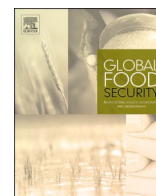




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# 'We would rather die from Covid-19 than from hunger' - Exploring lockdown stringencies in five African countries

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## ABSTRACT

Facing COVID-19, African countries were confronted with a dilemma: enacting strict lockdowns to “flatten the curve” could potentially have large effects on food security. Given this catch-22 situation, there was widespread concern that Africa would suffer most from the pandemic. Yet, emerging evidence in early 2021 showed that COVID-19 morbidity remained low, while “biblical famines” have been avoided so far. This paper explores how five African countries maneuvered around the potentially large trade-offs between public health and food security when designing their policy responses to COVID-19 based on a content analysis of 1188 newspaper articles. The findings show that food security concerns played an important role in the public policy debate and influenced the stringency of lockdowns, especially in more democratic countries.

## 1. Introduction

Facing COVID-19, governments across the world faced the difficult question: to which degree should they enact lockdowns to curb the spread of the virus. Lockdowns, a term describing restrictions of movement and closing of workplaces, among others, are an extreme form of non-pharmaceutical intervention to address outbreaks of contagious diseases for which no medical cure or vaccination exists (Hale et al., 2020a, 2020b; Hsiang et al., 2020). Lockdown decisions were particularly challenging for low-income countries, many of which are located in Africa, leading to dire outlooks on how such countries would handle the pandemic (e.g., Economic Commission for Africa, 2020).

On the one hand, there were fears about countless deaths due to limited healthcare systems, overcrowded slums, and populations' underlying health conditions like tuberculosis and HIV/AIDS, creating pressure to lockdown to “flatten the curve” (Wood, 2020; Maclean and Marks, 2020). At the time, a UN report estimated that in 2020 “between 300,000 and 3.3 million African people could lose their lives as a direct result of COVID-19” (p.v) (Economic Commission for Africa, 2020). On the other hand, there were concerns that lockdowns could devastate food security in countries with large informal sectors and patchy social safety net programs (Laborde et al., 2020; Torero, 2020; WFP, 2020b; Latif,

2020). For example, in April 2020, the World Food Programme warned of famines of “biblical proportions” (WFP, 2020a). Around the same time, the FAO estimated that 80–130 million additional people would become undernourished (FAO et al., 2020). As shown in section 3.3., food security concerns were voiced in all of the case study countries. Additional concerns related to lockdowns were effects on poverty (Laborde et al., 2020; Sumner et al., 2020) and education (Van Lancker and Parolin, 2020), among others (see also section 3.3).

One year later, COVID-19 morbidity across Africa was much lower than expected, puzzling experts (Ghosh et al., 2020; Lawal, 2020). Moreover, while there were increasing empirical evidence that COVID-19 and the related global recession have led to rising food insecurity across Africa (see e.g., Adjognon et al., 2020, for Mali; Arndt et al., 2020, for South Africa; Kansime et al., 2021, for Kenya and Uganda, Mahmud and Riley, 2021, for Uganda), there were no famines of “biblical proportions” and a notable absence of food riots, which characterized the food price crisis of 2007/2008 (Berazneva and Lee, 2013). Overall, the situation was far from perfect, but also far from the dire outlooks forecast at the beginning of the pandemic.

This paper explores how five African countries - Zambia (Southern Africa), Ghana, Benin, (West Africa), Kenya, and Uganda (East Africa) - maneuvered the potentially large trade-offs between the containment of

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the pandemic and food and nutrition security when - under higher uncertainty - designing their policy responses to the first wave of the pandemic. The countries were selected to reflect different levels of food insecurity at the onset of the pandemic, different degrees of political freedom, and different lockdown stringencies during the first wave of COVID-19. The pre-COVID-19 food security levels were ranging from “moderate” (Ghana) to “serious” (Benin, Zambia, Kenya, and Uganda). The degrees of political freedom were ranging from “free” (Ghana) to “partly free” (Zambia, Benin, and Kenya) to “not free” (Uganda) (see Supplementary Information (SI), Table S1). The sampled countries enacted different levels of lockdown stringencies, with Zambia, Ghana, and Benin choosing much less stringent lockdowns as compared to Kenya and Uganda – as based on the Oxford COVID-19 Government Response Tracker (OxCGRT) (Hale et al., 2020a) (see section 3.1.). Moreover, the aim was to ensure that at least one Francophone country is selected and that at least one member of the author team has intensive research experience and/or is a native of the selected countries.

Little is known about the public and political debates influencing the stringency of the lockdown measures. Why did Uganda and Kenya impose strict lockdowns but not the other countries? Which political motives shaped their lockdown strategies? To which extent did food security considerations influence the government’s decisions to impose and maintain lockdowns? These questions are of high significance since the food security effects of the ongoing pandemic are largely shaped by the government’s policy responses. Moreover, studying policy responses of low-income countries deepens our understanding of policymaking in crises like COVID-19 and potential future pandemics. This paper examines the societal and political debates leading to the countries’ lockdown decision through a content analysis of 1188 articles in major newspapers and a review of official statements in the five countries (see Materials and Methods). In this regard, we focus in particular on the role of food security considerations in shaping the lockdown decision, the link between COVID-19 policy measures and food insecurity, and reported governance challenges of implementing food security measures.

The paper draws on different theoretical approaches that are suitable to explain the logic of the lockdown decisions and the role food security concerns played. These theoretical considerations also informed the coding schemes for the content analysis. Based on Sen’s theory of famines, democratic countries may have stronger incentives than more authoritarian regimes to consider food security issues when determining the stringency of a lockdown (11). To examine the applicability of this theory during COVID-19, we sampled countries with different levels of political freedom and compared the extent to which food security considerations shaped the lockdown stringencies of these countries (see section 3.3). The “feasibility hypothesis” of civil conflict by Collier et al. (2008) assumes that governments will take into account: I) the expected scale of opposition against stringent lockdowns, and II) the government’s capacity, a) to offset adverse effects of stringent lockdowns by providing support such as food aid or financial transfers, and b) their capacity and willingness to use police or military force to implement stringent lockdown measures against the opposition. To examine the applicability of the “feasibility hypothesis”, we explore the viewpoints of the opposition on lockdown measures (see section 3.3.) as well as the use of offsetting food security measures (see section 3.4.) and potential governance challenges such as the use of force (see section 3.6). Based on the theory of policy diffusion by Berry and Berry (2019), governments may adopt policies, because a) they observe that such policies are implemented in other countries and are perceived to be successful, b) they perceive political pressure to conform to internationally accepted standards, and c) such mimicking may help to avoid responsibility and shelter from criticism (Sebhatu et al., 2020). To examine this explanation, we explore the extent to which national debates – as reflected in the content analysis of the newspaper articles - were informed by lockdown decisions in other countries (see section 3.5). We also note that in the context of COVID-19 lockdowns, the role of policy diffusion has already been shown to be relevant for high-income countries (Sebhatu et al.,

2020).

## 2. Materials and Methods

### 2.1. Measuring the stringency of lockdowns from a food security perspective

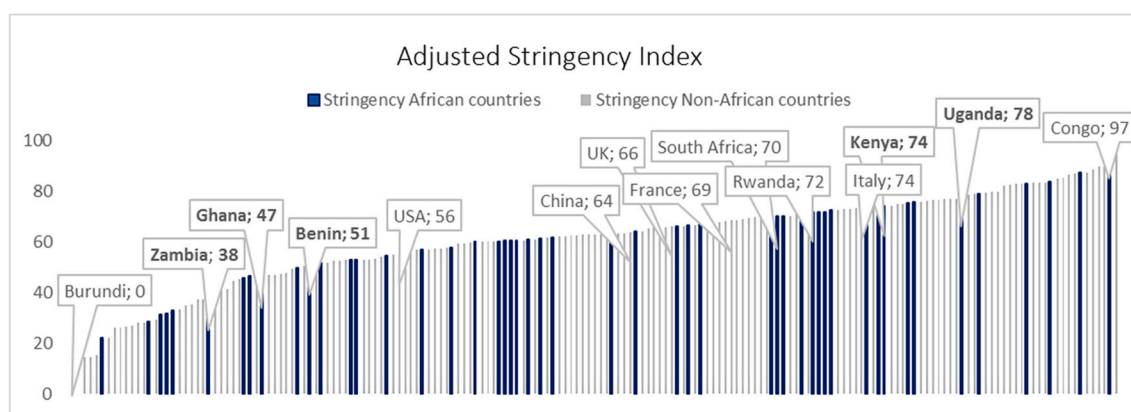
To quantify the stringency of the lockdown measures and compare across countries, we use data from the freely available Oxford COVID-19 Government Response Tracker (Hale et al., 2020a), which systematically records government responses worldwide. Eight indicators on containment and closure policies are aggregated into one Stringency Index. We adjust this index by including only policies that might negatively affect food security; public event cancellation and public information campaigns were excluded (see SI, Table S7). We follow the authors’ methodology to rescale each of the indicators by their maximum value to create a score between 0 and 100. These indicator scores, in our case seven, are then averaged to get the composite Stringency Index (Hale et al., 2020b). We calculate the average adjusted lockdown stringency for each country from the day when the value exceeded 10 until May 17 2020, see Fig. 1. We use individual starting points to calculate the average to avoid any distortion through very early measures that, in isolation, did not strongly affect the population, like restrictions on international travel.

### 2.2. Content analysis of newspapers

A content analysis of online newspaper articles was conducted. To cover the political spectrum, two newspapers were chosen for each selected country: The largest government-affiliated and one of the largest newspapers affiliated to the opposition or non-affiliated. The newspapers were selected based on local expert knowledge (see SI, Table S8). The study period was between January 1 and May 17, 2020, as the major lockdown measures fell into this period (see SI, Figure S1). This time period can be considered long enough to study the political and societal debates on lockdown decisions, including the role of food security considerations, during the first wave of COVID-19 and to explore some immediate effects of COVID-19 lockdowns on food security. Potential long-term food security effects are not covered in this paper. However, other papers are studying such effects, as further discussed in section 4.

Due to limitations in the search functions of the newspaper archives, an internet search was conducted using Google and entering “site: [internet address of a selected newspaper] covid lock” for English-speaking countries and “site: [internet address of a selected newspaper] covid cordon” for the French-speaking country Benin. All newspaper articles (see SI, Table S9) were included in the analysis, except in Kenya, where the number of newspaper articles was far higher than in the other countries. Therefore, only the first 200 articles of each of the two Kenyan newspapers from the Google search, which orders articles by relevance and not by date, were included to make numbers comparable. Newspaper articles that did not cover COVID-19, or only provided updated case numbers, or solely reported the lifting of lockdown measures were excluded.

All remaining newspaper articles were manually coded by five members of the author team using the Qualitative Data Analysis (QDA) Miner Lite software. For the coding, pre-determined coding schemes were used. The coding schemes were developed to cover rationales for and against lockdowns (see SI, Table S2), food security effects (see Table 4) and measures (see Table 5), governance challenges (see SI, Table S6), and references to other countries and national and



**Fig. 1.** Adjusted lockdown stringency by countries (mean daily values between January 1 to May 17, 2020), based on Hale et al. (Hale et al., 2020a) see values in SI, Table S5.

international organizations (see SI, Table S5).<sup>1</sup> To develop the coding scheme and to ensure consistency of coding, the author team used the following approach: I) broad categories were defined based on the conceptual considerations; II) a set of approx. 20 newspaper articles was coded for Kenya, Uganda, and Zambia; III) the most common themes of each category were identified to build a common set of codes applicable to all five countries; and IV) five members of the author team used these codes to analyze all selected newspaper articles.

To test the trustworthiness of the content analysis, the five coders double-coded 50 randomly selected newspaper articles - 10 from each country. Table 6 shows the results of intercoder reliability testing using STATA. The overall percentage agreement is 0.97. The overall Cohen kappa is 0.64, which is considered “good”. Cohen’s kappa is lower than the percentage agreement since a large share (95%) of codes did not apply for the selected newspaper articles as perceived by both the first and second coders. This phenomenon, called the Kappa paradox, emphasizes the need to look at both the Kappa value and percentage agreement jointly (Cicchetti and Feinstein, 1990; Feinstein and Cicchetti, 1990). Brennan and Prediger (1981) suggest using a prevalence-adjusted bias-adjusted kappa (see also Table 6) to account for skewness when facing the Kappa paradox.

### 3. Results

#### 3.1. Situating the case study countries’ lockdown stringencies

Fig. 1 shows the adjusted lockdown stringencies of countries across the globe. Overall, the lockdown stringencies of countries worldwide vary widely, with the same applying to African countries. Although slightly delayed compared to other continents, Africa reached an average lockdown stringency comparable to Asia and Europe until mid-April 2020 (see SI - Figure S1).

Zambia, Ghana, and Benin were grouped as countries with less stringent lockdowns, while Kenya and Uganda form the group of countries with more stringent lockdowns. Fig. 2 shows a time trend of lockdown stringency, reported daily infections, and accumulated COVID-19 deaths for the five countries.

#### 3.2. Number and timing of newspaper articles

As Table 1 shows, the search yielded 1188 relevant newspaper

articles. Before the announcement of major lockdown measures, the number of newspaper articles was relatively low, potentially because governments felt pressured to quickly decide; most likely surprising the public with their lockdown decisions.

#### 3.3. Rationales for and against stringent lockdowns

Table 2 and Table 3 display the most important rationales for and against stringent lockdowns (for more detailed information see SI, Table S2).

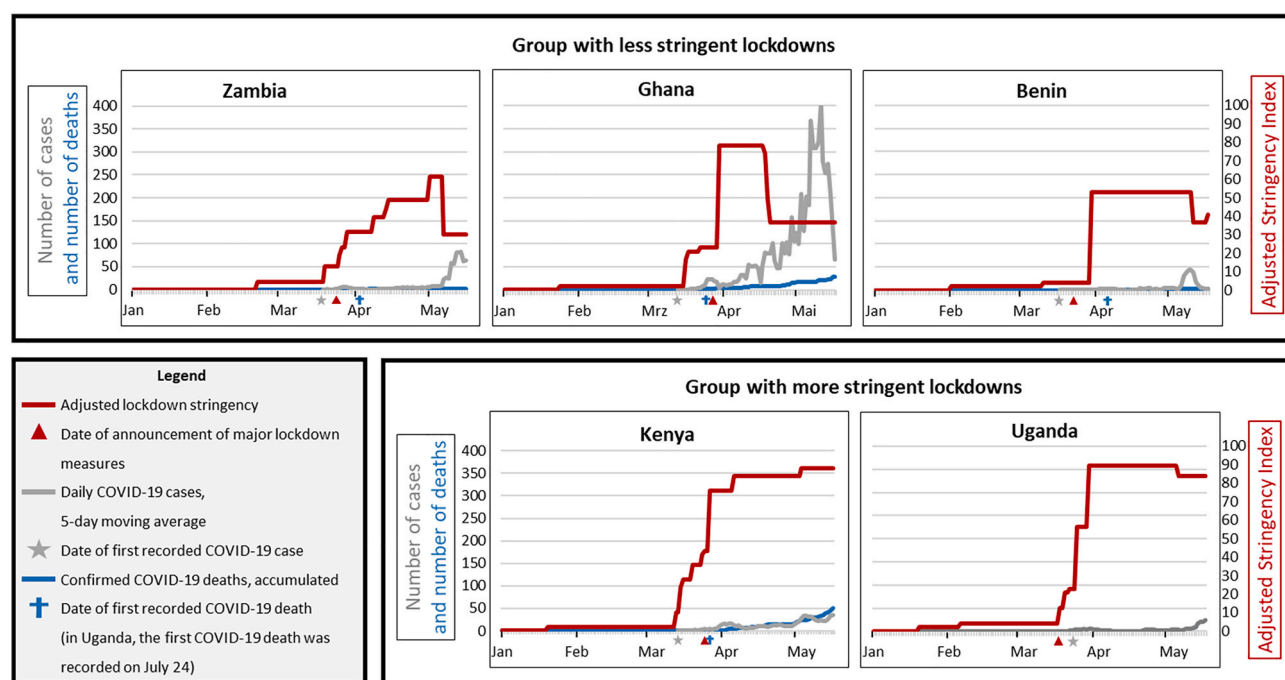
##### 3.3.1. Zambia, Ghana, and Benin

Zambia, Ghana, and Benin aimed to avoid strict and prolonged lockdown measures. Zambia has never restricted the movement of people, but closed universities, schools, and entertainment businesses, and also banned large public gatherings. Benin established a “cordon sanitaire”, a quarantine zone, around the major cities - but movements within and outside this zone were allowed. Ghana’s approach was more stringent, but limited in terms of area and duration: a stay-at-home order and the closure of non-essential businesses applied in major cities from March 30 to April 20.

In all three countries, governments justified the absence of stricter measures largely with poverty and food security concerns. In Benin, for example, President Patrice Talon asked on March 29: “How many people in Benin have a monthly salary and who can wait two, three, or four weeks even without working and living on monthly income?” [Q1] (for sources of direct quotes see SI, Table S3). In Zambia, President Edgar Lungu refrained from stricter measures stressing on April 5: “I am aware that some of you have been saying, ‘We would rather die from Covid-19 than from hunger’” [Q2].

In all three countries, the opposition criticized the governments’ decision to only implement less stringent lockdowns as insufficient. In Benin, opposition leader Candid Azannai said: “Benin has never implemented a confinement. (...) This is extremely dangerous. The so-called cordon sanitaire (...) is nonsense” [Q3]. Ghanaian opposition parties and national organizations like the Ghana Medical Association initially demanded a stronger lockdown. James Agalga of the opposition party National Democratic Congress said on March 24: “If you consider what is happening in other countries with very robust health systems in place ... I should think that by now, this country should have gone into lockdown” [Q4]. In Zambia, on March 23, the opposition party United Party for National Development called for a complete lockdown, because the healthcare system has “no capacity to contain full-scale COVID-19”, as, among other reasons, there are “only 18 ventilators” [Q5]. The Movement for Multiparty Democracy and major church bodies issued similar calls. The ruling party considered such calls impractical, with its communications director saying: “A total lockdown may work for the “Mayadi” elite

<sup>1</sup> There was one exception. To identify the countries to which news paper articles referred (e.g., to report on lockdown measures in other countries), the manual coding was followed up by an automated coding to ensure that all countries are captured.



**Fig. 2.** Case study country groupings according to adjusted lockdown stringency, with individual COVID-19 trajectories, all data are taken from Hale et al. (Hale et al., 2020a). The number of cases must be treated with caution since it depends on how much countries test. The number of deaths depends on the definition of COVID-19 deaths.

**Table 1**

Number of newspaper articles considered in the analysis, differentiated by time of publication and affiliation of newspaper.

		Zambia		Ghana		Benin		Kenya		Uganda		
Announcement of major lockdown measures		March 25, 2020		March 27, 2020		March 23, 2020		March 25, 2020		March 18, 2020		
Affiliation of newspaper		Gov	Opp	Gov	Opp	Gov	Opp	Gov	Opp	Gov	Opp	Total
Number of articles	Before	14	5	42	31	3	0	42	24	6	5	172
	After	61	55	177	187	30	48	92	73	70	223	1016

Gov: Government-affiliated newspaper; Opp: Newspaper affiliated with the opposition.

Before: Before the announcement of lockdown measures; After: After the announcement, including the day of announcement.

**Table 2**

Percentage of articles coded with the most frequent rationales against a stringent lockdown. All coded rationales are presented in SI, Table S2.

Affiliation of newspaper		Zambia		Ghana		Benin		Kenya		Uganda		Total
		Gov	Opp	Gov	Opp	Gov	Opp	Gov	Opp	Gov	Opp	
Livelihoods, income, poverty, jobs, safety nets	Before	29	<b>60</b>	7	<b>26</b>	33		14	14		<b>40</b>	17.6
	After	44	55	10	15	13	8	24	15	20	18	19.5
Food security	Before			7	16				10			6.0
	After	25	20	8	11	7		10	6	19	27	14.8
Local solutions, needed, copycats do not work	Before	14	40	2	19	33		19	<b>24</b>			14.8
	After	15	9	5	2	37	<b>38</b>	17	11	3	2	8.5

Gov: Government-affiliated newspaper; Opp: Newspaper affiliated with the opposition.

Before: Before the announcement of lockdown measures; After: After the announcement, including the day of announcement.

The highest percentage in each country is marked in bold.

like Mr. Hichilema [an opposition leader] who can afford to stock up food for months on end but elsewhere in the compounds it will be a total disaster" [Q6].

Both government- and opposition-affiliated newspapers covered arguments in favor and against lockdowns. Arguments for lockdowns mostly centered on the prevention of deaths, the need for fast action, and the need to "flatten the curve". In Ghana and Zambia, the argument "follow other countries" also featured prominently. While appearing in both types of newspapers, these arguments appear more in opposition-affiliated newspapers, in particular in Ghana and Zambia, feeding the

call of the opposition for stronger lockdowns (see Table 3).

The most frequent arguments against lockdowns relate to livelihood and poverty effects, with no clear difference between government and opposition-affiliated newspapers. Food security concerns were rarely mentioned before the lockdown; the only exception being the opposition-affiliated newspaper in Ghana. After the first lockdown measures were announced, food security arguments became more prominent, especially in Zambia. For example, an article in the government-affiliated newspaper argued that "most African countries went into lockdowns in a copycat fashion and based their decisions on the

**Table 3**

Percentage of articles coded with the most frequent rationales for a stringent lockdown. All coded rationales are presented in SI, Table S2.

Affiliation of newspaper		Zambia		Ghana		Benin		Kenya		Uganda		Total
		Gov	Opp	Gov	Opp	Gov	Opp	Gov	Opp	Gov	Opp	
Prevent deaths and worst-case scenario	Before	50	<b>60</b>	14	19					17	<b>60</b>	<b>15.0</b>
	After	32	40	8	11					19	19	<b>13.0</b>
Act fast, undetected spread, stop spread to 'crowded' places	Before	29	20	17	<b>23</b>			5	14	17	20	<b>15.6</b>
	After	21	18	13	16	10	4	1	22	19	6	<b>12.2</b>
"Flatten the curve" and buy time to build capacity	Before	14	<b>60</b>	7	19	<b>33</b>		21	24			<b>17.1</b>
	After	23	27	3	9	7	15	19	18	10	5	<b>10.7</b>
Follow others who locked down	Before	14	<b>60</b>	2	7			10	<b>29</b>			<b>11.1</b>
	After	7	7		4	3			6	6	1	<b>2.7</b>

Gov: Government-affiliated newspaper; Opp: Newspaper affiliated with the opposition.

Before: Before the announcement of lockdown measures; After: After the announcement, including the day of announcement.

The highest percentage in each country is marked in bold.

**Table 4**

Percentage of articles coded with food security effects.

Affiliation of newspaper		Zambia		Ghana		Benin		Kenya		Uganda		Total
		Gov	Opp	Gov	Opp	Gov	Opp	Gov	Opp	Gov	Opp	
Trade: international (delays, restrictions on import/export)	Before				7	<b>33</b>		<b>12</b>	5			<b>5.5</b>
	After			1	1	10	4	1	1	1	4	<b>2.0</b>
Trade: national (shops, markets, transport)	Before			5	3			2				<b>2.3</b>
	After			4	2		2	3		4	9	<b>3.7</b>
Production upstream (inputs)	Before				3							<b>0.5</b>
	After	3			1					1	2	<b>0.9</b>
Farm production (access to inputs, labourers, extension)	Before											<b>0.0</b>
	After	2									3	<b>0.8</b>
Production downstream (value chains, processing, etc.)	Before				3							<b>0.5</b>
	After				1					1	5	<b>1.4</b>
Access: Loss of jobs and income, high prices	Before			2	<b>10</b>			2				<b>2.8</b>
	After	<b>8</b>	4	4	6		4	2	1	4	<b>10</b>	<b>5.4</b>
Access: Loss of transfers, food aid, school feeding, remittances	Before			5								<b>1.2</b>
	After		2	1								<b>0.3</b>
Access: Changing diets (canned food)	Before											<b>0.0</b>
	After				1					1		<b>0.3</b>
Access: sharp spikes in buying and prices, running out of stock	Before			7	<b>10</b>			10	5			<b>6.7</b>
	After	3	4	3	7					4	2	<b>2.9</b>
Other food security effects	Before				<b>10</b>			2				<b>2.3</b>
	After	5		3	3			7	6	7	3	<b>3.6</b>

Gov: Government-affiliated newspaper; Opp: Newspaper affiliated with the opposition.

Before: Before the announcement of lockdown measures; After: After the announcement, including the day of announcement.

The highest percentage in each country is marked in bold.

**Table 5**

Percentage of articles coded with food security measures.

Affiliation of newspaper		Zambia		Ghana		Benin		Kenya		Uganda		Total
		Gov	Opp	Gov	Opp	Gov	Opp	Gov	Opp	Gov	Opp	
Social protection (e.g. cash transfers)	Before			7	10			5			20	<b>5.3</b>
	After			14	10	3	8	1	4	9	1	<b>6.0</b>
Food aid, food for work, school feeding	Before				7							<b>1.3</b>
	After			<b>19</b>	12		4	3	7	13	9	<b>9.4</b>
Input subsidies, free inputs	Before				3							<b>0.5</b>
	After			3	3			2				<b>1.3</b>
Government stockpiling, purchase, imports	Before											<b>0.0</b>
	After	2		1	1			2		1		<b>0.7</b>
Other food security measures	Before			5	10			5	10			<b>11.3</b>
	After			4	12	3	<b>13</b>	14	<b>16</b>	<b>24</b>	1	<b>7.9</b>

Gov: Government-affiliated newspaper; Opp: Newspaper affiliated with the opposition.

Before: Before the announcement of lockdown measures; After: After the announcement of lockdown measures, including the day of announcement. The highest percentage in each country is marked in bold.

projections from Western countries and the WHO", but these lockdowns will cause "more harm than good", because "the majority of our people (...) live from hand to mouth. (...). Lockdowns consign them to starvation" [Q7].

### 3.3.2. Uganda and Kenya

Kenya and Uganda implemented relatively stringent partial

lockdown measures (see Fig. 2). Unlike in the less stringent group, the opinions of government and opposition leaders did not differ greatly. While both Kenya and Uganda enacted a nationwide curfew (announced on March 25 and 30, respectively), Kenya took a relatively tentative approach, introducing measures only after the first confirmed case, and gradually tightened restrictions with rising case numbers. In contrast,

**Table 6**  
Intercoder reliability.

	Lockdown Arguments	Governance Challenges	Food Security Effects and Measures	Organizations and Countries	Total
<b>Percent Agreement</b>	0.8968 (0.000)	0.9600 (0.000)	0.9493 (0.000)	0.9951 (0.000)	<b>0.9741 (0.000)</b>
<b>Brennan and Prediger</b>	0.7937 (0.000)	0.9200 (0.000)	0.8987 (0.000)	0.9901 (0.000)	<b>0.9481 (0.000)</b>
<b>Cohen's Kappa</b>	0.3532 (0.000)	0.4795 (0.000)	0.1826 (0.000)	0.9065 (0.000)	<b>0.6359 (0.000)</b>

Note: P-Values in Brackets.

Uganda adopted a pre-emptive approach and implemented restrictions, before a single case was reported. Both countries banned international travel, restricted local movements, prohibited public gatherings, and closed learning institutions. Uganda was the only country that restricted private transportation.

The sentiment in Kenya is reflected by President Uhuru Muigai Kenyatta's speech on April 5: "*Different measures are being taken across the globe depending on every country's unique circumstances (...). But what is clear from their experience is that the pandemic is likely to continue spreading with lethal effect without drastic action*" [Q8]. Analogously, Uganda's President Yoweri Museveni stressed on April 8: "*The issue is not business or how a business has suffered! The issue we are dealing with is a matter of life and death - Covid-19. We are talking about stopping mass deaths*" [Q9].

The most frequently cited rationales in favor of a strict lockdown differed between the two countries. Kenya's government-affiliated newspaper predominantly featured arguments on "flattening the curve", while both the Ugandan newspapers reported mostly on preventing deaths. Preventing the spread of COVID-19 was the most mentioned reason for a lockdown in Kenya's opposition-affiliated newspaper after the curfew announcement, while earlier articles mainly cited the idea to follow countries already implementing lockdowns.

Livelihood concerns were also a dominant feature in both countries' newspapers as arguments against a Wuhan-style lockdown. In Kenya, livelihoods and food security challenges were discussed in equal measure before and after the lockdown announcement, mostly in the opposition-affiliated newspaper, whereas the government-affiliated newspaper cited similar concerns mostly after the lockdown announcement. Both newspapers also referred to local solutions as a suitable alternative to a full lockdown - a counterargument to the idea of following others. In Uganda, economic livelihoods and food security concerns were covered often in the government and opposition-affiliated newspapers after the lockdown announcement. However, very few articles from the opposition newspaper in Uganda explicitly and directly challenged the lockdown, and only cautious reporting against the lockdown was found in the articles.

### 3.4. Food security effects and measures

#### 3.4.1. Food security effects

Table 4 shows how often food security effects were reported in the newspapers, showing that food security effects were mentioned less in the countries with less stringent lockdowns, with the exception being Ghana, which had a strict lockdown for a short time (see Table 4). This does not mean that no effects were reported. In Zambia, newspapers reported a loss of income and increasing prices. In Benin, the opposition-affiliated newspaper reported income losses after the cordon sanitaire was announced. In Ghana, loss of income, price spikes, and panic buying were reported, in particular in the opposition-affiliated newspaper. These food security aspects seemed to have influenced government decisions. Presidents explicitly cited food security risks when arguing against stricter lockdowns in Zambia and Benin (see above) – and in Ghana when easing the lockdown relatively quickly. In Ghana, President Nana Akufo-Addo partially lifted the lockdown, citing "*the severe impact on the poor and vulnerable*" [Q10].

In the more stringent group, food security concerns were discussed

more frequently, indicating more severe effects on food security caused by the more stringent lockdowns. Uganda serves as a good example. Here, several aspects like spiking prices, closure of markets, food shops, and public transport were reported by the opposition-affiliated newspaper. The opposition-affiliated newspaper also frequently mentioned the loss of income and thus access to food, for example, quoting a bar owner: "*I am a single mother with five children. The worst thing is that I can't start doing something new to feed my children and I don't know when the lockdown will end,*" she says." [Q11]. Compared to the countries with less stringent lockdowns, such effects did not change the lockdown decisions of the governments, however. President Yoweri Museveni blamed price hikes on food traders and warned: "*I will send in spies. If I find anyone hiking the price of food, I will cancel their license*" [Q12].

#### 3.4.2. Food security measures

To mitigate the food security risks of lockdowns, social protection measures and the exemption of agriculture from the lockdowns, among others, have been recommended (e.g. by IFPRI (Laborde et al., 2020)). In all five countries, newspapers discussed such measures (see Table 5). Measures were discussed mostly after the lockdown decisions were done, except for Ghana, the most democratic of the five countries, and the opposition-affiliated newspaper in Uganda. In Zambia, which refrained from stringent lockdowns, measures were hardly discussed. The type of measure most frequently mentioned after the announcement of lockdown were food aid and cash transfers. In all countries except Benin, at least one food aid program was implemented until mid-May, which might indicate the existence of food security issues (see SI, Table S4).

In Zambia, in his third presidential address on COVID-19, President Edgar Lungu acknowledged food security concerns, that were aggravated by the lockdown measures, saying: "*I feel your pain*" [Q13], and announced a series of economic measures. One newspaper article criticized these measures, as they "*hardly address the biggest impact of COVID which are lower income levels are [sic!] rising hunger*" claiming that they will not reach "*the ordinary Zambian and the neediest*" [Q14]. In the newspapers, no implementation of COVID-19 and lockdown related food security measures was recorded. In Ghana, both newspapers reported on food aid from the government, organizations, companies, and private persons. The government reported having distributed 470,000 food packs to families to avoid food insecurity. In an open letter to the government published in both newspapers, the opposition indicated that many more people, namely 13 million Ghanaians live "*hand-to-mouth*" and thus need food aid during the lockdown. While Benin did not implement a food aid program until mid-May, food security measures such as cash transfer and food aid were reported as suggestions, more prominently from the opposition-affiliated newspaper.

In Uganda, food security measures were not discussed in the government-affiliated newspapers before the announcement of the stringent lockdown, but social safety programs were discussed in the opposition-affiliated newspapers. After the lockdowns were announced, food aid was the only prominent aspect, reflecting its contested nature in Uganda (see "Governance challenges"). Facing criticism for disproportionately targeting richer households, President Museveni said: "*If you were poor before the lockdown, you'll be poor after the lockdown. Eat what you were eating before ... we shall deal with your poverty later*" [Q15]. The president of the biggest opposition party, on the other hand, advised Ugandans "*(...) not to die of starvation silently in their homes but to continue*

demanding for food and other relief items from Mr Museveni” [Q15]. However, protests over unreceived relief food were discredited by the police as “violent” and politically motivated: “We have intelligence that the group was mobilised by people who want to stand in the next general elections” [Q16].

Compared to Uganda, Kenya, which also imposed stringent lockdown, significantly scaled-up social protection coverage and benefits (Gentilini et al., 2020), which may explain the lower number of reports on food security effects (see Table 4). After the announcement of the lockdown, both newspapers cited existing or planned alternative measures to address food security challenges.

### 3.5. Policy diffusion

Fig. 3 shows how frequently the newspapers in Benin, Zambia (less stringent group), and Uganda (more stringent group), referred to other countries (for all countries and codes on policy diffusion see SI, Table S5). Across all five countries, the most frequently mentioned country is China, followed by South Africa, which implemented a rather strict lockdown, the United States, Italy, and Tanzania. Generally, the newspapers mostly referred to countries with measured or strict lockdowns, and only a few newspaper articles across the five countries cite countries that chose light lockdowns at the time, such as South Korea, Sweden, and Taiwan. The only exception is Tanzania, mentioned in almost 6% of articles, where the president, however, denied the danger of the pandemic.

Ugandan newspapers refer mostly to China and European countries - and some extent to neighboring African countries - while Zambian newspapers refer to similar countries as Uganda, but less frequently. In Benin, which developed its unique “cordon sanitaire”, newspaper articles seem to be even more “inward-looking”, referring little to countries other than China and France, its former colonizer. No statistically significant correlation was found between the countries’ lockdown stringencies and the stringency of countries they referred to.

How newspapers from different countries describe other countries’ situations can differ. For example, both Zambian and Ugandan newspapers refer to South Africa, which imposed a strict lockdown, but in a different way. Zambian newspapers report more on the negative effects

of the “copycat” lockdown, which has led to long queues in front of supermarkets, arguing that the total lockdown is “a total disaster” and “can be dangerous where people live hand-to-mouth” [Q17]. In contrast, in Uganda, which imposed a strict lockdown itself, newspapers emphasized that South Africa is the “worst-affected country” [Q18], which “feared to be on the brink”, needs a lockdown “to save the country” [Q19], and, quoting the South African president Civil Ramaphosa, to “avoid a human catastrophe” [Q20].

The newspapers in the five case study countries frequently refer to other countries, suggesting a large role of policy diffusion. However, section 3.3 has shown that food security considerations were an integral component of the national lockdown debates. This seems to have limited the actual diffusion and uncritical mimicking of policies from other countries that have different levels of food security.

### 3.6. Governance challenges

The most frequent type of governance challenge was the use of police or military force to enforce lockdown restrictions (see SI, Table S6). For example, an opposition-affiliated newspaper in Uganda reports: “A 14-year-old girl in Kapchorwa District has been shot in the neck by what police say was a stray bullet. She was hit on Saturday by the bullet as security operatives enforced lockdown directives to stop the spread of coronavirus” [Q21]. In Ghana and Zambia (but not in other countries), the opposition-related newspapers referred more often to this problem. Kenya had the lowest share of newspaper articles referring to this problem, but, apart from Benin, it was the only country, where newspaper articles mentioned this as a potential problem before the announcement of lockdown measures.

Governance challenges related to food security programs were reported in Ghana, Kenya, and most notably Uganda, the least politically free country in our sample, where food aid was highly politicized: the government’s food aid program was the only legally accepted channel for food distribution, forcing private persons and the opposition to channel any food donations to the government’s food relief task force. Prime minister Ruhakana Rugunda, head of the COVID-19 task force, justified this, as donating food “... is looking for cheap popularity, because you’re going to make people gather which is risky”. Non-adherence was

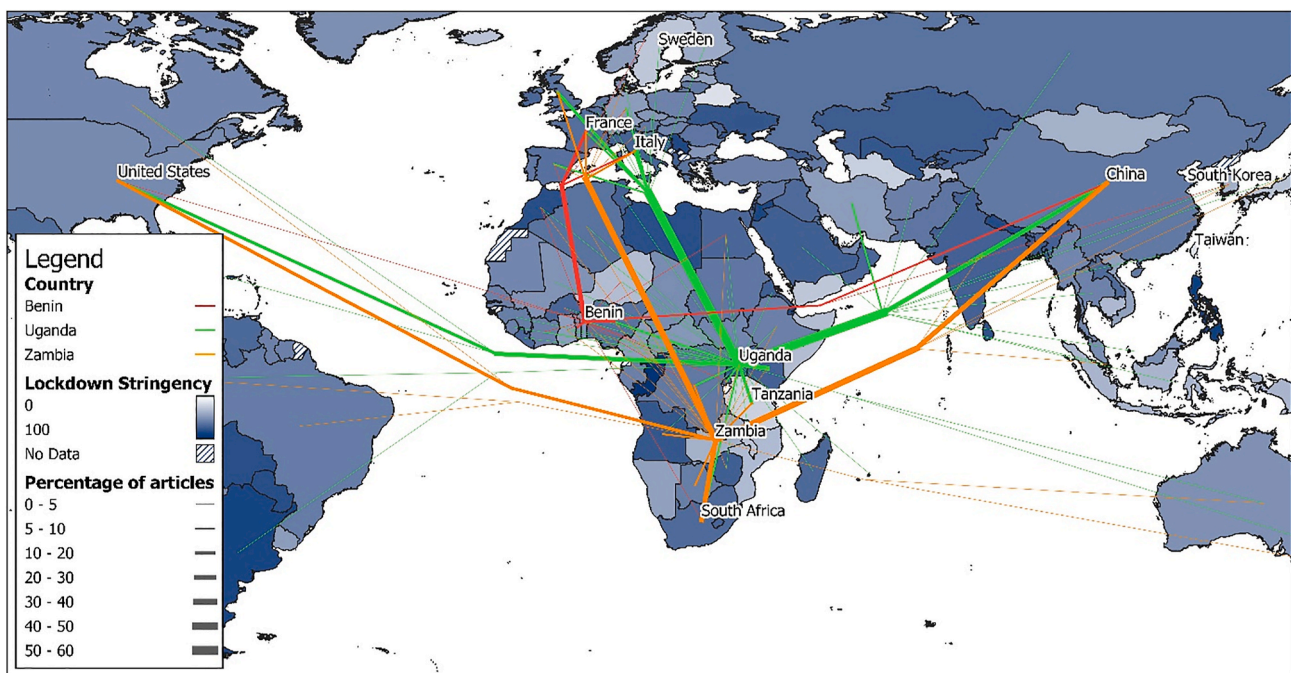


Fig. 3. Lockdown stringencies (shading) and percentage of newspaper articles referring to countries (thickness of arrows); the arrows of each continent are summed up for visual purposes; all countries mentioned in the text are labeled.

charged with “attempted murder” [Q122]. Further, food aid was mostly distributed to rather affluent urban people as well as opposition strongholds to increase the ruling party’s popularity for the 2021 presidential elections. This was confirmed by a nationally representative phone survey done in June by the Uganda Bureau of Statistics and the World Bank (Uganda Bureau of Statistics and World Bank, 2020) which revealed that food transfers were not reaching the poorest and were disproportionately targeted towards the richest households.

Lockdown measures may affect the repertoire of political action available to the opposition, especially before elections. In Uganda, where elections were scheduled in 2021, 10% of the opposition newspaper articles identified this problem. Other governance challenges specified in our codes hardly appeared at all (see SI, Table S6). Generally, the findings have to be interpreted with caution, because in countries with restrictions on freedom of the press, it is unlikely that the newspaper articles reflect the actual extent of governance challenges related to lockdown measures.

#### 4. Discussion

The content analysis of 1188 newspaper articles from five African countries provides valuable insights on the question of how food-insecure countries faced the dilemma of deciding the stringency of lockdown measures, showing that governments that enacted less stringent lockdown measures predominantly justified their choice with food security and poverty concerns. These were also the more democratic countries in the sample, based on the Global Freedom Index. Ghana, for example, lifted some of its already modest lockdown measures in response to food security concerns, even though the country had the highest number of COVID-19 cases in the sample (see Fig. 2). These observations match Sen’s theory (Sen, 1981) that open democratic debate fosters attention to food security. However, food security concerns were not entirely neglected in Kenya and Uganda, the two countries that scored lower on the Global Freedom Index and adopted more stringent lockdown measures. Food security concerns featured in the public debate in these two countries and both countries implemented measures to alleviate the negative food security effects of lockdown measures. The effectiveness of such measures deserves, however, further consideration as the analysis pointed to considerable governance challenges in implementation.

Concerning the “feasibility hypothesis” (Collier et al., 2008) our findings show that countries with high lockdown stringency were willing to use military and police force to defend lockdown measures. However, in countries with less stringent lockdown measures the use of force was also reported. The method of analyzing newspaper articles has limitations in identifying the actual extent of the use of force since authoritarian regimes are more likely to suppress reporting on this issue.

Regarding policy diffusion theories, the analysis shows that countries with more stringent lockdown measures refer more frequently to other countries. However, our findings indicate that African countries did not simply “copy” lockdown measures implemented elsewhere because governments rather strategically referred to countries with stringent lockdowns either positively or negatively to justify their own choice. Moreover, instead of merely mimicking the lockdown responses from high-income countries, all countries carefully considered food and nutrition security considerations when choosing their lockdown response. This seemed to have limited policy diffusion from abroad.

Overall, more research is required to better understand the political economy of lockdown policies in food-insecure countries. It may be useful to apply quantitative research approaches that involve a larger set of countries and employ cross-country regression techniques regarding the factors influencing lockdown stringency.

Future research may also assess how effective the policy choices of African countries were in limiting the spread of COVID-19 on the one hand and avoiding major food security crises on the other. When the first cases of COVID-19 appeared in Africa, there were fears that the disease

could kill millions of people on the continent in 2020 (Economic Commission for Africa, 2020). But COVID-19 fatalities have remained much below predictions - a phenomenon referred to as the Africa-paradox (Ghosh et al., 2020; Lawal, 2020) – which can likely be explained by the lower average age and lower share of people with cardiovascular diseases (Ghosh et al., 2020). These findings indicate that African countries can “afford” less stringent lockdown measures to avoid negative food security effects.

Regarding the impact of different lockdown stringencies on food security, the available evidence is insufficient to quantify effects in the five case study countries due to confounding factors. Kenya and Uganda were affected by locust outbreaks, and Kenya was also affected by flooding (FAO Locust Watch, 2020; FAO Regional Office for Africa, 2020; Global Network Against Food Crises and FSIN, 2020). Several other papers have focused on the immediate effects of COVID-19 lockdowns measures on food security, mostly showing that lockdowns have affected the economic and physical access to food and to a lesser extent the availability of food (see, e.g., Kansiime et al., 2021, for Kenya; Mahmud and Riley, 2021, for Uganda; and Daum et al., 2020, for five African countries). It is worth noting “biblical famine” caused by COVID-19 and related response measures did not occur. Such projections neglected countries’ and communities’ capacity to respond to new food security risks. Not only did governments in all case study countries try to balance COVID-19 and livelihood risks, but, until May 17, all countries except Benin also implemented measures to mitigate declines in food entitlements (Gentilini et al., 2020). Still, there is reason to worry about the politicized nature of food distribution, which may have prevented access to those, who needed it most, as well as about the long-term nutritional effects on children and vulnerable groups such as the urban poor, women, pastoralists, and informal traders, who provide food to the urban poor (IFPRI, 2020).

Overall, this study indicates that African countries did not neglect food security when making difficult choices on lockdown policies. Africa does not need to be considered the “basket case” concerning COVID-19, even though early international assessments painted that picture. African countries may be best served if international efforts can identify “food and nutrition-sensitive measures” that fight the pandemic while reducing the grim trade-off between saving lives and saving livelihoods that food-insecure countries face.

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#### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.gfs.2021.100571>.

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