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ASSESSING CITIZENS' ACCESS TO OPEN GOVERNMENT DATA ON COVID-19 IN MALAWI



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PROTECT is a partnership for knowledge and learning in three countries – Malawi, Kenya and Myanmar aimed at countering shrinking civic space, easing pressure on independent media and infomediaries, and enhancing transparency through empowered, independent and informed individuals and communities who demand that governments uphold their obligations in a protective and enabling environment.

In Malawi, PROTECT will focus on the unequal participation in society by women and marginalised groups. PROTECT in Kenya will strengthen and promote the ability of women in media and civil society to protect civic and media space and push for accountable and transparent governance at local and national level. In Myanmar PROTECT will tackle the intolerance which has fuelled so much recent violence in the country.

Above all PROTECT will increase the freedom to enjoy free, open and inclusive societies for many and will promote societies that thrive with diverse voices.

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FOREWORD

Hivos is a Dutch development organization that seeks new solutions to persistent global issues. Hivos has two broad Strategic Themes which are; Green Society and Open Society. It is under the Open Society that Hivos is implementing a 3 year Programme funded by the Foreign, Commonwealth & Development Office (FCDO). The Programme Protecting Rights, Openness, Transparency and Enhancing Civic Transformation (PROTECT) is being implemented under a consortium of ARTICLE 19, Hivos, Internews and the International Center for Not-for-Profit Law (ICNL).

The PROTECT Consortium brings together four leading organizations working on shifting the paradigm from unequal and closed societies towards free and open societies with civil society including media organizations, able to help people to hold governments to account. The Consortium, alongside local and expert partners is strengthening the foundations for an open society in three target countries: Kenya, Malawi and Myanmar by combining their worldwide expertise in the areas of Civic Space, Media Freedom, and Data Transparency.

Hivos under the PROTECT Programme commissioned a study with the broad objective of unearthing the barriers and enablers to accessing the COVID-19 Government Open Access data. The study specifically aimed to ascertain the availability of Government Open Data on COVID-19 on various platforms such as the availability of data as a whole; reasonable reproduction cost and preferably possibility of downloading over the internet. The study also wanted to find out whether Government Open Data is accessible particularly if the data is available in a convenient and modifiable form and to determine whether the data can be re-used and redistributed, and provided under the terms that permit re-use and redistribution including the intermixing with other datasets. Finally, the study wanted to assess the extent to which the Government Open Data facilitates universal participation. This includes to find out whether everyone able to use, re-use and redistribute to ensure that there is no discrimination against fields of endeavor or against persons or groups.

This paper therefore presents the findings of the study, the methodology used and the recommendations that should be considered in order to achieve effective citizen's access to quality data.



EXECUTIVE SUMMARY

Introduction

The Protecting Rights, Openness and Transparency Enhancing Civic Transformation (PROTECT) Consortium brings together four leading organisations: ARTICLE 19, Hivos, Internews and the International Center for Not-for-Profit Law (ICNL), working on shifting the paradigm from unequal and closed societies towards free and open societies with civil society including media organisations, able to help people to hold governments to account. The Consortium, alongside local and expert partners, will strengthen the foundations for an open society in three target countries: Kenya, Malawi and Myanmar by combining their worldwide expertise in the areas of Civic Space, Media Freedom, and Data Transparency.

Hivos would like to unearth the barriers and enablers to accessing the COVID-19 Government Open Access data. The following were the specific objectives of the assignment:

- I. To ascertain the availability of Government Open Data on COVID-19 on various platforms: the data must be readily available as a whole and at no more than a reasonable reproduction cost, preferably by downloading over the internet;
- **ii.** To find out whether Government Open Data is accessible: the data must also be available in a convenient and modifiable form;
- **iii.** To determine whether the data can be re-used and redistributed. The data must be provided under terms that permit re-use and redistribution including the intermixing with other datasets; and
- iv. To assess the extent to which the Government Open Data facilitates universal participation: whether everyone is be able to use, re-use and redistribute there should be no discrimination against fields of endeavour or against persons or groups. For example, 'non-commercial' restrictions that would prevent 'commercial' use, or restrictions of use for certain purposes (e.g. only in health), are not allowed.

Key Results

- **a**. The radio is the main source of accessing information about COVID-19 although social media is also being used by both Government of Malawi and the general population in COVID-19 information sharing.
- **b.** 83% of the respondents found it easy to access COVID-19 information however the females were less likely to access the COVID-19 information
- c. Access and re-use knowledge of COVID-19 data was higher amongst those aged 18-34 years than those aged 35 and above
- **d.** Some researchers have bemoaned delays in accessing COVID-19 data from PHIM for in-depth analysis of the risk factors of COVID-19 in Malawi





- **e**. The prevalence of fake news is high in Malawi with those in non-cities being at risk of accessing more fake news on COVID-19.
- f. Low knowledge on ethical issues surrounding open data use in Malawi
- **g**. There are accountability mechanisms in place in Malawi for all COVID-19 open data.
- **h**. The data for COVID-19 is re-usable in Malawi
- i. Low capacity of the government of Malawi to provide all the requisite support for open data on COVID-19
- j. Weak implementation of data policies has potential for data transfer without proper channels (data slavery)

Recommendations

- **a.** Government should make more deliberate efforts to narrow the City-Non-city gap on availability of and access to COVID-19 information by, among others, supporting community radios for sustainability of the support they provide on dissemination of COVID information;
- **b.** Government should institute swift feedback mechanisms on processed data for the respective geographic areas for consensus before making such information public.
- **c.** Government should strengthen the COVID-19 data capturing infrastructure and institutions beginning at the community level by facilitating formation of COVID-19 platforms involving community structures and community leaders including community health workers who are better placed to reach out to the non-city population with updates and also by providing technology that supports fast or real-time transmission of COVID-19 information.
- **d.** The PHIM Facebook page should be used as another avenue for dissemination of COVID-19 open data.
- **e.** The government of Malawi should further encourage the re-suing of COVID-19 data in order to enable the researchers further analyse the data and provide insights into the risk factors associated with acquisition of COVID-19.
- **f.** The government of Malawi should devise methods of reaching to people with disability such as the visually and the deaf in Malawi through producing and dissemination of audio and braille materials and infographics to such populations.
- **g.** The government should also introduce the deliberate efforts to reach to the women as there is a gender disparity on the access to COVID-19 information. Efforts to ensure that women have more access to COVID-19 open data through community sensitisations may be explored.
- **h.**The government should put in stringent measures to curb the infordemic associated with COVID-19 in order to reduce the further risk of transmission through proper and appropriate messaging on COVID-19.



ABOUT THE PROTECT PROGRAME PURPOSE OF THE ASSIGNMENT STUDY METHODOLOGY





1.0. ABOUT THE PROTECT PROGRAMME

The PROTECT (Protecting Rights, Openness and Transparency Enhancing Civic Transformation) Consortium brings together four leading organisations: ARTICLE 19, Hivos, Internews and the International Center for Not-for-Profit Law (ICNL), working on shifting the paradigm from unequal and closed societies towards free and open societies with civil society including media organisations, able to help people to hold governments to account. The Consortium, alongside local and expert partners, will strengthen the foundations for an open society in three target countries: Kenya, Malawi and Myanmar by combining their worldwide expertise in the areas of Civic Space, Media Freedom, and Data Transparency.

There are several challenges that PROTECT will tackle in Malawi. One of them focuses on the growing public demand for and government commitment to increasing transparency and accountability. However, corruption is endemic and accessing government information remains a challenge for citizens, civil society organisations (CSOs) and the media. In addition, data literacy is limited in Malawi. Government, civil society, media outlets and infomediaries are generally under-equipped to understand how to work with the data they have access to. PROTECT intervention seeks to tackle contextualised threat of Transparency and Accountability using Data. PROTECT seeks to translate complex data into actionable information for marginalised groups, journalists and civil society.

The study therefore sought to address gaps in the available data on gender inequality, building the capacity of journalists and actors from vulnerable groups to access and use information to improve government accountability.

2.0. PURPOSE OF THE ASSIGNMENT

Hivos would like to unearth the barriers and enablers to accessing the COVID-19 Government Open Access data. The following were the specific objectives of the assignment:

- I. To ascertain the availability of Government Open Data on COVID-19 on various platforms: the data must be readily available as a whole and at no more than a reasonable reproduction cost, preferably by downloading over the internet;
- **ii.** To find out whether Government Open Data is accessible: the data must also be available in a convenient and modifiable form;
- **iii.** To determine whether the data can be re-used and redistributed. The data must be provided under terms that permit re-use and redistribution including the intermixing with other datasets; and
- iv To assess the extent to which the Government Open Data facilitates universal participation: whether



everyone is be able to use, re-use and redistribute - there should be no discrimination against fields of endeavour or against persons or groups. For example, 'non-commercial' restrictions that would prevent 'commercial' use, or restrictions of use for certain purposes (e.g. only in health), are not allowed.

3.0. STUDY METHODOLOGY

3.1. Study Areas

The assessment was done in Chitipa, Mzimba, Mzuzu City, Nkhata Bay, Salima, Lilongwe Non-city, Lilongwe City, Blantyre City, Zomba City, Phalombe, Nsanje, Mangochi, Neno, Ntchisi and Ntcheu. We also conducted upstream interviews involving relevant national stakeholders on COVID-19.

3.2. Data Collection Methods

The assessment used a mixed method approach which included both quantitative and qualitative methods of data collection and desk review. Quantitative data was collected through a community survey while qualitative data was collected through Key Informant Interviews (KII), with relevant stakeholders. Structured questionnaires were used during the Community survey while Checklists were used during Key Informant Interviews. The segmentation of the interviewed respondents is shown in Table 1, by type of data collection method. Data collection tools used in this study are presented in Annex 7.1 while the list of institutions that participated or were represented in the KIIs is presented in Annex 7.2.



Table 1: Segmentation of sample size by type of respondent for the assessment, 2020

Geographic Area	Type of respondent	Number of target
		respondents
	Ministry of Information	1
	e-Government	1
	National Planning Commission (M&E)	1
	Central M&E Division, Planning Directorate (MoH)	2
National Level	National Statistical Office	1
	Ministry of Gender)	2
	Public Health Institute of Malawi	1
	Presidential Taskforce on COVID-19	2
	Media Houses	2
	District Social Welfare Officers	11
District level	District Information Officers	11
District level	CSOs Coordinators	11
	District Environmental Health Officers	11
Non-city/Community	General Public Survey	114
level		
City level	General Public Survey	39

3.3. Data Analysis

The assessment employed a cross sectional study design. Data from the community survey was analyzed using STATA v16.0 (Stata Corp., Texas, USA). Data was analyzed using frequencies, proportions, means, standard deviation and medians as appropriate. The quantitative data is presented in tables and graphs as appropriate. Detailed standalone tables and graphs were produced so that one can use them without referring to the main text.

Data from Key Informant Interviews was recorded and transcribed in word. We managed, sorted and organized qualitative data, stored, annotated and retrieved text, located words, phrases and segments of data and extracted quotes. Wherever possible, the study triangulated what was obtained in qualitative data analysis with quantitative results and relevant literature obtained through document review. The



analysis also provided for gender disaggregation in order to provide understanding of how different gender access COVID-19 data in Malawi.

3.4. Ethical Consideration

We obtained consent from all participating individuals in this assessment. The participant responses or any other information were not be shared with any other person in the community. We conformed to the Ministry of Health National Guidelines for Conducting Research in the era of COVID-19 released on 1 May 2020 by conducting interviews through phone calls, observing social distancing during the interviews and wearing of face masks during the interviews as well as sanitising the hands and the tablets used for data collection.

3.5. Strength and weaknesses of the selected design and research methods

The strength of this assessment is that it covers fourteen districts spread across Malawi however the limitation is that the sample size was not large enough. Furthermore, the sampling of the districts was not randomly done but rather purposively done on the basis of proximity to bordering with other countries or high case load of COVID-19.



FINDINGS AND DISCUSSIONS



4.0. FINDINGS AND DISCUSSIONS

4.1. Characteristics Of Respondents For The Assessment

With reference to **Table 2**, this section presents findings on key socio-demographic characteristics of the sampled respondents that were interviewed during the survey. Socio-demographic characteristics allow us to understand in more details about the type of respondents in the selected districts and communities. There were 153 respondents: 58% were male, 75% were from non-city areas and 93% were able to read and write. The median age of the respondents was 32 years (interquartile range (IQR): 27-41). Of the 153 respondents, 52% were aged of ages from 18 to 34 years.

Characteristics	Number	Percent
Total	153	100
Residence		
Non-city	114	75
City	39	25
Sex		
Male	89	58
Female	64	42
Age group in complete years		
18-34	88	58
35+	65	42
Able to read and write		
Yes	143	93
No	10	7

Table 2: Characteristics of persons interviewed in the assessment in Malawi, 2020



4.2. Open Data Availability and Accessibility

Qualitative interviews with key informants showed that the data on COVID-19 is available in different forms from raw to processed data. However, it was clear that the non-city population especially the elderly who are not conversant with technology were left behind when it comes to accessing COVID-19 data of information. The study also found out that people with disabilities have not been adequately considered in COVID-19 information dissemination strategies.

Furthermore, qualitative data showed that the raw data are available within the Public Health Institute of Malawi (PHIM) while the different products of these processed raw data are available from the Ministry of Health website, Facebook, Twitter and WhatsApp as well as both print media and radio announcements. The main information data shared are the daily and weekly situational reports on COVID-19.

Key informant interviews with some researchers showed that the PHIM is also able to release the raw data for a more in-depth analysis of the COVID-19 data so that they inform the risk factor analysis despite delays in releasing such data. Furthermore, the KIIs also showed that there is a lot of information on COVID-19 some from unknown sources and this has been more overwhelming than the COVID-19 pandemic. Below are some of the notable quotes from responses on availability of and access to COVID-19 data:

"The availability of COVID-19 Data for Disabled People's organizations has been put in question due to lack of accessible formats especially for PWDS with visual and hearing difficulties. Majority of people with hearing difficulties have low literacy levels and are only able to access information through sign language. Lack of sign language interpreters on COVID-19 digital media programs being presented by the government and stakeholders has led of many Deaf people unable to access adequate information so that they can make informed choices".

(KII with an officer from MANAD)

"Availability and accessibility of COVID-19 data is above 50% anecdotally that is. It is not optimal levels because of how the data is shared with the people. The thing is sharing of this data has mostly used technology which is not affordable for the average citizen who makes trade-offs even within the basic needs basket" (KII with an officer from e-government department)

"COVID data is available and timely from different platforms such as WhatsApp and radio. But in non-city areas there is a problem especially where a radio is not readily available. In addition, there is an age barrier for the modern technologies such as WhatsApp - the elderly is not conversant with use of some gadgets such as android phones".

(KII with a nurse from Ntcheu DHO)



"Government is doing better by allowing private as well as community radios to disseminate COVID-19 information but there are still challenges to do with sustainability especially on the part of community radios who are supported by development partners" (KII with CSO representative)

The survey found that 78% of the individuals had ever heard of the open data on COVID-19 in Malawi. Access to information was higher in men (85%) than the women (68%). On the contrary, 82% of the non-city population compared to 69% of the city population had access to COVID-19 information. The proportion of persons that have ever heard of COVID-19 information was similar by age (77% amongst those aged 18-34 years vs. 80% amongst those aged 35+ years). The sources of COVID-19 information by residence are shown in

Table 3. The main source of information was the radio (91%) while the least source was LinkedIn (4%). A majority of the city residents reported that they accessed COVID-19 information from the Malawi Government and other websites, Facebook, radio and newspaper while most of the non-city residents accessed information through WhatsApp, LinkedIn, church and friends (see

Table 3). The higher coverage of LinkedIn amongst the non-city residents may have been due to selection bias since the respondents were not randomly selected in this survey but rather purposively selected. The survey also showed gender disparities with respect to access to COVID-19 data with females accessing more information than males from friends and church while men had more access to COVID-19 information through websites, newspapers, WhatsApp, Facebook, LinkedIn, etc. (see

Figure 1). Although the radio is the main source of disseminating open government data on COVID-19 in Malawi, there are certain communities like Usisya that have poor reception to the Malawi radio stations and this area receives signal from radio stations in Tanzania thereby having a mix of information on COVID-19 amongst the Usisya community members since they have information that there is no COVID-19 as aired by Radio Stations from Tanzania as aired on Zodiak Broadcasting Station on 21 August 2020.

Qualitative interviews showed that the disparity between males and females on access to COVID-19 in Malawi can be attributed to use of modern technologies where more males than females have access to modern gadgets such as android phones. See quote below:

"There are more men than women who are in the know. More men than women have android phones meaning they have better access to gadgets which can help them to access information on COVID-19." (KII with a nurse from Ntcheu DHO)



Source	Non-city	City	Total
Newspapers	40	41	40
Radio	89	96	91
WhatsApp	55	44	53
Facebook	29	37	31
LinkedIn	5	0	4
Government Website	16	26	18
Other Websites	8	11	8
Church	45	26	41
Friends	56	48	54
Others	15	37	20

Table 3: Percentage distribution of the respondents by source of COVID-19 open data andresidence, 2020

Figure 1: Percentage distribution of sources of COVID-19 information by sex of respondent in Malawi



A total of 83% of the people that reported to have heard of COVID-19 open data, found it easy to access the information. Of these 86% of the 76 males found it easy to access COVID-19 data compared to 76% of the 44 among the females. However, a similar proportion of the city and non-city residents found it easy to

access COVID-19 information (81% and 83% respectively). Those aged 18-34 years were more likely to access COVID-19 information than those aged 35+ years (85% of 68 vs 79% of 52). The COVID-19 open data products accessed included the situational reports and communique as shown in **Table 4**,

Figure 2 and Figure 3. More males accessed the data products than the females. The daily updates were the most accessed information while the COVID-19 communique was almost the least accessed information. While more city residents accessed the daily situational report than the non-city residents, more non-city residents accessed the COVID-19 daily updates than the city residents.

Data Product	Male	Female	Total	
Situational report	55	44	51	
COVID-19 Daily updates	95	85	91	
COVID-19 Weekly updates	40	39	40	
COVID-19 policy changes	39	37	38	
COVID-19 Communique	32	32	32	
Other	5	15	9	

Table4: Percentage distribution of the respondents by COVID-19 open data products by sex in Malawi, 2020







Figure 3: Percentage distribution of the respondents by COVID-19 open data products by age in Malawi, 2020



4.3. Structures Behind the Covid-19 Data Value Chain

At district level, the interviews with the MoH officers showed that the Integrated Disease Surveillance Officers lead the data generation and processing into district data that are used to inform the epidemic control at district level. The districts report to the PHIM on a weekly basis. Mostly, the districts share their



reports via WhatsApp after the data have been vetted by the District Health Office and the District Commissioner. In the districts with community radios, the COVID-19 situational reports are then announced on the local radios for community sensitization. Impact of COVID-19 data on institutional and individual practices.

4.4. Impact of COVID-19 Data

As can be seen from the quotes below from responses on the impact COVID-19 data has had, COVID-19 has affected both individuals and communities of Malawi. This has been a major reason the individuals have been tracking COVID-19 data with keen interest - demand for COVID-19 data has been driven by perceived risks of acquisition of the virus causing COVID-19.

"There has been a positive impact of the COVID 19 data on programming. For example, we can see response at prisons where some prisoners were released again when returnees are coming from the diaspora, we are seeing response from all concerned ministries and departments. In a way I can say it has created good linkages between government, NGOs and the development partners to work together. Donors are now willing to share resources to respond on COVID 19 have reprogrammed their projects around COVID 19. Donors can now send money to government ministries to revamp community structures. Now there is a move to engage chiefs more to support the COVID 19 fight and its consequences such as child marriages"

(KII with an Officer from the Ministry of Gender, Community Development and Social Welfare)

"Information on COVID 19 has affected the nation and individuals. We use the data that we receive to make decisions, for example, decisions such as working from home came from the same data. Access to health care services has also been affected as people fear contracting COVID 19 from health facilities. Many economic activities have stopped".

(KII with Principal Nutritionist)

"At individual level, the data has facilitated improvements in the level of awareness on the need for mindset change and adherence to measures on COVID-19 prevention and management. At institutional level, COVID data has informed re-strategising of efforts to make their everyday operations responsive to wider environment" (KII with Zonal Officer -Northern Zone)



A search on LinkedIn also shows that the individuals and clinics in Malawi have been practicing social distancing and handwashing as preventive measures for COVID-19. COVID-19 prevention has been integrated in several programmes in Malawi. An example of integration of COVID-19 in immunization.



Figure 4: Immunization in the time of COVID-19 and beyond, 2020

Source: https://www.linkedin.com/feed/update/urn:li:activity:6671681326741037056/

4.5. Data Governance in Malawi

The study found out that the general population is not aware of the exact policy that is guiding government COVID-19 information sharing approaches. It was indicated during the interviews that observed processes government has embraced in sharing of COVID-19 information is the same for even for any other information, and that the proposed Access to Information (ATI) bill still presents a big opportunity to clear the picture. However, KII responses repeatedly pointed to the fact that government information sharing strategies seem to be guided by the principle only sharing the information which is processed for relevance to the public, and that which would not cause public panic. On the other hand, quantitative data, showed that Government of Malawi has policies that govern data, in which 50% of the respondents showed that the GoM has policies on open data.



Although most of the data being collected in Malawi has ended up in other countries and not being available to Malawi, there are guiding documentations on what needs to be done. The implementation of the guidelines is weak and needs to be beefed up.

Qualitative data showed that communication of information in government follows bureaucratic channels where not every officer can share data to the public. It was clear that some officers would not share public data for fear of consequences. See quote below:

"Government is a system of bureaucrats. It is a domain of Public Relations Officers (PROs), Principal Secretaries and ministers. Therefore, if an officer shares information, he or she may contradict what the authorities are saying. Another question that is considered is who is using the data. As public officers we are always asked to hear from authorities for fear of victimizing yourself and the likely negative consequences". (KII with an Officer from the Ministry of Gender, Community Development and Social Welfare)

4.6. Ethics And Policy Related To Open Data In Malawi

A total of 32% of the respondents reported awareness of the ethical issues surrounding accessing open data in Malawi. Knowledge of ethical issues related to open data was higher in males (39%) than in females (23%). Respondents in the cities were more knowledgeable of ethical issues related to open data (50%) than those in the non-cities (26%). A total of 34% of those aged 35+ years were aware of ethics related to open data while the corresponding value for those aged 18 to 34 years was 31%.

Key informant interviews showed that most respondents demonstrated awareness of ethical issues on some data for example on COVID 19. It was clear that they appreciated that some information for example, demographics of patients could not be made public because of ethical reasons. See quote below:

"COVID-19 data, just like any other health data is governed by ethics and cannot just be provided anyhow as much as the people have the right to access the data". (KII with the Environmental Health Officer)

"There may be some policies which were set - in a way the process limits use. There are privacy issues especially for confidential information". (KII with Nurse at Ntcheu DHO) With regard to reusing open data, 29% of the respondents had knowledge related to re-using open data. Knowledge of ethical issues related to re-using open data was higher in males (32%) than in females (26%). Respondents in the cities were more knowledgeable of ethical issues related to re-using open data (41%) than those in non-city areas (25%). The respondents aged 18-34 years had more knowledge (32%) to reuse open data compared to those aged 35+ years (25%).

The general guidance on using and re-using open data in Malawi is guided by the National Guidelines for Research under the Malawi Ministry of Health and the National Commission for Science and Technology (NCST). The standard practice is to request the data from the owners of the data and then re-use it as appropriate. Interviews with key informants showed that those who want to further analyse the COVID-19 raw data beyond the situational reports are supposed to have a detailed research proposal as well as make a formal request of the data from the PHIM. However, all the aggregate level data are shared by PHIM or District Health Office after vetting. There are some instances where the open data has been re-used in Malawi as shown in the Malawi Public Health Forum on Facebook as shown inFigure 5. On his Facebook page, Dr. Richard Munthali writes "Some good news that recoveries have been increasing recently. As of 25 July, 1,585 of 3,557 (44.6%) have recovered almost more than double recovery rate compared to 271 of 1,342 (20.2%) on 1 July 2020. The recovery rate is still lower than some SADC countries but the relative increase recovery rate is promising. More graphs on: https://datastudio.google.com/s/jLsz0x2-cTU." However, the PHIM Facebook page does not have any COVID-19 data contrary to the expectation since such a page was expected to have situational reports uploaded.



Figure : Re-using of government open data for COVID-19 in Malawi, 2020

Source: Facebook as of 25 July 2020



4.7. Transparency and Accountability With Open Data

A total of 82% of the respondents indicated that COVID-19 data were published timely. More males than females reported that the COVID-19 data were reported in a timely fashion (84% and 77% respectively). More city residents than non-city residents reported that the COVID-19 data were reported in a timely (90% and 79% respectively). More of the respondents aged 35+ (88%) felt the data was published timely compared to those aged 18-34 years (77%).

Qualitative data showed that the majority of key informants agreed that there is transparency and accountability in the way COVID 19 data is being handled. It was clear that the transparency and accountability had helped in building peoples trust in the data. See quotes below:

"The process has been transparent and the generators have been accountable as have been able to share the information at all levels. The only challenge is that there has been no clear feedback mechanisms" (KII with the Environmental Health Officer for Nsanje)

"It is transparent for example, there is dissemination on public radios- we hear where death has happened and they are accountable ie when people are coming from COVID 19 affected countries such as South Africa". (KII with an officer from Ministry of Gender, Community Development and Social Welfare)

Although most key informants agreed that there was transparency in the way COVID-19 data was shared, some key informant observed that there were some elements that were which were casting doubts on the COVID-19 data. See quotes below:

"The doubt is still there. People believe information from overseas and doubt our own COVID-19 data". (KII with nutrition officer from Lilongwe)

"I can say transparency is there though not 100 percent. I can rate it at 70-80 percent. But transparency is still a problem for example, details of the actual patients are not available. Politics in a way affected this trust as well. The government could say this patient has died of COVID-19 and relatives were refuting and some government officials could hold public functions amidst the COVID-19 pandemic" (KII with a nurse from Ntcheu DHO)



However, on key respondent observed that with time there have been improvements on the availability of data on COVID-19.

"Data availability has varied with time. Initially, the data was not sufficient but with the increase in the cases, the data was made available to the radio station". (KII with a radio presenter from Neno)

Furthermore, qualitative interviews showed that there are reporting arrangements in place with all the districts mandated to submit line list data to the PHIM. Then the PHIM consolidates the line lists into a master line list for the whole country. At district level, the daily and weekly reports are prepared and disseminated through WhatsApp or local radios. However, the disseminated data are just the basic descriptive analysis. The PHIM is mandated to report the data to the general public through its website, Facebook page and WhatsApp. Then the general public provide input to the data in the event where there are errors. The PHIM also reports to the World Health Organisation on the COVID-19 situation for Malawi. An example of feedback provided to PHIM on cumulative figures by the citizens on COVID-19 government open data:

Figure 6: Feedback provided by citizens on COVID-19 open government data on WhatsApp, 2020



4.8. Capacity to Utilize Open Data

The assessment shows that 29% of the respondents believed that the government of Malawi had the required technical capacity to support them in accessing open data. This is consistent with the key informants who said that much of the support for data cleaning, management and analysis is done by the partners of the Malawi Ministry of Health. However, the PHIM is headed by an Epidemiologist trained to Doctoral level. Considering the huge volumes of epidemiological data to be analysed, there is need to beef up staff within the PHIM through support from the partners of the Malawi MoH.

4.9. Fake News and Mitigation Methods

The prevalence of fake news on COVID-19 in Malawi was 76%. Men were more likely to report having come across fake news than women (79% and 73% respectively). Those in the non-city areas were more likely to report fake news than those from the cities (74% and 77% respectively). Those in the 18-34-year age group were more likely to report fake news than those aged 35+ (85% and 64% respectively). The sources of fake news from the survey are shown in Table 5. The major sources of the fake news were WhatsApp, Prevente 98 (1995) Facebook.

Qualitative interviews also showed that there is a proliferation of fake news in Malawi and that there is actually more fake news than the actual information on the COVID-19 pandemic. It was clear that in most cases people tend to mix some truths with fake news to try to legitimize their claims. See quote below:

"I have ever heard fake news. For example, there was news that once one has contracted COVID he or she dies instantly and there is no hope of healing. When I heard about this, I played a wait and see of course that time COVID had not yet come to Malawi and when I heard of recoveries, I knew that it was fake". (KII with a nurse from Ntcheu DHO)

"There were several misconceptions from the general public about treatment of COVID 19 and this distorted the flow of information from the national to district. District coordinating structures came together to communicate one language. In addition, the radio station put up some free airtime program special on COVID 19 that partners, sections, the public can access to disseminate the information on COVID 19". (KII with a radio presenter from Neno)

Source (n=153)	Percentage
Newspapers	6
Radio	10
WhatsApp	74
Facebook	40
LinkedIn	2
Government Website	2
Other Websites	9
Church	4
Friends	63
Others	4

Table 5: Percentage distribution of the sources of fake COVID-19 news in Malawi, 2020



5.0. KEY CONCLUSIONS

- 5.1. There is need for information targeting women and those in the cities of Malawi when it comes to accessing information on COVID-19.
- 5.2. The radio is the main source of accessing information about COVID-19 although social media is also being used by both Government of Malawi and the general population in COVID-19 information sharing.
- 5.3. 83% of the respondents found it easy to access COVID-19 information however the females were less likely to access the COVID-19 information
- 5.4. Some researchers have bemoaned delays in accessing COVID-19 data from PHIM for in-depth analysis of the risk factors of COVID-19 in Malawi
- 5.5. The prevalence of fake news is high in Malawi with those in non-cities being at risk of accessing more fake news on COVID-19.
- 5.6. Low knowledge on ethical issues surrounding open data use in Malawi
- 5.7. There are accountability mechanisms in place in Malawi for all COVID-19 open data.
- 5.8. The data for COVID-19 is re-usable in Malawi so long ethical issues are followed or adhered to.
- 5.9. Low capacity of the government of Malawi to provide all the requisite support for open data on COVID-19
- 5.10. Access and re-use knowledge of COVID-19 data was higher amongst those aged 18-34 years than those aged 35 and above
- 5.11. Weak implementation of data policies has potential for data transfer without proper channels- aka data slavery

6.0. **RECOMMENDATIONS**

- 6.1. Government should make more deliberate efforts to narrow the City-Non-city gap on availability of and access to COVID-19 information by, among others, supporting community radios for sustainability of the support they provide on dissemination of COVID information;
- 6.2. Government should institute swift feedback mechanisms on processed data for the respective geographic areas for consensus before making such information public.



- 6.3. Government should strengthen the COVID-19 data capturing infrastructure and institutions beginning at the community level by facilitating formation of COVID-19 platforms involving community health workers who are better placed to reach out to the non-city population with updates and also by providing technology that supports fast or real-time
- 6.4. transmission of COVID-19 information.
- 6.5. The PHIM Facebook page should be used as another avenue for dissemination of COVID-19 open data.
- 6.6. The government of Malawi should further encourage the re-suing of COVID-19 data in order to enable the researchers further analyse the data and provide insights into the risk factors associated with acquisition of COVID-19.
- 6.7. The government of Malawi should devise methods of reaching to the visually and audially impaired population in Malawi through producing and dissemination of audio reports and infographics to such populations.
- 6.8. The government should also introduce the deliberate efforts to reach to the women as there is a gender disparity on the access to COVID-19 information. Efforts to ensure that women have more access to COVID-19 open data through community sensitisations may be explored.
- 6.9. The government should put in stringent measures to curb the infordemic associated with COVID-19 in order to reduce the further risk of transmission through proper and appropriate messaging on COVID-19.

7.0. ANNEXES

7.1. Data Collection Tool - KII

7.1.1. KII Topic Guide

Availability & Accessibility

- 1. What can you say about management of COVID-19 data in Malawi? Probe: Availability
- 2. How is COVID-19 data shared amongst stakeholders in the country? Probe: social media, print & electronic media.

Open Data Policy & Citizen Participation

- 3. Tell me about the policy situation around open data in the country? Probe: availability, implementation, citizen awareness
- 4. How does the policy address gender mainstreaming regarding open data access?
- 5. How does the policy address the non-city/city divide?
- 6. What lessons have you learned regarding capacities that are developed by government to enable access to COVID-19 data at district/nation at large?
- 7. How have the capacities developed by government been used to access COVID-19 data?

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- 8. What are your experiences in accessing data on COVID-19 from government? Probe: How easy, how difficult to access data
- 9. What are the possible opportunities that you can see in facilitating access to COVID-19 data in your district/country at large?
- 10. What are the possible challenges that you can see hindering access to COVID-19 data in your district/country at large?
- 11. How flexible are citizens to freely request for access to COVID-19 data? Probe: facilitators, barriers
- 12. What can you say on the collaboration existing among data generators, processors and users in the country?
- 13. What is the relationship like between those officials tasked custodians of data in government and data users in general?
- 14. What efforts have been put in place to ensure that generated data is used for learning among public officers and citizens alike?
- 15. What fears are there among government agencies when it comes to sharing COVID-19 data? Why? Why not? Probe: Who is going to use the data; how data is going to be used; consequences
- 16. What fears are there for the citizens to request for access to COVID-19 data? Why? Why not? Probe: consequences
- 17. What can you say about whether the collection and dissemination of COVID-19 data has led to the fulfilment of transparency and accountability by government? Probe: Trust; belief that correct information can be presented
- 18. What factors influence institutions to enroll or not enroll in the quest for COVID-19 data?
- 19. What are the reasons behind their willingness or reluctance to access such data?
- 20. How do they perceive the impact of the data?
- 21. What factors influence decisions to release or not release COVID-19 data?



7.1.2. Data Collection Tool – General Survey Interview

Assess Citizens' Access to Open Government Data on COVID-19 under the PROTECT Programme Individual beneficiary questionnaire

Consent

I am..... from the Data Science and Statistical Consulting Centre. We have been recruited by Hivos to Assess **Citizens' Access to Open Government Data on COVID-19 under the PROTECT Programme.**

I would like to ask you a few questions about your access to open government data on COVID-19. All answers you will provide will be confidential and will not be shared with anyone.

QN	QUESTION	RESPONSES	SKIP
			то
100.	NAME OF INTERVIEWER		
101.	DATE OF INTERVIEW	/08/2020	
102.	AREA OF RESIDENCE	Non-city1	
		City2	
103.	DISTRICT	Chitipa1	
		Nkhata Bay2	
		Mzimba3	
		Ntchisi4	
		Salima5	
		Lilongwe non-city6	
		Ntcheu7	
		Neno8	
		Mangochi9	
		Zomba City10	
		Blantyre City11	
		Phalombe12	
		Mzuzu13	
		Lilongwe City14	
104.	NAME OF RESPONDENT		
105.	UNIQUE ID FOR INTERVIEWEE		
106.	PHONE NUMBER OF INTERVIEWEE		
107.	SEX OF RESPONDENT	1 = Male	
		2 = Female	
108.	AGE OF RESPONDENT (Years)		
109.	MARITAL STATUS	1 = Married	

SECTION 1: IDENTIFICATION



		2 = Single	
		3 = Divorced/separated	
		4 = Widowed	
110.	HIGHEST LEVEL OF EDUCATION	None1	
		Std 1-42	
		Std 5-83	
		Form 1-24	
		Form 3-45	
		Tertiary6	
111.	ABILITY TO READ AND WRITE	Able to read and write====1	
		Not able to read and write===2	

SECTION 2: DATA AVAILABILITY AND ACCESSIBILITY

QN	QUESTION	RESPONSES	SKIP
			ТО
200.	Have you ever heard of government	Yes=1	
	open data on COVID-19?	No=2	
201.	How did you first hear about it?	Newspapers=1	
		Radio=2	
		WhatsApp=3	
		LinkedIn=3	
		Internet=4	
		Church=5	
		Friends=6	
		Others=99	
202.	What open data products have you heard	Situational report =1	
	about?	COVID-19 Weekly updates=2	
		COVID-19 policy changes=3	
		COVID-19 Communique=3	
		Other=99	



203.	What are the modes of access?	WhatsApp=1	
		Government of Malawi websites=2	
		Radio=3	
		Television=4	
		Other websites=5	
		Friends/relatives=6	
		Employer=7	
		Colleague=8	
		Other=99	
204.	How many days does it take to access the		
	information?		
205.	In your view is it easy to access	Yes=1	
	government open data on COVID-19?	No = 2	
206.	Why is it easy or not easy to access?	Good internet=1	
		Within reach of most of	
		communication=2	
		Access to raw data for further	
		analysis=3	
		Other=99	
207.	Why is it not easy to access?	Poor internet=1	
		No communications to our	
		community=2	
		High cost of internet=3	
		Other=99	
208.	Do you have any of the following skills?	Data generating=1	
		Data manipulation (simple	
		calculations) =2	
		Data analysis=3	
		Generating reports=4	
		Interpreting/understanding data=5	
		Dissemination of data=6	



		Other=99	
209.	Do you know of any data access policies	Yes =1	
	in Malawi?	No = 2	
210.	Do you know any ethical issues regarding	Yes =1	
	accessing open data in Malawi?	No = 2	
211.	Do you know any ethical issues regarding	Yes =1	
	re-using of data in Malawi?	No = 2	
212.	Is the information published timely?	Yes =1	
		No = 2	
213.	Do you know of any place where		
	government data are shared?		
214.	Name the places?	Website=1	
		Facebook=2	
		LinkedIn=3	
		Noticeboards=4	
		Quarterly reports=5	
		Other=99	
215.	Do you receive support from Government	Yes =1	
	officials in accessing COVID-19 open	No = 2	
	data?		
216.	What support do you receive?		
217.	Does the government of Malawi have an	Yes =1	
	open data policy?	No = 2	
218.	Do you think the government has capacity	Yes =1	
	for open data?	No = 2	
219.	What data are available as open data for	TB=1	
	Malawi?	HIV=1	
		Malaria=2	
		COVID-19=3	
		Schistosomiasis=4	
		Maternity=5	
		Postnatal=6	



7.2. List of Institutions that Participated in the KIIs

The following are the institutions that participated in the KIIs

- Chitipa DHO Environmental Health Department
- MoH Satelite Office North
- e-Government- Office of President and Cabinet
- Presidential Taskforce on COVID-19
- Public Health Institute of Malawi
- College of Medicine Health Economics and Policy Unit (HEPU)
- Ministry of Gender, Community and Social Services
- Lilongwe District Council Nutrition Department
- Ntcheu DHO Nursing Department
- Neno DHO Environmental Health Department
- MANAD Blantyre
- Nsanje DHO Environmental Health Department
- Nsanje CSO Network
- Nsanje District Council Information Department
- Neno Community Radio



For more details contact:

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