


# The impact of COVID-19 on informal humanitarian supply chains – The case study of Zimbabwe

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**Background:** For the last 20 years Zimbabwe has been dependent on humanitarian aid. The country is in a desperate condition, with millions of citizens leaving to reside in neighbouring countries. These Zimbabweans are providing and sending food, necessities and cash to relatives in the country using largely informal humanitarian supply chains (HSCs). The outbreak of the coronavirus disease 2019 (COVID-19) pandemic was disastrous causing more hardship.

**Objective:** This case study explores how informal HSCs played a significant role in the Zimbabwe humanitarian aid initiative and the impact of COVID-19 on these supply chains.

**Method:** A mixed method design was used to collect qualitative data through personal interviews with Zimbabweans in South Africa. Additional quantitative data was obtained from humanitarian reports, Zimbabwe government reports as well as other publications. These were used to present the humanitarian crisis in Zimbabwe and specifically how support was provided through informal HSCs from outside Zimbabwe.

**Results:** Through the case study the devastating effect COVID-19 had on a large component of the food insecure and suffering population of Zimbabwe is vividly illustrated. The closing of national borders prevented any food and other necessities, sent by diaspora from South Africa, reaching relatives.

**Conclusion:** The results of this case study show the effect COVID-19 had on the humanitarian aid from relatives in South Africa. All the aid to Zimbabweans completely stopped for an extended period as these informal HSCs were completely broken because of the COVID-19 pandemic and 2 years later they remain disrupted.

**Keywords:** humanitarian aid; humanitarian logistics; formal humanitarian supply chains; informal humanitarian supply chains; case study.

## Introduction

At the start of 2020 the situation in Zimbabwe was precarious. The United Nations, World Food Programme (WFP), issued a short report at the beginning of that year where it identified the potential international 'flashpoints' that required attention in the new year. These flashpoints or hotspots, were 'countries and regions where conflict, political instability and climate disasters are threatening the food security of millions of people' (WFP 2020b). Among the 15 critical and complex emergencies identified worldwide, the ones that were at risk of descending further into crisis were several sub-Saharan countries, including Zimbabwe. The situation in Zimbabwe was in an 'overheating' condition. According to the WFP, half the Zimbabwean population, 7.7 million people, were food insecure. The political instability in the country over an extended period, together with one of the worst droughts in living memory, had contributed to this crisis. In addition, the situation was aggravated by Cyclone Idai, which caused havoc in four of the 10 provinces in the country early in 2019. In an updated report published in March 2020, the WFP stated (WFP 2020a): 'Zimbabwe is experiencing its highest food insecurity levels in a decade, with latest analysis from an International Food Classification report estimating about 4.3 million people facing severe acute food insecurity'. It was at this stage that the worldwide pandemic, the coronavirus disease 2019 (COVID-19) virus, began to spread across the globe with massive implications.

The situation in Zimbabwe, as outlined above, was aggravated, and compounded by the outbreak of the pandemic. A preliminary assessment at that stage by the United Nations Sustainable Development Group (UNSDG) of the potential impact of the virus showed that the country's healthcare system, already in a perilous position, was likely to be stretched even further (UNSDP 2020). As elsewhere in the world, economic activities were disrupted negatively

**Note:** Special Collection: Impact of COVID-19 on the transport and logistics management.

resulting in increased poverty and vulnerability of livelihoods. According to the UNSDP report the pandemic was affecting socio-economic and gender groups differently, with women, children, poor households, persons with disabilities and people living with HIV and AIDS most adversely affected. It was stressed that there was an urgent requirement for collective responses to address the social and economic impacts of the COVID-19 pandemic, if not, suffering will escalate, endangering lives and livelihoods for years to come. For Zimbabwe, with an already huge food security problem, the closing of borders because of COVID-19 lockdown protocols, the immediate response worldwide to the pandemic, was a further serious threat to the country.

As a result of the droughts and cyclone that affected Zimbabwe, together with the 'human-made' devastations over an extended period, various humanitarian aid organizations offered aid to the people in the country. These aid organizations operated in a well-organized, formal manner supported by different functions and services, such as humanitarian logistics, the latter playing an important role in addressing these long-term challenges. At the outbreak of the pandemic the WFP was one of many partners and humanitarian aid organizations that had already provided extensive assistance to those in need in Zimbabwe (WFP 2020c), but this was not sufficient. Over the years because of many reasons Zimbabweans had left the country, migrating to neighbouring countries. One of the largest groups of foreign migrants in South Africa at that stage, and still today, are Zimbabweans. In South Africa estimates range from 1 to around 3 million Zimbabweans (there are no accurate numbers). They live and work in this country trying to make a living. Most of these Zimbabweans still have families in their country who are struggling to survive. Many of them support and provide those close to them with food stuff and other necessities. It was thus not only aid organizations that played a role in assisting the country, but humanitarian aid also came from Zimbabwean compatriots in all the neighbouring countries. What was different, however, was that this aid was organized in a totally informal manner. These informal, and unregulated, humanitarian aid came into being because of the huge need that existed in Zimbabwe. The COVID-19 pandemic had a major impact on all aspects of this informal support and aid. This case study aims at describing the aid, the informal supply chains, how they operate and how the pandemic disrupted these in a big way.

This is a case study, and the outline of the study is as follows: the Section 'Literature review – Humanitarian logistics' contains a literature review of humanitarian logistics as well as formal and informal humanitarian supply chains (HSCs). Sections 'Research design' and 'Research methodology' briefly outline the research design and methodology used in the case study. In the section 'Zimbabwe by 2020', a brief geographical overview is given of Zimbabwe; the human tragedy that developed over many years is touched on while the economic situation in the country before 2020 is outlined with an emphasis on food supply. The humanitarian aid

Zimbabwe is receiving from the diaspora in neighbouring countries, and specifically South Africa, is presented in the section 'Informal humanitarian aid – Background'. Informal HSCs as it relates to the Zimbabwe case is discussed in the section 'Informal humanitarian supply chains – Zimbabwe'. The impact of COVID-19 on the desperate situation in Zimbabwe is outlined in the section 'The COVID-19 pandemic outbreak March 2020 – Impact' as well as its effect on the informal HSCs. The section 'Discussion' briefly summarizes the aim of the case study, the limitations of the study, suggested further research and, in addition, a proposal for action plans. A conclusion is presented in the last section.

## Literature review – Humanitarian logistics

For many years, possibly centuries, humanitarian aid has been provided to assist those in need because of various emergency situations such as natural disasters, wars, etc. The objective was to provide relief to the victims. A major component of humanitarian aid is to get medical supplies, food and other emergency supplies to the affected areas and the victims. Logistics becomes critical in such situations. This led to what is called humanitarian logistics, which is defined as:

[T]he process of planning, implementing, and controlling the efficient, cost-effective flow and storage of goods and materials as well as related information from the point of origin to the point of consumption for the purpose of alleviating the suffering of vulnerable people. The function encompasses a range of activities, including preparedness, planning, procurement, transport, warehousing, tracking, and tracing, customs, and clearance. (Thomas & Kopczak 2005:2)

Noticeably, in this definition, there is no reference to profit as humanitarian organizations seek a balance between speed and costs. Furthermore, the main objective of any humanitarian logistics operation is to satisfy the requirements of those in need. This is very different from typical commercial logistics operations, where the emphasis is on having the right item in the right quantity at the right time at the right place for the right price in the right condition to the right customer. The focus is on the objectives of the supplier of products or services.

Tomasini and Van Wassenhove (2009), in one of the first books on humanitarian logistics, focused on the logistics associated in humanitarian aid. They show similarities between commercial supply chains and those used for humanitarian relief. In a HSC, there is the flow of materials (or products), information and financial information, such as normal supply chains. However, additional flows are present in HSCs, namely people, knowledge and skills. The latter is especially important in the humanitarian sector, because each time a supply chain is re-established for a new disaster, the required skills need to be reconfigured, indicating the uniqueness of every supply chain. HSCs must also be agile, adaptable and aligned.

Bean et al. (2011) provided an overview of humanitarian logistics within the South African context. They also emphasized the fact that humanitarian logistics extends far beyond emergencies, such as natural disasters, and presented two case studies to illustrate this. The first case study addressed aid given to Orphaned and Vulnerable Children (OVC) because of HIV and AIDS, and the second one dealt with the provision of donor breastmilk to vulnerable babies.

### Formal humanitarian supply chains

Over the last 10 years a lot of research has focused on delivering humanitarian aid more efficiently from a logistics or supply chain management point of view. The reason is that logistics or supply chain management is a critical, indispensable component of humanitarian aid. Agostinho (2013), one of many papers, emphasizes the key link between receiving donations, and delivering it to the victims: the more efficient the supply chain, the HSC in this case, the more resources are available for those in need. Agostinho proposes an algorithm, to be used for HSCs, that will identify and classify the main problems faced by organizations and define internal operational factors to be improved and the order in which to implement these.

A comprehensive literature review on humanitarian logistics was conducted by Kunz and Reiner (2012). They found that research, at that stage, did not focus on continuous humanitarian aid operations, slow onset disasters and human-made catastrophes.

Najjar, Dahabiyeh and Nawayseh (2019) examine HSC performance as perceived by refugees. This was a study performed in Jordan with the aim of addressing the problem of measuring the performance of HSCs.

In a study by Mbohwa (2010), the logistics systems and operations of several humanitarian aid organizations active in Zimbabwe were analyzed. These organizations face various problems and difficulties mainly around the lack of humanitarian logistics knowhow and the lack of collaboration.

Chingono and Mbohwa (2017) make the point that humanitarian intervention is required where commodities are in short supply. They use the HIV and AIDS pandemic in Zimbabwe to show that with humanitarian relief, the provision of such aid must remain distinct from political processes. Humanitarian agencies must be given the space and support needed to function independently in times of emergencies.

Mushanyuri and Ngcamu (2020) using qualitative data considered the impact of culture, leadership attitudes and the political state on the effectiveness of HSCs in Zimbabwe. Their study revealed that these had a negative influence on the effectiveness while the same study indicated that the economic state and legal framework had a positive effect.

Alani (2020) investigated the challenges facing HSCs in Iraq. Some six factors were identified, namely the lack of proper

procurement plans, the lack of cooperation between organizations, the next three factors are all financial oriented with the sixth challenge being the lack of specialized suppliers.

Southern Africa experienced a severe food crisis over the period 2002–2005. The WFP established a formal presence in the area opening an office in Johannesburg from where the humanitarian aid was managed. Lesotho, a landlocked country within South Africa, was one of the countries within the WFP regional structure. At that stage about one third of the Lesotho population was affected by the HIV and AIDS pandemic, and this had a significant impact on food production. The way in which the effort of the WFP was managed and how a proper team, using Lesotho citizens, was built over time to provide this aid is documented as a case study by Tomasini et al. (2008).

The WFP has been assisting and providing formal humanitarian aid in Mozambique since 1977. Located in the Southern Africa region, with a population of 30 million, Mozambique is a low-income and food-deficit country with escalating violence in the north of the country. Some 80% of the population does not have the means to afford adequate food. The WFP is supporting the government with its zero-hunger agenda. More than 20 countries and aid agencies are donors who support the WFP initiatives in Mozambique (WFP 2022).

Figure 10 illustrates a formal HSC. It is considered formal because there is an aid organization, or some related organization, involved through which donor aid, in whatever form, is managed and ultimately delivered to those in need.

### Informal humanitarian supply chains

There is very little literature that address, outline and describe informal HSCs. Informal humanitarian aid is not very common and research around this is almost nonexistent.

Piotrowicz (2018), in a case study, outlines the humanitarian aid provided by Polish Non-Governmental Organizations (NGOs) to Internally Displaced Persons (IDPs) in Ukraine, a situation that developed in Ukraine after the annexation of Crimea early in 2014. Most of the aid was financed by the Polish government and well organized. Piotrowicz does, however, refer to the 'family to family' aid where small parcels for Ukraine were sent through the postal operator, Poczta Polska. It was a free parcel postage service, but the content of the parcels, containing food as well as clothing and hygiene supplies, were paid for by a family in Poland. The duration of this initiative was short lived, only a month, but it did show solidarity with Ukrainians and around 450 tons were delivered in this way. This was an example of informal humanitarian aid, but the logistics involved were well organized and managed.

The Za'atari refugee camp, an area of 3 square miles of desert land, was established in Jordan at the onset of the Syrian Civil War. This was in support of the fleeing refugees from both

sides of the war. Abushaikha, Wu and Khoury (2021) develop a theory of informal supply networks using this refugee camp as a case study. A refugee camp can almost be considered a small town where all the activities of a small town are prevalent. By focusing on the building materials and housing supply networks, electricity, food and goods supply networks Abushaikha et al. (2021) were able to define the operational characteristics of informal supply networks. Aid organizations provide various forms of relief, but the camp organizes itself through networks that are self-organized, that serve specific functions establishing mechanisms to interact with the formal aid operations and the host community. On a small scale, within the refugee camp, some of the networks are very closely related to supply chains, but most of these are characterized by the social make-up of the camp community. The informal networks typically comprise individuals bonded by family, kinship or geospatial proximity while the same affiliations, networks, social groups or organizations play a significant role in the networks that are formed.

Informal HSCs can be typified by the fact that aid goes directly from the donor to those in need. The aid is spontaneous, provided by citizens, in this case, outside a country to their relatives inside a country. There is no formal organization involved. Furthermore, there are possibly hundreds, if not thousands, of small supply chains originating from various locations across the country from where the aid comes from, to the different receiving relative locations where the aid goes too.

## Research design

Humanitarian aid for Zimbabwe comes from various sources (see Figure 9) (ZIMVAC 2020:21). One of the sources is Zimbabwean relatives residing in neighbouring countries. In total 10% of the population receives aid in this way. In what form is the aid provided and how does it get to the aid recipients? This case study explores how informal HSCs are used to provide aid and outlines their significance in this Zimbabwe humanitarian aid initiative. Lastly, the impact of COVID-19 on these supply chains is explored.

Zimbabwe was selected for this case study as there are different unique aspects to the situation within this country. Firstly, Zimbabwe is landlocked and has suffered from droughts, a cyclone, a long, extended and sustainable 'human-made' disaster, the effect being that the country and its people are in a desperate situation. Secondly, many citizens left the country and now reside in neighbouring countries. They have relatives in their homeland, and they are fully aware of the suffering of their relatives. Thirdly, this diaspora spontaneously responded to provide humanitarian aid to their families left in Zimbabwe. This response was informal with no structures in place to organize or manage the aid and assistance. Informal HSCs, established by the diaspora, have now been used for many years to transport foodstuff, etc., to Zimbabweans. The concept of informal HSCs as experienced in the Zimbabwe situation is in essence unique. Given this background, this case study is an approach

to gain a more comprehensive and in-depth understanding of this real-life, complex and unique situation in Zimbabwe.

## Research methodology

The methodology used in this case study is a 'mixed method design' approach. Two sources of data were obtained in the process. Firstly, qualitative data were obtained through interactions, interviews and discussions, with Zimbabwean citizens residing in South Africa. For this purpose, the interviews were guided by a self-designed set of questions as part of a semi-structured questionnaire. Those interviewed were mainly in the hospitality industry although many held totally different positions in Zimbabwe. The aim was to get an understanding of what the aid provided by relatives entails such as food stuff and general necessities and more importantly what transport mode and mechanism was used to transport the goods to Zimbabwe.

Quantitative data were available and obtained from various aid organizations such as the World Food Programme, the World Health Organization (WHO) and others. As this whole initiative is informal, specific quantitative data are nonexistent and here the newsletters of a Zimbabwe citizen still residing in the country and also an author, Cathy Buckle,<sup>1</sup> was invaluable. A further source of quantitative data, which provided input to sketch the situation in Zimbabwe before the outbreak of COVID-19, was various government reports and also from relevant institutions in the country.

## Zimbabwe by 2020

Zimbabwe is a landlocked Republic located in Southern Africa (see Figure 1), with a population of roughly 15.1 million (Zim 2020a). It is entirely encircled by the following neighbouring countries, namely South Africa, Botswana, Zambia and Mozambique. Most of the country is elevated, consisting of a central plateau (high veld) stretching from the southwest, northwards with altitudes between 1000 and 1600 m above sea level. The extreme east of the country is mountainous, and this area is known as the Eastern Highlands. In total the country covers an area of 390 757 km<sup>2</sup> and is divided into eight provinces (see Figure 2). Zimbabwe is one of the countries that forms part of Southern Africa. The other countries include Angola, Botswana, Eswatini (previously Swaziland), Lesotho, Malawi, Mozambique, Namibia, South Africa and Zambia. The capital of Zimbabwe is Harare, the largest city, with Bulawayo the second largest city.

The composition of the Zimbabwe population is 52% females while 67% of the population live in rural areas (ZIMSTAT 2015:22, 25–26). Nine per cent of the population has a disability with life expectancy estimated at 60 years in 2017 (ZIMSTAT 2017). The population is young with about 67% below the age of 35, with the 15- to 24-year-old accounting for approximately 36% of the population.

1.Cathy Buckle is a resident of Zimbabwe. She has authored four children's books and several non-fiction books covering the situation in Zimbabwe. She also writes a short biweekly digital newsletter of events in Zimbabwe – her website is [www.cathybuckle.com](http://www.cathybuckle.com).



Source: GeoCurrents, n.d., Free Customizable Maps of Africa for Download, viewed n.d., from <https://www.geocurrents.info/geographical-education/free-customizable-map-of-africa-for-download>

**FIGURE 1:** Africa with Zimbabwe landlocked in the Southern African region.

## A human tragedy

Zimbabwe, previously Rhodesia, has had a checkered history over the last just over half a century. In 1965 the then Prime Minister of Rhodesia, Ian Smith, unilaterally declared independence from the United Kingdom. After a protracted civil war, during which 30 000 lives were lost, the black majority in the country came into power in 1980. Robert Mugabe became the president of the country that was renamed Zimbabwe. At that stage Zimbabwe was one of Southern Africa's most prosperous countries, held great promise and was considered the breadbasket of Africa. As Power (2003), who became the UN ambassador for the USA in 2013, indicated Mugabe went so far as telling Smith he had inherited 'the jewel of Africa'. She adds, Zimbabwe's economy in 1997 was the fastest growing in all of Africa; and then things started going downwards and by 2003 it was the fastest shrinking. From being a net exporter of maize, cotton, beef, tobacco, roses and sugarcane, the only exports from Zimbabwe were its well-educated professionals, who were fleeing the country by the tens of thousands. In Zimbabwe,

with some of the richest farmland in Africa, she observed then that school-going children were arriving at school with clear indications of starvation. The destruction of the country Power (2003) ascribed to the policies of Mugabe. The current reality in 2022 is that Zimbabwe is a country in crisis, facing a real human tragedy.

One of the major policies of the Mugabe regime was the introduction of land redistribution. Elver (2019), the United Nations Special Rapporteur on the right to food, in her report makes the following observation: 'the land reform altered the landscape of Zimbabwean agriculture and, over the years had serious negative effects on productivity'. In the report she points out that: 'the people of Zimbabwe are slowly getting to a point of suffering a man-made starvation'.

President Mnangagwa, who succeeded Robert Mugabe as President, stated in an appeal in 2019 for humanitarian aid that 'Zimbabwe is in the grip of a drought, aggravated by Cyclone Idai' and 'the drought itself caused a massive national crop failure, while the freak Cyclone washed away



Source: Nations Online, n.d., Political Map of Zimbabwe, viewed n.d., from [https://www.nationsonline.org/oneworld/map/zimbabwe\\_map2.htm](https://www.nationsonline.org/oneworld/map/zimbabwe_map2.htm)

FIGURE 2: Zimbabwe, provinces, capital, Harare, and towns and villages.

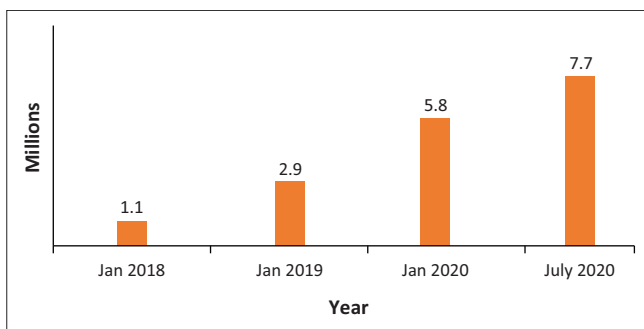


FIGURE 3: Food-insecure population over a period of 3.5 years.

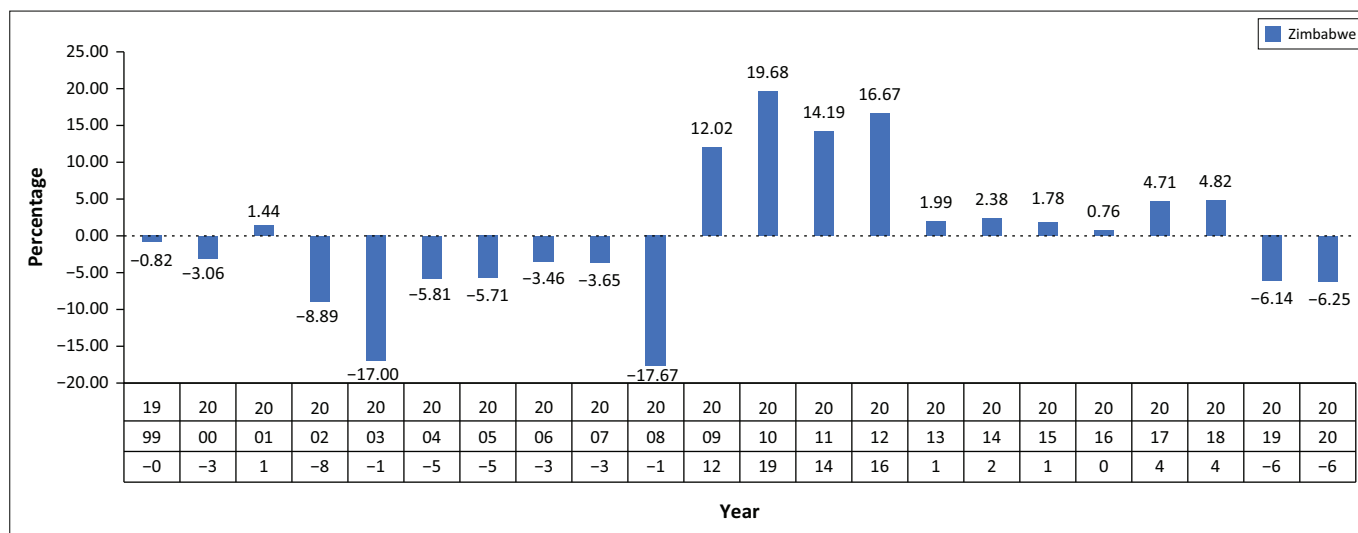
remaining crops and livelihoods in the affected districts' (Zim 2019:2). There is no reference to the impact of the policies introduced by the government over the years on the devastation in the country! In his appeal for humanitarian aid President Mnangagwa (Zim 2019) requested some \$334 million (US Dollars) for humanitarian aid. The COVID-19 pandemic aggravated the situation significantly. In two subsequent reports Zim (2020a) published in March 2020 and Zim (2020b), an update published in July 2020 in response to COVID-19, the total amount of humanitarian aid increased to \$715 million. At that stage the required amount

for support more than doubled in a matter of 8 months as a result of the pandemic. By February 2021 this number reduced to \$505 million (Zim 2021), still a significant amount.

The cumulative impact of the political destruction over many years, the drought, the cyclone and the effect of COVID-19 was enormous – a very complex emergency, largely human-made and leading to an economic crisis. Many people left Zimbabwe, mainly to neighbouring countries, while more than half of those remaining in desperate need of humanitarian aid.

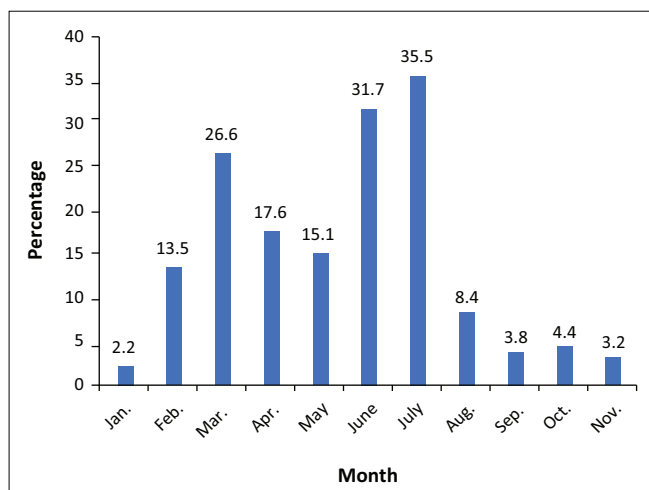
### People in need of food

There has been a dramatic increase in the number of people in Zimbabwe who needed humanitarian aid. Figure 3 shows how this number, for the severely food-insecure population, has increased from 1.1 million in January 2018 to 5.8 million in January 2020 (OCHA 2020a) (United Nations Office for the Coordination of Humanitarian Affairs (OCHA)). By July 2020 with COVID-19 in full swing, aid organizations estimated that this number had increased to 7.7 million, about half of the population in the country (SADC 2020; UNICEF 2020) at that stage.



Source: World Bank, 2022, World Bank national accounts data, and OECD national accounts data files – GDP growth (annual %) – Zimbabwe, viewed 07 February 2022, from <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2020&locations=ZW&start=1961&view=chart>

FIGURE 4: Real gross domestic product annual percentage growth rate in Zimbabwe.



Source: Zim, 2021, Humanitarian response plan Zimbabwe draft, Humanitarian Programme Cycle 2021, viewed 12 November 2021, from [https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/zim\\_2021\\_hrp\\_draft.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/zim_2021_hrp_draft.pdf)

FIGURE 5: Monthly inflation rate for 2020 in Zimbabwe.

Buckle (2020e) gives a personal view of the situation in Zimbabwe early in February 2020, before the pandemic:

This is the fact of the shocking situation; Zimbabweans are trying to survive in the second collapse in our country in just over a decade. A situation where the taps are usually dry, the power is almost always off, banks have no money, fuel stations are mostly dry, over half the population needs food aid and the rest of us can't afford most of the food in the shops.

and adds that the country has yet again ran out of its staple food, namely maize meal. Clearly a desperate situation.

Buckle (2020d) on August 28, 2020, indicated that the WFP estimated that by end of 2020 some 60% of Zimbabweans, 8.6 million people, will be 'food insecure', which is 1.1 million more than the number in July 2020 (see Figure 3).

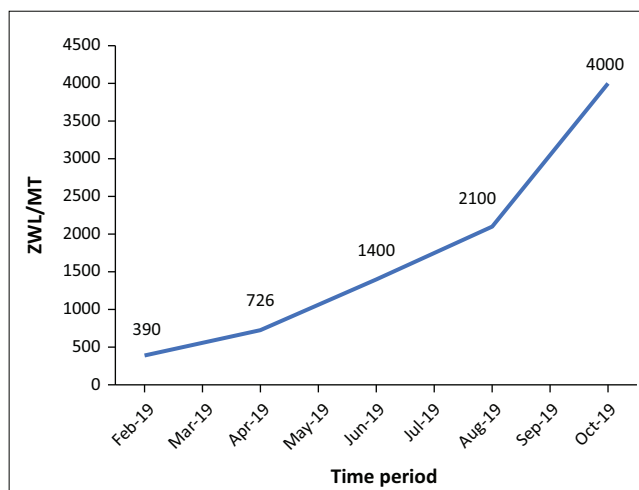


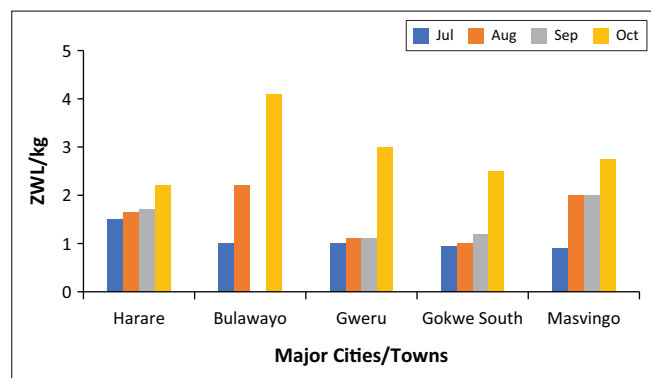
FIGURE 6: Grain marketing board prices of maize grain over the period from February 2019 to October 2019.

### Gross domestic product, maize production, maize prices and households supported in Zimbabwe

In this section a brief view is presented of the economy and one of the main food produce, maize, in Zimbabwe. There are obviously many similar data that can be shown, but the aim is just to indicate the predicament within the country.

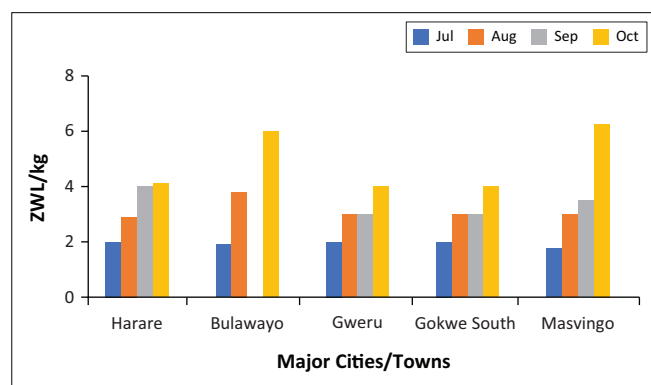
In Figure 4 the annual gross domestic product (GDP) is shown for the period 1999–2020 (World Bank 2022). Clearly things have turned the wrong way with very low positive annual growth rates from 2013 to 2018 and for 2019 and 2020 negative growth rates of more than 6%. In the year that the COVID-19 pandemic started, 2020, the inflation rate was positive every month with an extreme high of 35.5% in July as depicted in Figure 5 (Zim 2021).

Figure 6 shows the steep increase in prices paid for maize grain by the Grain Marketing Board (GMB) in Zimbabwe because of the devaluation of the Zimbabwe Dollar (ZWL)



Source: FEWS NET, 2020, ZIMBABWE food security outlook – October 2019 to May 2020, poor harvests and increasing economic hardships lead to high humanitarian assistance needs Zimbabwe, viewed 20 August 2020, from [fewsinqury.zimbabwe@fews.net](mailto:fewsinqury.zimbabwe@fews.net) www.fews.net/zimbabwe.

**FIGURE 7:** Maize grain prices in five major cities for the months July to October 2019.



Source: FEWS NET, 2020, ZIMBABWE food security outlook – October 2019 to May 2020, poor harvests and increasing economic hardships lead to high humanitarian assistance needs Zimbabwe, viewed 20 August 2020, from [fewsinqury.zimbabwe@fews.net](mailto:fewsinqury.zimbabwe@fews.net) www.fews.net/zimbabwe.

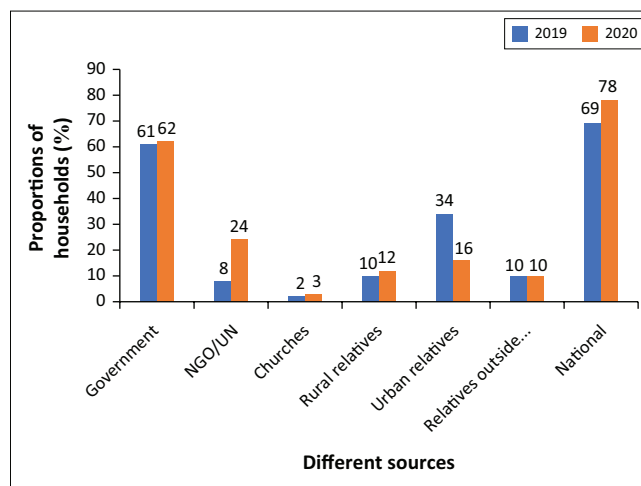
**FIGURE 8:** Maize meal prices in five major cities for the months July to October 2019.

and below-average production in 2019 (FEWS NET 2020). In October 2019 the price paid was \$4000 ZWL for a million tons of maize grain. This shows an increase of 925% from February to October 2019. For consumers there was a serious shortage of this important basic food with prices escalated substantially making it almost impossible for people to buy maize grain and maize meal. Figure 7 and Figure 8 show the increase in price for a kilogram of maize grain and maize meal, respectively, in five of the major cities or towns over a 4-month period in 2019 (FEWS NET 2020).

Buckle (2019) gives a view of what is happening to food prices in Zimbabwe in 2019:

Prices of everything have soared, many items have more than doubled in ten days. Locally produced butter and margarine (are) not available and imported butter, for those who were still able to afford it a fortnight ago, has increased from \$35<sup>2</sup> to \$80 for 500 grams. A packet of locally produced sausages has gone from \$14 to \$24 dollars; locally produced breakfast cereal from

<sup>2</sup>At that stage the Zimbabwe currency was giving in Bond dollars. A dollar bond is a bond issued outside of the USA, by a foreign company or government, that is, denominated in US dollars instead of their local currency. With 10 Bond dollars one could get one U.S. dollar on the black market.



Source: ZIMVAC, 2020, Food and nutrition security updated report, viewed 13 August 2020, from [https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/zimvac\\_2020\\_food\\_and\\_nutrition\\_security\\_update\\_report\\_february\\_2020.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/zimvac_2020_food_and_nutrition_security_update_report_february_2020.pdf)

**FIGURE 9:** Sources of support as a percentage of sampled households.

\$11 to \$24; imported breakfast cereal from \$24 to \$48; instant porridge oats from \$24 to \$61. Locally grown sugar has increased from \$8 to \$12 and is in very short supply: two per customer if you happen to be there at the right time. And then there's bread, or rather there isn't any bread. One of the country's biggest bakeries said they had stopped production because they had run out of wheat.

Almost a year later the situation is as bad and getting worse (Buckle 2020h):

In the last fortnight a box of 100 tea bags has gone from Z\$59 to Z\$159; a loaf of bread from Z\$40 to Z\$69 and supplies of sugar and maize meal have disappeared altogether. A liter of fuel has increased from Z\$21 to Z\$29 and the queues stretch for kilometers as yet again the supply chain has been choked. As I write the official exchange rate is 25 Zimbabwe dollars to one US dollar but on the black market it's 81 to one.

Finally, Figure 9 gives an indication of what percentage of households in the country were receiving support, as well as the sources of support, in 2019 and 2020, respectively (ZIMVAC 2020). Nationally, 78% of sampled households received social assistance from different sources in 2020, an increase from the 69% recorded in 2019. It illustrates how widespread and big the need was, increasing by 9% from 2019 to 2020, the year of the COVID-19 pandemic outbreak.

Although the emphasis is on food in this article, the requirements are multifaceted across the country. In the Humanitarian Needs Appeal of the Zimbabwe government the requirements in 12 different sectors, or areas, are outlined in detail (OCHA 2020b). These sectors are agriculture and livelihood, coordination (UN and NGOs), education, food security, health, nutrition, child protection, protection from gender-based violence (GBV), shelter and non-food items, water, sanitation and hygiene (WASH), early recovery and logistics and refugee response strategy. In 2020 Zimbabwe was clearly in desperate trouble.



## Informal humanitarian aid – Background

Given the above picture of circumstances within Zimbabwe, it was inevitable that family and friends living in neighbouring countries could not turn a blind eye to the suffering of their compatriots in their homeland. As is clear from Figure 9, both in 2019 and 2020, 10% of households surveyed indicated that their source of support came from relatives outside of Zimbabwe. Buckle (2020c) gives her views on this:

We are now two decades into Zimbabweans working in SA, Botswana, Namibia, Malawi and Mozambique for long hours, low wages and often without legal documentation to send money or food home to support their desperate families and relations in Zim. Unemployment is around 90% in Zimbabwe and has been since the early 2000's.

Various mechanisms were being used to provide support through sending especially food and other necessities to people in Zimbabwe. The suffering households that received support from relatives from outside the country were impacted directly from the country-wide lockdown that emanated from COVID-19 in March 2020.

According to Nyamunda (2014) this cross-border, informal 'transport and courier' support originated from the late 90s. It is known as *omalaitsha*<sup>3</sup> and operates between South Africa (other neighbouring countries) and Zimbabwe. The *omalaitsha* could be small, often unregistered, operators using bakkies, pick-up trucks or minibuses to transport money and goods, or they could be large, registered transport companies. The larger companies use depots for storage and collection of goods. *Omalaitsha* also offer a door-to-door service. Many migrants in South Africa prefer money to be transported. They believed that the financial institutions in Zimbabwe cannot be trusted when funds are transferred electronically as there is no guarantee that the funds would be accessible in Zimbabwe. The service provided by the *omalaitsha* was quite profitable and Nyamunda (2014) reports that one return trip at that stage could show a profit of R7000. This is confirmed by Buckle (2020c) as she states:

People with pick-up trucks and transport vehicles have been making a very good living out of this system for many years and because people are desperate you pay whatever they ask. ... sometimes the transporting costs are greater than the cost of the goods being moved. The bigger the box, the more it costs to bring to Zim.

Many of the Zimbabwean diaspora living in South Africa form part of those supporting relatives and others in their country. Below are a few brief experiences of Zimbabweans, living in South Africa, who were interviewed and who provided support before the COVID-19 pandemic to relatives in their homeland:

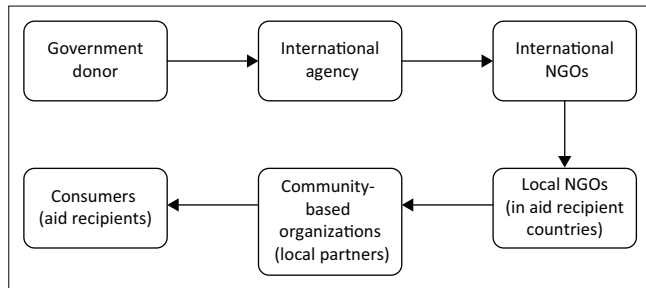
1. A gardener worked in one of the more affluent suburbs of the City of Johannesburg. He lived with his wife and their one child in Diepsloot, a densely populated township in

<sup>3</sup>The name *malaitsha* is a SiNdebele term, which means 'the one who carries a heavy load'. *Malaitsha* is singular whereas *omalaitsha* is plural.

the north of Johannesburg. Too many in South Africa Diepsloot are associated with poverty, hopelessness and violent crime. From his earnings as a gardener, he had to provide for his small family. It left him with relatively little spending money every month. As outlined above his relatives in Zimbabwe, who resided in Bulawayo, were struggling and ran out of food regularly, a situation that worsened with COVID-19 and has persisted ever since the start of COVID-19.

Using mobile phones, the family could convey their most urgent needs as far as groceries are concerned. Maize meal, cooking oil, fish oil, etc., were the most frequently required items. If funding allowed it, these items were purchased at large retail stores, spending up to R1000–R1500 a turn. These items would then be taken to a person (one of the *omalaitsha*) in a light delivery vehicle (called a 'bakkie' in South Africa) that provides service to deliver these goods to families in Bulawayo. When the stuff arrives in Bulawayo a message was sent to confirm receipt. The private (informal) delivery service was good, nothing was ever lost, and items were delivered to the family home in Bulawayo. The transportation cost at that stage was around R1200, depending on the size and weight of the goods. One consignment therefore cost over R2000 for someone who could hardly make a living for himself and his family in South Africa. When the COVID-19 pandemic struck he was in Zimbabwe and could not return because of the lockdown. The result was he lost his employment as a gardener and with no income he was not able to support relatives any longer.

2. A Zimbabwean entrepreneur working in the Johannesburg region and living in North Riding, a suburb of Randburg, offered a delivery service to Zimbabwe before COVID-19, operating as one of the *omalaitsha* but on a part-time basis. The bakkie typically delivered goods to Bulawayo, leaving on a Friday afternoon to reach Bulawayo after 14–16 hours. Challenges experienced were being stopped by police on the way, both in South Africa and Zimbabwe. Crossing the border, where customs checked everything on the vehicle, was both a challenge and time consuming. Bribes are common at border posts but according to this person he never had to pay any bribes. Deliveries were to various addresses in Bulawayo and normally the vehicle returned empty. The service was provided on demand, to ensure a full or close to full load, with the number of 'clients' ranging between 20 and 25. There was no fixed transport cost structure, with costs being negotiated. Nevertheless, the service provided was very lucrative implying that those using the service paid quite a premium to have goods delivered to their relatives. With COVID-19 this person was not able to provide any type of service for many months.
3. A waitress moved to South Africa several years ago with one of her kids. Her older child was studying in Zimbabwe and stayed with a family in Harare. She worked in a restaurant in Pretoria where she lived before the pandemic and where she still lives. As a waitress, she did not receive



Source: Oloruntoba, R. & Gray, R., 2006, 'Humanitarian aid: An agile supply chain?', *Supply Chain Management: An International Journal* 11(2), 115–120. <https://doi.org/10.1108/13598540610652492>

**FIGURE 10:** A typical humanitarian supply chain.

a fixed monthly income; her only income was from tips she received. Even before COVID-19 the economic situation in South Africa was under pressure with fewer people patronizing restaurants, influencing her income directly. The impact of the COVID-19 was devastating to her as with all those many Zimbabweans involved in the hospitality industry. At the end of most months, before March 2020, essential groceries such as maize meal, cooking oil and soap worth around R1000, was sent to the family in Harare. The goods were sent by bus in this case. To achieve this the goods had to be purchased and then taken to the bus terminal from where it departed to Harare arriving at its destination 2 days later. The transport cost was around R500. At arrival the goods needed to be collected from the bus terminal in Harare. Typically, the family sent a monthly 'order' via a WhatsApp and confirmed receipt in the same manner. The hospitality industry was the one possibly affected the worst by COVID-19 and all the associated regulations to prevent the spread of the virus. It was only after 18 months or so that the restaurant started operating again, the impact on providing relatives with desperately needed food being devastating for this person.

4. Other mechanisms of supporting relatives is Zimbabweans sending money electronically to relatives, many similar cases, as outlined above, of aid from relatives in South Africa to family in Zimbabwe could be found. In addition, people would take food with them when visiting relatives in Zimbabwe: they would find various mechanisms to get food across. Seeing the possibilities to provide a profitable service a company, Malaicha,<sup>4</sup> was established in 2019 to deliver food and other items to relatives in Zimbabwe. Malaicha also have stores in Zimbabwe, where goods can be collected on the same day it was purchased by relatives in South Africa. Access to the internet was required to use this online shop.

At the outbreak of COVID-19 the Zimbabwe's finance minister, Mthuli Ncube, stated the country was facing a 'catastrophe' and needed international aid to fight the combined impact of the drought and the COVID-19 pandemic (Kuyedzwa 2020). Informal humanitarian aid from neighbouring countries stopped with all the informal supply chains having been broken completely.

4. Malaicha's website is [www.malaicha.com](http://www.malaicha.com).

## Informal humanitarian supply chains – Zimbabwe

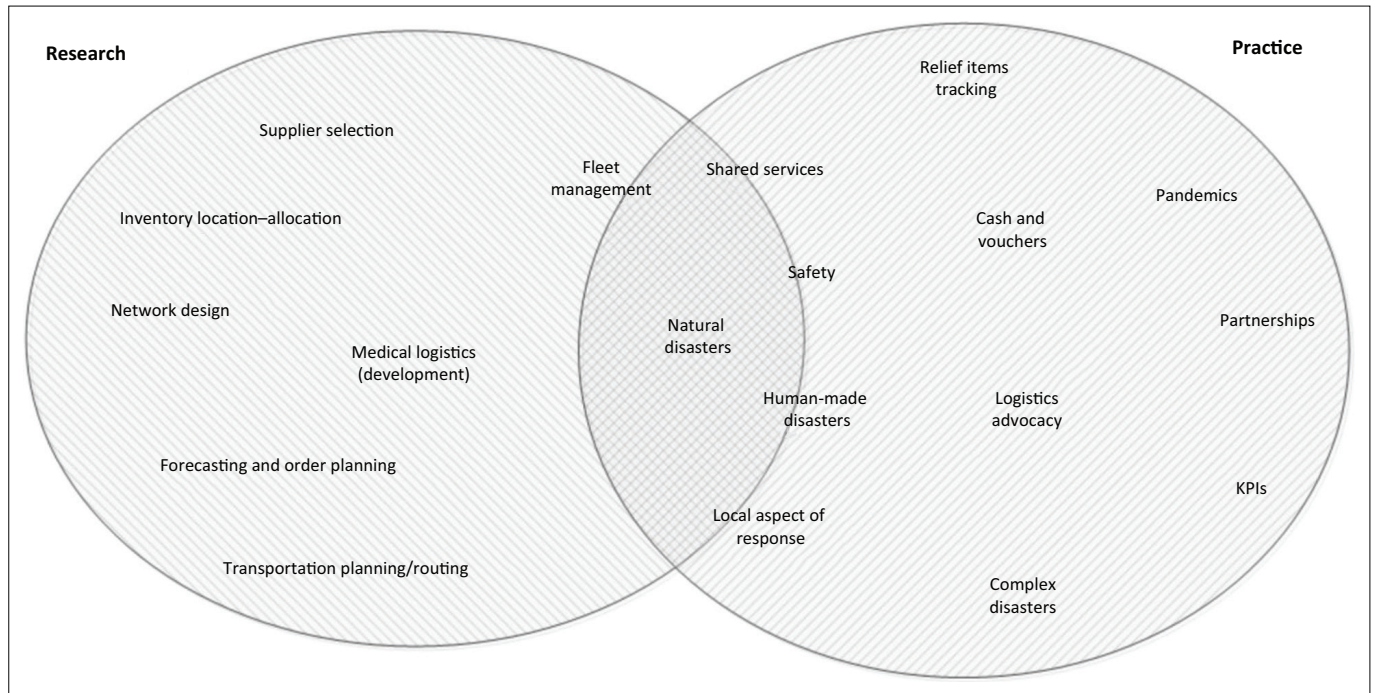
Given the outline in section 'Informal humanitarian aid – Background' of informal humanitarian aid in the case of Zimbabwe, the focus in this section is on the HSCs as it relates to this aid. Informal HSCs have no formal definition and the objective here is largely to highlight the differences between formal and informal HSCs.

A typical HSC is shown in Figure 10. There could be different aid organizations as shown in the figure, namely a country, aid agencies and NGOs. They could all work through local NGOs or community-based organizations in the recipient country to supply goods and aid. Direct assistance to those in need typically don't happen. Then there are those benefiting from the aid, the consumers or the aid recipients (Oloruntoba & Gray 2006). Furthermore, these supply chains are often unstable, and they can break down at the receiving end, for example, a receiving airport can become cluttered and overloaded with goods making it impossible to locate these and then getting things to the recipients. Instability can be caused through politicized donations by governments and the competitive nature of fund-raising from private donors (Oloruntoba & Gray 2002).

An informal HSC in its simplest form is where the donors deliver aid directly to the aid recipients. There are close similarities to the 'informal supply networks' as described by Abushaikha et al. (2021). Relatives from outside Zimbabwe receive basic items such as food and clothing delivered to their family and relatives in their home country – donors deliver aid to consumers directly (Buckle 2020c; Nyamunda 2014). From the information gained through the interviews it was clear that the aid can be delivered by a hired bakkie (vehicle), a taxi, a bus or train while relatives can have various items with them for their relatives when they visit them in their own vehicles. These supply chains are set-up informally, they operate when there is a need, they are inconvenient, unreliable and could be expensive. They are also unstable and can break down.

In formal humanitarian aid and the related supply chains, there are formal structures in place to manage the aid. People in charge are typically knowledgeable, experienced and responsible (eds. Kovács & Spens 2012; Tomasini & Van Wassenhove 2009). This is not necessarily the case with informal humanitarian aid and the associated supply chains. The donors are very dependent on others to ensure the aid recipients do, in fact, receive the food stuff and other items.

According to Thomas & Kopczak (2005:2) humanitarian logistics comprises the following functions: 'preparedness, planning, procurement, transport, warehousing, tracking and tracing, customs and clearance'. Procurement, transport, customs and clearance are functions found within informal supply chains. There is basically no preparedness and planning while goods are being delivered directly to



Source: Besiou, M. & Van Wassenhove, L.N., 2020, 'Humanitarian operations: A world of opportunity for relevant and impactful research', *Manufacturing & Service Operations Management* 22(1), 135–145. <https://doi.org/10.1287/msom.2019.0799>

**FIGURE 11:** Matching research with practice in humanitarian operations.

the recipients of the aid, negating any warehousing function, no inventory is kept anywhere, while tracking and tracing are also absent.

With natural disasters, where there is a rapid onset, the humanitarian response can typically be divided into three phases (Maspero & Ittmann 2008): phase one, called the Ramp Up phase, when the aid and infrastructure required are deployed to the area; phase two, the Sustainment phase, when the staff, the aid and assets are fully employed to provide the support for the entire period of the crisis; and finally, the Ramp Down phase, when the support and aid is gradually reduced and ultimately withdrawn. The situation in Zimbabwe is largely a human-made disaster. Buckle (2020c) outlines it vividly with the aid being one long, continuous sustainment:

We are now two decades into Zimbabweans working in SA, Botswana, Namibia, Malawi and Mozambique for long hours, low wages and often without legal documentation in order to send money or food home to support their desperate families and relations in Zimbabwe.

In the case of informal supply chains, the main objective is to get the right product (mainly maize meal as the staple foodstuff) to the right place and the right recipient, clearly showing the difference with typical commercial logistics operations.

In a recent article, Besiou and Van Wassenhove (2020) look holistically at humanitarian aid, research and practice, by reflecting on the past, present and future of humanitarian operations. They indicate that humanitarian aid organizations have recognized the importance and role of supply chain

management in providing aid to recipients. Here many of the commercial concepts have been adapted to suit the needs of aid organizations, but they also show that problems faced by humanitarian practitioners have evolved rapidly. The objective of their paper is to see how to match challenges faced by practitioners with the research in the area and using this to identify and outline the opportunities for research that is relevant and impactful (see Figure 11). The possibility, potential and concept of informal humanitarian aid, and associated supply chains, are not mentioned. This could, however, be an area where practical challenges can be addressed by appropriate research. Based on what is presented here for the Zimbabwe situation it may be challenging.

The typical disaster management lifecycle consists of four phases: mitigation, disaster preparedness, disaster response and disaster recovery (CDP 2021). Relatives respond to the disaster, by buying food and other items to reduce the impact of the disaster and using the informal HSC to get the goods to the recipients. In this manner the urgent needs are mitigated. There is, however, no 'disaster preparedness', 'disaster response' or 'disaster recovery' phase.

Without a formal definition for informal HSCs the aim in this section was to show how it differs, and where the contrasts are, with formal HSCs.

## The COVID-19 pandemic outbreak March 2020 – Impact

Pandemics are identified as one of the disasters that could potentially require humanitarian aid. No one across the

world, at the start of 2020, contemplated the possibility of a pandemic that could have a global impact. COVID-19 was declared a global pandemic on March 11, 2020, by the WHO (2020). The WHO indicated that this was a highly infectious disease. As the pandemic spread most countries responded by announcing a total lockdown. Some of the implications of the lockdown were the closing of borders, travel was banned and citizens were ordered to stay at home. The government of South Africa announced an initial lockdown of 3 weeks beginning March 26, 2020. Zimbabwe followed suite shortly afterward with the lockdown starting on March 30, 2020.

Zimbabwe, devastated by political greed and incompetence over many years, a situation exacerbated by a terrible drought and cyclone, had to now brace itself for the onslaught of this deadly virus. Within days after the onset of the lockdown Chingogo (2020) reported that the poor expressed serious doubts about the lockdown:

[W]hile affluent Zimbabweans stocked their pantries with food last weekend in preparation for the lockdown, which began on Monday, poor people were unable to do so. With basics such as mielie-meal in short supply, many fear they may not survive!

For the poor, hunger because of COVID-19 restrictions was a huge concern.

With the proclamation of the lockdown all informal aid, using whatever mode of transport, from the diaspora in South Africa to relatives and families in Zimbabwe came to an abrupt standstill. Informal supply chains were broken completely. For a significant portion of the population in Zimbabwe no foodstuff was forthcoming from relatives in South Africa for the foreseeable future. The impact was immediate as many of those in Zimbabwe lived a hand-to-mouth life with no stock or inventories of food. As early as May 2020, Ncube (2020) reported that the Zimbabwe Community in South Africa was engaging with the South African government to open the borders between the two countries to allow *omalayitsha* to resume its operations. At that stage with South Africa at level 4 of the national lockdown and Zimbabwe at level 2 only trucks were allowed to cross the borders. Illegal activities such as bribes related to the pandemic already appeared at border posts.

By September 2020 only commercial cargo was allowed through the borders (Dlodlo 2020). To assist Zimbabweans in South Africa, the Zimbabwe Revenue Authority (Zimra) introduced a 'consolidated private imports cargo facility' at the border enabling people to send food home as 'most Zimbabweans rely on their relatives in the diaspora for their general upkeep and most of them employ the services of *omalayitsha* to send their food parcels' (Dlodlo 2020). Over this period some of the smaller operators upgraded to commercial vehicles, but many were pushed out of business because of this CITE (2020). In November 2020, many of the smaller *omalayitsha* wanted to resume operations using their smaller vehicles but that was still not allowed. There was, however, indication that the borders were going to be opened on 1 December 2020.

In February 2021, Bulawayo News 24 (Bulawayo 2021) reported that there was a 2 hours standoff with police when many *omalayitsha* were refused entry into Zimbabwe because of lockdown protocols. These regulations only allowed 'commercial cargo, diplomats on government business, bodies for burial, light commercial trucks (15 tonnes), foreigners legally resident in Zimbabwe and returning residents' to enter Zimbabwe through the land borders. The South African authorities allowed *omalayitsha* through, but they were stopped by the Zimbabwe authorities, and this led South African transporters to block traffic from both sides. The implication being that almost a year since the outbreak of the pandemic, the informal supply chains were still not allowed to operate as before COVID-19, making food or other items reaching families in Zimbabwe problematic.

Within South Africa the diaspora people were also affected in different ways by COVID-19. Like many South Africans many of the Zimbabweans lost their jobs, many earned no or very little income, and they were thus in no position to support their relatives in Zimbabwe. Those who were able to continue supporting their relatives had to deal with and overcome difficulties of getting foodstuff to Zimbabwe. Transport costs increased as well.

How did people in Zimbabwe itself had to survive during lockdown? Here is a short timeline as to how Cathy Buckle experienced and reported it, very briefly:

Day 5 (3 April 2020) – she knew people living hand to mouth, and making a living by selling fruits and vegetables from stalls along the road would be getting desperate; on TV she saw big crowds desperately waiting to buy maize meal, no adherence to COVID-19 protocols, etc. (Buckle 2020b).

Day 20 (18 April 2020) – President Mnangagwa addresses the nation but after 25 min the TV screen froze, no indication of extending the lockdown (it was extended by 14 days), nothing about reopening shops, etc., and no indication of how the government plans to feed 7.7 million people (Buckle 2020i).

Day 33 (2 May 2020) – the lockdown is extended by another 14 days and the President openly discusses and exposes the nation's realities, namely 'illegal sanctions', 'informal economy', 'import dependent' economy and 'notable diaspora' (Buckle 2020a).

Day 43 (15 May 2020) – school kids are herding cattle, not at school and many don't have the opportunity for online education; financial assistance promised on 30 March by the government to vulnerable families has not materialized (Buckle 2020f).

Day 61 (12 June 2020) – prices of foodstuff have gone through the roof (see Figure 5 for monthly inflation rates); for most Zimbabweans the struggle to survive is unbearable (Buckle 2020g).

5 January 2021 – re-introduction of total lockdown; hospitals and clinics are overwhelmed and struggle to handle the numbers of patients (Buckle 2021).

Chirisa et al. (2021) reflect on the impact of COVID-19, from a social point of view, on the Zimbabwe society. For more than the last two decades the economy in Zimbabwe has been on a downward spiral with the result that remittances from

migrants, even before COVID-19, have become a major livelihood source. Rural communities rely heavily on cross-border transporters popularly known as '*omalayitsha*' for basic commodities sent by their relatives in neighbouring South Africa and Botswana (Habakkuk Trust 2020). However, the closure of borders because of the lockdown is likely to have a huge impact on community members whose livelihoods were largely dependent on diaspora remittances. In urban areas these remittances in the form of cash flows are complemented by flows of foodstuffs. With COVID-19 these contributions from relatives outside of Zimbabwe are threatening urban and rural livelihoods.

## Discussion

At the outset it was stated that the aim of this case study was to show the impact of COVID-19 on informal HSCs. These informal HSCs played a significant role in the aid offered by Zimbabwean citizens, residing in neighbouring countries, to their relatives in Zimbabwe. At the onset it was shown how desperate the humanitarian crisis was in Zimbabwe before the pandemic. This case study outlines how almost 10% of the Zimbabwean population received humanitarian aid from their relatives mainly through transporting much required goods by road to their destinations in Zimbabwe using 'bakkies' or light delivery vehicles, other commercial vehicles, buses, etc. In this way indispensable basic foodstuff such as maize meal, cooking oil, etc., were delivered to desperately hungry people. The case study also highlights the concept of informal HSCs, a concept that has almost no presence in the literature. Lastly, the intention was also to show the devastating impact of COVID-19 on a critical component of humanitarian aid to people suffering in Zimbabwe; the informal HSC were completely broken.

One of the limitations of this case study is the small sample of Zimbabweans used in obtaining inputs to outline and describe the informal humanitarian aid. However, the inputs did correlate with the quantitative data obtained from primary sources (see Nyamunda 2014 and Buckle 2020c). The scope of this informal humanitarian aid was not quantified, and the real impact of COVID-19 on the volume of foodstuff and other necessities, which did not reach the aid recipients, was not determined. A further limitation of this case study is not being able to get a sense of the size and scope of the supply chains used for this informal humanitarian aid. How far across South Africa do these supply chains stretch, are there many of these, and are the origins of the supply chains largely big metros or also smaller towns and locations?

Further detailed research is required to get to a point where the aid and supply chains can be operated more efficiently. A detailed survey reaching Zimbabweans residing across South Africa to determine what percentage of this grouping is involved in providing the aid. What kind of aid in the form of foodstuff and other goods or money are provided and what is the typical size of the aid, both the quantity and the volume? Is the support from all over South Africa or is it

localized in the main centres? Data should also be collected at border posts to get a sense of what is moving through the borders to Zimbabwe.

Given the nature of a pandemic such as COVID-19, it is almost impossible to plan and be prepared to mitigate against the effects of this phenomenon. Worldwide everyone is finding this an enormous challenge. It is inevitable that informal HSCs will be affected as well. Given the COVID-19 protocols, introduced by the respective governments, these supply chains were broken immediately. To mitigate against this, given the specific humanitarian aid outlined here, the only way to reduce the risks is to store inventory in Zimbabwe. Within the context of the case study this makes no sense. There is nothing the aid donors can do except to transfer money to their relatives.

When a more detailed understanding of the size, scope and extent of the aid has been determined through proper research, a few schemes or action plans can be proposed. To suggest formal structures negates the informal nature of the support. Government involvement is not feasible as there is a lack of trust towards those in power. A NGO could be established to coordinate the aid activities. This could entail closer collaboration between those providing the aid, to consolidate loads of goods and the delivery thereof, introducing more effectiveness and efficiency. More and detailed data would guide additional actions.

## Conclusion

The informal HSCs between Zimbabwe and its neighbouring countries allow Zimbabweans in these countries to provide indispensable humanitarian aid to their relatives back home. As Walters (2021) indicates supply chains are typically able to withstand many risks such as droughts, famine, unrest, etc., but COVID-19 has indeed been a 'perfect storm' for the informal HSCs. With some of the strictest lockdown protocols by the South African government, where international borders were closed for 'bakkies', pickup trucks and combis for an extended period, these supply chains were broken completely. There is no doubt that it had a devastating effect on a significant percentage of the Zimbabwean population. The suffering of these people, who were dependent on especially foodstuff from their relatives, worsened and remained so for an extended period.

Many of those entrepreneurs who operated with their smaller vehicles to deliver goods to Zimbabwe went out of business. The consequence of this is difficult to determine. Those who used their services will possibly have to pay more in future for this service when traffic across borders return to normal. In addition, some of these smaller operators reverted to illegal means during COVID-19 to get goods across the borders while protests and scuffles with police increased since the beginning and during the pandemic. Bribes of various kinds, especially at border posts, must have become a more common occurrence.

In this case study it was shown how COVID-19 came at a time when an already struggling Zimbabwe was recovering from a severe drought and a cyclone that wreaked havoc in parts of the country. The economy was basically on its knees, and Zimbabwe had to now deal with a deadly disease that many well-resourced countries have not been able to contain. In the process the informal HSCs that ensured aid to parts of the population were abruptly severed and broken completely.

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## Competing interests

The author has declared that no competing interest exists.

## Author's contribution

I declare that I am the sole author of this research article.

## Ethical considerations

'Stories' of three humans are reflected in the article, but there is no mention of names, et cetera. They all gave their consent but requested that their names should not be mentioned.

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## Data availability

The authors confirm that the data supporting the findings of this study are available within the article [and/or] its supplementary materials.

## Disclaimer

The views and opinions expressed in this article are those of the author and do not necessarily reflect the official policy of any affiliated agency of the author.

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