4.12 Cross tabulation of health status by Group

<table>
<thead>
<tr>
<th>In general, how would you rate your health today?</th>
<th>non Batwa</th>
<th>Batwa</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad</td>
<td>8.8%</td>
<td>20.0%</td>
<td>13.2%</td>
</tr>
<tr>
<td>Not good</td>
<td>63.7%</td>
<td>61.7%</td>
<td>62.9%</td>
</tr>
<tr>
<td>Very good</td>
<td>27.5%</td>
<td>18.3%</td>
<td>23.8%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Author’s data collection (July-August 2018)

$X^2=4.721$ DF=2, $P=.094$

There is no significant association between health status and group status as the chi-square calculated is not significant at the 0.05 level. A chi-square test of association is carried out to determine if there is an association between enrollment and the health status of sampled respondents. Below is the result.

Table 4.13 Test of association between enrollment in CBHI and health status of respondents

<table>
<thead>
<tr>
<th>Are you enrolled in CBHI?</th>
<th>In general, how would you rate your health today?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bad</td>
<td>Not good</td>
</tr>
<tr>
<td>No</td>
<td>38.9%</td>
<td>61.1%</td>
</tr>
<tr>
<td>YES</td>
<td>9.8%</td>
<td>63.2%</td>
</tr>
<tr>
<td>Total</td>
<td>13.2%</td>
<td>62.9%</td>
</tr>
</tbody>
</table>

Source: Author’s data collection (July-August 2018)

$X^2=15.029$, df=2, $P=.001$

The chi-square calculated is $X^2 = 15.029$ at 2 degrees of freedom which is significant at the 0.05 level. Not one of those who reported not been enrolled indicated that their health status is very good. On the contrary 27.1% of those who enrolled reported having very good
health status. 38.9% of those who did not enroll indicated that their health status is worse which is high when compared to 9.8% who indicated same in the category of those who enrolled. There is thus a significant association between enrollment in CBHI and the health outcomes for respondents.

When the factor of enrollment is considered along other factors, the OLS is used to calculate the predictive value of enrollment in CBHI. OLS was calculated to predict the health status based on the following independent variables; income, enrollment, self-rating of wealth and educational level of respondents.

<table>
<thead>
<tr>
<th>Variables</th>
<th>(OLS)</th>
<th>(Robust)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health status</td>
<td>Health status</td>
</tr>
<tr>
<td>Higheduc</td>
<td>0.223***</td>
<td>0.223**</td>
</tr>
<tr>
<td></td>
<td>(0.0732)</td>
<td>(0.110)</td>
</tr>
<tr>
<td>incomemnth</td>
<td>9.41e-05***</td>
<td>9.41e-05***</td>
</tr>
<tr>
<td></td>
<td>(7.31e-06)</td>
<td>(1.12e-05)</td>
</tr>
<tr>
<td>enrollCBHI</td>
<td>0.0855</td>
<td>0.0855</td>
</tr>
<tr>
<td></td>
<td>(0.119)</td>
<td>(0.0836)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.519***</td>
<td>0.519***</td>
</tr>
<tr>
<td></td>
<td>(0.134)</td>
<td>(0.123)</td>
</tr>
<tr>
<td>Observations</td>
<td>151</td>
<td>151</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.659</td>
<td>0.659</td>
</tr>
</tbody>
</table>

Note: Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

A significant regression equation was found (F (3,147) = 63.01, p<.000), with an R² of .659. Equation = .519 + .223EDU +0.000000.9IN,

The regression table above shows that the level of education of all respondents (batwa and non-batwa) affect the household health status positively and increases significantly the household health status by 22, 3 percentage points. The same on the income which significantly increases household health status by 0.00009 percentage points. Even though the CBHI enrollment appears to be insignificant which means it doesn’t affect household health status, in general, all explanatory variables are significant because the F test is significant at 1% level.
I also used the robust standard error to check the robustness of the OLS regression and results confirm the significance of the OLS regression.

Then after this, we looked at Batwa situation on effect of independents variables on the dependent variable.

Table 4.15 The effect of CBHI enroll, IN and EDU on household status on Batwa

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Health status</th>
</tr>
</thead>
<tbody>
<tr>
<td>incomeynth</td>
<td>0.00104***</td>
</tr>
<tr>
<td></td>
<td>(2.739-05)</td>
</tr>
<tr>
<td>Higheduc</td>
<td>0.160**</td>
</tr>
<tr>
<td></td>
<td>(0.0790)</td>
</tr>
<tr>
<td>enrCBHI</td>
<td>-0.0918</td>
</tr>
<tr>
<td></td>
<td>(0.0721)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.500***</td>
</tr>
<tr>
<td></td>
<td>(0.148)</td>
</tr>
</tbody>
</table>

Observations  60
R-squared  0.293

Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

As per the above table the income affects positively the household health status by 0.00104 percentage which is statistically significant at 99 per cent confidence interval whereas education increase the household the household health status by 16.8 per cent at 95 confidence intervals.

These results correlate favorably with Marmot’s findings in his study done in 2002. He showed that education is among the significant factors influencing people’s health status and health related decision. In fact, the more people are educated the easier they get well-paying jobs and become more health conscious.

Respondents who have enrolled in the CBHI program were asked if participating has had any change in their income. Below is the response.
Table 4.16. Do you think that having access to CBHI has changed your life in terms of income?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>25</td>
<td>18.6</td>
<td>18.6</td>
<td>18.6</td>
</tr>
<tr>
<td>YES</td>
<td>108</td>
<td>81.2</td>
<td>81.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>133</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author's data collection (July-August 2018)

Are you enrolled in CBHI? = YES

Of the sampled respondents who were enrolled, 81.2% indicated that having access to CBHI has changed their life in terms of income. While 25 respondents (18.8%) indicated that there has been no change. There is a wider number of respondents who admit to the efficacy of the health insurance scheme. This agrees with the observation of Abdulraheem et al (2012) and Posavac (2015) that health insurance constitutes a positive influence in welfare for beneficiaries. From the sampled respondents who were enrolled, 81.2% indicated that having access to CBHI has changed their life in terms of income while 25 (18.8%) indicated that there has been no change.

Table 4.17 Cross tabulation of perceived impact by group status

<table>
<thead>
<tr>
<th>Do you think that having access to CBHI has changed your life in terms of income?</th>
<th>non barwa</th>
<th>Barwa</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>16.5%</td>
<td>28.8%</td>
<td>21.2%</td>
</tr>
<tr>
<td>YES</td>
<td>83.5%</td>
<td>71.7%</td>
<td>78.8%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Author’s data collection (July-August 2018),

\[X^2=3.040, df=1, P=.081\]

There is no significant association between perceived association of group status and change income level as the Chi square calculated is not significant at the 0.05 level. In general, from the data presented in this section, it was evident that the CBHI have a relationship and
influence on the income of Batwa people that enrolled in CBHI even though they still remain extremely poor going by the classification of wealth categories. Unfortunately, the increase in income did not translate into having good health for the vast majority of Batwa. The implication of this is that the increase in income due to CBHI because the participants in the scheme will save money that ought to spend on health care did not necessarily mean poor people should graduate out of poverty. It means that you can have CBHI and still be poor depending on the stage of poverty the participants are before enrolment into CBHI.

4.6 Expectation of Batwa Community from Government

During the process of the interviews with few selected Batwa people in both districts, it was discovered that although the statistics might show how grateful and happy the Batwa are because of the CBHI scheme, the reality is that they have so many expectations. Most especially the expectation that will address the challenges that they have in either registering for CBHI or even making use of the CBHI when the need arises.

4.6.1 Waiver of any form of Payment and Reclassification of Wealth Categories to include household size

Top of the expectation list of the Batwa people is the total abolition of any form of payment such as registration and passport fees as well as reclassification of wealth category beyond the level of income. As demonstrated from the expectation of the Batwa in this study, the government should redesign the classification of wealth categories to include household size because the non-inclusion of the household size misrepresents the true wealth status of the majority of Batwa people. From the findings of this study, 63 respondents (41.7%) have a household size of between 2 and 5 people. 83 (55.0%) have a household size of between 6 and 10 people while those having above 10 people are 3 (2.0%) respondents. The vast majority of Batwa people fall under the household size that have 6-10 members. One of the respondents on the CBHI scheme that classified himself under category 2 of wealth argued that majority of them beg to be able to feed their families and without providing food for the household everybody in the household will fall sick. He was of the opinion that, while his 10,000 RWF earning per month placed him high among those that have source of income in the society, in reality he still considered himself extremely poor, but the classification of wealth placed him under category 2 without considering the size of the household and how many people are employed in the household. He explains in detail;
“The wealth category classification is nonsense from my point of view, yes I earn 10,000 monthly which amounting to 120,000 yearly. Now let us do some calculation together, you are aware that because I paid 3,000 premium for CBHI, it did not cover my household. I have 7 children that means I have to pay 3,000 each for 7 children, my wife and myself which is 27,000. Now remove 27,000 from 120,000 that means I am left with 93,000 RWF per year (almost 100 Euros). Tell me which category you think I should belong to? Place me back at category 1 from category 2” (Anonymous Batwa Respondent, Huye District, Interview on 2nd August 2018).

In general, from the discussion I had with the Batwa community, it was gathered that many Batwa people that fall under the category 2 and 3 of wealth status classification have to lie about their household size to the government officials so as to reduce the number of the mandatory payment for all the members of the household. One respondent corroborated the above argument that the head of household which is the breadwinner of the family have to make choices on who to register under the CBHI scheme as the wealth category classification is totally misplaced. From his point of view

“Presently, I earn 18,000 RWF which place me in category 3 but when I went to register for CBHI I did not disclose the true size of my household because they will ask me to pay, as a result I told them that I only have 2 children and in reality, I have five children. Having two children under CBHI is better not to have any, the best thing the government can do is to give a total waiver for Batwa people” (Anonymous Batwa Respondent, Huye District, Interview on 4th August 2018).

The implication of the argument above is that the way the Rwanda government conceptualized poverty reflects in the government policy. Definitely the policy did not consider the fluidity in movement from relative poverty to absolute poverty to chronic poverty (Humel et al, 2001). The government low flat rate on premium doesn’t address the needs of the Batwa people that have been historically marginalized. This is similar to the observation of Madhukumar et al (2012) who noted that many rural people struggle under the burden of financial weights that makes it difficult for them to afford health premiums. It is also in line with the observation by Shimeless (2010) that the flat rates which are expectedly cheap are still beyond the reach of many.
4.6.2 Education

The vast majority of the Batwa are not educated and education is critical to employment for the Batwa people (Warrilow, 2008:14). From the discussion I had with the respondents on their expectation it was gathered the government need to prioritized education for the indigenous population. While education is free in Rwanda, there are many obstacles such as discrimination against Batwa children among their peers and teachers, distance to school and other hidden cost of education such as uniforms, transports fees, food among others that hinder Batwa children access to education that can prepare them for employment. However, the most interesting aspect of the Batwa people expectation was the suggestion of adult education targeted at Batwa community. All the respondents were of the opinion that, while government can develop programs that will make school environment conducive for the Batwa children to be educated, it however did not solve the immediate need to get employment. According to one of the respondents;

“Many parents that have no form of education really wish they can get at least a primary school certificate or any form of certificates that can get them employment. The problem is that you will not expect me to be going to school with my children in the same class, so if the government can at least make arrangement of some kind of adult education or some trainings that can improve our employment opportunity it will be great” (Anonymous Batwa Respondent, Gicumbi District, Interview on 17th August 2018).

Another respondent expresses her view

“The government need to help us because before we don’t need education to survive, it was the government that disturbed us from our way of life, so I should not be blamed not going to school when I was a child. So, for me, the government if they want, they should come up with education program that suit my age so that I can get a job to take care of my children when they fall sick” (Anonymous Batwa Respondent, Gicumbi District, Interview on 14th August 2018).

The expectation of the Batwa people resonates with previous studies (Sommerlad, 1981; Richardson & Blanchet-Cohen; Rao and Robinson-Pant, 2006) that have suggested adult education as a panacea to the level of illiteracy among the Indigenous population all over the world. Apart from getting permanent jobs, education play significant role in living a healthy
life that can prevent diseases such as HIV/AIDS. Without education that can lead to employment, many Batwa women turn to prostitution for merger amount even sometimes in exchange for food (Warrilow, 2008:15). This means that for the successfully impact of CBHI, the government must address the education problem among the Batwa people because the more you are educated the more you understand some basic understanding about health-related issues. As a result, they will not fall to illness that are so severe beyond the coverage of CBHI

4.6.3 Expansion of Medical Coverage of CBHI

The Batwa community expectation from government on improving their access as well as usage of CBHI calls for the government to address the peculiarity of illness that is most common among the Batwa community as a result of their way of life and living conditions. The present design of the CBHI covers basic health issues and sexual reproductive related problems and a few surgeries. From the findings, the vast majority of Batwa people suffer from dental problem, lungs and heart disease probably due to their consumption of alcohol and tobacco. One of the respondents explain further that;

"Because of our poor condition we don’t leave healthy live and this has led to series of complications. You might be suffering from multiple alignment but the CBHI only address the one that falls under the scheme. For example, you might be suffering from dental or heart problem, malaria, and diabetics at the same time. So, when you go to the hospital, they will treat the malaria and diabetics which is also subject to specific diet that cost money, then leave you with the dental or the heart problem because the CBHI did not cover such treatments" (Anonymous Batwa Respondent, Huye District, Interview on 7th August 2018).

The above response explains why the majority of the Batwa people despite enrolment in CBHI indicated that their health status is not good as demonstrated earlier in this chapter. The expectation of the Batwa is valid and previous studies supported the argument on the need to factor the health needs of the indigenous people in the design of health care intervention. It is only the Indigenous people that knows what kind of health care they most need in their community, therefore it is important for government to have close consultation with, if not the straight contribution of members of the community in indicating and then addressing health care needs (Davy et al., 2016:6-7).

In this chapter, we have been able to establish that the argument that portray the Batwa community as an ignorant set of people that lack understanding of the importance of CBHI
to be untrue. While it is true that the majority of Batwa people are uneducated, they really appreciate the importance of enrolling in CBHI. However, their non-usage of enrollment in CBHI was as a result of a number of militating factors such as poverty, low-income, unemployment due to lack of education. Without a doubt the CBHI have positive impact on the income level of the Batwa people, however, the increase in the income level is not sufficient enough to move the vast majority away from their chronic poverty situation. This was justified from the expectation of the Batwa on the need for government to redesign their wealth sources.
Chapter 5 Conclusion and Recommendations

The study set out to assess Batwa people’s socio-economic situation such as level of education, household income, employment and the relationship and influences on access to Community Based Health Insurance (CBHI) in Rwanda in order to have a clear understanding to what degree does the Batwa people have access to CBHI. As a result of the set-out objectives for this study, four questions were asked, 1) what is the understanding/perception of Batwa peoples about CBHI? 2) what are the constraints/barriers for Batwa to access CBHI? 3) what changes in socio-economic indicators of the Batwa occur as a result of access to CBHI? and 4) what are the expectations of the Batwa community from CBHI?

To answer all these questions, a mixed method approach through the administration of 151 questionnaires face-to-face survey questionnaires and 5 unstructured interviews sessions were adopted to gather data in two districts (Huye and Gicumbi) in Rwanda that have a significant presence of Batwa people living together in the same community with the non-Batwa. The interview sessions were also extended to government officials responsible for the CBHI scheme as well as the umbrella body that represents that Batwa people trying to give them a voice within the Rwanda polity. The focus of this chapter is to draw a conclusion from the findings that were presented in the previous chapter organized along the line of the research questions, discuss the limitation in the scope of the study and as a result suggest recommendations on both future area of area of research as well as how to improve the CBHI scheme to be more inclusive to the Batwa people.

5.1 Conclusion and Summary

For the first research question that seek to understand the perception and understanding of the Batwa people about CBHI, the findings of this study contradicts the assumptions of government officials and a number of previous studies that the Batwa people did not understand the importance of the CBHI, thus responsible for low enrollment among the Batwa people even though the vast majority of the Batwa people fall under the category of wealth classification that require them not to pay premium fees for the CBHI. Although, considering the fact that 30% out of the Batwa people that participated in the study are not presently enrolled in CBHI in comparison with the 0% non-enrollment in CBHI of the non-Batwa people living the same community, one might one to agree with the assumption that the
Batwa people did not really understand the importance of the CBHI. On the contrary, the findings suggest that the non-enrollment of Batwa people is not about not understanding the importance of the CBHI but rather was based on a number of constraints hindered them to access CBHI. For the fact that only 1.8% of the Batwa people rated the CBHI service low, 0.6% indicated not happy, and 99% claiming the CBHI is either extremely helpful or very helpful to them suggests that the Batwa people that are not enrolled with the CBHI have previously enrolled but couldn’t renew their enrollment due to a number of constraints. Government officials downplayed the constraints identified by the Batwa people with the suggestion that even those that are enrolled don’t use the CBHI due to lack of education that is prevalent among the Batwa people. Despite the study findings back the lack of education argument with 66.7% of Batwa people with no form of education in comparison with 26.4% of the non-Batwas in the same community on the one hand. On the other hand, the findings revealed that the lack education did not directly have a relationship on the perception of the importance of CBHI among the Batwa people but rather contributed much to the constraints that hinder them to either register, make use of CBHI, or renew the CBHI after the expiration.

For the second research question that focuses on barriers and constraints that hinder the Batwa people in accessing the CBHI, the findings revealed poverty, lack of education, low monthly income, and unemployment were key issues raised by the Batwa people. From the findings, the vast majority of Batwa people rated themselves as extremely poor with 73.4% falling under this category complemented with the 11% that indicated to be poor, then see that 85% of the Batwa population are poor which explains why 68.3% fall under category one of Rwanda government wealth classification that represents households who do not have their own a house and that can’t get basic needs easily, in comparison with 20.9% on the non-Batwa in the same community. If we expand our scope of Rwanda classification of poverty, 30% of the Batwa compared to 60.4% of the non-Batwa falls under second category that covers those who have their own houses or able to rent but hardly to secure permanent jobs. However, one might want to argue that the extremely poor population among the Batwa people have been accommodated by the free CBHI based on their wealth category and monthly income, but the findings of this study shows that there is a clear difference between access and accessibility. It is true that the vast majority of the Batwa have free access to medical care through CBHI, but unfortunately they are so poor to the level that they lack the capacity to access the CBHI due to cost of transportations to the hospitals,
cost of purchasing drugs that are not listed within the coverage of CBHI or due to the non-availability of the drugs even to many to cost of taking passport photograph for the free registration is overwhelming for a many Batwa families. From evidence gathered from the findings, free CBHI will have little or no significant impact if the monthly income of the majority of the Batwa people that falls within the range of 1000RWF ($1.5) and 5000RWF ($5.7) did not change drastically. To compound the challenges of the Batwa, the vast majority have no form of education or training that can enable them to get jobs that can improve their livelihood, the accessibility of CBHI regardless of making it free will continue to elude the Batwa people.

For the third research question that seek to examine the changes in socio economic indicators of the Batwas that occurred as a result of access to CBHI, the findings revealed that while there is a slight change in the income of the Batwa people as a result of their access in income, the vast majority of Batwa people still considered their health situations not good or bad. From the relationship of CBHI and increase in income, 71.7% of Batwa people as compared to 83.5% of the non-Batwa people have seen an increase in their income since the introduction of CBHI although the increase in income did not necessarily translate to change in status that will enable them to graduate out from extreme poverty. The implication of this is that the assumptions that CBHI save household out of pockets payment for medical care is valid but does not stop a poor household from been poor or extremely poor. When it comes to the health-related issue, it is evident from the fact that 71.5% of the non-Batwa people in the community indicated not good and bad on their current health status despite all the non-batwa enrollment in CBHI that the CBHI scheme requires reforms to meet the health care expectation of the general poor population of Rwanda. Therefore, is it not a surprise that 81.7% of batwa people health status did not reveal very good.

The last research question now looks at the expectations of the Batwas community from CBHI looking at the reality on the ground that the CBHI needs a total reform. The findings revealed that there are three main expectations of the Batwa people. The first one is the reclassification of the wealth categories of the Rwandan government. The conceptualization of poverty that the Rwandan government used in the classification of wealth categories did not ignore the typology of poverty but also did not factor the household size in their classification. The findings reveal that the vast majority of Batwa household size is between 6 to 10 members, therefore, making it difficult for those in category 2 and 3 to cover the payment of premium for the whole household. In reality, they ought they to belong to category 1
rather than category 2 and 3 because when compared to the household income with the size of children and dependents, they are actually extremely poor, and the wealth categorization already placed them above other categories that enjoy free CBHI. Also, the Batwa people expectation follow the thought of having a special education and training programs that will enable them to earn a form certification that can be used in getting jobs. The Batwa people suggested adult education is the key since the majority of the head of households and bread-winners lack education, they are expecting the government to come to their rescue in this regard. Most importantly in their expectation is the expansion of the CBHI coverage that will include the treatment of common sickness and diseases in the Batwa community due to the peculiarity in their way of living that is different from the mainstream population. Due to the high consumption of kola, tobacco, and alcohol, dental, liver and heart-related disease are very common among the Batwa community and of course, these are not covered by CBHI. Therefore, the Batwa people expected that CBHI should really reflect community participation in determining the most needed type of health care that the CBHI will cover in healthcare scheme.

Generally, the CBHI in Rwanda is a laudable program that gives hopes to may poor population regardless of status as non-Batwa or Batwa in accessing health care that would have eluded them if the CBHI is not in existence. While the sense of equality been promoted by the Rwanda government by giving a flat rate of premium to the poor population in a bid to avoid discrimination and advance the sense of unity by not classifying people by ethnicity of Tutsi, Hutu, or Batwa in all the government policies but rather as wealth categories. It is important at this juncture to emphasize that as much as the Batwa welcome equality of treatments, they needed equity more to enjoy the idea of equality considering the fact that they have been historically marginalized in the country even before the genocide.
5.2 Recommendations

Against the backdrop of the findings of this study, it is important that the government considers the following recommendations:

1) The government should build the capacity of Batwa to access CBHI and encourage enrollment into the insurance program by increasing their levels of education, household income and employment. This can be done by providing employment opportunities, free/subsidized education and capital for starting business for the Batwa people.

2) The Rwanda government needs to recognize the existence of the Batwa people as an Indigenous population that needs attention. Criminalizing non-governmental organizations like COPORWA should be avoided as such organizations render help to the vulnerable population and helps improve the wellbeing of the Batwa people. Rather, the government should offer support to such organizations in the form of funds and resources.

3) Since it has been established that even though Rwanda is a poor country with a lot of its citizen below the poverty line, the Batwa, remain the poorest living in chronic poverty. The government can introduce social security safety nets such as cash transfer to support Batwa families since their population is less than 30,000 in the 11 million population of Rwanda. The cash transfer will help the Batwa people to afford extra cash that they can use for transportation to health centers to either register for the CBHI or make use of the CBHI. Moreover, they will have extra cash that they can use to eat good food that will contribute to their health status.

5.3 Limitation of the Study and Suggestion for Areas of Future Research

The main limitation of the current study lies in the small size of the sample in the process of data collection that is limited to 60 Batwa and two districts in the country. Arguably, 60 people cannot represent the views of tens of thousands of people as definite and moreover the economic situation of different regions in the country is not homogenous. Notwithstanding the limited sample, this study has been able to bring to the forefront of discourse around the international organization making Rwanda CBHI as a poster model to be emulated by many developing countries. Here we see that the 90% statistical figure of coverage of the 11 million Rwanda population did not reflect equity towards the 0.4% Batwa people of Rwanda, where in reality the CBHI is needed more. Moreover, no known study has assessed the Batwa
people accessibility of the CBHI in comparison with the non-Batwa, all that have been done also relies much more on a small sample. This study could be considered as a pilot study for future research that will expand the coverage of assessing the Batwa people accessibility of CBHI across the country or with a much larger sample in many districts in the country.

5.4 Appraisal of Jehoel-Gijsbers and Vrooman (2007) theory

The theory of Jehoel-Gijsbers and Vrooman (2007) was useful in the Batwa’s context as it is shown in the above results. In relation with this social exclusion theory, the findings showed that batwa population are the poorest which inform their limited access to social rights and limited social participation because they feel discriminated and they rate themselves as extremely poor, which results into inequality towards access to CBHI compare to non-batwa.
List of Appendices

Appendix 1: Questionnaire and Interview guides

Hello! My name is HIATEGEKIMANA Francoise, I am a student from the International Institute of Social Studies of Erasmus University Rotterdam in the Netherlands. I am conducting a research study and the purpose of this study is to assess Indigenous people’s socio-economic situation and its relationship with Community Based Health Insurance (CBHI) in Rwanda, specifically in Byumba and Huye districts, as part of my dissertation leading to the award of master’s degree in Economics of Development studies. The answers that you will provide will be confidential and used only for academic purposes. I would be grateful for your assistance in responding to the following questions to the best of your knowledge and if you do not know the answers to the questions, feel free to indicated so. You have the right to withdraw from the study at any time throughout the process, but I value your contribution to this research.

A. Demographic Profile of the Respondent

1. Sex (tick one): a) Male □ b) Female □

2. What is your age group: a) 21-29 □ b) 30-39 □ c) 40-49 □
               d) 50-59 □ e) 60 and above □

                              d) Widowed □

4. Highest Completed level of education: a) None □ b) Primary □
                                             c) Secondary □ d) University □
                                             e) Others □ (specify)......................
5. Are you the household head?  Yes ☐ No ☐

6. If no, what is your relationship with the household head?
   a) Wife ☐  b) Child ☐  c) Others, ☐ specify.......

7. What is your religion?  a) Christian ☐  b) Islam ☐  c) ☐ Tradition

8. How many people are currently living in your household including yourself?
   a) 2-5 ☐  b) 6-10 ☐  c) 10 and above ☐

9. Of this people, how many are children?
   a) 2-5 ☐  b) 6-10 ☐  c) 10 and above ☐

10. Employment status
    a) Employed ☐  b) Retired ☐  c) Unemployed and seeking employment ☐
    d) Unemployed and not seeking employment ☐  e) Self employed ☐
    f) Full time student ☐  g) Temporary job ☐
    h) Farmer ☐  i) Others, ☐ (specify)

11. Which socio-economic category are you belonging to?
    a) Category 1(Icyiciro cy’ubudehe cyA1) ☐
    b) Category 2(Icyiciro cy’ubudehe cyA2) ☐
    d) Category 3(Icyiciro cy’ubudehe cyA3) ☐
    e) Category 4(Icyiciro cy’ubudehe cyA4) ☐
12. How do you rate yourself to others community in terms of wealth?
   a) Extremely poor □
   b) Poor □
   c) Not poor □
   d) Don't know □

13. What is your income per month?
   a) 1000 frws-5000frws □
   b) 6000-10000frws □
   c) 11000-15000frws □
   d) 16000frws and beyond □

B. Evaluation on perception and barriers on Community Based Health Insurance (CBHI) usage among Batwa

1. Do you know about the CBHI program?
   Yes □    No □

2. If yes, how did you know about it?
   a) Through radio □
   b) Local authorities □
   c) Neighbors □
   d) Others, □ (specify)……

3. In your understanding, what do you understand about CBHI? (Explain)

4. Are you enrolled in CBHI?
   Yes, □    No □    If no, skip to 6
5. Why did you subscribe in CBHI program?
   a) Illness and/or injury occurs frequently in our household  
   b) To support in health care expenses
   c) Household is exempt from registration fee and premium payment
   d) Premium is low compared to the user fee price to obtain medical treatment
   e) Pressure from other family members/community
   f) Pressure from the CBHI office
   g) Others, (Specify) …

6. Does everyone in your household have CBHI insurance (mutuelle de sante)?
   Yes  
   No  
   Not all  

7. If yes, why was he/she an exception? (Explain)
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………

8. Do you see any difference in his/her health status and economic situation compared to the rest in the household?
   (Explain)…………………………………………………………………………………………
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………

9. If you are not a CBHI member, why did you decide not to enroll in CBHI?
   a) Illness and injury does not occur frequently in our household  
   b) The registration fee and premiums are not affordable
   c) Want to wait in order to confirm the benefits of the scheme from others
   d) We do not know enough about the CBHI scheme
   e) There is limited availability of health services
   f) The quality of health care services is low
g) The benefit package does not meet our needs ✓

h) CBHI management staff is not trustworthy ✓

i) Waiting time to access services is longer for CBHI members ✓

j) Other reasons, ___________ please specify ___________

10. In general, how would you rate your health today?
   a) Very good ✓
   b) Good ✓
   c) Not good ✓
   d) Worse ✓

11. In the last 6 months, did you seek advice or treatment for the illness from any source?
   Yes, ___________ No ✓ If no, skip to 14

12. Where did you seek advice or treatment?
   a) Private hospital ✓
   b) Public hospital ✓
   c) Health center ✓
   d) Community health worker ✓
   e) Other public facility ✓
   f) Tradition healer ✓

13. How much did you pay for the treatment (if not covered by CBHI)?
   a) Between 1000-5000frws ✓
   b) Between 5000-10000frw ✓
   c) Between 10000-beyond ✓
   d) Free ✓

14. What is the average distance do you cover to access CBHI host health centers?
   a) Very far (20KM-30KM) ✓
   b) Far (10km-20km) ✓
   c) Not far (5km-10km) ✓
   d) Don’t know ✓
15. How helpful is the CBHI program?
   a) Extremely helpful  
   b) Very helpful  
   c) Moderately helpful  
   d) Slightly helpful  
   e) Not at all helpful  

16. Where do you consider the CBHI to be much more important?
   a) On your household health status  
   b) On your economy  
   c) On societal appearance and acceptance  

17. How happy are you with the CBHI program?
   a) Extremely happy  
   b) Very happy  
   c) Moderately happy  
   d) Slightly happy  
   e) Not at all happy  

18. How do you rate CBHI services?
   a) Extremely high  
   b) Very high  
   c) High  
   d) Low  
   e) Extremely low  

C. Social issues

1. In general, have you ever been insulted or discriminated because of who you are?
   a) Never  
   b) A few times  
   c) Many times  
   d) Always  

2. When you go to health care center or elsewhere for health issues, how do health care providers and community health workers treat you?
   a) Bad  
   b) Not so bad  
   c) Fair  
   d) Good  
   e) Very good
D. Relationship between socioeconomic indicators and access to CBHI, and expectations from CBHI program and services.

1. Do you think that having access to CBHI has changed your life in terms of income?
   Yes [ ]    No [ ]

2. If yes, how?
   (Explain) ........................................................................................................................................
   ........................................................................................................................................
   ........................................................................................................................................
   ........................................................................................................................................
   ........................................................................................................................................
   ........................................................................................................................................

3. If no, why?
   (Explain) ........................................................................................................................................
   ........................................................................................................................................
   ........................................................................................................................................

4. Do you think there are some changes that can be done about CBHI program?
   Explain ........................................................................................................................................
   ........................................................................................................................................
   ........................................................................................................................................
   ........................................................................................................................................

5. What would you suggest to be added to CBHI program in general? Explain
   ........................................................................................................................................
   ........................................................................................................................................
   ........................................................................................................................................
   ........................................................................................................................................

THANK YOU
Interview guide for the Social affairs in GISHAMVU and MIYOVE sector

1. Compare to others, are HPMs renew they membership regularly (for those who pay their mutuelle de sante) ?.

2. Are there any challenges for their full involvement in CBHI compare to others? Explain

3. Describe what you see as an impact of CBHI on HMPSs?

4. What are your suggestions for improving their participation?

Interview guide for health workers in GISHAMVU and MIYOVE sector

1. Do you receive people from HMPs community in the health center?

2. What is their proportion compare to other community members?

3. Compare to other community members, are the HMPs conscious about the importance of CBHI?

4. Did you notice any difference in seeking health care between the HMPs with CBHI and those without?

5. Do you have any suggestion for a full involvement of the HMPs community and the other community in general in the process of improving health status through CBHI?
Appendix 2: Author Interviewing one of the respondents

Field work photo: July-August 2018
Appendix 3: Respondents Random Picture

Field work photo: July-August 2018

Appendix 4: Respondents’ neighborhood

Field work photo: July-August 2018
Appendix 5: Authors interviewing the respondent

Field work photo: July-August 2018
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