



## INSIGHT ON LIVING CONDITIONS IN SHINGIRO SECTOR, MUSANZE DISTRICT IN THE VICINITY OF THE VOLCANOES NATIONAL PARK OF RWANDA

Task	Names	Institution
Main author	Emmanuel Biracyaza <sup>1</sup>	University of Rwanda , School of Pubic Health
Co-author	Emmanuel Bugingo <sup>2</sup>	Partners For Conservation

**Institutional affiliations: Partners For Conservation (PFC), Musanze district**

### ABSTRACT:

#### Abstract

**Background:** *Batwa people are among the most vulnerable people worldwide and have limited access to key social determinants of health, including health care, education, clean-water, employment and adequate clothing, nutrition, and security. The study focused on living conditions of communities formed by indigenous and vulnerable people from Mudende and Mugari cells of Shingiro sector in Musanze district, Northern Province.*

**Methods:** *The cross-sectional method was conducted in the areas surrounding VNP in the vulnerable communities. From the target study population of 260, 156 were recruited. The purposive sampling*

<sup>1</sup> University of Rwanda, School of Public Health, College of Medicine and Health Sciences, University of Rwanda.  
Email: [biremmy01@yahoo.com](mailto:biremmy01@yahoo.com); Tel: +250785686886

<sup>2</sup> Director and founder of Partners For Conservation, Local Non-Governmental Organization, Northern Province, Musanze district, Rwanda

*technique was conducted in Mudende and Mugari cells of Shingiro sector in Musanze district, Northern Province of Rwanda. Data were analyzed descriptively and performed using SPSS version 21.*

**Results:** *The results of the study showed that there were 3.3 children per family. It founded that the population was still young in the range of age 20-54 years old at 64.10% of the total respondents. The high concentration of members in households was demonstrated with 4-8 as they were 73.87%. They had high rate of illiteracy at 57.05%, high level of children at the age of school but not attending at 43.07%, high rate of unemployed with 62.18%, a low rate of the population who were able to build their own houses at 4.49%, a high rate of who were unable to pay health insurance at 93.04%. The 64.74% of the HMP were not able to pay school fees, 21.79% were free of social welfare issues, 95.51% ate once daily and 99.36% consumed under 1\$ a day.*

**Discussion:** *The results revealed that demography of HMP was problematic and associated with the low level of education and extreme poverty. There was the need to develop social mobilization programs to enable these communities acquire enough knowledge on the demographic threats in the area. The need to develop micro and income generating projects to potentially increase the knowledge and economic self-reliance, enough for these communities to become responsible of their fate was mostly needed. The respiratory and psychological health issues represented 8.33% and 5.77% respectively.*

**Conclusion:** *HMP were the vulnerable people who need the potential supports for their health. Their education, hygiene and sanitation as well as the sexual reproductive were mostly needed to be reinforced for promoting the public health through the programs. Coordinated policies of public and private sectors is required to improve the Public Health of Batwa through the enforcement of their rights and increased participation in policies and programs affecting their well-being.*

**Key-words:** *Historically Marginalized People, Batwa, indigenous people, vicinity, conservation.*

## 1. BACKGROUND

Indigenous Batwa people are among the most vulnerable populations in the world and have limited access to key social determinants of health, including health care, education, clean water, employment and adequate clothing, nutrition, and security<sup>(1,2)</sup>. These people were expelled from their native and are now considered conservation refugees undergoing a drastic transition from forest dwellers to agriculturalists; the shift has negatively affected their people's health<sup>(2)</sup>. Being marginality is an experience that has the negative effect on millions of people worldwide<sup>(3-5)</sup>. Marginality is an experience that affects millions of people throughout the world. People who are marginalized have relatively little control over their lives, and the resources available to them. This results in making them handicapped in delving contribution to society. The community of Historical Marginalized People (HMP) is considered to be vulnerable. This affect the way of living of this community that develop lack of positive, supportive relationships means and they are prevented from participating in local life, which in turn leads to further isolation, frustration and stigmatization<sup>(3)</sup>. This has a tremendous impact on development of human beings, as well as on society at large. As the objective of development is to create an enabling environment for people to enjoy a productive, healthy, and creative life, it is important to address the issue of marginalization. Development is always broadly perceived in terms of mass participation of population. Marginalization deprives a large majority of people across the globe from participating in the social economic activities that bring the development<sup>(6)</sup>. It is a complex problem, and there are many factors associated with marginalization in the community including physiological, social and

environmental. This complex and serious problem need to be addressed at the policy level<sup>(7)</sup>.

Children, pregnant women, elderly people, malnourished people, and people who are ill or immune compromised, are particularly vulnerable when a disaster strikes, and take a relatively high share of the disease burden associated with emergencies. Poverty and its common impacts such as poor sanitation and hygiene, malnutrition, homelessness, poor housing and destitution is the major Public Health contributor to vulnerability of the HMP. The following resources deal specifically with the environmental health issues affecting vulnerable groups. Vulnerability is the degree to which a population, individual or organization is unable to anticipate, cope with, resist and recover from the impacts of disasters<sup>(8)</sup>. Marginalization describes the overt actions or tendencies of human societies, where people who they perceive to undesirable or without useful function, are excluded, i.e., marginalized<sup>(9)</sup>. The marginalized people from a group or community for their protection and integration and are known as marginalized groups. This limits their opportunities and means for survival. Peter Leonard defines marginality as being outside the mainstream of productive activity and/or social reproductive activity<sup>(9,10)</sup>.

HMP also named «Twa» of Rwanda are part of a larger grouping of Twa Pygmies. They were historically specialist hunter-gatherers adapted to the mountain forests of the region. They are the indigenous people of the Great Lakes Region. Their life depends on the hunting and pottery activities<sup>(7)</sup>. HMP live in parts of South-western Uganda, Eastern DRC, Rwanda and Burundi. The HMP compromised 20,000-27,000 people in Rwanda. Their traditional culture is respected for its sophisticated knowledge of the forest ecosystem. Their

great talents are performing arts including musicians, singers, dancers, acrobats and clowns, is unsurpassed in the region and widely appreciated. The insecurity of HMP subsistence strategies contributes to their increasing poverty and marginalization from mainstream society<sup>(11)</sup>.

Economic Development and Poverty Reduction Strategy (EDPRS-II) indicated that the social protection is critical to enabling some of the poorest households to graduate out of extreme poverty in a sustainable way. The social protection concept in Rwanda has four elements. Firstly, it is protective characterizing of providing the essential support to those living in poverty. In the second element, it is preventive where the country puts in place a safety net that can be activated to prevent people falling into poverty. Thirdly, it is primitive characterized by seeking to support poor people's investment so that they can pull themselves out of poverty and fourth, it is transformational where the government aims at improving the social status and rights of the marginalized, particularly women<sup>(12)</sup>. Rwanda's economy is heavily dependent on its environment and natural resources, and the livelihoods of rural (and increasingly urban) communities depend on access, use and management of such resources. Without sound environmental management, development activities in key sectors such as agriculture, industry, infrastructure, commerce, and energy can lead to significant environmental degradation that can undermine economic growth. Living around the VNP has the impact on the public health of the HMP and others surrounding it. These impacts of NVP affect the livelihoods of the communities bordering the park<sup>(5)</sup>.

The Rwanda Wildlife Policy recalls that human-wildlife conflict has become an increasing threat to conservation protection as it constitutes one of the most serious threats

to the continued survival of Rwanda's National Parks and calls for the creation of conditions where people and wildlife can co-exist and have as little negative impact on each other as possible. These conflicts include but not limited to habitat destruction and poaching<sup>(13,14)</sup>. The previous studies indicated the significant marginalized population around the park identified as the poorest category, with some with small land or not. They are also marginalized within the communities where they live depending on the park by harvesting wild food and hunting for survival or selling. They suffer extreme poverty and have the least number of livestock. The dependency on park resources for livelihood and harvest of forest products for income are higher<sup>(4)</sup>.

The 2012-2021 Volcanoes National Park management plan specified that community conservation and awareness activities continue being priority in sectors adjacent to this zone, and, within the zone, the monitoring of human impacts both from tourism use and from neighboring community areas is a management priority. The implementations of appropriate management measures mitigate these impacts<sup>(15)</sup>. In the second half of the 20th century, countless conflicts between local people and park authorities emerged in Africa, Asia and Latin America. Being confronted with local communities that fought back and NGOs that focused on human rights and justice, conservation agencies gradually started to rethink the fortress approach. They realized that control alone was not sufficient and started looking for ways to integrate human development into conservation<sup>(16)</sup>. At the 1968 Biosphere Conference in Paris, organized by UNESCO, it was stated that conservation and use by local people should be reconciled. This was a first shift away from the preservation paradigm. In 1971, UNESCO

introduced the Man and Biosphere program, and this marked the start of the creation of biosphere reserves. The idea underlying the biosphere a reserve was that local people will be willing to cooperate in conservation efforts provided there a certain benefit for them<sup>(17)</sup>.

In Rwanda, some NGOs worked with communities as one of the solution to reduce human pressure on protected areas without formal approach until late in 2005 when the Office Rwandais du Tourisme et des Parcs Nationaux (ORTPN) was restructured to become part of the Rwanda Development Board in charge of Tourism and Conservation<sup>(18)</sup>. The restructuring brought in new conservation priorities and the most important was the introduction of "Community Conservation". This new paradigm was quickly embraced by almost all stakeholders not only that they wanted to tackle illegal activities but as tourism opportunity. Various tools were developed including policies and laws to ensure the involvement of local communities in conservation really benefit to communities and conservation such as the revenue sharing scheme, role of civil society and private sector defined<sup>(4,13)</sup>.

### **Statement of the problem**

Rwanda is small country but one of the highly populated countries of Sub-Saharan Africa at 230 inhabitants/km<sup>2</sup><sup>(4)</sup>. The first impact linked with the high population is the increased competition for land, water resources, forest products and mineral resources within communities as a major trigger of natural resources management at the national level. The second impact is the size of protected areas and national parks which cause the loss of some of biodiversity and put some of them at the very high risk like gorillas threatened to extinction. Mining, cattle grazing, search for land for farming and settlements and the creation of national parks for tourism and biodiversity

conservation spark hostilities as surrounding communities including indigenous groups (part of central African pygmies whose; status of post 1994 war was changed from HMP after the governmental of Rwanda banished the ethnicity to entrench unity and reconciliation) compete with national and multinational agencies for the use of resources upon which they traditionally depended for their livelihood and cultural integrity before the creation of national parks. Considering the current human population growth rate, increasing demand for resources from natural resources exploitation and the growing demand for access to land, competition and claims on natural resources will not be eradicated in the near future<sup>(13,19)</sup>. The involvement of the local communities is essential for the sustainable management of protected areas. The local communities exert constant pressure on the protected areas and carry out illegal activities. The population number increases regularly and live in extreme poverty. The need to acquire a land is a permanent challenge for conservation in Rwanda<sup>(15)</sup>. The three national parks of Rwanda had lost more than 51% of their initial area since their creation. However, some activities have been initiated to encourage the local communities to get involved in conservation activities<sup>(20)</sup>. VNP is situated in area which; has the highest density nationwide with a population estimated at 600 people per km<sup>2</sup> mainly skewed towards younger age group<sup>(15)</sup>. The same document indicated that there was an insufficiency of land estimated at no more than 0.2 to 0.8 ha of land per family, in an area where agricultural constitutes the primary livelihood of all communities. There was also significant marginalized population around the park identified as the poorest category, with some with small land or not<sup>(4,13)</sup>. They were vulnerable within the communities where they lived depending on the park by harvesting wild food and

hunting for survival or selling. They had the least number of livestock. The dependency on park resources for livelihood and harvest of forest products for income are higher. 28.8% of HMP got fuel from the park while it was only 0.4% from other community<sup>(4)</sup>.

The indigenous community of Batwa shrouding the VNP highly populated, there is always a need to assess what the presence of such population represents in terms of the conservation and protection of this park. The eligible studies were only concerned on the conservation and biodiversity. There was no study conducted on the public health issues of these vulnerable people. The current study will help to understand better the prevailing situation especially in terms of measures to be undertaken to potentially reduce the human pressure on this park through addressing the basic needs of the neighboring population. The study findings were expected to be used by the PFC as well as other stakeholders in conservation and community development to identify the root causes of everlasting conflicts between park and the population conflicts and design appropriate strategies aimed at creating everlasting positive actions that can benefit to these traditional neighbors. The findings of the study will help stakeholders adjust their procedures pertaining Park People partnership. The objective of this study was to investigate the living conditions of poor and vulnerable people in the vicinity of the VNP.

## 2. METHODS AND MATERIALS

### Research Design

The cross-sectional quantitative study was conducted to describe the Public Health issues of the families of HMP. Simple random sampling and purposive sampling were used in the study.

### Settings

The study was carried out around VNP, in North-West side of Rwanda, Shingiro sector of Musanze District in the Batwa people. This was due to that this sector is one of 14 sectors neighboring the VNP. In fact, Shingiro is part of what is called sector 4 in park management which; is known to have high rate of illegal activities. It is one of 15 sectors forming Musanze district. Shingiro is also one of 14 sectors surrounding the VNP and is mostly inhabited by poor and vulnerable people. Batwa currently known as HMP consist of huge number hunters following their traditional way of living. Initially, HMP are the indigenous, forest-dwelling inhabitants of Rwanda evicted from the forest, without compensation, during the creation of the national parks. They are among the poorest communities in a poverty-stricken area. Shingiro is highly populated districts in Rwanda representing itself 3.9% of the total population of Rwanda<sup>(21)</sup> and one of the densely inhabited districts (368,264 total population) on a total area of 530km<sup>2</sup> representing a density of 690/km<sup>2</sup><sup>(19)</sup>.

Situated in northern Rwanda on the border with the Democratic Republic of Congo and Uganda, the VNP is world famous as the home of a globally important population of the endangered Mountain gorilla, as well as numerous of other plant and animal species that are endemic to the Albertine Rift region. In recognition of the park's importance, VNP was added to the International Network of Biosphere Reserves under the UNESCO Man and Biosphere Program in 1983<sup>(4)</sup>. The study analyzed living conditions of poor and vulnerable people in the vicinity of the VNP. It specifically gave the demographic status, established the accessibility to socio-economic, development facilities and the welfare status of the population from Shingiro. The study was conducted in

January to February 2016, in the period where HMP are busy with preparing the next farming season even though there was some who are harvesting (for some crops such as potatoes). This period was very sensitive as it was seen as one of the busiest not only because people were busy harvesting or preparing the next season, but because also, it was the period through which students started the academic year.

### **Sampling size and selection**

The population targeted by this study was 260 all poor and vulnerable and that live in Shingiro sector. The sample of 156 respondents from 156 families was recruited into consideration to get reach and quality information. Purposive sampling was used to select the respondents. This technique helped to gather information from government local population living Mugari and Mudende cells of Shingiro.

### **Data collection instruments:**

The questionnaire was used to help the researchers to gain the first-hand information and more experience over a short period of time. A total of 156 questionnaires were elaborated and used to collect data from respondents. The interview was used for the oral questioning and face to face interaction between the researchers and the respondents.

### **Data processing and analysis**

Quantitative data were collected using questionnaires and documentary Checklists. The output from the SPSS was presented in form of tables indicating frequencies and percentages. After collection, statistical data were analyzed Scientific Package for Social Sciences (SPSS version 21). The information was presented using tables and qualitative statements basing on the literature review

and findings from the field. The study was reviewed and approved by the local leaders of the government member headed by the Rwanda Governance Board. It was important during the process of the study to understand that participation was voluntary. Participants were free to refuse to answer any question and may withdraw anytime without giving any reason. Another important consideration, involved getting the informed consent of those going to be met during the study process, which involved interviews and observation. The study was limited to issues pertaining community living conditions of vulnerable and poor people surrounding the protected areas in order to have an insight of their socio-economic and development conditions in a bid to foster a sustainable conservation of the VNP. The study was reviewed and approved by the research committee of Partners For Conservation<sup>3</sup> and the Rwanda Governmental Board through the local leaders of Musanze district.

### **3. RESULTS**

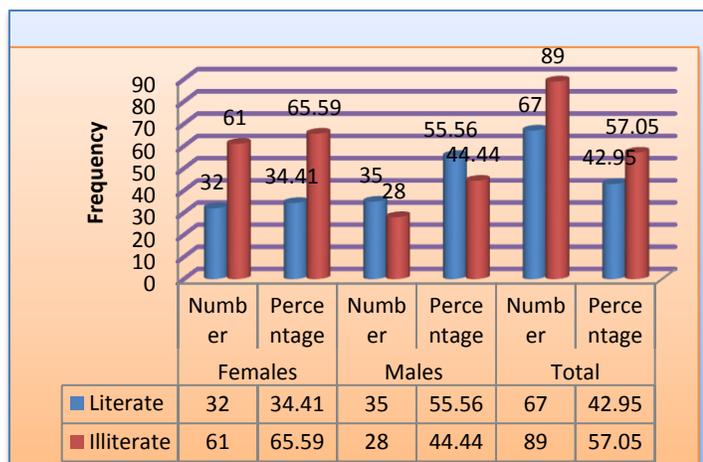
The assessment of respondents was implied that the most of people who participated in this study were females and it was attributed to the fact that like it was the case in the whole country, this region had many women head of families. Of the total participants 59.62% were found to be females whereas 40.38% males. The table below shows that the participants were categorized according to their ages. This implies that the majority of respondents were mature and able to understand their living conditions based to the socio-economic and development standards and that in the region. The number of

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<sup>3</sup> Partners For Conservation is the NGO located in Musanze district that aim at extending and sharing the opportunities in promotion, protection and conservation of biodiversity through education, research and sharing, development and cultural activities to allow every society member to enjoy the innate gift in daily biodiversity management.

respondents belonged in the age group 20-54 (64.10%) while a small number of respondents belonged in the age group of between 0-19 (1.92). There're still families headed by children represented by 1.92%.

**Figure 3.1: The rate of illiteracy versus literacy in HMP**



The figure 3.1. shows the illiteracy was very high in HMP at 57.05% with, female representing a high number of illiterate at 68.54% and men are at 31.46%. HMP who were educated was 42.94% including 47.76% for females and 52.24% for the males. The majority among the educated was males and the majority among the educated was females.

The table 3.1. analyzed the level of education of respondents by assessing the level of schools attended. The data presented 8.33% attended adult literacy programs, 20.51% attended primary schools, 5.77% completed primary schools, 4.49% attended secondary schools, 3.85% completed secondary schools and 57.05% have never attended any school. Rwanda is one of low-middle and income countries that are facing the poverty and overpopulation in the small surface area.

**Table 3.1: Respondents' education level by school attended**

Level of education	Female		Male		Total	
	N	%	N	%	N	%
Adult literacy programs	5	3.21	8	5.1	13	8.33
Attended primary schools	19	12.1	13	8.3	32	20.51
Completed primary schools	3	1.92	6	3.8	9	5.77
Attended secondary schools	4	2.56	3	1.9	7	4.49
Completed secondary schools	3	1.92	3	1.9	6	3.85
Who did not attend any school	54	34.6	35	22.44	89	57.05
<b>Total</b>	<b>88</b>	<b>100</b>	<b>68</b>	<b>100</b>	<b>156</b>	<b>100</b>

**Table 3.1: Family size composition by the education**

Famil y size	Attending		At school but not attending		Not attending because of over age	
	N	%	N	%	N	%
0-3	26	3.80	50	7.30	50	7.30
4 to 8	194	28.32	218	31.82	94	13.72
Over 8	21	3.07	27	3.94	5	0.73
<b>Total</b>	<b>241</b>	<b>35.18</b>	<b>295</b>	<b>43.07</b>	<b>149</b>	<b>21.75</b>

The findings indicated that the total respondents' family members was 685 (18.39%) were that families that had 0-3 family members, 73.87% for 4-8 household members, and 7.74% for the households that had more than 8 members. There was a high rate of

membership in families whose members were between 4 and 8 are the most. Although, the table 3.2. indicated that there was high rate of children at the age of school but never attend it (43.07%). The table indicates that the rate of those who attended (35.18%) was still low while the rate of those who didn't attend because of the age is also important (21.75%) most of which are those who drop out or those heading families (children heads of families). The findings indicated that 95.51% had houses of 1 to 4 rooms, only 2.56% had no rooms because they did not have houses and 1.92% had houses of over 4 rooms. There was very low number of respondents who built their houses (4.49%) while the rest got houses thanks to the mercy of benefactors or the governmental programs such as Bye Bye Nyakatsi<sup>4</sup>. This leaves a question mark on what would happen to 529 members of the families of respondents when there were no comprehensive approaches to be adopted for their self-resilience. This implies that there's still potential violability of the park integrity as both those without formal occupation and farmers may need to use the park either for land (farmers) or other park resources for their survival. 62.18% had no formal occupation and 34.62% were farmers.

Although, the region is agricultural based, the table here shows however, that the majority of respondents don't rely on farming to earn money as 62.18% of respondents rely on non-formal occupations. This justified the on-going park-people conflicts in the

area. The findings showed that majority of respondents earned weekly less than 4000Rwf (94.87%) whereas 4.49% earned between 4,001-6,000Rwf. Only 0.64% earned over 6,000Rwf a week. This implied that the majority in the area lived under the poverty line. 92.31% did not pay rents. About the education, all respondents confirmed that they paid a certain amount as school fees despite the free education program (education for all). This explained why there was a high level of children not attending schools as they quickly drop-out when aids become inconsistent. The results showed that 64.74% of HMP in VNP areas did not know how much they paid because all school costs were covered by benefactors mainly NGOs and churches, while 23.72% of HMP paid less than 4,000 Rwf (4.5US dollars) a term and that only (18%) paid over 6,000 Rwf.

The findings showed that 149 (95.51%) ate once in a day, and only that 7 (4.49%) twice a day. The findings indicated that there was no respondent ate three times a day. The majority representing respondents confirmed that this situation had the impacts on the education of their children; as they had to help parents find food. This inferred the inconsistent education of the children as some were forced to drop out to start investing themselves in no-formal occupations or early marriages. This was a result of lack of means to access to health services. Out of 156 respondents: 107 had health issues that represent 69% and 49 (31.41%) respondents had not health issues.

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<sup>4</sup> **Bye Bye Nyakatsi:** It was the project implemented by the Rwandan Diaspora Community with the purpose to build a model village. The beneficiaries were offered modern houses equipped of three bedrooms, biogas systems, water and electricity. The village is also compiled with infrastructures such as health center, school and commercial areas.

**Table 2.3: Most-identified health issues per**

Health issues	Female		Male		Total	
	N	%	N	%	N	%
Respiratory diseases	6	9.38	7	7.78	13	8.33
Psychological diseases	4	6.25	5	5.56	9	5.77
Sexual Transmissible Diseases (STDs)	1	1.56	2	2.22	3	1.92
Other health issues	28	43.75	54	60	82	52.56
No health issues	25	39.06	24	26.67	49	31.41
<b>Total</b>	<b>64</b>		<b>92</b>		<b>156</b>	<b>100</b>

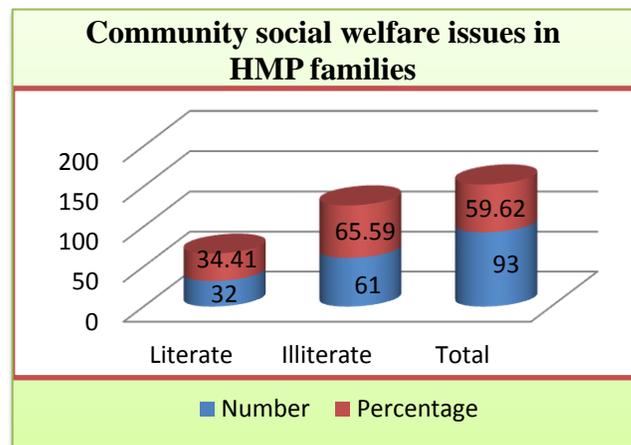
**respondents' families**

Other health issues or such as non-communicable, as gastro-intestinal diseases, age effects, physical weakness, hygiene and sanitation, lack of food etc. represent a high rate of 52.56% while respiratory and psychological health issues represent respectively 8.33% and 5.77%. Health issues related to STDs represent still a low rate of 1.92% but this may be accredited to the fact that there's a high population that didn't proceeded to voluntary tests.

The findings of the study showed that there were campaigns on HIV and voluntary tests were conducted as 116 respondents representing. It suggested that voluntary test was still far from 100%. 74.36% passed the HIV voluntary tests and 25.64% said not to have proceeded to that. The findings also indicated that the social welfare of the HMP was problematic where 21.79% of participants said to be free of community social welfare. This implied that there were severe issues pertained the social welfare of targeted communities. This called for the necessity of social mobilization campaign to halt such bad habits that could hinder to the socio-economic development of this population. 49.36% were drugs, tobacco and alcohol abusers, 27.57% had disputes or fighting,

21.79% didn't present any welfare issue other drugs at, 24.36%, alcohol at and the prevalent rate of sexual violence was 1.28%.

**Figure 3.2. Community social welfare of HMP**



The figure 3.2 shows that out of 685 members of respondents' families, implies that there must be challenges that are preventing these communities to be at 100% of health insurance as per the national health insurance policy. 546 are affiliated to the health insurance representing 79.71% and not affiliated are 139 representing 20.29%.

The findings demonstrated the information on various challenges that faced the sampled community to subscribe to health insurance that indicated that the intensive campaigns to mobilize the both those who lack information as well as those who had their own reasons about health insurance scheme were need. Micro-projects as well as income generating projects were needed for a financial inclusion of those who did not have financial means. Out of 139 people that were incapable to pay health insurance, 97 of them representing 69.78% endorsed this on lack of financial means, 10 of them representing 7.19% say that they did not do it because they had no idea about that whereas 32 of them representing 23.02% said

they had other reasons to not subscribe to health insurance.

The findings indicated that they all used Health Insurance Scheme (Mutuelle de Santé) and that none from the sampled community used other types of health insurance including neither RAMA (for governmental staff) nor MMI (for army and police staff). Government or NGOs supported 93.04% of people who paid health insurance, 0.733% respondents were supported by their employers and 6.22% used other means to pay for their health insurance.

#### 4. DISCUSSIONS

##### **The demography situation in respondents' families**

The current study aimed to describe the public health issues of the Batwa living in the sectors surrounding the VNP of Rwanda. Our findings indicated that indicated that this indigenous people have high public health issues. The study noticed that high demography rate in targeted communities because for only 156 respondents, the study noticed that their families are formed by 529 more individuals. This gives 3.3 children per family. The study also found that the population is still young as respondents aged between 20-54 years old represent 64.10% of the total respondents. The study also found that there's a high concentration of members within families whose members are between 4 and 8 as they represent 73.87%.

##### **Socio-economic and development facilities accessibility**

The study found the availability of basic socio-economic and development facilities such as Health

insurance, schools, tourism activities, social program such as Ubudehe<sup>5</sup> targeted communities face challenges to benefit. It's within this context that the study found a high rate of illiterate population represented by 57.05%, high level of children at the age of school but not attending represented by 43.07%, high rate of unemployed population represented by 62.18%, a low rate of the population who are able to build their own houses represented by 4.49%, a high rate of the population that can't afford pay health insurance represented by 93.04% and well as those who can't pay school fees represented by 64.74%.

Indigenous populations in African countries and globally consistently have higher rates of harmful health outcomes than their non-Indigenous counterparts (1). In social welfare conditions in the respondents' families, 21.79% of respondents were free of social welfare issues, 95.51% of respondents that are able to eat at least once a in a day and 99.36% respondents that leave under 1\$ a day. This implies that a lot is still to be done in terms of improving the living conditions in poor and vulnerable people of targeted communities in order to help them access to food, hygiene and sanitation as well as the knowledge on related behaviors. Other health issues or such as non-communicable, as gastro-intestinal diseases, age effects, physical weakness, hygiene and sanitation, lack of food etc. represent a high rate of 52.56%, while respiratory and psychological health issues represent respectively 8.33% and 5.77% and health

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<sup>5</sup> **Ubudehe**: It refers to the long-standing Rwandan practice and culture of collective action and mutual support to solve problems within a community, according to a recent academic research paper. The Community plays an active role in solving problems at Cell level.

issues related to STDs represent still a low rate of 1.92% but this may be accredited to the fact that there's a high population that didn't proceed to voluntary tests. The above given issues affect negatively the community social welfare and many of which, have direct effects on the biodiversity welfare. This is how for some protected areas we don't have buffer zones as they were squatted. Also, lack of land can force a community to invade someone's farm looking for food (rooting).

Issues that can affect social community welfare include Extreme poverty (lack access to land, food, hygiene and sanitation, education). The possible solutions for prompting the public health the HMP are to support working together through cooperatives for example, support the social, integration programs, promote their cooperatives and development of off-farm and vocational, sanitation knowledge. The actions that require immediate intervention are the education of the youth to reduce the jobless rate, initiation of Public health campaigns. Initiation of appropriate mobilization campaigns facilitate or promote interaction population between such as form joint cooperatives).

The mobility and instability affecting Batwa or indigenous peoples could have particular relevance to their health. The social, alienation from families and society, and incarceration are all health issues that predominantly affect health of HMP. Indigenous people have disproportionately high rates of incarceration; this is common to developed nations, and possibly a worldwide occurrence. The prevalent rates of exposure to potentially psychological problems were high (5.77%) indicating increasing frequencies of sexual violence (1.28%), the

indigenous women have been mainly demoted by colonization and discrimination in the communities surrounding the VNP of Rwanda. There were a few limitations in the current study the authors would like to address. The study was limited to issues pertaining community living conditions of vulnerable and poor people surrounding the protected areas in order to have an insight of their socio-economic and development conditions in a bid to foster a sustainable conservation of the Volcanoes National Park.

## CONCLUSION

On the demography situation in the families and welfare conditions in the HMP, there was a need to develop social mobilization programs to enable these communities acquire enough knowledge on the demographic threats in the area. On the Socio-economic and development facilities accessibility, there was the need to develop micro and income generating projects to potentially increase the knowledge and economic self-reliance, enough for these communities to become responsible of their fate. Specific and urgent actions are needed to help lift the population from the chronic poor life. Specifically, we find in this group a large number of people who are traditional forest-dwelling but whose ways of living had to abruptly change following the creation of the national park in Rwanda. This population was left at their own in poverty of all type and stigma. Despite, the positive actions from the Government of Rwanda and its partners in development including the park management, For long, vulnerability living conditions of people living in the vicinity of the VNP has always been linked to the vulnerability of this park hence the necessity of conciliating approaches such as park-people

partnership. This study goes further to recommend that comprehensive approaches and provide the basic needs to these people ensure on a regular basis that the beneficiaries are attending schools and be developed and that existing ones be adapted to embrace this new paradigm.

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### Acronyms And Abbreviations

<b>CNRBM</b>	: Community Natural Resource Based Management
<b>DP</b>	: District Plan
<b>HMP</b>	: Historically Marginalized People
<b>MAB</b>	: Man And Biosphere
<b>ORTPN</b>	: Office Rwandais du Tourisme et des Parcs Nationaux
<b>PFC</b>	: Partners For Conservation
<b>RDB</b>	: Rwanda Development Board
<b>RDB/TC</b>	: Rwanda Development Board/ Tourism & Conservation
<b>UNESCO</b>	: United Nations Education, Science and Culture Organization
<b>VNP</b>	: Volcanoes National Park

