

Improving Housing Conditions of Historically Marginalised People (HMPs) in Rwanda: Mapping Regional Performance for Directed Interventions

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Abstract

Historically Marginalised People (HMPs), count between 0.2 and 0.4% of the Rwandan population. For many decades, they have been living in hatched houses that are not suitable for human habitation. For improving HMPs' living conditions, the Government of Rwanda committed to providing them with decent housing, access to basic infrastructure and services. For a good capture of the effectiveness of such initiatives, a survey on HMPs' housing conditions was conducted in 11 districts. Data were processed with SPSS thereafter mapped using QGIS. The study reveals that most of the HMPs villages live close to basic infrastructure and services. However, in six districts, more than 75% of HMPs households still live in derelict houses and more than 50% have no toilet and kitchen, this results in high exposure of their occupants to various diseases. On one hand, the Government of Rwanda and local government should sensitize the HMPs to build their houses themselves even though they may be assisted, and on the other introduce specific plans for their integration.

Keywords: Historical Marginalised People, Housing Comfort, Access to infrastructure, Deprivation Index.

1. Introduction

Historically Marginalised Peoples (HMPs), formerly known as Twa, belong to pygmies' group, hunter-gatherers in the mountain forests of the great lakes' region. In Rwanda, HMPs count between 20,000-33,000 people, that is equivalent to about 0.2-0.4 percent of the Rwanda population (Lewis, 2006; Society for Threatened Peoples, 2011; Unrepresented Nations and Peoples Organization, 2012; Gina and Vorderstrasse, 2012). The estimation of HMPs is rough because the Government of Rwanda (GoR) does not recognise the existence of any ethnic group in the country (Ramsay, 2010; Society for Threatened Peoples, 2011), instead, it instructs the population of Rwanda as Rwandans. This move is reflected in "*Ndi Umunyarwanda*" program ("We all are Rwandans") that seeks to build a national identity and trust and unity for all Rwandans.

For centuries, HMPs lived in forests, in bushes and hatched housing (Society for Threatened Peoples, 2011) - a type of housing that is far below minimum standards and not suitable for human habitation in the current socio-economic context of Rwanda and likely elsewhere in the world. Moreover, HMPs live at the spatial, social and economic margin of the society,

lacking entitlements such as access to land, housing and education (Society for Threatened Peoples, 2011; Huggins, 2009; Institute of Research and Dialogue for Peace, COPORWA, Tilburg University (n.d); Unrepresented Nations and Peoples Organization (n.d)). In response to that, the GoR has adopted a measure to improve the living conditions and encourages the integration of Historically Marginalized People in the Rwandan society. Initially, the Rwandan political and social integration policies have changed Batwa's name to Historically Marginalised Peoples. Thereafter, various strategic actions were introduced to uplift their level of education, access to health services and housing. Further, in 2010, the GoR adopted the eradication of thatched houses (Gaugler, 2013) and assistance was provided to HMPs and other vulnerable groups to enable to live in decent habitation.

Since that period, as affirmed by COPORWA, no comprehensive study has been conducted to analyse how housing conditions of HMPs improved or worsened. In addition, recent disasters have pushed the GoR to develop policy aiming at protecting communities from living in high risks zone. For HMPs, it is not known how “Bye-bye Nyakatsi” policy (Eradication of thatched housing) and removing people from high-risk zones to more safe sites have contributed to improvement or degradation of their housing conditions. It is in this regard that this study has been conducted to assess housing conditions of HMPs for directing possible future interventions related to improving their housing conditions. This study was commissioned by the *Communauté des Potiers du Rwanda* (COPORWA) in collaboration with the African Commission on Human Rights and the GoR.

2. Materials and Methods

2.1. Sampling

This study was conducted in 11 districts of Rwanda. The selection of these districts was based on the presence and high number of HMPs based on data owned by COPORWA. This study, applied a purposive sampling technique targeting, in each district, sectors that harbour village with HMPs. The study was carried out in 70 sectors comprising 1,848 HMPs households. A survey questionnaire was administered to adult and consent heads of households of which 1,143 (61.9%) were male while 705 (38.1%) were female.

Table 1: Distribution of Sample in Different Districts

Districts	Male Number	Percentage	Female Number	Percentage	Total Number
Gakenke	50	63.3%	29	36.7%	79
Gasabo	183	58.3%	131	41.7%	314
Gatsibo	122	61.3%	77	38.7%	199
Gicumbi	110	67.9%	52	32.1%	162
Gisagara	10	76.9%	3	23.1%	13
Huye	107	56.3%	83	43.7%	190
Karongi	124	65.6%	65	34.4%	189
Ngoma	23	46.9%	26	53.1%	49
Nyamasheke	165	63.0%	97	37.0%	262
Nyaruguru	147	63.4%	85	36.6%	232
Rubavu	102	64.2%	57	35.8%	159
Total	1143	61.9%	705	38.1%	1848

Source: Field survey, May 2018

2.2 Data Collection

Primary data on housing conditions and marginalisation of HMPs were collected using an *ad hoc* household survey questionnaire. The latter was designed to capture spatial aspects of marginalisation of HMPs and map differences among districts. Based on the conceptualisation of deprivation and housing in Guio and Maquet (2007); Ajami, Kuffer, Persello and Pfeffer (2019) and Kuffer (2017), we collected information on property endowment and housing materials and locational attributes that infer deprivation and allow to depict housing conditions. In total the study considered 17 following variables (from housing materials, the roof materials were excluded because it is assumed that all houses are covered with iron sheets following *Bye-bye Nyakatsi* Policy):

1. Possession of land,
2. Possession of house,
3. Presence of kitchen,
4. Possession of toilet,
5. Material used for wall,
6. Material used for coating,
7. Material used for pavement,
8. House equipped with doors/windows,
9. Overcrowding,
10. Durability of the house and perceived safety,
11. Settlement being exclusively-HMPs,
12. Remoteness to school,
13. Remoteness to water source,
14. Remoteness to market,
15. Remoteness to electrical line,
16. Remoteness to health centre, and
17. Remoteness to road.

The survey questionnaire was administrated through a face-to-face interview in May 2018. The survey was done by trained enumerators.

2.3. Data Analysis

Coding and transcription of responses from the questionnaire and descriptive analysis were done in SPSS-25. From 17 deprivation characteristics collected, a global deprivation index was then calculated. SSPS data were then exported as tabular data and used to create charts. To visualise the findings on maps, QGIS was used because it allows layering labelled graphs (Scalable Vector Graphs) onto the map. By considering the global deprivation index colour ramp was used to visualise the ranking of districts and show districts where interventions need to be directed first.

3. Findings and Discussion

3.1. Age and Life Expectancy of Respondents as Proxy Life Conditions of HMPs

To have a general picture of life conditions that HMPs are living, our survey questionnaire was designed to capture basic information on their socio-economic life. One of the most important aspects of that was to capture the life expectancy of HMPS. For all 1,848 questioned HMPs, 61.9% were male and 38.1% female, the mean age was found to be 44

years. The comparison of mean age across districts shows that age of the respondents varies from 42 (Rubavu and Karongi) to 50 years (Gisagara). Table 2 shows that the average standard deviation varies between 13.368 and 19.864 with an average 14.877 that means that the respondents comprised of very young and aged people. Since the study was undertaken in households from sectors where HMPs are prevalent, considering a sample of 1,848 out of 33,000; these results can be generalised to confirm that the majority of HMPs do not reach the national life expectancy, which is 67.8 (NISR, 2020). Understandably, the short life of HMPs indicates the persistent poor living conditions and calls for more strategic interventions.

Table 2: Mean Age of Respondents

District	Mean age	Number	Standard Deviation
Gakenke	43	79	14.709
Gasabo	43	314	13.368
Gatsibo	47	199	16.687
Gicumbi	45	162	14.279
Gisagara	50	13	19.864
Huye	45	190	13.886
Karongi	42	189	14.166
Ngoma	46	49	16.535
Nyamasheke	43	262	15.264
Nyaruguru	44	232	14.765
Rubavu	42	159	15.989
Total Mean	44	1848	14.877

Source: Field survey, May 2018

3.2. Analysis of HMPs Deprivation

Findings on deprivation are grouped into three categories: (1) Possession of land and housing; (2) Quality of owned house and (3) Accessibility to basic infrastructure and services.

Possession of Land and Housing

The study revealed that 30.3% of HMPs are homeless. To cope with homelessness, these HMPs are accommodated in kitchens or annexes of neighbours. The highest rate of HMPs without house and land was found in Gasabo with 58% and 54% respectively (Figure 1). It is followed by Rubavu district with respectively 57.6% of households that lack house and 39.6% that lack land. The highest proportion of HMPs who have houses was found in Nyaruguru (80.6%) and Gicumbi (75.9%), most of those houses were provided by the government or various NGOs. The lowest proportion of HMPs households who have kitchen was found in Gisagara and Rubavu. In Gisagara district, none of the HMPs households had a toilet.

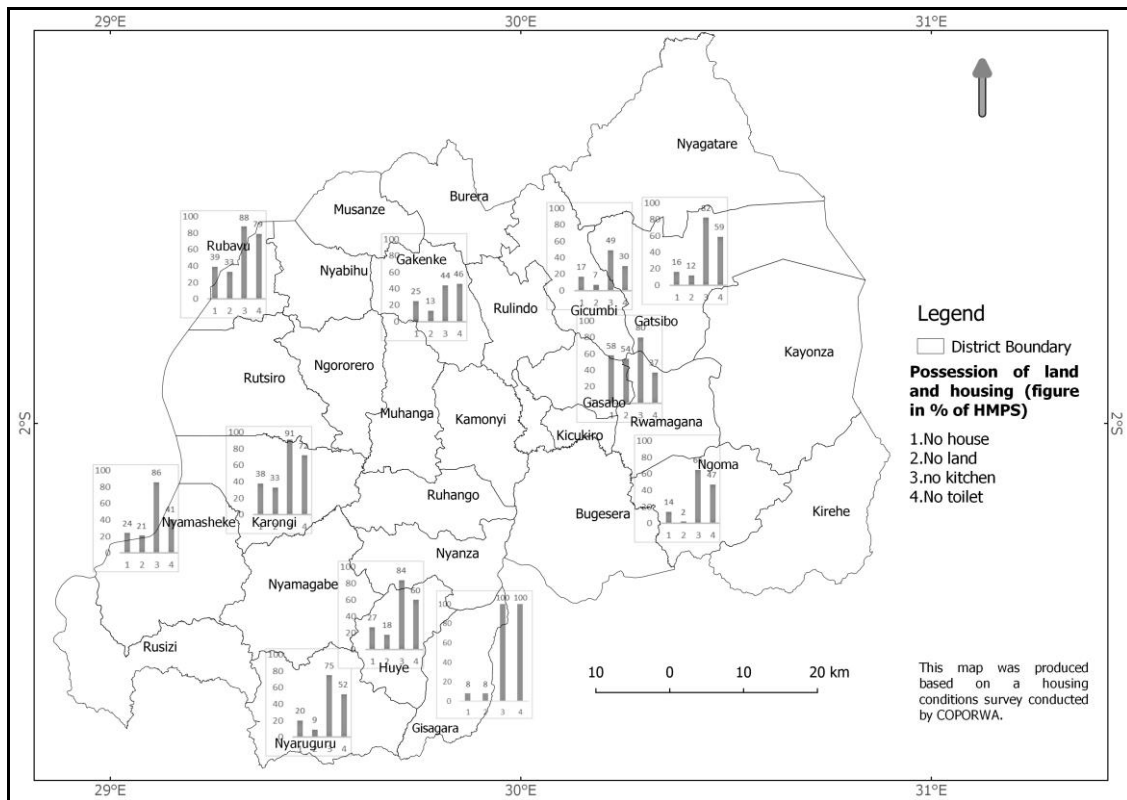


Figure 1: Possession of Land and Housing (Source: COPORWA, 2018)

The study reveals that near one-third of surveyed households are homeless. This situation is very critical since in Rwanda 76.5% of households own their dwellings and 16.7% live in rented houses (NISR, 2018). Not possessing own house is very critical when the person cannot even afford renting a housing be in rural or urban area. Moreover, considering that in districts where most of the HMPs have housing that were provided by the GoR or NGOs put HMPs in heavy reliance from donors and the government, this situation is not sustainable because such assistance can be stopped any time when housing providers do not have money to invest in housing for vulnerable groups or when there is a change in their policy. Likewise, HMPs accommodated in neighbours' ancillary construction can be chased out any time.

The study also shows that a large portion of households of HMPs do not have a kitchen and toilet, which means such people are living in precarious conditions. As mentioned by Bonnefoy (2007), living in a house without kitchen and toilet exposes their occupants to various "Sick Building Syndromes" like irritation of eyes, skin, nose and throat, or fatigue, headache, and decreased concentration capacity, and others.

The situation is worst for HMPs households who do not own land. The lack of land ownership is a "corrosive disadvantage" because the land is not only the key factor to securing the minimum standards of life in Rwanda through farming production but also land is fundamental for empowerment, dignity and social inclusion (IRDP, COPORWA and Tilburg University (n.d). We recall that most of HMPs have been removed from the forest and therefore have lost customary land ownership and are now destitute (Gina and Vorderstrasse, 2012). It is important to note that some of the HMPs households may own land, such land parcel might be very small to make a profit from it. Moreover, owning a land

parcel does not guarantee the capacity of erecting a house, because the construction of an adequate house, whatever the size, is very costly especially for vulnerable people like most of HMPs.

Status of Owned House and Level of Comfort

The survey revealed that 48.2% of HMPs houses had a cob wall (wood and earth). This proportion is a bit higher than the national average which is 35.4% (NISR, 2018). As presented in Figure 2, Gisagara stands out of all other districts to have a great number of HMPs with poor housing conditions. In this district, 100% of houses do not have doors, windows and kitchen. The lack of kitchen implies that living houses and even sleeping rooms are used as a kitchen. The smoke contributes to the degradation of iron sheets and finally, they got riddled with holes. The existence of these holes constrains the safety of occupants because the roof leaks during the rain. This may also expose HMPs to malaria especially in Ngoma, Gisagara, Gatsibo, and Nyamasheke where there is a high prevalence of malaria (Bizimana, Twarabamenye & Kienberger, 2015). The lack of spacious houses for more than half of HMPs exposes them to lack of couple privacy, but also can ease the transmission of some infections because of promiscuity. Living with livestock in non-spacious houses exposes HMPS to other diseases.

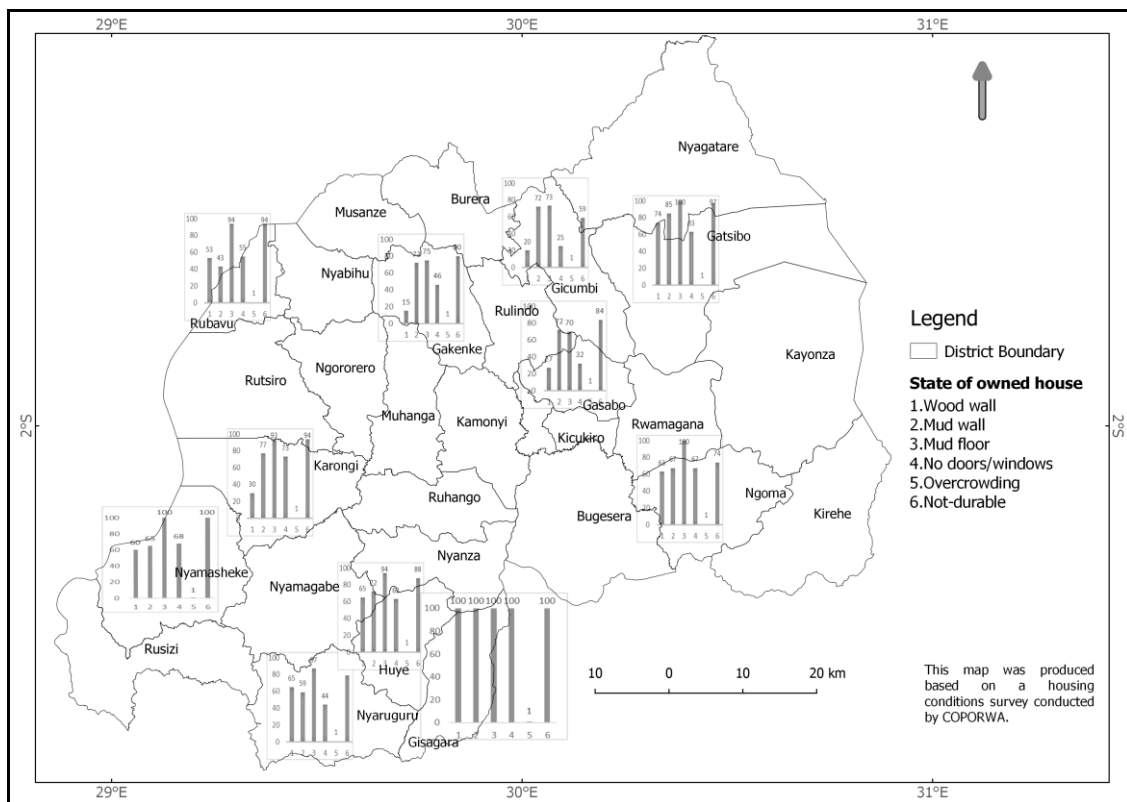


Figure 2: Construction materials for owned houses and level of comfort (Source: COPORWA, 2018)

Access to Basic Infrastructure

In general, the majority of HMPs (91.6%) lives in villages that are close to school and fairly serviced with by road network. Karongi is the only district with the highest proportion of

HMPs households which are remotely located from the schools (41.3%). The majority of HMPs villages (68.8%) are located nearby water points with the exception of Gisagara with 100 % are located far from a water source. In Gisagara, all surveyed 100% of HMPs households live exclusively in their own village and far from the market. In general, few of HMPs households (41.7%) are located closer to the electricity, this implies that connecting HMPs villages will be difficult for the 58.3% (1,077 households) that are remotely located far from electrical lines. For instance, Gisagara, Gasabo and Ngoma districts have the highest proportion of HMPs villages which are closely located to electrical lines (respectively, 100%, 75.5% and 51%). Karongi and Rubavu are the districts with the highest proportion of HMPs households which are remotely located to schools (respectively 97.9% and 83 %).

The results show that 75.3% of HMPs households are closely located to health centres. This implies that, if properly assisted through health insurance scheme, many HMPs can have access to health services. Only 24.5% (457) of households are remotely located to health centres. Gasabo and Ngoma districts have the highest proportion of HMPs villages which are closely located to health centres (respectively 75.5% and 51%), as presented in Figure 3. Gatsibo is the district with the highest proportion of HMPs households which are remotely located to the health centres (39.7%).

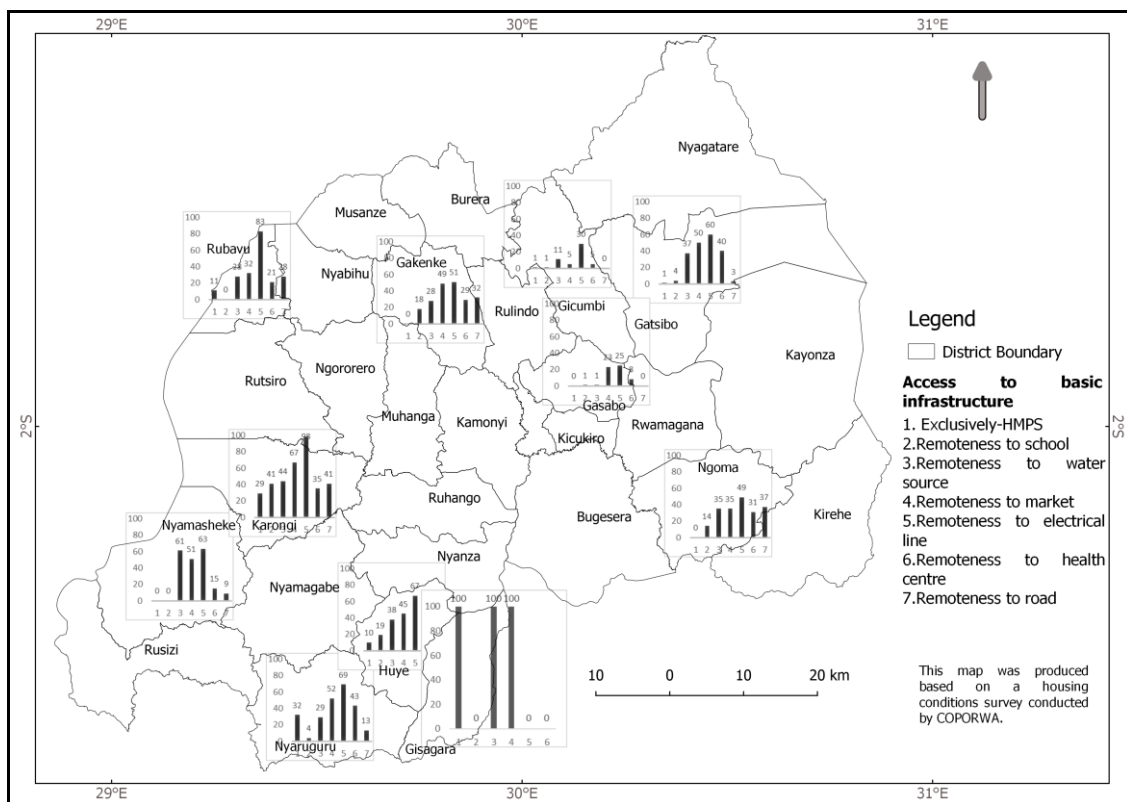


Figure 3: Access to Basic Services and Infrastructure (Source: COPORWA, 2018)

Overall Deprivation

In general, the study findings allow to rank districts as follow: Gisagara district is where more interventions are needed followed by Karongi, Nyamasheke, Gatsibo, Huye, Rubavu, Nyaruguru, Ngoma, Gasabo and Gakenke respectively. The situation is most critical

Gisagara, Nyamasheke, Rubavu, Karongi, Gatsibo and Huye districts where between 80 % and 100% of Historically Marginalized People do not have houses and consequently live in very precarious conditions. The findings in Gisagara and Nyaruguru show the same trend with statistics produced by EICV5 which indicated that poverty has increased in Southern Province between 2014 and 2017 (NISR, 2017). Gisagara, Karongi and Nyaruguru are among the poorest districts in 2017 with a total poverty rate which ranges between 45.1 and 60.0%. Nyaruguru and Gisagara have a rate of 21.4 and 28.1% of extreme poverty (Figure 4). Gatsibo and Rubavu have a total poverty rate which is comprised between 35.1 and 45 %. The case of Gasabo seems to fit the general context of deprivation since the total poverty rate of Gasabo is less than 20%. However, as it is in urban areas, more attention must be paid to Historically Marginalized Peoples. Rubavu and Gatsibo are strange cases because those districts have low rates of poverty and extreme poverty (NISR, 2017; NISR, 2018), it was expected that HMPs would have better housing conditions. Moreover, the case of Gasabo needs to be looked at carefully because it is an urban district with less land availability. Therefore, providing land to HMPs may be problematic.

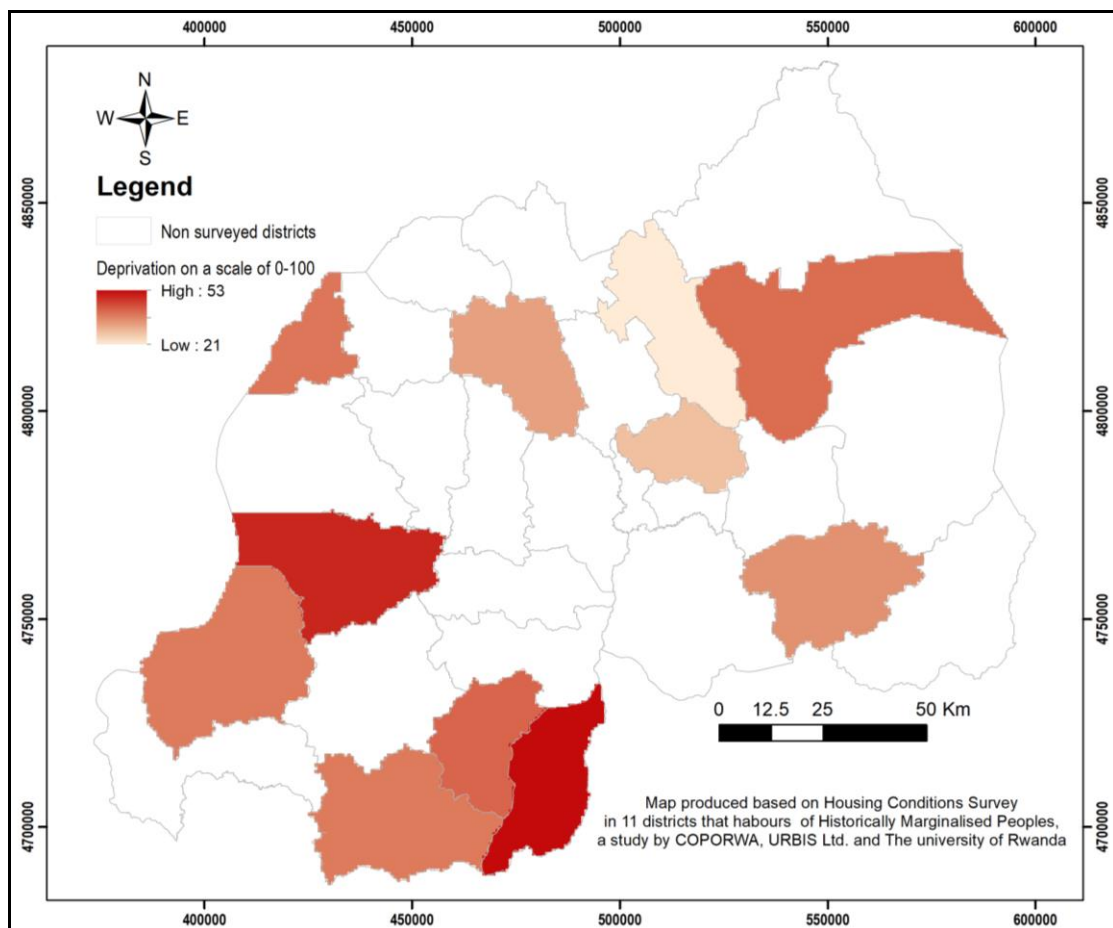


Figure 4: Overall deprivation (Source: COPORWA, 2018)

5. Conclusion

This study has the objective to assess housing conditions of Historically Marginalised People in Rwanda. It indicates that some districts have achieved improvements in the provision of decent housing to HMPs. These are Gicumbi, Gakenke and Gasabo. Others like Gatsibo,

Rutsiro, Rubavu, Karongi, Gisagara and Ngoma are far from reaching expected improvements in HMPs housing. In these districts and others with some improvements, it was observed that many HMPs households do not possess toilets and kitchens. There is a need to conduct a detailed study to enlighten the causes of the difference in providing adequate housing to HMPs.

Regarding access to the toilet, more than half of HMPs households do not have toilets exposing them to disease-related poor sanitation. This combined with the fact that more than three-quarters of houses are not paved, health and sanitation issues become more complicated because HMPs are also exposed to skin diseases such as jigger. Lack of access to kitchen exposes more than three-quarters of households to cardio-respiratory diseases because of smoke inhalation. The smoke also exposes house iron roofs to deterioration and leaking. The lack of doors and windows structures and living in not durable houses exposes HMPs to cold which may cause pneumonia and death when houses fell apart. Mosquitoes use those unclosed large openings to invade the houses.

However, some opportunities are worthy to mention. Most of the HMPs households are closely located to health centres, road and water points, though they may not afford them because of limited household income. This may constitute an opportunity for integration development and improvement in access to health, hygiene and sanitation. Against this research backdrop, it is important to know that non-access to land is a critical problem that needs to be addressed at all government levels. Because possession and farming are the sources of income for most of the rural Rwandan population, the provision of housing to the HMPs could be associated with the allocation of land that can be taken from land owned by the central government or districts. Of course, the beneficiaries would be prevented to sell the land parcel given to them. As a matter of equity to reduce regional inequalities, concerned actors must strive to intervene in the regions characterised by poor performance. In addition, generalised issues related the poor quality of houses, lack of kitchen, toilet calls for not only the self-organisation of HMPs but also the mobilization of NGOs, government organisations at all levels and neighbours to utilise existing community development frameworks such as *Umuganda* and *Ubudehe* to overcome the issues of poor hygiene and health that are induced by poor housing quality. Finally, capacity building initiative through a system of sensitization must be mobilised to teach HMPs on good practices in houses uses and maintenance.

The strength of this research is that it has provided the empirical description of HMPs housing conditions in Rwanda in the selected districts. It has revealed that regional disparities exist in HMPs housing quality, and this can inform spatially targeted interventions in improving housing quality for HMPs. However, it did not address the causes of the regional disparities. More research is needed to seriously engage with how cultural, historical, demographic and economic backgrounds of HMPs influence HMPs housing conditions to call for more interventions that address the roots of HMPs poor housing.

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References

- Ajami, A.; Kuffer, M.; Persello, C.; Pfeffer, K. Identifying a Slums' Degree of Deprivation from VHR Images Using Convolutional Neural Networks. *Remote Sensing* 2019, 11, 1282.
- Bizimana, J.P, Twarabamenye, E. and Kienberger, S. (2015). Assessing the Social Vulnerability to Malaria in Rwanda. *Malaria Journal* 14:2. Available at <http://www.malariajournal.com/content/14/1/2>. Retrieved 24 November 2019.
- Bonnefoy, X. (2007). Inadequate housing and health: an overview. *International Journal of Environment and Pollution*, Vol. 30, No. ¾.
- COPORWA (2018). Housing Issues for Historically Marginalized Peoples (HMPs), Draft Report. COPORWA. Kigali. pp31
- Huggins, C. (2009). Land Rights and the Forest Peoples of Africa Historical, Legal and Anthropological Perspectives. No 4 Historical and contemporary land laws and their impact on indigenous peoples' land rights in Rwanda. Available at <https://www.illegal-logging.info/sites/files/chlogging/uploads/RRIRwandadoc1204.pdf>. Retrieved on 18 October 2019
- Gaugler, J. (2013). Selective Visibility: Governmental Policy and the Changing Cultural Landscape of Rwanda. ARCC 2013. The Visibility of Research Policy: Educating Policymakers, Practitioners, and the Public
- Gina N. Vorderstrasse, B.A. (2012). Overcoming Apocalyptic Identities in Rwanda: The Successes and Challenges of Development after Genocide. MSc Thesis, Faculty of the Graduate School of Arts and Sciences. Georgetown University. Available at <https://repository.library.georgetown.edu/handle/10822/557600> Retrieved 2 November 2019
- Guio, A. C., & Maquet, E. (2007). Material deprivation and poor housing. *Comparative EU statistics on income and living conditions: Issues and challenge*, 193-214
- Institute of Research and Dialogue for Peace, COPORWA, Tilburg University (n.d) Structural barriers to Batwa/HMP inclusion in development in Rwanda Policy Brief. Available at https://includeplatform.net/wp-content/uploads/2019/07/Morag-Goodwin_Policy-Brief-2018.pdf. Retrieved 29 December 2019.
- Kuffer, M., Pfeffer, K., Sliuzas, R., Baud, I., & Maarseveen, M. (2017). Capturing the Diversity of Deprived Areas with Image-Based Features: The Case of Mumbai. *Remote Sensing*, 9(4), 384

- Lewis, J. (2006). The Twa Pygmies: Rwanda's Ignored People. La marginalisation des pygmées d'Afrique Centrale. Langres: Maisonneuve et Larose, 79-105.
- NISR (2017). The Fifth Integrated Household Living Survey (EICV5). Kigali
- NISR (2014). RPHC4: Population Projections. Life expectancy at birth 2020. Available at <https://www.statistics.gov.rw/publication/life-expectancy-birth>. Retrieved 24 May 2020
- NISR (2018), EICV5 Utilities and Amenities. Thematic Report. Kigali
- Ramsay, K. (2010). Uncounted: the hidden lives of Batwa women. Available at <https://www.refworld.org/pdfid/4bf389f82.pdf>. Retrieved 6 November 2019
- Society for Threatened Peoples (2011). Right to Adequate Housing. The Destruction of Batwa houses in Rwanda. Available at https://www.gfbv.de/fileadmin/redaktion/UN-statements/2011/Ruanda_Zerstoeerung_von_Batwa_Haeusern_16th_HRC_2011_Written_Statement_Rwanda_Revised.pdf. Retrieved 30 November 2019.
- The Rights of Indigenous Peoples in Rwanda. Available at <http://www.forestpeoples.org/sites/fpp/files/publication/2010/08/rwandahrcrepoc06eng.pdf>. Retrieved on 24 October 2019.
- Unrepresented Nations and Peoples Organization (2015). Submission to the UN Office of the High Commissioner for Human Rights for the consideration of the Universal Periodic Review of the Republic of Rwanda during the 23rd Session. Available at https://www.upr-info.org/sites/default/files/document/rwanda/session_23_-_november_2015/unpo_upr23_rwa_e_main.pdf. Retrieved 5 November 2019.