



**THE STATE HOUSE
BANJUL**

Social, Economic and Health Impacts of Covid-19

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Executive Summary¹

All over the world, countries are struggling to handle and contain the coronavirus pandemic. In July cases have increased faster than ever before, a trend which is also true for The Gambia. Also in the same month, the Government of The Gambia lifted the State of Public Emergency and started easing restrictions, which was later followed by the introduction of new restrictions by the Minister of Health under the Public Health Act. Nonetheless, by the end of July it was clear the number of positive cases had started surging and severe community transmission had begun taking place in The Gambia. The positivity rate (the share positive cases of new test results) has been steadily rising, indicating that testing capacity is insufficient. People are currently waiting for days to get tested, potentially infecting others in the meantime.

The impact of the pandemic and of the restrictions vary across regions. One championed strategy to reduce the spread is social distancing. However, in The Gambia where average household sizes are large and a majority of households in most regions rely on shared kitchen or water facilities the social distancing strategy may prove to be impossible to adhere to. In regions with particularly high numbers or high shares of the population belonging to risk groups (Greater Banjul Area, Brikama, Mansakonko and Basse) it is important that there is preparedness to quickly respond to outbreaks and curb the spread. Unfortunately Greater Banjul Area and Brikama have somewhat failed in this regards as the disease has started spreading in healthcare clinics, causing them to temporarily close and limiting the access to these facilities which are essential to the elderly and people in morbid conditions.

Another important part of the healthcare service is also experiencing disruptions – the child vaccination programs. While vaccination rates have generally been high in recent years, the number of vaccinations between March and May in 2020 was the lowest for the period in over five years. This poses a direct threat in terms of increased risk of outbreaks of other infectious diseases like measles, hepatitis B, tuberculosis, etc. that may cause additional deaths from preventable diseases. Besides vaccine hesitancy, existing literature suggests that some factors increasing the likelihood of missed or delayed vaccinations include unemployment, illiteracy and home births, all of which has likely increased during the pandemic and could have long term effects on vaccination rates and the likelihood of outbreaks of infectious diseases.

Children are also directly affected by the school closures since March 18th 2020, creating a learning gap and human capital losses that will impact the future lives of these children and the prospects for the Gambian economy. While the Ministry of Basic and Secondary education has offered distance learning in the form of classes broadcast in radio, TV and social media there is a clear divide in accessibility to information and communication technology between rural and urban Gambia. Urban Gambia has higher enrolment rates, a higher share private schools (offering more advanced distance learning techniques) and more widespread access to TV, internet and computers, than rural Gambia. As such the current situation may aggravate already existing inequalities in educational attainment and income between rural and urban households. There are no significant gender disparities in enrolment rates but existing literature warns of

¹ The considerations presented in this Policy Note belong to the authors and do not necessarily reflect the views of the Department of Strategic Policy and Delivery or the Office of the President.

negative income shocks leading to rising numbers of child marriages which could lead to higher drop out rates. This is a potential concern in The Gambia where the girl's family receive a bride price. Another issue is food security as 223 657 children were benefitting from the school feeding program which is now suspended with the school closures. Again this will affect rural households most, where food insecurity is a more serious concern.

The pandemic has also taken a severe toll on the Gambian economy. The GDP growth projection has been revised and lowered by 3.8 percentage points, to 2.5 percent in 2020. Unemployment has increased while economic activity has decreased. In the Western region the abrupt disruptions in the tourism industry and restrictions on non-essential businesses have caused many businesses to lay off workers or go bankrupt. In rural Gambia where most people are working in agriculture and retail trade a big obstacle has been the closure of weekly markets, *lomos*, where products and crops are normally traded, leading to income losses and increased food insecurity. These last mentioned sectors also employ 81.3 percent of all women in the Gambia, making the negative impact especially hard on women. Also the local area councils are experiencing income losses with the suspension of *lomos* from which the fees normally constitute a significant revenue.

Given the rapid increase in new cases and evident local transmission we recommend expanded testing throughout the country which will require more tests and trained staff. Since the new surge is mostly concentrated in the Greater Banjul Area, where also several healthcare clinics have been temporarily closed, we recommend that the government urgently assesses and considers a strictly enforced regional lockdown to contain the spread and regain control over the situation. According to Section 5 of the Quarantine Act, Cap 40:03, Vol.6, Revised Laws of The Gambia 2009, "the Minister of Health may make regulation for all or any of the following purposes: /.../ preventing the spread of any dangerous infectious disease from any place within The Gambia, whether an infected local area or not, to any other place within The Gambia". This provision can be invoked to empower the Minister to enforce a regional lockdown without undue delay.

With disruptions in other parts of the healthcare system, more specifically child vaccination programs, we call on the Ministry of Health and other stakeholders to proactively ramp up vaccination programs and build preparedness for emergency response vaccinations should local outbreaks of other infectious diseases occur. The schools are also experiencing major disruptions and we encourage the Ministry of Basic and Secondary Education to develop a strategy to fill the learning gap, with both a regional and gender sensitive perspective. Should the current developments stabilize, in terms of the new surge of Covid-19 cases, we also urge the Ministry to consider reopening schools in the fall under strict safety precautions. With regards to the suspension of *lomos* we welcome the planned rapid assessment by the UNDP that could potentially help guide efforts to reopen the weekly markets in a safe, efficient and sustainable manner to alleviate the deteriorating situation in terms of household finances and food security. In conclusion, having a grip on the health issues is the ultimate solution and a necessary prerequisite to tackle the issues mentioned above and find a sustainable path forward.

I. Introduction

The world has not been the same since the emergence of the outbreak of Covid-19 (the disease caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-COV-2)). Between July 3rd 2020 and August 3rd 2020, the number of global cases increased from an estimated 11 million to a staggering 18 million. Over the same period in Africa, the cases moved from less than 500,000 to 945,000. Due to the pace of the growth, there is uncertainty on the epidemiological side, including the infectiousness and lethality of the virus (Fauci et al. 2020; Li et al. 2020). The demographics of the cases span across all age groups but the fatality rates have been worse for elders and people in morbid conditions. In The Gambia, all lethal cases have been people with pre-existing health conditions and/or about 50 years of age or above.

The World Health Organisation's general guidelines is to maintain social distancing, wash hands regularly and recently advise on wearing a face mask. These measures have proven effective in many countries in curbing the spread. This is critical due to the asymptomatic aspect of the disease. Italy provides a good example of effective social distancing measures in containing the virus, even if it initially looked completely out of control.

Although similar in demographics, the Italian regions of Lombardy and Veneto had two distinct policy responses to the Covid-19 crisis with varying degree of success. On February 21st 2020, two cases of Covid-19 were detected in the Veneto region and 14 in Lombardy. Two days later, 10 cities in Lombardy and one city in Veneto were put in lockdown with residents not allowed to go in or out. By end-February, Veneto had closed its schools and cancelled public events including religious gatherings. They were also quick to launch comprehensive testing (including home-testing reducing the number of infected people who stepped outside to go to a medical facility) and tracing which allowed them detect the virus even with people who did not show symptoms (more than half the cases) and put the people who tested positive in strict quarantine while testing their families. Whereas Lombardy imposed similar lockdown measures, closing all non-essential shops and urging people to stay inside, they had problems enforcing these measures and people were still socializing out in public and visiting nearby cities. Furthermore, they were only testing and quarantining people who showed symptoms, which in the aftermath might have led to more than half of the cases going undetected and spreading the virus. By March 24th Veneto and Lombardy reported 2704 and 16 200 cases respectively (Secon, 2020). In sum, quick and decisive actions, stricter enforcement and regional lockdowns where necessary proved to be the catalyst for success in the Veneto region.

Historically, The Gambia has witnessed outbreaks of infectious disease before. In 1869 there was a cholera outbreak in Banjul (then Bathurst). The first non-pharmaceutical policy measure taken by Governor Patey, at the time, was confinement of people of Bathurst not to travel out to the Kombos (National Archives, 1869). This was later heightened to a complete lockdown of movement in and out of the city. Furthermore, all boats and ships bringing groundnuts and other cargoes from other harbours such as Georgetown, Kuntaur, Fatoto, etc. were stopped (The Point Newspaper, 2020). Due to the pressure on the healthcare system, two temporary hospitals were established for the dispensing of medicines to patients.² Just as tough, decisive

² Additional facts and clarifications provided by Historian Mr Hassoum Ceesay.

and drastic actions were necessary at the time, they will be necessary to safeguard The Gambia throughout this pandemic.

Also in terms of economic impact, The Gambia has seen challenging circumstances before. The National Development Plan 2018 – 2021 (NDP), describes that the economic stagnation and the resulting 3 percent loss in GDP experienced in 2016 arose from several shocks, including a poor agricultural season, a severe contraction of tourism receipts and volatile oil and commodity prices. Other issues mentioned in the NDP is poor access to quality education and declining value of exports (NDP, 2017). The onset of the Covid-19 pandemic has created similar circumstances resulting in anticipated Government revenue shortfalls, declining trading activities and tourism, and disruptions to education and healthcare. Several reports have already documented the impact of the pandemic on employment, income level, health and education. Workers in the informal services sector are among the most affected populations following the imposed restrictions. Access to education and healthcare have been significantly affected as schools still remain closed and the health facilities close in the wake of new infections.

This paper takes a closer look at the social, economic and health impacts of the Covid-19 pandemic in The Gambia by analysing underlying factors and effects of government measures. The Policy Note is structured as follows: section II describes the background to the current Covid-19 situation in The Gambia, section III provides the demographic and social setting on a regional basis which affects the vulnerability to the virus and imposed regulations, section IV looks at the effects on, as well as risks to, healthcare in the country, section V analyses the potential impact on education, section VI discusses the impact on selected aspects of the Gambian economy, and section VII concludes the paper with discussion and policy recommendations.

II. Background

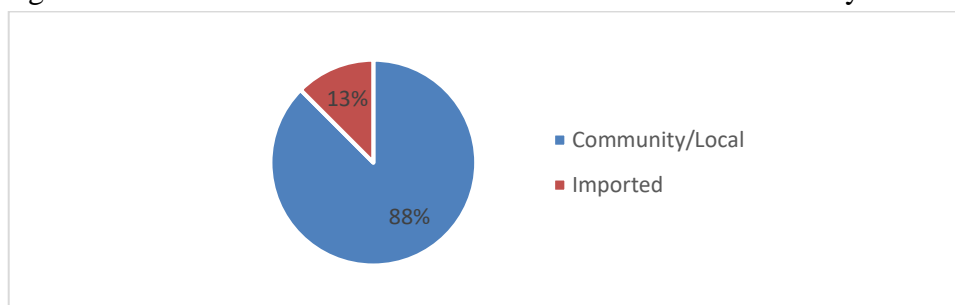
The Gambia recorded its first case of Covid-19 on March 17th 2020. In the days following the confirmation, the government took swift action to stop further spread, including banning public gatherings, closing schools and universities, suspending air traffic, closing land and sea borders, and closing non-essential businesses. As a result the number of Covid-19 cases remained very low in the country with a total of only 61 infections by mid-June, most of which were imported, primarily from Senegal. However, the economy, as for most countries, has suffered greatly from the pandemic and the imposed measures to reduce the spread. In an economy that is highly dependent on tourism, trade and agriculture many people have lost their jobs and incomes, businesses have gone bankrupt, and food insecurity has increased. Hundreds of thousands of children have been unable to attend school, causing a big learning gap, and many have missed out on essential vaccinations and healthcare.

To limit the negative social and economic consequences, and with a cautiously promising outlook in terms of infections, the government slowly started easing some restrictions in end-June. International air traffic carefully resumed a few flights allowing stranded Gambians, residents and others to return to the country and trapped internationals to leave the country, places of worship were allowed to resume their services and last year students could sit their

final exams. In the same vein, the State of Public Emergency (SoPE) was lifted on July 24th 2020 with the following regulations ceasing to be in effect as they were made in accordance with the Emergency Powers Act: (i) the Essential Commodities Emergency Powers Regulations 2020, aimed to avoid price hikes of essential commodities; (ii) Restrictions on Open Markets and Shopping Areas Emergency Powers Regulations 2020; (iii) Closure and Restrictions on Non-Essential Public Places Emergency Powers Regulation 2020; and (iv) Restrictions on Public Transportation Emergency Powers Regulations 2020, limiting the number of passengers on public transport.

Unfortunately, more or less coinciding with the easing, the number of Covid-19 cases rapidly started increasing on July 22nd 2020. In the following week it became evident that pervasive community transmission had started to take place, constituting a new threat to The Gambia. Furthermore, as of July 29th 2020, more than 44 of these new cases were infected healthcare workers and lab technicians putting strains on testing capacities and causing several healthcare clinics to temporarily shut down their operations. In response to the new surge the Minister of Health has exercised his powers to introduce Public Health Regulations. According to Regulation No. 6 of the Public Health (Dangerous Infectious Diseases) Protection Regulations, 2020, The Gambian government has announced the compulsory wearing of face masks, temporary closure of non-essential public places, the prohibition of public and social gatherings and introduction of 1000 Dalasi fines for violation of the rules. In the last weekend of July Eid al-Adha (Tobaski) celebrations were taking place, when many people are expected to have travelled to their villages and families, potentially worsening the spread. Over the coming weeks in August it will become evident whether the coronavirus has taken a grip of the country or if it has been possible to curb the spread.

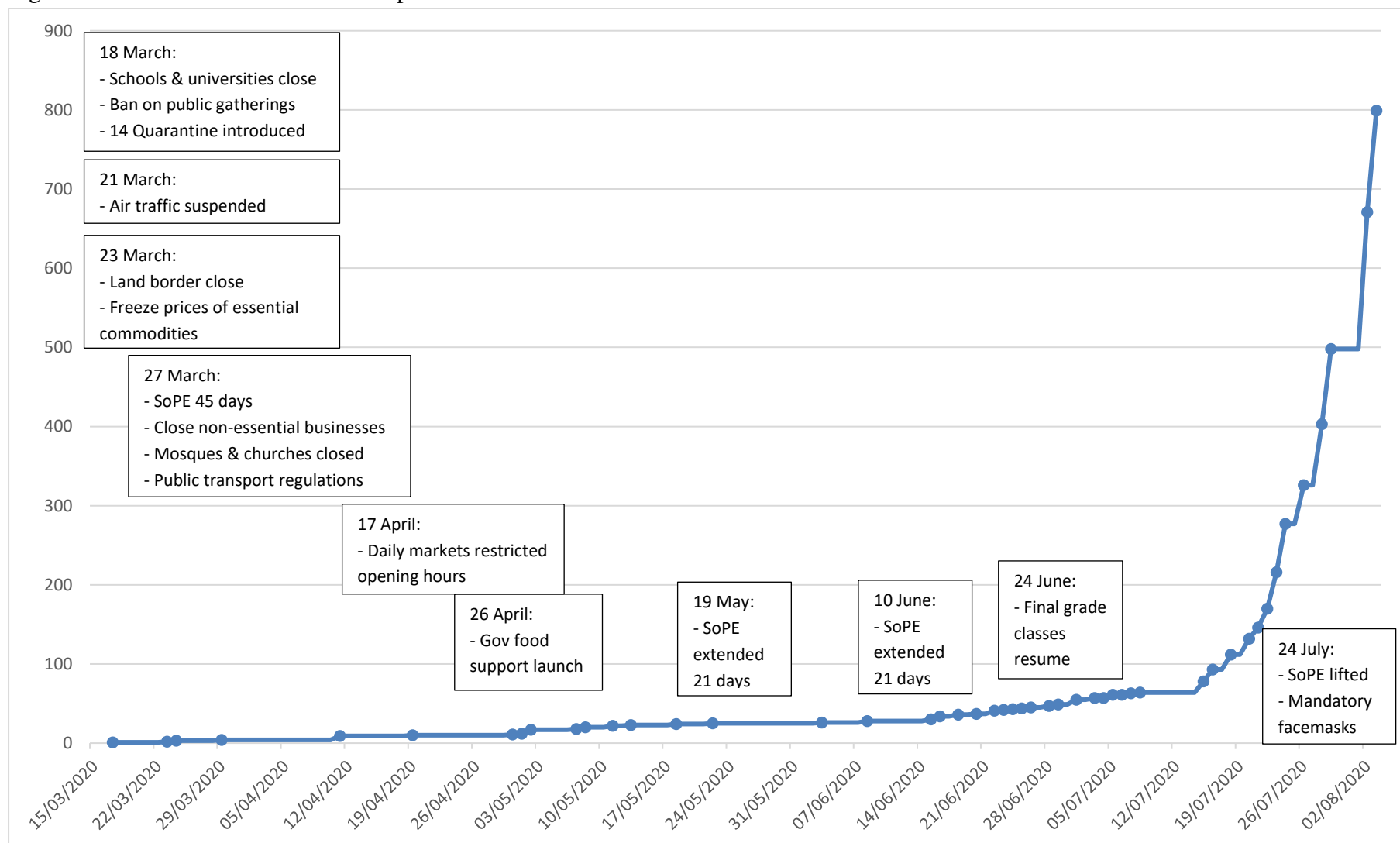
Figure I. Source of new Covid-19 Infections in the Gambia 22 July 2020.



Source: MOH Covid-19 Situation report 22 July 2020

The above graph shows the distribution of source of infections from the 24 new cases registered on July 22nd 2020. Up until mid-July almost all cases had been imported from abroad, primarily from Senegal. Since then local and community transmission had started taking place and now constitutes the majority of all confirmed cases in The Gambia. Between the 20th-23rd July 2020, 44 healthcare workers and lab technicians from Edward Francis Small Teaching Hospital, Medicare, National Public Health Laboratories and others were confirmed positive of having the coronavirus. As the number of daily new cases have grown, the Ministry of Health (MoH) stopped reporting the details of each case and its chain of transmission. Since the 27th July 2020, they have reported that “only a soupçon of the new cases were imported” (MoH, Situation Report 27th & 28th July 2020, p.1).

Figure II. Timeline of Covid-19 developments in The Gambia



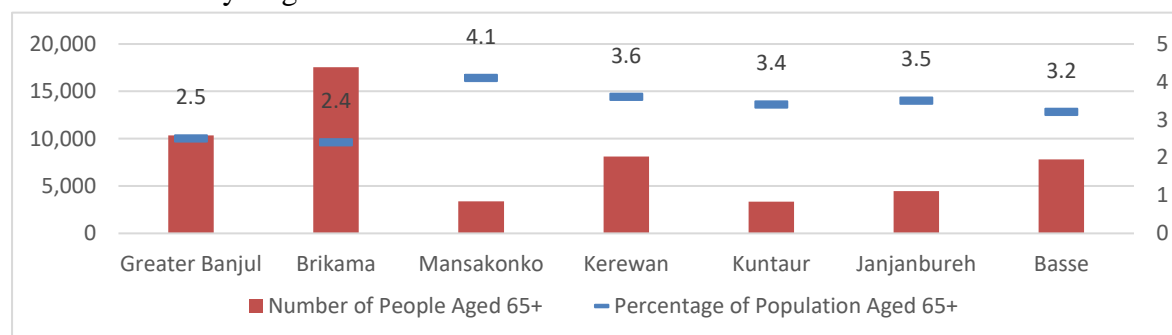
Source: MoH Covid-19 Situation Reports (confirmed cases).

III. Demographic & Social Setting

The demographics and the socio-economic conditions vary across the country. This will in turn impact the vulnerability to the pandemic itself as well as the imposed restrictions to curb the spread. In this section we take a look at some of the factors that may influence these things and could guide policies and measures to ease the negative impacts.

III.I Regional risk group profiles

Figure III. Risk group profile: Number (left axis) and Percentage (right axis) of People Aged 65+ by Region.*

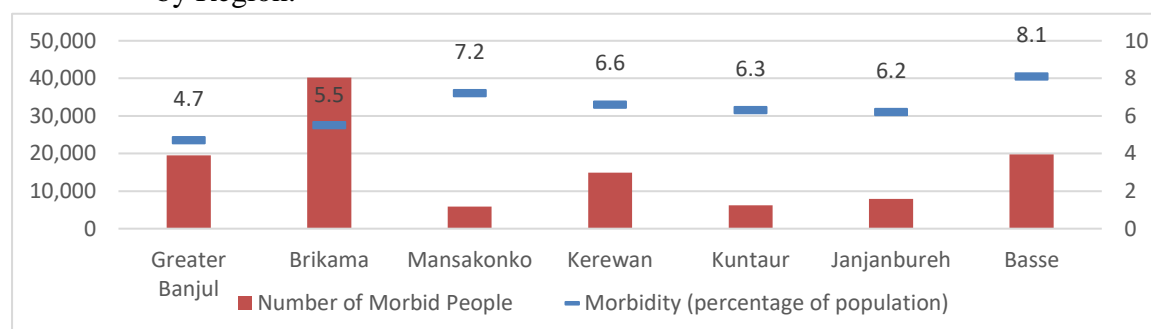


*Note. The areas indicated in the graph refer to the Administrative Region and not just the city within it. Greater Banjul includes both BCC (Banjul) and KMC (Kanifing).

Source: GBOS IHS 2015/16

The coronavirus has been known to cause the most severe cases of infection and the highest number of deaths among people above the age of 65, as well as those with pre-existing health conditions. The figure above shows that the share of the population aged 65 or above is generally low in all regions (between 2.4 and 4.1 percent). The region with largest share of the population belonging to this risk group is Mansakonko, where 4.1 percent would be especially likely to have severe or lethal cases of the coronavirus should they be infected. However, in terms of number of elderly people, Brikama is the region that is most vulnerable with about 17 500 elderly, followed by Greater Banjul with a bit more than 10 000 elderly. While the elderly population in The Gambia can be considered small, there are also other risk groups that needs to be considered. Moreover, while people over 65 are considered a risk group in developed countries, the general health of people in The Gambia is likely lower, and therefore the elderly risk group “age limit” could be lower than 65. Figure IV on morbidity illustrates this point.

Figure IV. Risk group profile: Number (left axis) and Percentage (right axis) Morbid People by Region.*



*Note. The areas indicated in the graph refer to the Administrative Region and not just the city within it. Greater Banjul includes both BCC (Banjul) and KMC (Kanifing).
Source: GBOS IHS 2015/16

In terms of morbidity Mansakonko and Basse are especially vulnerable as their morbidity rates are the highest in the country (7.2 and 8.1 percent respectively). However, Brikama is again the region with the highest number of people belonging this risk group, with about 40 000 people in morbid conditions. Similarly, Greater Banjul and Basse has high numbers of morbid persons, with around 20 000 in each region.

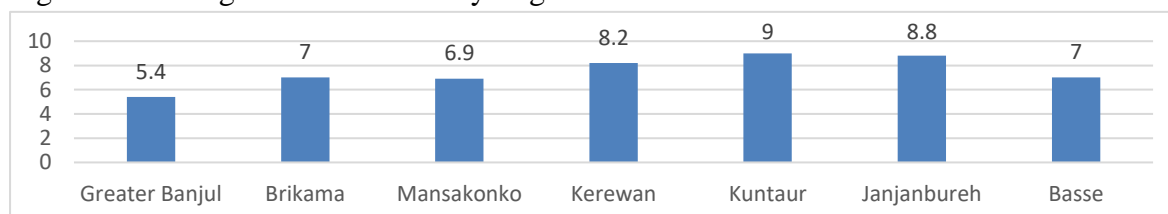
As such, Brikama, Greater Banjul, Mansakonko and Basse are the most vulnerable regions in terms of number and share of population belonging to risk groups (old age and morbidity). For the two first mentioned regions this is worrying considering the recent spread of Covid-19 in healthcare clinics and subsequent temporary closures. Elderly and morbid people are both in need of general healthcare unrelated to the coronavirus, and in greatest need of treatment should they become infected by the coronavirus. Lessons learned from the recent event should be utilized to build preparedness in the last mentioned regions (Mansakonko and Basse) such that spread in, and closure of, healthcare clinics can be avoided.

As of July 28th 2020, when the total number of confirmed cases stood at 403, the coronavirus outbreak in The Gambia had essentially been concentrated in Western health region (where 368 cases have been recorded), although all regions have registered some cases (between 3 to 10 in the other regions). While this is plausible considering that all Covid-19 patients are being treated in the Greater Banjul Area (meaning the confirmed infectious disease will inevitably be concentrated here), it is an urban area where people live close to each other and some imported cases have gone through the airport, this could also be a result of skewed testing as it may be more limited in the rural parts of the country. As of July 29th 2020, only 36 cases were people over the age of 70 and 68 percent of cases were under the age of 40, reflecting the youthful population in The Gambia. Only nine deaths had been confirmed to be corona related, although the figure may be higher due to unknown infection and transmission.

III.II Social distancing

Social distancing is said to be one of the most effective measures to reduce the spread of Covid-19. The fewer people you are in close contact with, the smaller is the risk of catching the disease as you limit your exposure. However, the cultural and structural settings are likely strongly related to the possibility of practicing social distancing. Below we take a look at some factors that may affect the possibility of this practice in the different regions of The Gambia.

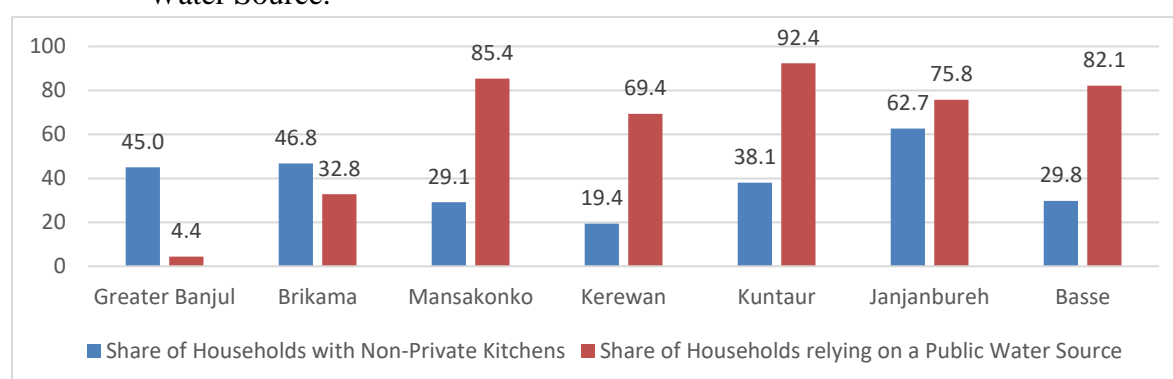
Figure V. Average household size by Region.*



*Note. The areas indicated in the graph refer to the Administrative Region and not just the city within it. Greater Banjul includes both BCC (Banjul) and KMC (Kanifing).
Source: GBOS IHS 2015/16

Social distancing measures can be difficult to implement and comply with. While it is indeed best to only meet people of your own household, with limited space that also means that if just one person in the household contracts the virus, it will likely spread to the rest. In some regions where the average household sizes are particularly large, that means the virus could spread to many people fast. Figure V shows that one infected person in Kuntaur could potentially spread it to at least 8 other people on average, regardless of imposed lockdowns or social distancing measures. As such, social distancing measures in The Gambia may not be as effective as in other countries where it is more common to live alone or in smaller households of 2-4 people.

Figure VI. Percentage of Households with Non-Private Kitchens and Reliance on a Public Water Source.*



*Note. The areas indicated in the graph refer to the Administrative Region and not just the city within it. Greater Banjul includes both BCC (Banjul) and KMC (Kanifing).

Source: GBOS IHS 2015/16

Besides housing, there are other infrastructural challenges that limits the effectiveness and possibility of social distancing in The Gambia. Figure VI shows that a large share of households lack private kitchens and water sources, meaning that they are forced to use shared or communal options for pure survival and sanitation reasons. In 5 out of 7 regions in The Gambia around 70 percent of households or more rely on a shared public water source, with Kuntaur having the highest share – 92.4 percent. Due to the necessity of food and water, even an infected person will likely have to disobey social distancing rules and risk spreading the virus to neighbours.

In addition to the challenges mentioned above, the Greater Banjul Area and Brikama are faced with challenges that comes with urbanization. People live close together in crowded settlements and meet in large market places, restaurants, bars, and beaches. These are all places that are essential to the economic prosperity of the region but inevitably has made social distancing more difficult.

IV. Healthcare impact

Healthcare deliveries in countries highly affected by the coronavirus are being stretched, while in countries with a limited number of cases, most efforts in the health sector are aimed towards preventing yet preparing for a surge. While this is natural given the rapid developments and unknown territory the pandemic presents, there are growing risks to neglecting other parts of the healthcare system. The longer the pandemic goes on for the greater the cost to these

disruptions and to putting other patients on hold, and the greater the risk of increased deaths from other diseases.

IV.I Limited Testing Capacities and Clinic closures

Since The Gambia recorded its first case of Covid-19 the country has taken a contact tracing and testing approach. With a limited number of tests available and limited staff capacity to conduct the tests this seems to be a reasonable strategy. However, as cases of Covid-19 rapidly started increasing in mid-July the testing capacity has been challenged and is struggling to keep up – especially as several of the newly infected persons happen to be lab technicians handling the tests. As such, people wanting to get tested may have to wait for several days before they are able to do so, after which they also have to wait for some time before the results can be read. During this time, some of those waiting maybe walking infectious hazards to the rest of the community.

Furthermore, the number of positive results in relation to the total number of tests (the positivity rate) could tell us something about the adequacy of testing. If the number of positive results in a country increases it can be due to two reasons: expanded testing and detection; or increased transmission. If the positivity rate remains stable as the number of positive results increase, the new cases are likely a result of expanded testing and improved detection while transmission remains stable. However, if the positivity rate increases, this signals increased transmission and a need for expanded testing (John Hopkins, 2020). In The Gambia the positivity rate shows a clearly increasing trend since July 8th 2020. While the number of daily tests has increased over the same period of time, a continued rising positivity rate would suggests that the testing capacity has not been expanded enough.

In addition to a strained healthcare efforts to handle the Covid-19 infections, other parts of the healthcare systems are being challenged as well. A World Health Organization (WHO) survey of 155 countries during a three-week period in May, revealed that more than half of the countries reported reduced services for non-communicable diseases. This means cancer and diabetes patients amongst others have not been receiving adequate treatment. The devil in the details confirmed that it is worse in low-income countries (UN News, 2020). The WHO also predicts that malaria deaths in sub-Saharan Africa could double in 2020 compared to 2018 (WHO, 2020a).

In The Gambia, more than 44 of the recent coronavirus cases have been healthcare workers and lab technicians. This has led to temporary closures of several healthcare clinics in order to stop the spread amongst staff and patients. While short, temporary closures, which we have mostly observed so far, may be warranted for tracing and fumigation, there have been a few indefinite closures which are highly problematic as they both hinder the testing and treatment of Covid-19 in the midst of an ongoing pandemic, and it also reduces the access to other vital healthcare unrelated to the coronavirus. People with underlying conditions, treatable diseases, children in need of vaccinations (see next sub-section), and those with acute injuries are all at risk, in the long run potentially causing more deaths than the coronavirus itself.

IV.II Vaccination programmes

The WHO, UNICEF and Gavi (formerly Global Alliance for Vaccines and Immunization) projects that at least 80 million children under the age of one are currently at risk of vaccine-preventable diseases such as measles, mumps, rubella, polio, yellow fever, typhoid, cholera and tetanus, as routine childhood immunisation services have been disrupted in at least 68 countries due to the pandemic (WHO, 2020b).

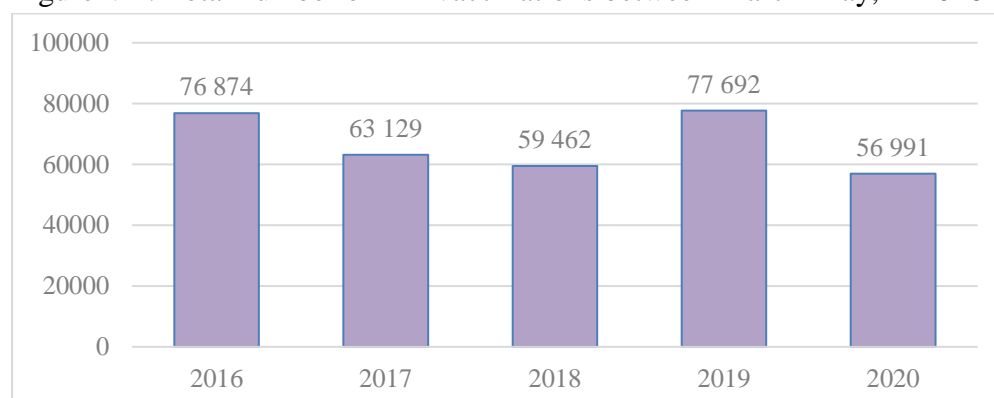
Historically, in the context of the West African Ebola outbreak, Takahashi et al. (2015) stress the dangers of disruptions to vaccination programmes. If vaccination programmes are disrupted other avoidable diseases like measles could re-emerge and cause additional deaths that could have been prevented. Measles is very transmittable and usually one of the first vaccines to be disrupted in crisis situations due to the relatively high age at which children receive the first dose. The authors projected that during the Ebola outbreak an 18-month disruption to the healthcare systems of Sierra Leone, Guinea and Liberia, with a 75% reduction in measles vaccinations could have caused a measles outbreak of about 100 000 additional cases and 5200 additional deaths. Furthermore, they estimated that 600 000 – 700 000 children could have missed out on the pentavalent vaccine (diphtheria, tetanus, pertussis, hepatitis B and haemophilus influenzae B vaccine), BCG (tuberculosis vaccine), and OPV (oral polio vaccine). This emphasizes the importance of continuing vaccination programs even in times of crisis.

Besides completely missing out on the vaccine, it is common that children's vaccinations are simply delayed, potentially causing insufficient immunity. Oduola et al. (2015) have studied the factors that increase the risk of delayed vaccinations in The Gambia. The paper finds that 63 percent of children (of a sample of 1154 observations in the Western region) were late in receiving at least one vaccination. The vaccine which was most timely given was the BCG (94 percent on time), and the least timely given were the third dose of oral polio vaccine and the third dose of DPT (diphtheria, pertussis, tetanus) (40 percent on time). The authors find that some factors increasing the probability of delay in some vaccinations include: the child being born at home instead of a health clinic, the mother being unemployed, the father being illiterate, and using public transport to get to the health clinic. Some of these factors are important to keep in mind during and after the Covid-19 pandemic as closure of healthcare clinics, more scepticism towards the healthcare system and fear of coronavirus exposure may cause more mothers to give birth at home rather than going to the hospital, unemployment has already increased, and human capital has been lost due to school closures, likely increasing illiteracy. As such the pandemic may have both short- and long-term effects on the immunisations and spread of other diseases.

In general, The Gambia has achieved very high vaccination coverage in the most common Expanded Program on Immunization (EPI) vaccine preventable diseases. For all vaccines except the second dose of MVC (measles vaccine) and the first dose of IPV (inactive polio vaccine), the coverage rate was above 90 percent throughout 2014-2018. However, in the light of the pandemic it is possible that these high coverage rates have not continued into 2020. In fact, when looking at the total number of vaccinations for five common EPI diseases between March-May each year, we see that the numbers have been dropping. Figure VII below, shows

that the three-month period in 2020 recorded the lowest number of vaccinations over the five years reported, with a significant drop from 2016 and 2019 levels.

Figure VII. Total number of EPI vaccinations between March-May, in 2016 to 2020.



Data source: MOH Vaccination data.

In addition to the falling number of vaccinations, the Government Local Funds (GLF) for vaccinations has been unutilized by MOH this year. Last year the ministry spent around GMD27 millions of their GMD30 millions allocated fund for vaccines. This year, with the same budget allocation, nothing had been spent on vaccinations as of June 30th 2020. UNICEF delivered a shipment of vaccines against tetanus, hepatitis b, diphtheria, pertussis and meningitis in June this year to continue vaccination programs (UNICEF, 2020). While this is a welcomed addition, more efforts from all stakeholders are needed.

If left unmitigated, the preliminary low vaccination coverage in 2020 may lead to a surge in the number of infectious diseases, costing lives, extra healthcare spending, lost productivity and incomes. With under-five mortality at 57 per 1,000 live births as of 2018 (MICS, 2018), an outbreak in measles, hepatitis or diphtheria will increase the number of under-five deaths if extra measures are not taken to meet the vaccination targets.

V. Social impact: Education

Most governments around the world have imposed school closures as a measure to reduce the spread of the coronavirus. As of July 9th 2020, 143 countries still had nation-wide school closures in place (UNESCO, 2020). On the other hand, some countries have left schools open and others have recently resumed classes without any apparent rise in coronavirus cases. It seems children are not very affected by the virus itself and no serious threats of spreading the virus (Haspel, 2020).

The Government of The Gambia was quick to respond and acted proactively by closing the schools on March 18th 2020, one day after the country recorded its first case of Covid-19. Since then, both public and private schools have adjusted to distance learning techniques. Public school teachers are broadcasting lessons over radio, television and social media. Private schools have similar solutions but also computerized learning to varying degrees, involving digital assignments and live video call lessons. For the academic year 2020, the number of children enrolled in Early Childhood Development (ECD) was 2780, in Lower Basic Education

(LBE) was 393 057, in Upper Basic Education (UBE) was 111 752, and in Senior Secondary Education (SSE) was 73 563 (MOBSE, 2020). As such, more than half a million students, have been affected by the school closures. On June 24th 2020 final year classes were allowed to resume in order to sit their exams.

As previously stated, the consequences of the current pandemic go beyond public health, and especially the children are and will be impacted in several different ways. On a global level the World Bank (Azevedo et al. 2020) has through simulation exercises estimated that the pandemic could lead to 3 – 7 months of lost learning for the affected cohorts and that 7 million children could drop out of school. More specifically for Sub-Saharan Africa the learning adjusted average years of schooling was only 4.9 years prior to the outbreak of Covid-19, but since the outbreak this is expected to drop to 4.7 years in the favourable scenario and to 4.3 years in the pessimistic scenario. Furthermore, when translated into monetary terms of lost income, children in Sub-Saharan Africa affected by the closures are estimated to lose between US\$2375 and US\$6848³ in lifetime earnings. As such, the World Bank calls on policy makers to rethink their strategies to minimize the lost learning due to the pandemic. In low income countries one important tool could potentially be cash transfers to families in order to reduce the opportunity cost of keeping older children (especially girls) in school.

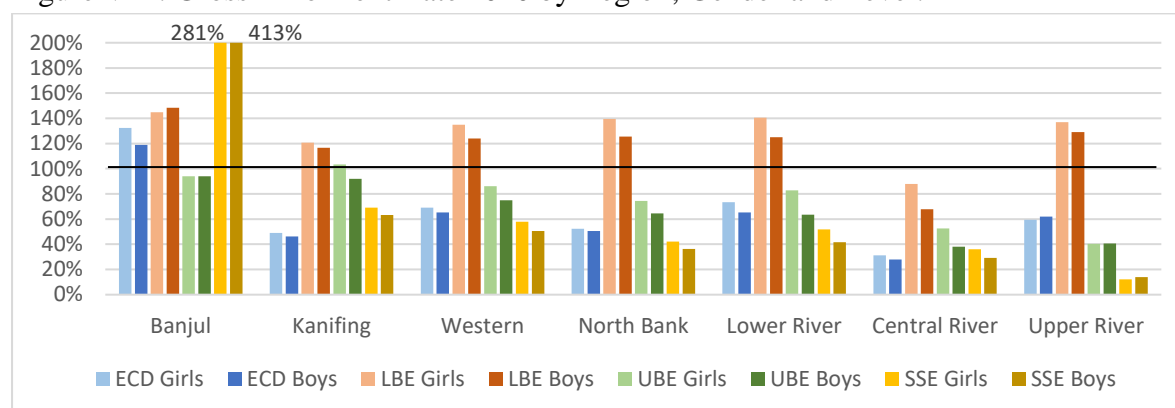
Archibong and Annan (2020) study the impact on schooling, gender disparities and child marriages from negative income shocks, using the Niger meningitis epidemic in 1986 as a natural experiment. In their study they show that due to the cultural tradition of bride prices (dowry) given to the woman's family when she's married off and the fact that men usually continue to live and care for his parents while the women live with her husband's family, the relative utility from educating a boy is higher than educating a girl. Additionally, when a negative income shock happens, families will try to smooth consumption, in which case they would be inclined to marry off their girls earlier in order to receive the bride prices. When a girl is married off she will usually drop out of school. Through regression analysis they show that in the case of Niger, an increase of 10 per 100 000 population increase in mean weekly meningitis cases led to 30-40 percent reduction in relative years of education for primary school girls in districts with average levels of meningitis exposure during the epidemic. Corno et al. (2019) studies the direct impact on child marriages due to income shocks in the form of drought through Sub-Saharan Africa and find a 3 percent increase in child marriages on average. While child marriages has been made illegal in The Gambia, MICS (2018) has reported that 17 percent of girls aged 15-19 are married – a number that will likely increase due to the severe income shocks experienced from the pandemic and potentially roll back the progress made in gender equality in schooling.

V.I Data and Statistics

Below we present some data and statistics on education, access to internet and communication technology and food security. These are all factors that will determine the severity of the impacts of school closures and some regions will inevitably be worse affected than others.

³ 2017 PPP USD.

Figure VIII. Gross Enrolment Rate 2020 by Region, Gender and Level.*

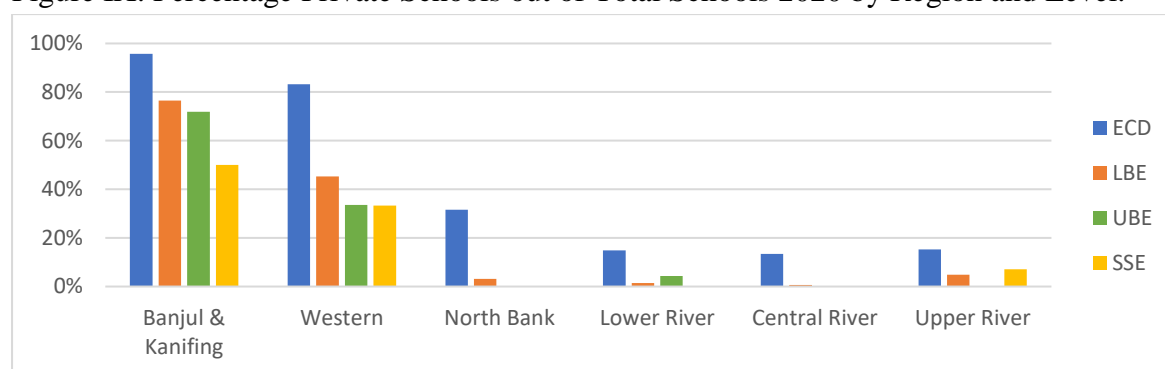


*Note. The Western region refers to the whole Western region except BCC (Banjul) and KMC (Kanifing).

Source: MoBSE Yearbook 2020.

The gross enrolment rate shows the total number of children enrolled in a given level as a percentage of the total number of children of the official corresponding school year age. Since some children may be older or younger than the official age for a certain year, the enrolment rate can be higher than 100 percent. As we can see there is a big urban-rural divide. While Banjul has high enrolment for all levels, we can see the rates dropping for all levels as we go further up-country, except for lower basic education, which is consistently high in all regions except CRR. There is no major gender disparity in enrolment rates – girls have slightly higher rates except for lower basic and senior secondary education in Banjul, where the boys are overrepresented.

Figure IX. Percentage Private Schools out of Total Schools 2020 by Region and Level.*



*Note. The Western region refers to the whole Western region except BCC (Banjul) and KMC (Kanifing).

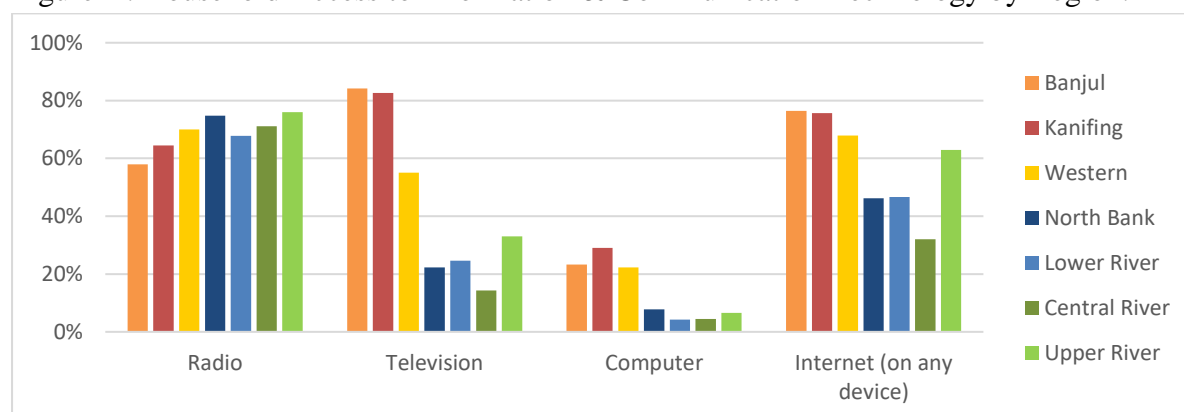
Source: MoBSE Yearbook 2020.

The conventional private schools generally have more resources than the public schools. As such, they can afford better distance learning solutions throughout the school closures during the pandemic. This is a concern if it will generate inequalities in human capital based on income and area. As we can see there is a clear rural-urban divide. As such, richer families living in urban Gambia can afford private schools and their children will have experienced much less lost learning during the school closures, and in the long run that may lead to income inequalities if they get more qualified jobs.

To limit the negative impact of school closures, the public schools offer distance learning solutions via radio, television and social media. The best way to learn out of those three is

social media. This allows the child the opportunity to visualize and hear the teacher and the content. The child can also pause the video to think and can re-watch it if the explanation needs to be repeated for better understanding. However, in order to properly be able to comprehend the information from social media, this requires a computer and internet access.

Figure X. Household Access to Information & Communication Technology by Region.*



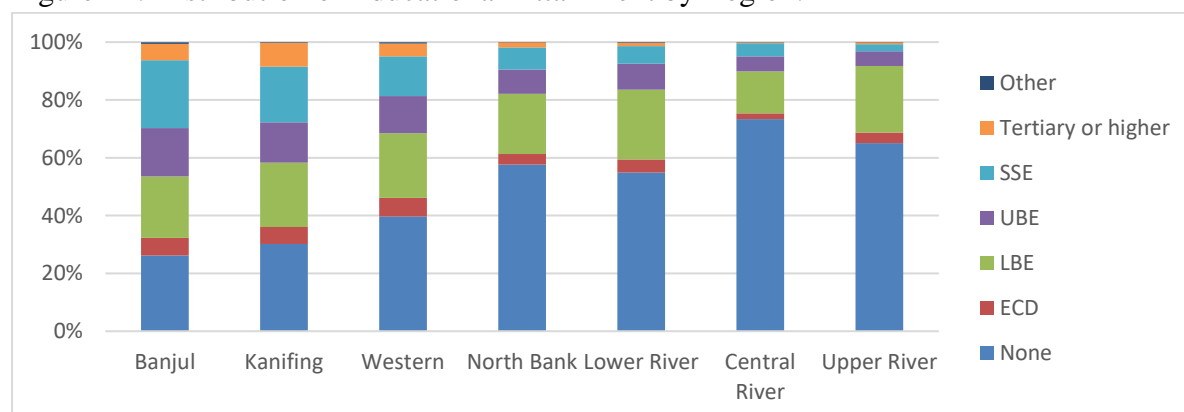
*Note. The Western region refers to the whole Western region except BCC (Banjul) and KMC (Kanifing).

Source: MICS 2018.

As can be seen in Figure X above, very few households in all regions have a computer but the levels are highest in the more urban areas. The same divide can be observed for internet access, except for URR which also has a fairly high share of households with internet. The second best option for distance learning would be television, which allows for both the auditory and visual elements. However, as we can see, this also comes with a clear urban-rural divide. While a majority of households in all regions have a radio, only a majority of households in the more urban areas (Banjul, Kanifing, Western region) have a television.

In the light of the above it seems like the rural areas are most vulnerable to lost learning and will see the biggest drop in human capital. This is worrisome as it will exacerbate an already existing pattern in human capital distribution (see Figure XI below) and potentially also increase the income inequalities between the urban and rural Gambia.

Figure XI. Distribution of Educational Attainment by Region.*

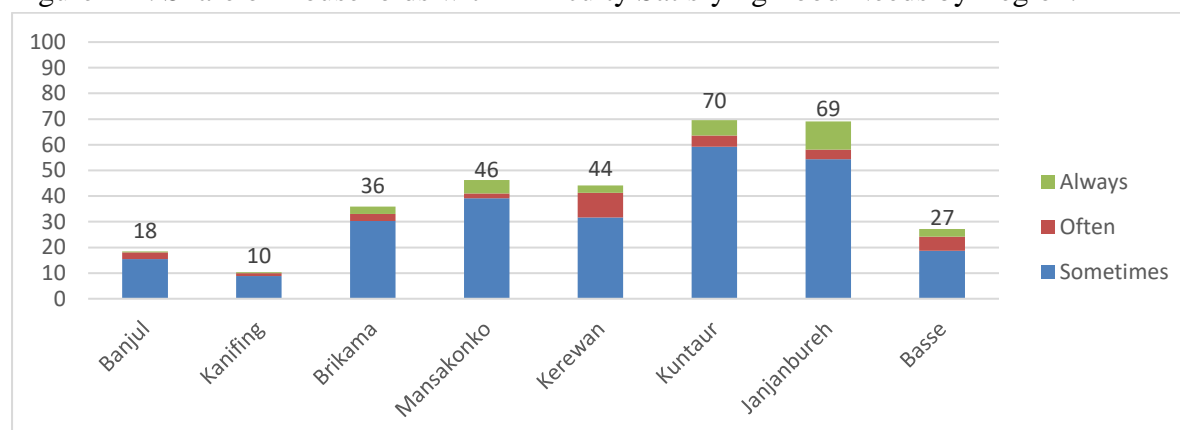


*Note. The Western region refers to the whole Western region except BCC (Banjul) and KMC (Kanifing).

Source: GBOS IHS 2015/16.

In addition to learning, there is also the issue of food security. MoBSE have informed us that the school feeding programme, benefitting more than 223 657 children in The Gambia has continued in a new form – providing take-home rations. However, there is a risk that it is not reaching quite as many children as before. Still, this is an encouraging effort as many households, especially in rural Gambia, were struggling to satisfy their food needs even before the onset of the pandemic (see Figure XII below). It is important that this program, or similar efforts, continue for as long as the schools are closed as to not aggravate the food insecurity in the country.

Figure XII. Share of Households with Difficulty Satisfying Food Needs by Region.*



*Note. The areas indicated in the graph refer to the Administrative Region and not just the city within it.

Data source: GBOS IHS 2015/16

VI. Economic impact

The impact of the Covid-19 pandemic goes beyond health aspects. Around the world unemployment has reached historical levels and economies are contracting. In this section we look at effects on selected individual aspects of the Gambian economy.

VI.I Economic outlook

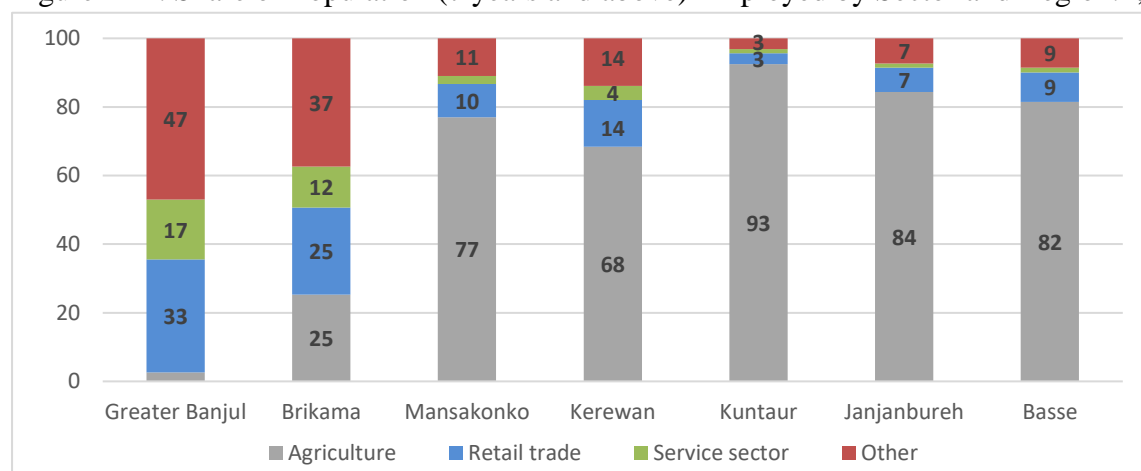
The government is an important economic actor in the Gambian economy through investments that creates employment and boosts economic activity. As of 2019, the total government expenditure amounted to GMD19.3 million (CBG, 2020a). Hence any government revenue shortfalls from a reduction in tax collections will add to a decline in economic activity. Tourism and related activities saw an abrupt disruption with the closure of borders and suspension of flights. Trade has been severely restrained both internally and externally, and both public and private investment has experienced a significant slowdown. GDP growth in 2020 is expected to decline to 2.5 percent from a projected growth of 6.3 percent, and the pandemic's impact on the country's balance of payments is estimated at over US\$40 million. Nonetheless, the Dalasi remains stable and the Central Bank of The Gambia assesses that there is enough foreign currency in the country to meet import needs (CBG, 2020b).

VI.II Lost incomes and unemployment

The closure of some businesses and the suspension of air traffic have huge impacts on both personal lives and the economy at large. Figure XIII shows the share of the population

employed in different sectors by region. As evident from the chart, agriculture, retail trade and services are the sectors that employ most people in The Gambia. The closure of non-essential businesses have now been eased but many enterprises have already gone bankrupt, unemployment have increased and many people have seen their incomes reduced. This will in turn effect the economy at large with reduced output, tax revenues and government resources. On an individual level, the severity of income losses vary greatly, but for a significant number of people it could lead to them not affording accessing necessary healthcare or even buying food to feed their families.

Figure XIII. Share of Population (7 years and above) Employed by Sector and Region.*,**



*Other sectors include manufacturing, mining, public administration, education, health, electricity and water supply, and international actors (NGOs, Foreign government institutions, etc.).

**Note. The areas indicated in the graph refer to the Administrative Region and not just the city within it. Greater Banjul includes both BCC (Banjul) and KMC (Kanifing).

Source: GBOS IHS 2015/16

While agriculture may be less affected by lockdown measures, as some people have their plot of land next to their homes and can therefore still access them, selling the crops may prove more difficult. Many farmers have been left with excess supply of crops as the access to market places is restricted (see the section on Lumos for a closer evaluation of the closure of weekly markets) and the government has in some cases offered to buy these products in bulk to reduce the lost incomes and support food security. Perhaps the most severely affected sectors are the service and the retail sectors, which employ 37 and 50 percent of population in Brikama and the Greater Banjul Area respectively. While some businesses in the retail sector are now allowed to operate, many rely on tourism. Similarly, the service sector is highly dependent on tourism and will therefore continue to suffer greatly from lost incomes and unemployment until the borders and airport can properly open again.

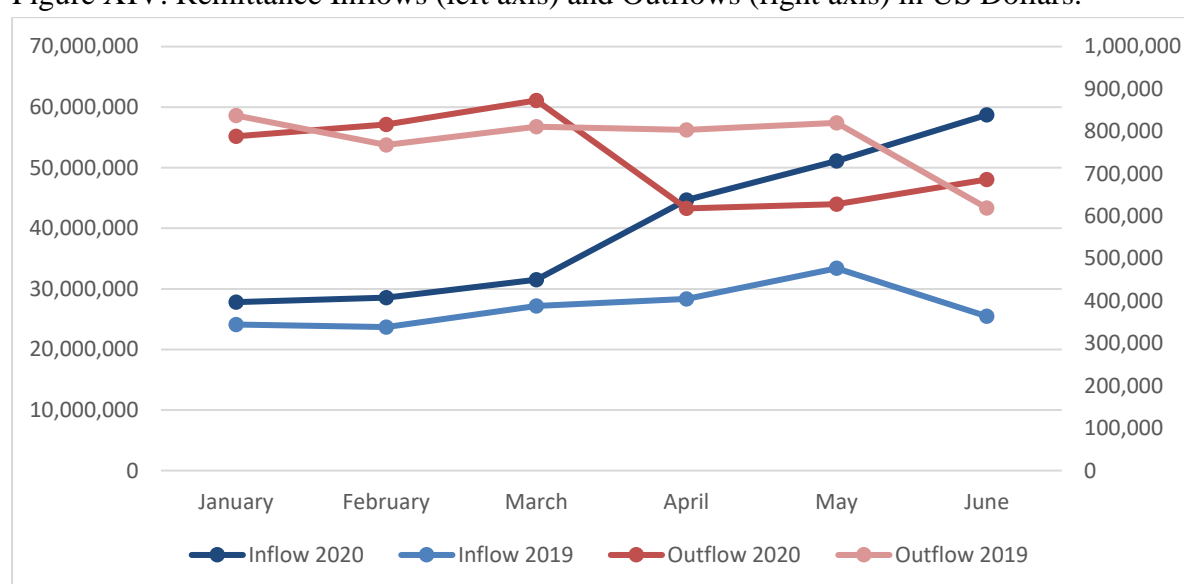
A rapid assessment of the impact of Covid-19 on tourism and related sectors forecasts a combined loss of nearly GMD7 billion in the industry. Hotels account for the most of the anticipated loss, reporting a total loss of D6.4 billion, or 95 percent of the total loss. The forecasted losses have been attributed to an estimated decline in tourism receipts by 101,930 arrivals between the March and October 2020 (GBOS, 2020). The industry also supports over 42,000 direct jobs and another 40,000 jobs indirectly and generates about US\$85 million in foreign exchange (UNDP, 2020). At the time of writing 167 out of 266 formal tourism

establishments has reduced working staff due to Covid-19 (GBOS, 2020). The anticipated decline in tourist receipts will therefore put many of these jobs at risk especially in the informal sector. The average out of pocket expenditure from tourists arriving in The Gambia is estimated at US\$924 per tourist and failure to contain the outbreak is expected to result in a loss of revenue amounting to US\$94.2 million which would otherwise trickle down to the service establishments such as bars, nightclubs, restaurants and taxis (UNDP, 2020).

VI.III Remittances

Besides the direct impacts of income loss on the employee and its household, extended family and friends are likely affected by it as well. In total 280,659 households have reported that they receive remittances (from any sender), and 7.8 percent of all households in The Gambia have reported that they rely on remittances to cope (GBOS IHS, 2017).

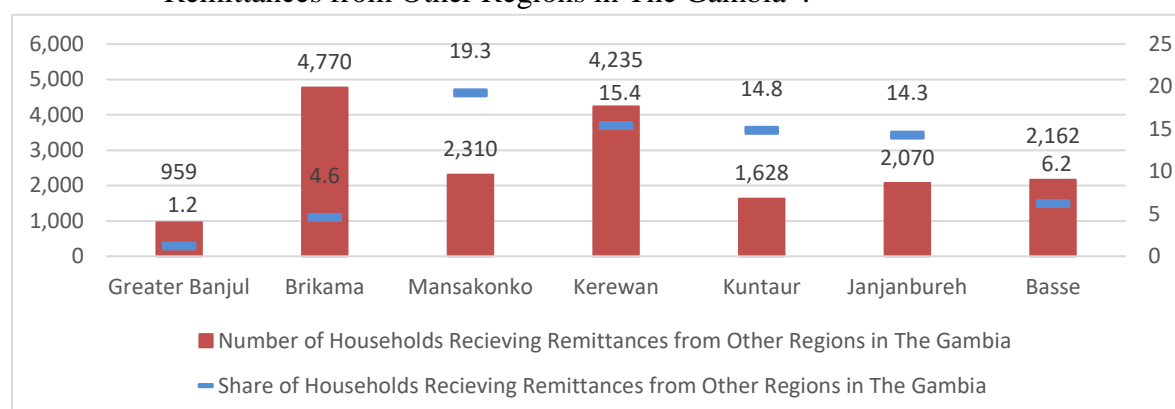
Figure XIV. Remittance Inflows (left axis) and Outflows (right axis) in US Dollars.



Source: CBG data.

Figure XIV above shows the remittance in- and outflows from The Gambia during the first six months in 2019 and 2020. The inflows have been consistently higher in 2020 and in total increased by 47 percent from same period the year before, indicating that many Gambians have received support from friends and family abroad to cope with the increasingly dire economic situation. In contrast, the outflow of remittances from The Gambia saw a sharp drop in April which then started recovering, and in total outflows only decreased by 5 percent over the first six months compared to the same period the year before, possibly reflecting the negative impact on finances in The Gambia.

Figure XV. Number (left axis) and Percentage (right axis) of Households Receiving Remittances from Other Regions in The Gambia*.**



*Note. Out of total households receiving remittances in The Gambia.

**Note. The areas indicated in the graph refer to the Administrative Region and not just the city within it. Greater Banjul includes both BCC (Banjul) and KMC (Kanifing).

Source: GBOS IHS 2015/16

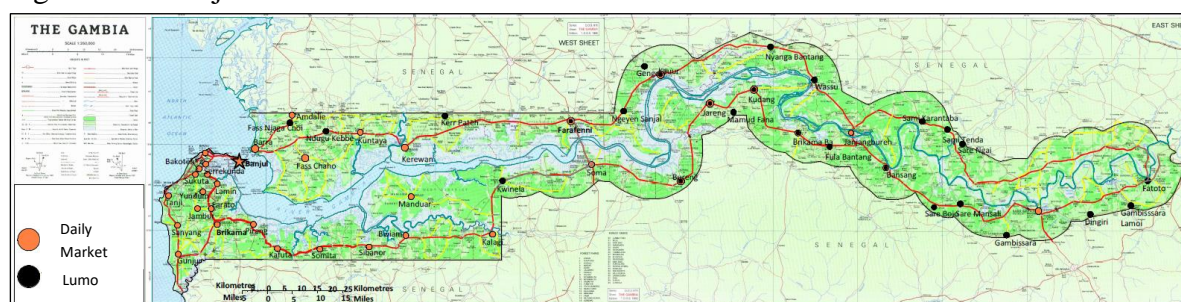
There are also several households that receive remittances from within the country. Figure XV above shows that almost 20 percent of households in Mansakonko that receive remittances, 2310 households, and 15 percent of households in Kerewan, 4235 households receive remittances, receive them from other regions in The Gambia. Many of these people have likely lost this stream of income as some senders have seen a reduction of their income or have become unemployed.

VI.IV Lumos

In the midst of the Covid-19 pandemic, saving lives requires partial lockdowns and or other social/physical distancing measures, which in turn have negative ramifications on livelihoods. In The Gambia one such measure was the initial suspension of all public gatherings, including daily markets and weekly markets commonly referred to as lumos. However, since April 17th daily markets have been allowed to operate under restricted hours, and on June 5th these restrictions were further eased. In contrast, lumos are still not allowed to operate. With the aim to limit the income losses and negative impact of the lumo closures, the UNDP are in the process of conducting a much welcomed rapid assessment of the impact of lumo closures on local communities. The outcome of this assessment could guide potential efforts to enable the lumos to safely reopen in accordance with existing Covid-19 regulations and facilitate future operations through digital solutions for finance and marketing.

Lumos like daily regular markets are an important center for buying and selling food items, livestock and important commodities especially in rural areas with highest incidence of poverty and fewer daily regular markets. Patrick (2009) highlights that lumos have a significant positive impact on food security in The Gambia by facilitating the distribution of agricultural products, improving access to cheaper food items and foreign goods. Additionally, lumos have become important sources of revenue for Area Councils who have become the main organizers that levy taxes on traders during lumos. Today, councils are collecting revenue from about 27 major lumos in the Gambia. There are 6 lumos in Kuntaur Local Government Area (LGA), 8 in Basse LGA, 6 in Kerewan LGA, 2 in Mansokonko LGA, and 5 in Janjanbureh.

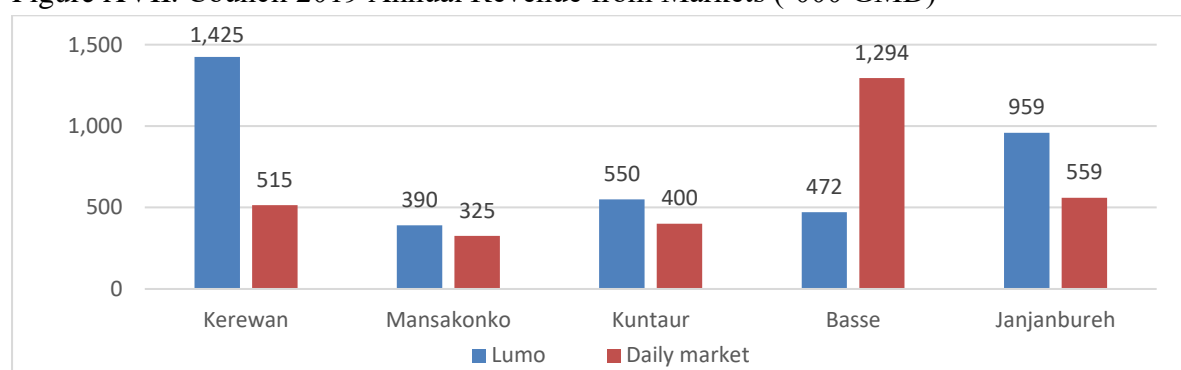
Figure XVI. Major market locations in The Gambia



Source: UK Government, Directorate of Overseas Survey (Base map); Lumo locations self-reported from Councils.

Figure XVI gives an indication of the importance of lumos and the limited access to markets, especially in the rural areas. While these are just the major ones it is clear from the map that the rural population is much more dependent on lumos with essentially no daily markets nearby. The Agricultural Census 2011/12 revealed that in 4 of the 11 districts with lumos (Kantora, Upper Saloum, Jokadu and Fulladu West 2), 100 percent of surveyed individuals reported lumos as the only markets they depend on for economic exchange (MOA, 2012).

Figure XVII. Council 2019 Annual Revenue from Markets (‘000 GMD)



Data source: Self-reported from the councils.

The lumos are important sources of income, not only to the traders, but also for the councils that host them. In Kerewan, Mansakonko, Kuntaur and Janjanbureh the weekly lumos generate more revenue than their daily markets. As of August 1st, the lumos had been closed for 20 weeks, the estimated lost revenue over this period approximately amounts to GMD548 000 in Kerewan, GMD150 000 in Mansakonko, GMD211 500 in Kuntaur, GMD181 500 in Basse, and 369 000 in Janjanbureh.

The two sectors that rely most heavily on markets are agriculture and retail/wholesale trade. These sectors together occupy 87.5 percent of the rural population and thus constitute their main sources of income. Furthermore, these sectors occupy 81.3 percent of all working women in The Gambia, compared to 53.7 percent of working men, making the impact unequal across genders and worse for women. The rural population, which is already vulnerable with 55 percent living in extreme poverty, is highly dependent on lumos for their income given their limited access to daily markets. Besides the supply and income aspect, the lumos are also vital for consumers to exchange goods and foods. While the exchange of foods and crops is essential for health and food security reasons, the exchange of other goods ensures access to other necessities such as soap, detergents, electronics, clothes, tools, etc.

In addition, lumos play a vital role for people who own livestock. It is common for farmers to keep livestock as security to sell off when in need of cash. This need usually arises in the period between planting and harvesting, which in The Gambia is known as the lean season, when cash from livestock is urgently needed for farmers to feed their families (Nwafor, 2004). Figures from FAO show that there are 27 livestock markets in The Gambia, out of which 24 are lumos, with the highest proportion located in the Central River Region with the highest poverty incidence (FAO, 2016). As such, essentially all rural livestock markets are currently closed, which will aggravate poverty and food security concerns in the most vulnerable regions of the country, especially now during the lean season. However, ahead of the celebration of Eid al-Adha (Tobaski) at least two lumos illegally resumed operations. This event coincided with the surge of new cases and as such the operations of these two lumos may have aggravated the spread of the coronavirus.

VII. Conclusion and Policy implications

Over the course of the last few weeks of July, the coronavirus cases started surging in The Gambia as local community transmission began taking place. This challenging situation has been further complicated by a large number of healthcare workers and lab technicians becoming infected by the coronavirus, causing delays in testing with potentially infected people having to wait several days to get tested. The positivity rate clearly indicates increased transmission and also suggests a need for further expanded testing which warrants additional test supplies and more trained staff to conduct the testing. The current limited testing capacity has also led efforts to be concentrated in the Western health region, but it is vital that testing is expanded throughout the country to identify undetected cases of Covid-19 also in the more rural parts of The Gambia.

While the SoPE has been lifted; land, sea and air borders remain closed and a new regulation has come into force making it mandatory to wear masks in public. This is a welcomed attempt to reduce the spread, especially as social distancing has proven difficult in The Gambia, yet further efforts are needed. Furthermore, the new regulations that have come into force under the Minister of Health are not the same as under the Emergency Regulations of the SoPE (for example non-essential businesses are now allowed to operate), creating a need for continuous assessment of additional measures that may become necessary. Considering the rapid increase and concentration of the new cases in the Greater Banjul Area a regional lockdown may be warranted sooner rather than later to contain the spread and allow healthcare workers and policy makers to regain control of the situation. According to Section 5 of the Quarantine Act, Cap 40:03, Vol.6, Revised Laws of The Gambia 2009, “the Minister of Health may make regulation for all or any of the following purposes: /.../ preventing the spread of any dangerous infectious disease from any place within The Gambia, whether an infected local area or not, to any other place within The Gambia”. This provision can be invoked to empower the Minister to enforce a regional lockdown without undue delay. Should this come to effect three aspects are of utmost importance: (i) strict enforcement of the restriction on movement of people with the positioning of police and/or military to make sure no one leaves or enters the lockdown region; (ii) strategic announcement of the lockdown giving the people a couple of days to

prepare but ensuring that panic movement cannot take place ahead of the announced lockdown; and (iii) expanded testing and tracing efforts must not be disrupted but will have to continue to get a clear image of the severity of the outbreak.

In addition to the direct difficulties the coronavirus presents, other parts of the healthcare system is also struggling. Several clinics have been temporarily closed, and some indefinitely closed, following outbreaks of Covid-19 amongst healthcare workers. This directly limits the access to other vital healthcare and puts people with preventable and treatable conditions at risk. Both a short and long term risk factor is the disruptions to the child vaccination programs. Direct factors such as fear of coronavirus exposure and vaccine hesitancy as well as structural factors such as unemployment, illiteracy and homebirths are correlated with lower vaccination rates and incomplete vaccination programs. This could lead to outbreaks of other diseases such as measles and tuberculosis, and potentially causing deaths that otherwise could have been prevented. As such we urge MoH, the Ministry of Women, Children and Social Welfare (MoWCSW), UNICEF and other stakeholders to proactively ramp up vaccination programs throughout the country and to build preparedness for rapid emergency vaccination responses should outbreaks of infectious disease flare up.

With regards to education, it is evident that a lot of learning has been lost during the school closure. The efforts for distance learning can potentially have mitigated part of it, but the effectiveness is likely to differ greatly between regions. There is a clear urban-rural divide when it comes to private schools and access to internet and communication technology. These differences will likely exacerbate already existing regional inequalities in human capital accumulation and incomes. Furthermore, the closure will likely cause higher drop out rates, especially in poorer rural areas where the opportunity cost to schooling already is higher than in urban areas, as evident by the relatively low enrolment rates. In addition to learning, inadequate nutrition for children is a concern when school meals are no longer distributed. Again, this will hit the rural areas worst, where food security is already a great concern to a lot of people.

Children have proved to be fairly unaffected by the coronavirus. There are few cases (43 confirmed cases under the age of 20 as of June 29th 2020), very few critical cases, and a low transmission among children. As such, if the current surge of Covid-19 cases can be curbed it would be reasonable to reopen schools in the fall with the appropriate security measures in place. However, even if schools are to resume, some of the damage of lost learning has already been made. As the Ministry of Basic and Secondary Education (MoBSE) develop a strategy to tackle these issues, in collaboration with MoWCSW, it needs to go well beyond resuming schools – it needs to consider how to “catch up” and make up for lost learning, it needs to ensure as few students as possible drop out (an issue which may be alleviated by cash transfers to poor households which will lower the opportunity cost of keeping children in school), and it needs to have regional and gender perspectives. Most importantly, any strategy to tackle these issues ought to be guided by the aim of leaving no child behind.

The pandemic has also had severe economic consequences for The Gambia. The Gambian economy is faced with significant challenges as unemployment has increased, investments

have decreased, and economic growth projection has declined by 3.8 percentage points. On an individual level incomes and jobs have been lost. People in the urban region are mostly hit by a sudden stop to tourism and restricted business operations. In the rural Gambia people are struggling to sell their crops and ensure food security, especially as lumos remains closed. On a national level there is a need for targeted efforts to boost the economy and diversify the industries on which it primarily depends (tourism, retail and agriculture) to become less dependent on foreign demand. On an individual level, the government and several organizations have launched aid initiatives to alleviate the acute needs for income and food. With regards to lumos we warmly welcome the UNDP's rapid assessment on the impact of closure of lumos, which could potentially guide efforts to help lumos operate in a safe, efficient and sustainable manner.

Girls and women are unproportionally negatively affected throughout this pandemic. 81.3 percent of all women in The Gambia are working in agriculture and wholesale/retail trade, two sectors that have been severely affected by limited market places to sell their products due to restrictions on daily markets, suspension of lumos, and closure of borders. As such a vast majority of working women in the country have likely faced significant income losses. When it comes to education, there are no evident gender inequalities in schooling, however the general educational attainment is higher amongst Gambian men than women (GBOS, 2017). Furthermore, some evidence suggest child marriages may increase as a result of negative income shocks, such as we are experiencing now. In The Gambia, where a price is paid to the bride's family, this is a concern that applies to girls and their schooling and which MoWCSW needs to be attentive to. In general, it is essential that all efforts aimed to remedy the negative impacts of the pandemic puts emphasis on the most vulnerable in society, including girls and women, as to not rollback on the progress made in gender equality in recent years.

In conclusion, it is clear that The Gambia is suffering on multiple fronts from the pandemic. In order to fully recover we must continue and step up efforts to contain the virus until a vaccine has become available. In light of the recent surge of cases, having a grip on the health issues is the ultimate solution and a necessary prerequisite for a sustainable path forward.

References

- Archibong & Annan. (2020). Schooling in Sickness and in Health: The Effects of Epidemic Disease on Gender Inequality.
- Azevedo et al. (2020). Simulating the Potential Impacts of Covid-19 Schools Closures on Schooling and Learning Outcomes: A set of Global Estimates. *The World Bank*. <http://pubdocs.worldbank.org/en/798061592482682799/covid-and-education-June17-r6.pdf>, retrieved 9 July 2020.
- CBG. (2020a). Central Bank of The Gambia Macro Economic Data Warehouse.
- CBG. (2020b). Central Bank of The Gambia Economic Council Brief April 2020.
- Corno et al. (2019). Age of Marriage, Weather Shocks, and the Direction of Marriage Payments. Becker Friedman Institute: Working Paper no. 2019-123.
- Dunn. (2003). Comparing Harm Done by Mobility and Class Absence: Missing Students and Missing Data. *Journal of Educational and Behavioral Statistics*, 28(3), pp. 269–288.
- FAO (2016). Review of the Livestock/Meat and Milk Value Chains and Policy influencing them in The Gambia. Food and Agricultural Organization of The United Nations.
- Fauci et al. (2020). Covid-19 – Navigating the Uncharted. *New England Journal of Medicine*, March 26th 2020.
- GBOS (2020). Covid-19 in The Gambia. A Rapid Assessment of the Impact of COVID-19 on Tourism and Related Sectors.
- GBOS IHS (2017). Integrated Household Survey 2015/16. Volume II: Socio-economic Characteristics. Gambia Bureau of Statistics. Banjul, October 2017.
- Gottfried, M. A. (2019). Chronic absenteeism in the classroom context: Effects on achievement. *Urban Education*, 54(1), pp. 3-34.
- Haspel. (2020). Opinion: Child Cares Look Safe — It's Time To Act Like It. *Early Learning Nation*, June 10, 2020. <http://earlylearningnation.com/2020/06/opinion-child-cares-look-safe-its-time-to-act-like-it/?fbclid=IwAR18jdAaMIG8x26ShjrsbulxrEzJduFsoHoz9BnCVmu004HrdBpo-5OPICA>, retrieved 9 July 2020.
- John Hopkins. (2020). Coronavirus Resource Center. Testing Trend Tools. Retrieved from <https://coronavirus.jhu.edu/testing/tracker/map/percent-positive> on August 4th 2020.
- Li et al. (2020). Substantial Undocumented Infection Facilitates the Rapid Dissemination of Novel Coronavirus (SARS-CoV2). *Science*, March 16th 2020.
- MOA. (2012). Report of the Agricultural Census of The Gambia 2011/12. Ministry of Agriculture of The Gambia.

- MICS. (2018). Multiple Indicator Cluster Survey The Gambia. GBOS/UNICEF.
- MOBSE. (2020). Education Statistics 2019/2020. Ministry of Basic & Secondary Education: Directorate of Planning, Policy Analysis, Research & Budgeting. Banjul, May 2020.
- MOFEA. (2018). Ministry of Finance and Economic Affairs Expenditure Brief December 2018.
- National Archives. (1869). Document dated April 1869. The Gambia National Records Service, Personnel Management Office, Banjul.
- NDP. (2017). The Gambia National Development Plan (2018-2021). Government of The Gambia.
- Nwafor (2004). Small ruminant livestock marketing in The Gambia: a socio-economic perspective.
- Patrick (2009). A Study of Food Insecurity and Rural Development in The Gambia: The Impact of Rural Weekly Markets (Lumos).
- Secon, H. (2020). 2 regions of Italy took different approaches to fighting the coronavirus. Their results show that widespread testing and early social distancing really work. *Business Insider*, March 19th 2020. Retrieved from <https://www.businessinsider.com/italy-provinces-aggressive-coronavirus-response-leads-to-fewer-cases-2020-3?r=US&IR=T> on March 30th 2020.
- The Point Newspaper. (2020). Historian Ceesay Recalls 1869 Cholera Epidemic in Bathurst to Fight Covid-19. Retrieved from <http://thepoint.gm/africa/gambia/article/historian-cesay-recalls-1869-cholera-epidemic-in-bathurst-to-fight-covid-19> on April 8th 2020.
- UN News. (2020). COVID-19 disrupting services to treat non-communicable diseases, WHO survey finds. 1st June 2020. Retrieved from <https://news.un.org/en/story/2020/06/1065172> on August 4th 2020.
- UNDP. (2020). The Tourism Sector in the Context of Covid-19 Outbreak in The Gambia. Brief#2: 03 April 2020.
- UNDP/UNICEF. (2020). The Education Sector in the Context of Covid-19 Outbreak in The Gambia. Brief #7: 15 May 2020.
- UNESCO. (2020). Education: From disruption to recovery. <https://en.unesco.org/covid19/educationresponse>, retrieved 9 July 2020.
- UNICEF. (2020). Immunization cannot wait. June 7th 2020. Retrieved from <https://www.unicef.org/gambia/stories/immunization-cannot-wait> on August 4th 2020.
- WHO. (2020a). WHO urges countries to move quickly to save lives from malaria in sub-Saharan Africa. April 23rd 2020. Retrieved from <https://www.who.int/news-room/detail/23->

[04-2020-who-urges-countries-to-move-quickly-to-save-lives-from-malaria-in-sub-saharan-africa](#) on August 4th 2020.

WHO. (2020b). At least 80 million children under one at risk of diseases such as diphtheria, measles and polio as COVID-19 disrupts routine vaccination efforts, warn Gavi, WHO and UNICEF. May 22nd 2020. Retrieved from <https://www.who.int/news-room/detail/22-05-2020-at-least-80-million-children-under-one-at-risk-of-diseases-such-as-diphtheria-measles-and-polio-as-covid-19-disrupts-routine-vaccination-efforts-warn-gavi-who-and-unicef> on August 4th 2020.