

Centre for Rural Development (SLE) Berlin

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Agency in South Africa's food systems

A food justice perspective of food security in the Cape Flats and St. Helena Bay during the COVID-19 pandemic

Nicole Paganini, Hilda Adams, Khutala Bokolo, Nomonde Buthelezi, Johanna Hansmann, Washiela Isaacs, Nomonde Kweza, Alexander Mewes, Hazel Nyaba, Vuyani Qamata, Vincent Reich, Moritz Reigl, Lara Sander, Haidee Swanby



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Seminar für Ländliche Entwicklung | Centre for Rural Development

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Study in cooperation with Heinrich Böll Foundation South Africa, Solidaridad Southern Africa, and INKOTA netzwerk e.V.



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Preface

For 59 years, the Centre for Rural Development (SLE, Seminar für Ländliche Entwicklung), Humboldt-Universität zu Berlin has trained young professionals in the field of German and international development cooperation.

Three-month empirical and solution-oriented research projects conducted on behalf of German or international development agencies form an integrated part of the one-year post-graduate course. In interdisciplinary teams and with the guidance of experienced team leaders, young professionals carry out assignments on innovative topics, providing consultancy support to the commissioning organisations while involving a diverse range of actors from household to national levels in the process. The outputs of this applied research directly contribute to solving specific development problems.

The studies are mostly linked to rural development themes and have a socio-economic focus, such as improvement of agricultural livelihoods or regimes for sustainable management of natural resources. The host countries are mainly developing or transforming countries, but also fragile states. In the latter, themes such as disaster prevention, peace building, and relief are examined. Some studies develop new methodologies, published in handbooks or guidelines. Further priorities are evaluations, impact analysis, and participatory planning. In the future, however, studies may also take place in the Global North since the Sustainable Development Goals (SDGs) are a global concern.

SLE has carried out more than two hundred consulting projects in more than ninety countries and regularly publishes project results in this series. In 2020, SLE teams completed studies remotely in South Africa, Cambodia, Benin, and the African Union.

The present study analyses food security in South Africa and was conducted in cooperation with the Weskusmandjie in St. Helena Bay, the Cape Town Urban Research Farmer Club, Heinrich Boell Foundation in Cape Town, Solidaridad Southern Africa, and INKOTA netzwerk e.V.

We wish you a stimulating read.

Prof. Dr. Bernhard Grimm
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Acknowledgements

This study is a multi-authored work, it speaks with many voices and mirrors the unique working and writing styles, passions, and learnings of each contributor. As the coordinator of this undertaking, I wish to express my sincere gratitude to all of those who contributed to this process; everyone added value, contributed significantly, and made the process a success.

This study was conducted as a follow up to a project documenting the challenges faced by small-scale farmers in different countries during the first weeks of the COVID-19 pandemic. It was further embedded in a co-research processes that started in 2016 and will continue beyond the realm of the SLE work. I would especially like to thank Nomonde Buthelezi from Cape Town, who was instrumental in advocating for a deeper exploration of food security in marginalised communities and encouraged this specific study. The 2020 pandemic forced us to rely on digital, remote research and learn from its benefits. It allowed us to push boundaries on conventional learning approaches and adapt the SLE course programme. I am very happy that we were able to conduct this rather unconventional study with wonderful partners from food producing communities, civil society, and academia.

I was very fortunate to work alongside a talented, smart, and ambitious team in Berlin. I would like to thank Alexander Mewes, Lara Sander, Johanna Hansmann, Moritz Reigl, and Vincent Reich for your great work and energy in this study and your patience and adaptability during the year. Though it turned out to be so entirely different from what you had wished for, we at least made it to Rome for a few weeks and the hinterlands of Brodowin. Each of you made significant contributions to the study.

My deepest gratitude goes to the co-researcher team. You demanded this study, planned it, carried it out, and, ultimately, made it what it is. Your passion for collaborative learning and for more democratic and decolonialised knowledge systems is impressive. To repeat Vuyani's words from the digital Food as a Commons event, *"When we speak about food as a commons, we have to understand that knowledge of food security and food systems should also be a commons and not the privilege of the few experts."* Thank you Nomonde Buthelezi and Hazel Nyaba in Mfuleni, Khutala Bokolo and Benji Nkwankwa in Khayelitsha, Washiela and Yaaseen Isaacs in Mitchell's Plain, Vuyani Qamata and Nomonde Kweza in Gugulethu, and Hilda Adams in St. Helena Bay for your work, your wisdom, your energy and for bringing so many wonderful people from your community on board.

My gratitude goes to the enumerators and mappers, who did the hard work in the field, on their phones, and in many calls. I wish to say enkosi kakhulu and baie dankie to Paula Qamata, Jael Qamata, Sive Fihla, Yaaseen Isaacs, Benji Nkwankwa, Khutala Bokolo, Ntlaahla Buthelezi, Christian Adams, Sanelisiwe Nyaba, and Yolanda Makhananda. You all did an amazing job.

We also would like to thank all 1,824 persons who completed the food security survey. A special thank you goes to the fifty people who shared PhotoVoices with us and helped us gain glimpses into their lives through the lens of their phones. I would further like to thank all key informants for their time and enlightening interviews, which were of value to the Berlin team who sought to understand the local context and politics.

We were fortunate to be supported by passionate partners and collaborators. I am tremendously thankful to Heinrich Boell Foundation. We want to thank Katrin Seidel for her cooperation, Lamese Abrahams for the smooth administration, and of course Keren Ben-Zeev for her support and valuable suggestions, for pushing us to our boundaries, and for enabling the on-site team to continue their inspiring local food committee initiative. We were supported by Solidaridad Southern Africa. Here, Karin Kleinbooi was a passionate partner and driver of the process, particularly in the important stage of sharing results. In Berlin, we were supported by INKOTA Netzwerke e.V. with Lena Bassermann and gained valuable insights in their advocacy work on agroecology, small-scale producers, and the politics of agriculture. Haidee Swanby supported this work as a focus group discussion facilitator, added a critical and much-needed political lens to the work and writing, and advised and guided the future plans of the team. Jane Battersby acted as the academic advisor for this study and I would like to say thank you for the valuable suggestions, comments, and critical reflections throughout the research.

Boniface Mabanza Bambu not only reminded the SLE team of our White privileges as a trainer, he also raised awareness for the study in South Africa and supported the team in Berlin with impactful reflections. I wish to thank Stefanie Lemke from BOKU Vienna / CAWR Coventry University for her comments on the Berlin team's final presentation and her initiative to produce a podcast series. In February 2021, we had fantastic speakers who, during the Food as a Commons workshop, shared valuable insights during a powerful discussion. I would, therefore, like to thank José Luis Vivero-Pol, Jane Battersby, Vuyani Qamata, Sipokazi Ndudane, and Sonia Mountford for making this webinar a success.

iv Acknowledgements

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Last, but not least, I would like to express my gratitude to the whole team back home, at the Centre for Rural Development, SLE, particularly Silke Stöber, Margitta Minah, Susanne Neubert, and Markus Hanisch who agreed to do this unconventional study and to take an unusual route in their study programme. Teaching during a pandemic challenged all of us, but I think we managed a successful year together. I am very grateful for your trust and financial support. The SLE, and especially you dear Silke, have contributed fundamentally to developing the concept of co-research. This study is certainly one result of these critical reflections.



Team South Africa: Co-researchers from Cape Town and St. Helena Bay during the PhotoVoice analysis in December 2020.



Team Berlin during a field trip to Rome in October 2020.

Executive summary

The COVID-19 pandemic and its control measures have had a devastating impact on household food security in South Africa. The pandemic brought existing food injustice patterns such as spatial inequality, intersectionality, and uneven power relations to the forefront resulting in the normalisation of food insecurity. It also created a new movement of charity and fostered new alliances for solidarity.

The project consortium conducting this study consisted of a team of five SLE study programme participants, co-researching community members from research sites, and supporting civil society members and researchers from Cape Town and Berlin. This project is grounded in the concept of co-research, which is a more radical and inclusive way of doing participatory action research and relied on the cooperation of local community members who joined, shaped, and drove the process. This approach allowed a broad understanding of the sensitive and intimate topic of food insecurity by involving co-researchers in contextualisation and triangulation and by adding their voices and lived experiences to the findings.

This study scrutinises household food security in five research sites in marginalised communities in four neighbourhoods of the Cape Flats and in a fishing settlement in St. Helena Bay along the west coast. The survey was conducted in September 2020 (half a year after the COVID-19 pandemic hit South Africa) and three months after the easing of strict lockdowns. Data was collected using digital data collection tools, with local enumerators conducting interviews face to face and via telephone and social media networks. Images were provided by randomly selected community members to provide a view of societal challenges through photography. In addition, enumerators mapped food outlets in their communities. The SLE team conducted several interviews with key informants from the research sites and gained crucial insights into the qualitative findings.

The study explores household food security by making use of the food insecurity experience scale (FIES). We found food insecurity is significantly shaped by the place people live and the intersectional challenges in that place. It is a dominant challenge in all the research sites, with St. Helena Bay most food insecure. Households are more likely to be food insecure when they are woman-headed, are unemployed (informally or formally), large (more than five members), or involved in the food system, for example as urban farmers, fishers, or employees of community kitchens, supermarkets, restaurants, or informal and formal food retail.

The right to food is enshrined in South Africa's constitution, yet the pandemic revealed that participating in a food system and having information, choice,

an enabling environment, and a voice in the system is a challenge. Agency means that individuals or groups have the power to make their own decisions about what foods they eat; what foods they produce; how that food is produced, processed, and distributed; and can engage in processes that shape food system policies and governance. The study measured how agency changed post-COVID-19 and found urban community members' agency increased slightly over this period. The findings further show that those engaged in the food sector have more agency to advocate for a just and inclusive food system.

The COVID-19 pandemic created momentum for change and called for an overhaul of existing food injustice patterns to address community members' challenges such as stalled fishing permit processes and distribution of foods produced by food-insecure urban farmers to up-scale markets. While long-term changes should be systemic and sustainable, the nature of the crisis called for emergency support. Food aid was seen by participating community members as a central theme that juxtaposed solidarity. Co-researchers identified community kitchens as a solution to support rapid food distribution in communities. They were established by individuals, collective and community organisations, and faith-based organisations, were financed by government and corporate sector funding, were often administered by women, and were supported by civil society. The decreases in public, philanthropic, and state funds hampered the longevity of community kitchens and might increase food insecurity again.

The development of a collaborative food governance structure is a common theory of change, building on co-created knowledge of local food systems and their drivers, potentials, and fault lines. A promising initiative is the establishment of networks of local food committees to create circular economies. These committees foster community engagement and capacity building while increasing agency over food systems. In triangulating, discussing, and contextualising their research results, the co-researcher team realised the importance of active participation in food governance processes through these committees. As a result, they built structures that allow them to engage with policy actors. While the COVID-19 pandemic aggravated the fragility of an already insecure food system and placed populations at risk of hunger, it also created space for communities to seek solidarity and enter political debates to advocate for long-term food security solutions. This research provided communities with data that supported their observations and allowed them to articulate their demands for agency or voice in their local food system governance.

Isishwankathelo

Ubhubhane we-COVID-19 kunye namanyathelo okuwulawula zibe neempembelelo ezitshabalalisayo ekufumanekeni kokutya emizini eMzantsi Afrika. Lo bhubhane uye waveza iipateni esezikhona zokungabikho kobulungisa ekufumanekeni kokutya pateni ezo zifana nokungalingani kwemithombo, intlanganisela yezinto ezifana nohlanga, isini nodidi ekuhlaleni, kunye namandla angalinganiyo oko okukhokelele ekulungisweni kokunqongophala kokutya. Ubhubhane we-COVID-19, kwelinye icala udale umbutho omtsha wesisa waze wamkela umanyano olutsha lwembumba yamanyama.

Iqela leprojekthi ebeliqhuba olu phononongo belineqela labathathi nxaxheba abahlanu benkqubo yophononongo lwe-SLE, amalungu oluntu nawo abandakanyekayo kuphando kwaye enegalelo avela kwiindawo zophando' kunye nama-lungu oluntu axhasayo asekuhlaleni kunye nabaphandi abavela eKapa naseBerlin. Le projekthi isekelwe kwindlela leyo abathathi nxaxheba banegalelo kuphando, eyiyindlela engundoqo nequkayo yokwenza uphando ekuthathwa inxaxheba kulo, kwaye ithembele kwintsebenziswano yamalungu oluntu engingqi aye azimanya, abumba kwaye ayiqhuba le nkqubo. Le nkqubo iye yenza siqondwe ngokubanzi isihloko esibuthathaka nesiphandiweyo sokungafumaneki kokutya ngokuquka abaphandi abanegalelo kuphando ukuba baphande umxholo kunye nokusetyenziswa kweendlela ezininzi kunye nokuvakalisa amazwi abo kunye namava ababe nawo kwizinto ezifunyaniswe kuphando olu.

Olu phononongo luphicotha ukufumaneka kokutya emizini kwiindawo ezintlanu zophononongo kwiindawo ezihlelekileyo zoluntu ezimeleneyo kwimimandla emine kwiCape Flats kunye nakwiindawo zabalobi eSt. Helena Bay ngakunxweme olusentshona. Uphando olu luqhutywe ngoSeptemba ka-2020 (kwisiqingatha somnyaka emva kokuba ubhubhane we-COVID-19 uthwaxe uMzantsi Afrika) kunye nakwiinyanga ezintathu ezisemva kokupheliswa kokuma ngxi kweentshukumo okungqongqo. Ukuqokelelwa kwedatha kuququzelelwe kusetyenziswa izixhobo zokuqokelela idatha zedijithali, nabasebenzi bophando ababalayo beqhuba udliwano-ndlebe lobuso ngobuso kunye nangomnxeba kunye nangothungelwano lwamakhasi onxibelelwano. Imifanekiso inikiwe ngamalungu oluntu akhethwe ngebhaqo ukuba axele imingeni yasekuhlaleni oko ke ekwenza ngokunika imifanekiso. Ukongeza, abasebenzi bophando ababalayo barekhode kwiimaphu indawo kokutya kwiindawo zoluntu abahlala kuzo. Iqela le-SLE liqhube iqela lodliwano-ndlebe ngenkqubo yokutya nabantu abanike ulwazi abangundoqo kwindawo

zophando laze lafumana kwaye laba nokuqonda okunzulu nokuchanekileyo ngedatha efunyenwe kuphando.

Uphononongo luhlalutye ukufumaneka kokutya emizini ngokusebenzisa amanyathelo asekelwe kumava okungafumaneki kokutya emizini (food insecurity experience scale) (FIES). Sifumanise ukuba ukungafumaneki kokutya kubangwe yindawo abahlala kuyo abantu kunye nayimingeni eyintlanganisela yezinto ezifana nohlanga, isini nodidi ekuhlaleni kuloo ndawo.

. Ngumngeni omkhulu kuzo zonke iindawo zophando, ngeSt. Helena Bay iyeyona kungakufumaneki kakhulu ke ukutya kuyo. Imizi ekunokwenzeka ibe yengakufumaniyo ukutya yileyo iphethwe ngabasetyhini, ekukho abantu abangaphangeliyo kuyo (okungekho sikweni nokusesikweni), emikhulu (enamalungu angaphezulu kwamahlanu), okanye ebandakanyeka kwinkqubo yokutya, umzekelo, abalimi basezidolophini, abalobi, okanye abasebenzi kumakhitshi oluntu, kwiisuphamakethe, kwiiresty, okanye kubathengisi bokutya abangekho sikweni kunye nabasesikweni.

Ilungelo lokufumana ukutya likhuselwe kumgaqo-siseko woMzantsi Afrika, kodwa nakuba kunjalo ubhubhane uveze ukuba kucela umngeni ukuthatha inxaxheba kwinkqubo yokutya kunye nokuba nolwazi, ukhetho, kunye nokusingqongileyo okuvumayo, kunye nokuba nezwi. Ungenelelo luthetha ukuba abantu bengabanye okanye bengamaqela banamandla okuzenzela ezabo izigqibo malunga nokuba kokuphi ukutya abakutyayo, kokuphi ukutya abakuvelisayo, kuveliswa njani oko kutya, kutshintshwe, kuze kukhutshwe, kunye nokuba banokubandakanyeka njani kwiinkqubo eziyila imigaqo-nkqubo kunye nolawulo lwenkqubo yokutya. Uphononongo lujonga ukuba ungenelelo lutshintshe njani emva kwe-COVID-19 kwaye, lwafumanisa ukuba ungenelelo lwamalungu oluntu lwasezidolophini lunyuke kancinci kanjani kweli thuba. Okufunyaniswe kuphando kubonakalisa ngokungaphaya ukuba abo babandakanyeka kwicandelo lokutya banamandla okusebenza ngokuzimeleyo ukuxhasa inkqubo yokutya enobulungisa kwaye equkayo.

Ubhubhane we-COVID-19 udale utshintsho olungamandla waze wenza ukuba kuphononongwe iipateni ezikhoyo zokungabikho kobulungisa ekutyeni ngenjongo yokulungisa imingeni ajongene nayo amalungu oluntu mingeni leyo ifana neenkqubo zeemvume zokuloba ezimisiweyo kunye nokuhanjiswa kokutya okuveliswe ngamafama asezidolophini angenafikelelo luthembekileyo ekutyeni okufikelelekayo oko ekwenzela ukuphucula iimarike. Ngexa utshintsho lwexesha elide kufanele ukuba lusebenze kuyo yonke indawo kwaye luzinze, uhlobo elulo intlekele le luye lwafuna inkxaso engxamisekileyo. Amalungu oluntu athathe

inxaxheba alubone uncedo lokutya njengondoqo osondele kwisisa kunye nomanyano. Abathathi nxaxheba abanegalelo nabo kuphando bakhethe amakhitshi oluntu njengesisombululo esikhawulezayo sokuxhasa ekunikeni uluntu ukutya. Asekwe ngabantu bengabanye, behlangene kunye nayimibutho yoluntu, imibutho yenkolo, emininzi yayo eqhutywa ngabasetynini - kwaye axhaswa luluntu ekuhlaleni, inkxaso ngezimali evela kwicandelo loshishino kunye nenkxaso karhulumente. Ukwehla kwenkxaso yezimali yezoshishino, yabucala nekarhulumente kuthintela uzinzo lwezi kangangokuba kunokude konyuse ukungafumaneki kokutya kwakhona. Okuthembisayo koku ke, nakuba ingelophulo litsha, kukusekwa kothungenlwano lweekomiti zokutya zengingqi ukuze zinyuse uqoqosho olusebenzisa imithombo ngokuqhubekayo. Ekusetyenzisweni kweendlela ezininzi, ukuxoxa, ukuqonda kunye nokuphanda umxholo weziphumo zophando, iqela lophando loluntu lixhase ukuba konyuswe uthatho nxaxheba lalo kwiinkqubo zolawulo lokutya olubanjwa ngezi komiti. Uphuhliso lolwakheko oluhlanganyelweyo lolawulo lokutya yithiyori yotshintsho exhaphakileyo, eyakhela kulwazi oluthathela ingqalelo izimvo ezifunyenweyo malunga nenkqubo zabo zokutya zengingqi kunye noko kuziqhubayo kunye noko kohlula amaqela. Oku kunokwenza kubandakanyeke uluntu kwaye lube namandla okucela umngeni kwiziko elo ngexa lunyusa ungenelelo lwalo kwinkqubo yokutya.

Ubhubhane we-COVID-19 uye wabenza banda ubuethethe-benkqubo esele kungafumaneki ukutya kuyo waze wabeka abantu emngciphekweni wendlala. Kodwa, udale isithuba kananjalo sokuba uluntu lufune umanyano, kwaye lungene kwiingxoxo-mpikiswano zezopolitiko ukuze luxhase izisombululo zexesha elide zokufumaneka kokutya. Olu phando lunike uluntu idatha exhase olukufumanisileyo kwaye yenza ukuba luzivakalise iimfuno zalo zongenelelo okanye luvakalise ulawulo lwenkqubo yalo yokutya yengingqi.

Opsomming

Die COVID-19-pandemie en die beheermaatreëls daarvan het 'n vernietigende uitwerking op huishoudings in Suid-Afrika se voedselsekerheid gehad. Die pandemie het bestaande patrone van voedselongeregtigheid, soos ruimtelike ongelikheid, interseksionaliteit en ongelyke magsverhoudings beklemtoon, wat gelei het tot die normalisering van voedselarmoede. Aan die ander kant het die COVID-19-pandemie 'n nuwe liefdadigheidsbeweging die lig laat sien en nuwe alliansies vir solidariteit gekoester.

Die projekkonsortium wat hierdie studie doen, het bestaan uit 'n span van vyf SLE-studieprogramdeelnemers, wat gemeenskapslede is van navorsingsentrums wat saam navorsing doen, lede wat die burgerlike samelewing steun en navorsers van Kaapstad en Berlyn. Hierdie projek is geskoei op die konsep van medenavorsing, wat 'n meer radikale en inklusiewe manier is om deelnemende aksienavorsing te doen, en het staatgemaak op die samewerking van plaaslike gemeenskapslede wat by die proses aangesluit, dit gestalte gegee en gedryf het. Hierdie benadering het 'n breë begrip van die sensitiewe en intieme onderwerp van voedselonsekerheid moontlik gemaak deur medenavorsers by kontekstualisering en triangulasie te betrek en deur hul stemme en lewenservarings deel van die bevindinge te maak.

Hierdie studie bekijk huishoudings se voedselsekerheid in vyf navorsingsentrums in randstandige gemeenskappe in vier buurte van die Kaapse Vlakte en in 'n vissersnederstelling in St. Helenabaai langs die weskus van naderby. Die opname is in September 2020 gedoen (ses maande nadat die COVID-19-pandemie Suid-Afrika getref het); drie maande ná die verligting van streng inperkingsmaatreëls. Die inwinning van data is aan die hand van digitale data-inwinningsinstrumente georganiseer, met plaaslike sensusopnemers wat onderhoude van aangesig tot aangesig en via telefoon- en sosiale media-netwerke gevoer het. Foto's is deur lukraak-verkose lede van die gemeenskap verskaf om 'n blik op sosiale uitdagings deur die lens van fotografie te bied. Daarbenewens het sensusopnemers plekke in hul gemeenskappe waar kos verkoop word, gekarteer. Die SLE-span het verskeie onderhoude oor die voedselstelsel met belangrike informante by die navorsingsentrums gevoer en het belangrike insigte in die kwalitatiewe bevindings gekry.

Die studie het huishoudings se voedselsekerheid van naderby aan die hand van die skaal van ervaring met betrekking tot voedselonsekerheid (*Food Insecurity Experience Scale* – FIES) bekijk. Ons het gevind dat voedselonsekerheid tot 'n groot mate gevorm word deur die plek waar mense woon en die sameloop van uitdagings op daardie plek.

Dit is 'n dominante uitdaging by al die navorsingsentrums, met St. Helenabaai wat die meeste voedselonsekerheid het. Huishoudings is meer geneig om voedselonsekerheid te hê as 'n vrou aan die hoof staan, daar werkloosheid is (informeel of formeel), dit groot is (meer as vyf lede) of betrokke is by die voedselstelsel, byvoorbeeld stedelike boere, vissers of werknemers van gemeenskapskombuise, supermarkte, restaurante of in informele en formele voedselkleinhandel.

Die reg op voedsel is in Suid-Afrika se grondwet vervat, tog het die pandemie aan die lig gebring dat deelname aan 'n voedselstelsel en om inligting, keuse, 'n bemagtigende omgewing en 'n stem in die stelsel te hê, uitdagend is. Verteenwoordiging (*Agency*) beteken dat individue of groepe die mag het om hul eie besluite te neem oor watter voedsel hulle eet, watter voedsel hulle produseer, hoe daardie voedsel geproduseer, verwerk en versprei word en dat hulle kan deelneem aan prosesse wat gestalte gee aan die beleide en bestuur van voedselstelsels. Die studie het ondersoek hoe verteenwoordiging ná COVID-19 verander het en bevind dat verteenwoordiging vir stedelike gemeenskapslede gedurende hierdie tydperk effens toegeneem het. Die bevindinge het voorts getoon dat diegene wat by die voedselsektor betrokke is, meer verteenwoordiging het om te pleit vir 'n regverdig en inklusiewe voedselstelsel.

Die COVID-19-pandemie het momentum vir verandering geskep en beklemtoon dat die bestaande patrone met betrekking tot voedselonsekerheid hersien moet word om die uitdagings wat gemeenskapslede in die gesig staar, aan te spreek, soos visvangpermitprosesse wat sloer en die verspreiding van voedsel, wat deur voedselonsekere stedelike boere geproduseer word, na markte met die be-
markingsketting langs. Alhoewel langtermynveranderinge sistemies en volhoubaar moet wees, het die aard van die krisis noodsteun genoodsaak. Deelnemende lede van die gemeenskap het voedselhulp as 'n sentrale tema beskou wat naasteliefde en solidariteit naas mekaar stel. Mede-navorsers het gemeenskapskombuise geïdentifiseer as 'n oplossing om vinnige voedselverspreiding aan gemeenskappe te ondersteun. Hierdie gemeenskapskombuise was gestig deur individue, kollektiewe en gemeenskapsorganisasies, geloofsorganisasies, meestal met vroue aan die stuur – en is ondersteun deur die burgerlike samelewing, befondsing deur die korporatiewe sektor en regeringsteun. Die afname in korporatiewe, privaat- en staatsfondse ry die gemeenskapskombuise se volhoubaarheid in die wiele en kan voedselonsekerheid weer verhoog. 'n Belowende, dog nie nuwe inisiatief nie, is die daarstel van netwerke van plaaslike voedselkomitees om volhoubare kringbaan-ekonomieë te bevorder. In triangulasie, waartydens navorsingsuitslae bespreek, begryp en gekontekstualiseer word, het die gemeenskapsnavorsingspan

gepleit om hul aktiewe deelname aan voedselbeheerprosesse wat deur hierdie komitees gehou word, op te skerp. Die ontwikkeling van 'n samewerkende struktuur vir voedselbestuur is 'n algemene teorie van verandering, wat voortbou op kennis wat saam geskep word oor eie plaaslike voedselstelsels en hul drywers, potensiaal en krake in daardie stelsels. Dit kan die gemeenskap se betrokkenheid en vermoë om die gesagsorde uit te daag bevorder, terwyl hulle verteenwoordiging in hul voedselstelsel uitbrei.

Die COVID-19-pandemie het die broosheid van 'n reeds-onsekere voedselstelsel vererger en bevolkings in gevaar gestel om honger te ly. Dit het egter ook ruimte geskep vir gemeenskappe om solidariteit na te jaag en politieke debatte te voer om langtermyn-oplossings vir voedselsekerheid te bepleit. Hierdie navorsing het gemeenskappe van data voorsien wat hul waarnemings ondersteun het en hulle in staat gestel het om uiting te gee aan hul eise vir verteenwoordiging of 'n seggenskap in die bestuur van hul plaaslike voedselstelsel.

Zusammenfassung

Die COVID-19-Pandemie und die entsprechenden Maßnahmen, die zur Eindämmung des Virus verhängt worden sind, hatten eine verheerende Wirkung auf die Ernährungssicherheit von Haushalten in Südafrika. Die Pandemie rückte bestehende Muster der Ernährungsungerechtigkeit wie zum Beispiel räumliche Ungleichheit, Intersektionalität und ungleiche Machtverhältnisse in den Vordergrund, die seit Jahren zu einer Normalisierung des Hungers geführt haben. Auf der anderen Seite entstand, während der COVID-19-Pandemie eine neue Bewegung der Unterstützung und förderte neue Allianzen der Solidarität.

Das Projektkonsortium, das diese Studie durchführte, bestand aus einem Team von fünf Teilnehmer und Teilnehmerinnen des SLE-Studienprogramms, Gemeindemitglieder aus den Untersuchungsgebieten, die als *co-researcher* mitwirkten, sowie Unterstützerinnen aus der Zivilgesellschaft und Wissenschaftlerinnen aus Kapstadt und Berlin. Diese Studie wurde als *co-research* Projekt durchgeführt, einer radikaleren und inklusiveren Art der partizipativen Aktionsforschung, und stützte sich auf die Mitarbeit von lokalen Akteuren, die den Forschungsprozess angestoßen haben, ihn mitgestalteten und vorantrieben. Dieser Ansatz ermöglichte ein breites Verständnis des sensiblen und persönlichen Themas der Ernährungsunsicherheit, indem die *co-researcher* in die Kontextualisierung und Triangulation einbezogen wurden und ihre Stimmen und gelebten Erfahrungen zu den Ergebnissen beitrugen.

Diese Studie untersucht die Ernährungssicherheit von Haushalten an fünf Forschungsstandorten in marginalisierten Gemeinden in vier townships der Cape Flats und in einer Fischersiedlung in St. Helena Bay an der West Coast. Die Datenerhebung wurde im September 2020 durchgeführt - ein halbes Jahr nach dem die COVID-19-Pandemie in Südafrika ausgebrochen ist und drei Monate nach den Lockerung des strikten lockdowns und den Ausgangssperren. Die Datenerhebung wurde mithilfe digitaler Datenerfassungstools organisiert, wobei lokale Teammitglieder persönliche, -telefonische, oder durch soziale Mediennetzwerke laufende Interviews durchführten. Fotos wurden von zufällig ausgewählten Bewohnerinnen und Bewohner zur Verfügung gestellt, um eine Perspektive auf gesellschaftliche Herausforderungen durch die Linse der Smartphone-Fotografie zu ermöglichen. Darüber hinaus kartierten die Teammitglieder die Orte, an denen sie Lebensmittel bekommen können, aber auch Gärten und Gemeinschaftsküchen. Das SLE-Team führte mehrere Interviews zum Ernährungssystem mit Schlüsselpersonen aus Wissenschaft und Praxis durch und gewann so entscheidende Erkenntnisse und Verständnis für den Untersuchungsraum.

Die Studie untersuchte die Ernährungssicherheit der Haushalte mit Hilfe der *Food Insecurity Experience Scale* (FIES). Wir fanden heraus, dass Ernährungsunsicherheit maßgeblich von dem Ort, an dem die Menschen leben, und den dortigen intersektionalen Herausforderungen geprägt ist.

Hunger ist eine dominante Herausforderung in allen Untersuchungsgebieten, wobei St. Helena Bay am stärksten von Ernährungsunsicherheit betroffen ist. Haushalte sind eher von Ernährungsunsicherheit betroffen, wenn sie von einer Frau geführt werden, wenn eine Person arbeitslos ist (ob im informellen oder formellen Sektor), der Haushalt groß ist (mehr als fünf Personen) oder die Personen des Haushaltes im Ernährungssystem aktiv sind, zum Beispiel als urbane Gärtnerinnen und Gärtner, Fischerinnen und Fischer oder in den Teams der Gemeinschaftsküchen, Supermärkten, Restaurants oder dem informellen und formellen Lebensmittelhandel.

Das Recht auf Nahrung ist in der südafrikanischen Verfassung verankert, doch die Pandemie hat gezeigt, dass es für viele eine Herausforderung ist, am Ernährungssystem teilzuhaben und Informationen, Wahlmöglichkeiten, ein unterstützendes Umfeld und eine Stimme in diesem System zu haben. *Agency* oder Handlungsfähigkeit bedeutet, dass Personen oder Gruppen die Fähigkeit haben, ihre eigenen Entscheidungen darüber zu treffen, welche Lebensmittel sie essen, welche Lebensmittel sie produzieren, wie diese Lebensmittel produziert, verarbeitet und verteilt werden, und dass sie sich an Prozessen beteiligen können, die die Politik und die Steuerung des Ernährungssystems beeinflussen. Die Studie hat gemessen, wie sich diese Handlungsfähigkeit mit Beginn der COVID-19 Pandemie verändert hat, und festgestellt, dass die Handlungsfähigkeit im städtischen Raum in diesem Zeitraum leicht zugenommen hat. Die Ergebnisse zeigen außerdem, dass diejenigen, die sich im Lebensmittelsektor engagieren, mehr Power haben, um sich für ein gerechtes und inklusives Lebensmittelsystem einzusetzen.

Die COVID-19-Pandemie schuf Power für Veränderungen und fordert die Überarbeitung bestehender Ernährungsungerechtigkeitsmuster, um Herausforderungen anzugehen, mit denen die Bewohnerinnen und Bewohner der Cape Flats und St. Helena Bay konfrontiert sind, wie z. B. stockende Genehmigungsverfahren für den Fischfang und die Vermarktung von Lebensmitteln, die in urbanen Gärten produziert werden. Während langfristige Veränderungen systemisch und nachhaltig sein sollten, erforderte die Dringlichkeit der Krise auch Soforthilfe. Nahrungsmittelhilfe wurde von den teilnehmenden *co-researchern* als ein zentrales Thema des Forschungsprozesses gesehen, welches Abhängigkeit und Solidarität gegenüberstellt. Die *co-researcher* identifizierten Gemeinschaftsküchen als eine Lösung, um

die schnelle Verteilung von Lebensmitteln innerhalb der Gemeinde zu unterstützen. Sie wurden von Einzelpersonen, Kollektiven und gemeinnützigen Organisationen, Glaubensgemeinschaften, meist von Frauen geführt - und von der Zivilgesellschaft, dem Unternehmenssektor und staatlicher Unterstützung finanziert. Der Rückgang von Unternehmens-, Privat- und staatlichen Geldern hemmt die Nachhaltigkeit der Küchen und könnte die Ernährungsunsicherheit mittelfristig wieder erhöhen. Eine vielversprechende, wenn auch nicht neue Initiative ist die Etablierung eines Netzwerks lokaler Lebensmittelkomitees, die eine lokale Kreislaufwirtschaft fördern sollen. Bei der Triangulation und der Kontextualisierung der Forschungsergebnisse plädierte das Forschungsteam für eine stärkere aktive Beteiligung an politischen Prozessen. Die Entwicklung einer kollaborativen Food-Governance-Struktur ist ein gemeinsamer Standpunkt des Forschungskonsortiums, der auf dem gemeinsam geschaffenen Wissen über die eigenen lokalen Ernährungssysteme und deren Prozesse, Potenziale und Schwachstellen aufbaut. Dies kann das Engagement in den Gemeinschaften fördern, das Establishment herauszufordern und gleichzeitig ihre Handlungsfähigkeit über das eigene Ernährungssystem zu erhöhen.

Die COVID-19-Pandemie verschlimmerte die Vulnerabilität eines bereits sehr fragilen und ungerechten Ernährungssystems und größere Teile der südafrikanischen Bevölkerung waren und sind akut von Hunger bedroht. Aber die Pandemie schuf auch Raum für die Bevölkerung, sich zu solidarisieren und in politische Debatten einzutreten, um sich für langfristige Lösungen zur Ernährungssicherheit einzusetzen. Diese Forschung unterstützt die *co-researcher* mit Daten, die ihre Beobachtungen wissenschaftlich untermauerten und es ihnen ermöglichten, ihre Forderungen nach mehr Teilhabe und Mitsprache in ihrem lokalen Ernährungssystem zu artikulieren.

Table of contents

Preface	i
Acknowledgements	ii
Executive summary.....	vii
Isishwankathelo.....	ix
Opsomming	xii
Zusammenfassung.....	xv
Table of contents	xix
List of tables.....	xxiii
List of figures.....	xxiv
Abbreviations	xxvi
1 Introduction	1
1.1 Responses to the COVID-19 pandemic in South Africa: A perspective from food systems actors.....	5
1.2 Research context	8
1.3 Project objectives and outcomes.....	9
<i>PERSPECTIVE: How to conduct anti-racist research?</i>	11
2 Conceptual framework and research approach.....	13
2.1 Food systems	14
2.2 Food security and nutrition	15
2.3 Food justice	15
2.4 Agency and the right to food	16
2.5 The co-research approach.....	17

XX Table of contents

<i>PERSPECTIVE: Reflections from five SLE post-graduate students on the co-research process</i>	18
<i>PERSPECTIVE: Community members' reflections on the co-research process</i>	20
3 Research context	22
3.1 A food justice perspective on food systems in South Africa	22
3.1.1 Food system context.....	23
3.1.2 Food justice: Place, labour, and power	25
3.2 Fisheries in South Africa	28
3.2.1 Small-scale fisheries	30
3.2.2 Restrictions in the small-scale fishing sector.....	31
3.2.3 Fishing rights as human rights.....	31
3.3 Research sites	33
3.3.1 Cape Flats.....	35
3.3.2 St. Helena Bay	37
4 Methodology	41
4.1 Research approach	41
4.2 Methods of data collection.....	41
4.2.1 Household survey	42
4.2.2 Food mapping	50
4.2.3 Key informant interviews	51
4.2.4 PhotoVoice.....	51
4.2.5 Focus group discussions.....	52
4.3 Data analysis	53
4.4 Limitations of the methods.....	54
4.4.1 Limitations of the research methodology	54
4.4.2 Limitations of working remotely via the co-research approach	56
4.5 Ethical considerations around conducting research during a pandemic	57
<i>PERSPECTIVE: Experiences from the enumerators</i>	58
5 Findings	60
5.1 Food security household survey	60

5.1.1	General findings	61
5.1.2	The state of food security	63
5.1.3	Who are the food insecure?.....	63
5.1.4	A place-perspective on the state of food security	68
5.1.5	Food sources	73
5.2	Coping with food insecurity during the pandemic.....	74
5.2.1	Asset-based coping strategies	76
5.2.2	Assistance-based coping strategies.....	77
5.2.3	Consumption-related coping mechanisms	83
5.2.4	Coping with food insecurity – multiple and community solutions.	84
5.2.5	Visions for a just and resilient food system	88
5.3	Agency in food systems	89
5.3.1	Perceptions of agency.....	90
5.3.2	Measuring agency.....	95
5.4	A place-based perspective on the food environments.....	99
5.4.1	Place-based perspective from the communities	99
5.5	Consolidating the findings	112
6	Reflections and responses from the study team	117
6.1	Intersectionality of food insecurity	117
6.2	Gaining a sense of agency in food governance through co-research.....	122
6.3	A way forward – from charity to solidarity	126
6.3.1	Vision: Understand systemic causes of food security to increase individual agency	126
6.3.2	Vision: Strengthen existing localised solutions: Our multidimensional perspective on community kitchens	128
6.3.3	Vision: Enhancing collective agency and community voice to participate in food governance processes.....	131
7	Conclusion.....	133
8	Bibliography	136
9	Annexes	148
	Annex 1: Household survey	148

xxii Table of contents

Annex 2: Guiding questions key informant interviews	154
Annex 3: Multiple regressions	154
Annex 4: FIES Results	157
List of SLE publications since 2011	158

List of tables

Table 1: Guiding research questions.....	10
Table 2: Socio-demographic characteristics of the research sites	35
Table 3: Research questions and data collection method.....	42
Table 4: Survey components	44
Table 5: Description of survey participants.....	61
Table 6: Characteristics of food insecure households	65
Table 7: Multiple regression for food insecurity status.....	66
Table 8: Multiple regression analysis per research site	68
Table 9: Coping strategies of food insecure respondents.....	75
Table 10: Source of food relief	80
Table 11: Sub-indices of the domains of agency	95
Table 12: Agency and the FIES.....	96
Table 13: Agency and characteristics of the respondents.....	98

List of figures

Figure 1: Overview of COVID-19 alert levels and daily infections in South Africa ...	2
Figure 2: Timeline of COVID-19 response events in South Africa	5
Figure 3: Conceptual framework for this study	14
Figure 4: The research sites in urban Cape Town and in rural St. Helena Bay	33
Figure 5: The four research sites in Cape Town.....	34
Figure 6: Fisheries value chain in St. Helena Bay	40
Figure 7: Design of the Agency Module	48
Figure 8: Employment status of respondents	62
Figure 9: State of food security in the five research sites per ward	63
Figure 10: Food insecurity among respondents who work in food systems	64
Figure 11: Respondents' main food source pre- and during COVID-19.....	73
Figure 12: Number of participants who received food relief.....	79
Figure 13: New food sources used during COVID-19 lockdown	84
Figure 14: PhotoVoice pictures selected by co-researchers.....	85
Figure 15: Top three changes community wants to see in their food system	88
Figure 16: Respondents' perception of their power to change their food security status.....	90
Figure 17: Communities' perspective on how to increase agency	91
Figure 18: Perceived agency differentiated by the state of food security	97
Figure 19: Perceived food environment of the local communities	100
Figure 20: Food sources in Ward 11 St. Helena Bay.....	101
Figure 21: PhotoVoice pictures from St. Helena Bay.....	102
Figure 22: Food sources in Ward 41 Gugulethu.....	104
Figure 23: PhotoVoices from Gugulethu	105
Figure 24: Food sources in ward 75 Mitchell's Plain	106
Figure 25: PhotoVoice pictures from Mitchell's Plain.....	107
Figure 26: Food sources in Ward 96 Khayelitsha	108
Figure 27: PhotoVoice pictures from Khayelitsha	109

Figure 28: Food sources in ward 108 Mfuleni	110
Figure 29: PhotoVoices from Mfuleni.....	111
Figure 30: Inspiration for food and community cohesion.	135

Abbreviations

AI	Agency Index
AM	Agency Module
BIPOC	Black, Indigenous, and People of Colour
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit <i>Federal Ministry for Economic Cooperation and Development</i>
CAN	Community Action Network
C19	COVID-19
CoCT	City of Cape Town
CTT	Cape Town Together
DAFF	Department of Agriculture, Forestry and Fisheries
CBLE	Community Based Legal Entities
DEFF	Department of Environmental Affairs (Environment, Forestry, Fisheries)
DoA	Department of Agriculture
ECD	Early Childhood Development
ECT	Eastern Cape Together
EDP	(Western Cape) Economic Development Partnership
ELCSA	Latin American and Caribbean Food Security Scale
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
FIAN	FoodFirst Information and Action Network
FIES	Food Insecurity Experience Scale
FGD	Focus Group Discussion
GDP	Gross Domestic Product
GIS	Geographical Information System
GTT	Gauteng Together
GUFI	Gugulethu Urban Farmer Initiative
HFIAS	Household food insecurity access scale
HLPE	High Level Panel of Experts
HU	Humboldt-Universität zu Berlin
IFPRI	International Food Policy Research Institute
IPC	Integrated Food Security Phase Classification
IPES Food	International Panel of Experts on Sustainable Food Systems
ITQ	Individual Transferable Quota
KASA	Kirchliche Arbeitsstelle Südliches Afrika <i>Ecumenical Service for Advocacy Work on Southern Africa</i>
KfW	Kreditbank für Wiederaufbau <i>German Development Bank</i>
MAPA	Marketing of Agricultural Products Act
MLRA	Marine Living Resources Act
MSC	Marine Stewardship Council
N	Sample Size

NGO	Non-Governmental Organisation
NIDS-CRAM	National Income Dynamics Study (NIDS) – Coronavirus Rapid Mobile Survey (CRAM)
NSNP	National School Nutrition Programme
NPFNS	National Policy on Food and Nutrition Security
NPO	Non-Profit Organisation
PAR	Participatory Action Research
PSFA	Peninsula School Feeding Association
PLAAS	Institute for Poverty, Land and Agrarian Studies
RDP	Reconstruction and Development Programme
SADC	Southern African Development Community
SAPFIA	South African Pelagic Fishing Industry Association
SASSA	South African Social Security Agency
SDG	Sustainable Development Goal
SLE	Seminar für Ländliche Entwicklung (Centre for Rural Development)
SPSS	Statistical Package for the Social Science
SSF	Small-Scale Fisheries
TAC	Total Allowable Catch
UA	Urban Agriculture
UCT	University of Cape Town
UN	United Nations
USD	US Dollar
VPUU	Violence Prevention through Urban Upgrade
WCEDP	Western Cape Economic Development Partnership
WEAI	Women's Empowerment in Agriculture Index
WHO	World Health Organisation

1 Introduction

May 2021. The COVID-19 pandemic has had the world in its grip for more than a year. The virus's rapid global spread has posed an unprecedented problem for communities, society, decision-makers, and academia. What was taken for granted is suddenly no longer there for many, be it a job, school, education, access to international travel, or a simple hug. The strain of coping with the global health threat and death toll was, for many, exacerbated by the COVID-19 prevention and control methods imposed by governments in their scramble to protect their citizens and health care systems.

The devastation that COVID-19 and its prevention measures have had on food security is not yet understood, though study findings show that the pandemic has had catastrophic impact. Global supply chains have seen unprecedented disruptions as borders closed, local markets became increasingly important, backyard vegetable growing became a necessity for many (and a favourite pastime for those forced to stay home), and millions of people faced the question of how to get food on the table in the face of rising prices and job losses (FAO, 2020; FIAN International, 2020; IPES Food, 2020).

South Africa was identified as a "hunger hotspot" as efforts to contain the spread of the virus during the first weeks of the pandemic exacerbated hunger in vulnerable households (Oxfam, 2020, p. 1). To understand the epidemiologic situation, Figure 1 provides an overview of measures implemented by the South African national government to control the spread of COVID-19. It depicts the durations of lockdown phases as well as the daily reported COVID-19 infections from March to December 2020.

2 Introduction

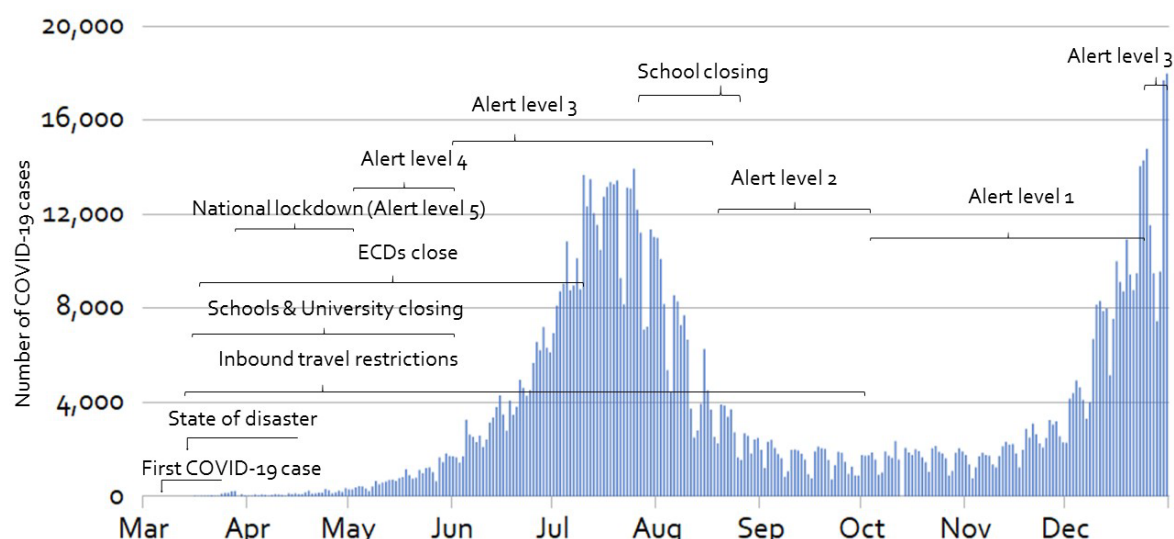


Figure 1: Overview of COVID-19-related alert levels and daily reported infections in South Africa. The first COVID-19 case in South Africa was reported on 5th March 2020. The World Health Organisation (WHO) declared a global pandemic on March 11th. South African president, Cyril Ramaphosa, declared a national state of disaster on March 15th and imposed a lockdown on March 27th.

The first lockdown effectively shut down most of the economy, the informal sector, and thus, income opportunities for marginalised communities who struggled with hunger prior to the pandemic. The urban poor, in particular, experienced increased vulnerability to food insecurity as a result of the COVID-19 pandemic (FAO, 2020). This manifested in greater inequity and powerlessness of poorer households in cities where compliance with lockdown and social distancing measures were low and COVID-19 virus infections high (ibid). Many households lost their income during the lockdowns and were unable to purchase food. As Buthelezi et al. (2020, p. 1) stated, “In South Africa, and worldwide, the pandemic reveals the fragility and injustice of existing food systems, which have clearly failed to feed those who are most marginalised, even before the current crisis.” Moreover, poorer households came to rely heavily on relief aid as a result of loss of employment during lockdown, which is either not enough (Stiegler & Bouchard, 2020), innutritious, subject to corruption and patronage, or inaccessible (Buthelezi et al., 2020).

This study was planned after the first lockdown in South Africa eased in May 2020, conducted from July to December 2020, and contextualised in community work with participating South African partners from January to April 2021.

The NIDS-CRAM nationwide survey (Spaull et al., 2020) conducted after the first lockdown by a consortium of South African universities gave us our first glimpses

of quantifiable impacts on the country and society. This multi-wave survey indicated that one-fifth of the respondents lost their jobs. 47% of the respondents indicated not having money to purchase food in April 2020, but by June, this proportion had decreased to 37% and was back up to 41% in November (Van der Berg, 2021). The NIDS-CRAM results further show that hunger was more often reported in rural areas, while in the urban space, shack dwellers in informal or marginalised areas were most vulnerable (Spaull et al., 2020).

The pandemic exposed many societal fault lines that have been swept under the carpet for decades, including the vulnerabilities of the global neo-liberal agro-food system, the power that corporations had in side-lining and criminalising the informal sector and small-scale fisheries environment, the shocking extent of (urban) hunger in the country, and the ongoing violent structural injustice that continues to plague South Africa.

With intense media focus on human struggles and vulnerabilities during the first lockdown, the issue of food security was dredged from hidden, private, and individual spaces and lifted into public and communal spaces. Food became more present in protests, politics, and cross-sectoral communication. The energy and resources invested in civic engagement fundamentally changed the way people understand their constitutional right to food and encouraged cooperation. Retrieving food security discourse from the technocratic and placing it within community dialogue resulted in mutual aid, activism, and a broader perspective of food (Clapp & Moseley, 2020; Seidel, 2020).

The release of the 2020 HLPE report 'Building a new global narrative' has inspired this study; here, food security is defined as, "a situation that exists when all people at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (p. 10). The components of *agency* and *sustainability* were added in 2020 to the HLPE's dimensions of food security: access, affordability, utilisation, and stability.

Agency refers to the capacity of individuals or groups to make their own decisions about what foods they eat; what foods they produce; how that food is produced, processed, and distributed within food systems; and their ability to engage in processes that shape food system policies and governance (HLPE, 2020). When including agency and, hence, the power of the individual and collective, the HLPE recognised that food security goes beyond calories and the number of plates on the table; it includes knowledge, choice, and participation—aspects of utmost im-

4 Introduction

portance, not only during crises. Sustainability in food systems is understood to foster long-term regeneration of natural, social, and economic systems. This should ensure that the present generation, but also future generations, don't have to compromise their food needs.

1.1 Responses to the COVID-19 pandemic in South Africa: A perspective from food systems actors

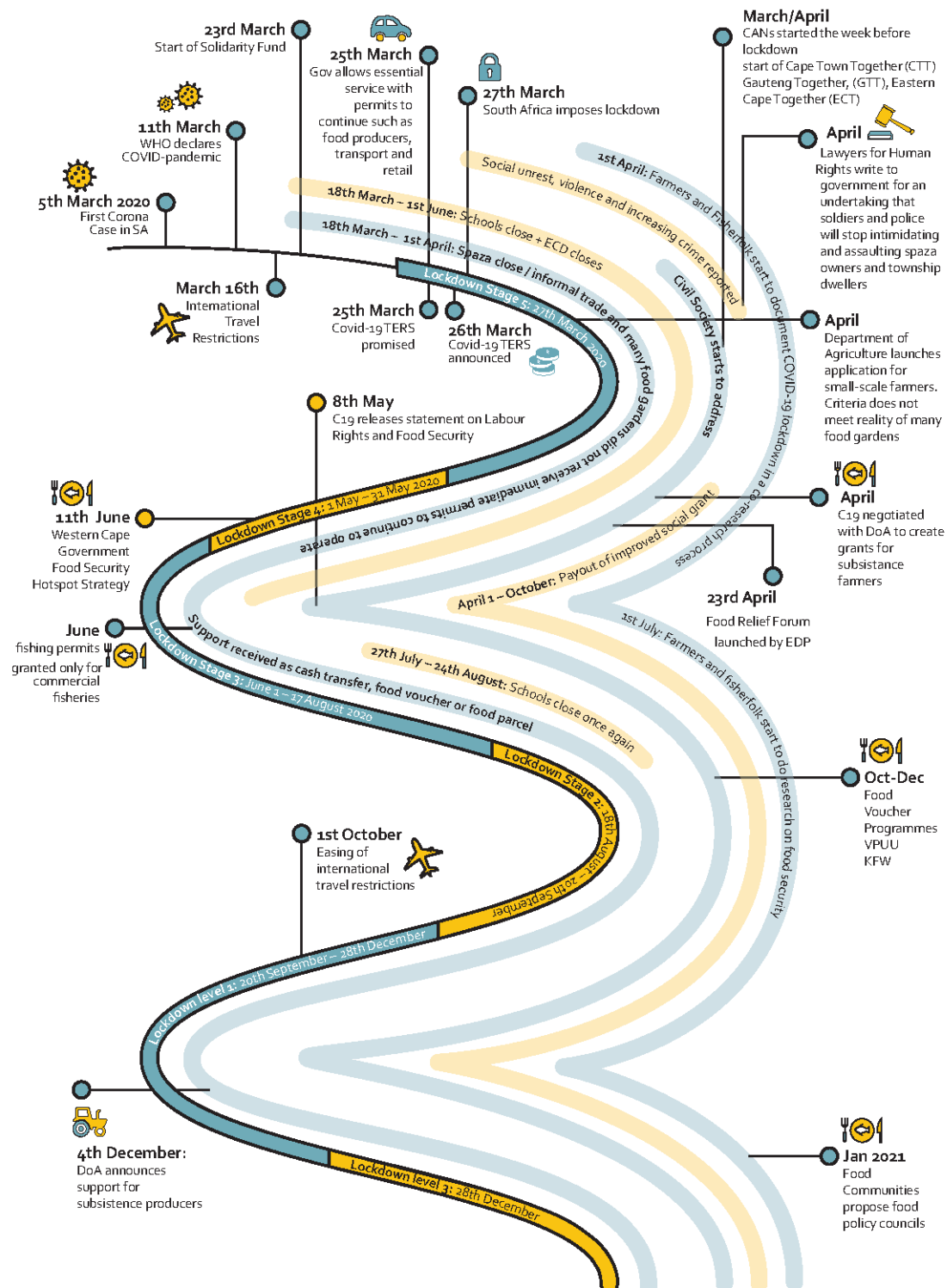


Figure 2: Timeline of COVID-19 response events in South Africa

The research team visually clustered the COVID-19 and food-security events that occurred from March 2020 to March 2021 into streams (see Figure 2). We describe them briefly here.

In March 2020, the South African government accelerated their efforts to “flatten the curve” through the introduction of extreme COVID-19 lockdown regulations. The first regulations were gazetted in the Disaster Management Act of 2002 on 25 March 2020. These regulations confined all citizens to their home (those who have them) unless they were part of essential goods and services provision or needed to leave their house for essential purposes. This was strictly enforced by the South African Police Service and the South African National Defence Force, in some instances with fatal consequences. The special brutality reserved for people living in high-density, low-income communities was a shocking hallmark of ‘stage 5 lockdown’ (Knoetze, 2020).

Through these measures, the spotlight fell on the South African government’s fundamental lack of understanding of how the poor access their food. As well, their “ongoing bias towards large-scale formal food system actors” (Battersby, 2020, p. 1) became evident. In the first weeks of lockdown, confusion regarding the informal food sector’s right to operate reigned. The first set of regulations explicitly stated that spaza shops¹ were essential services and that food markets should remain open², though the definition of food markets was not clear. However, from 25 March onward, all essential businesses were required to register via a dedicated business portal to gain permits to operate, effectively freezing the informal sector. A few weeks later in mid-April 2020, further confusion ensued following a public announcement by the Minister of Small Business Development stating that only South African run spaza shops could trade. This led to a spate of xenophobic attacks and the closure of legitimately operating shops (Githahu, 2020). This statement was subsequently withdrawn and, in the fourth week of lockdown, the state offered permits to spaza shops.

This harrowing episode brought the core role of the informal food system in South Africa to light and provided a sharp critique of the corporate-dominated agro-food sector that is privileged within South African policy and government narratives. It has also shown affected communities how vulnerable and dependent

¹ A spaza store is a small grocery store that sells basic food items in small quantities as well as cleaning products, candles, cigarettes, and cellular data. Spaza stores are located in shacks, shipping containers, or the homes of the owners.

² Regulation 11, Annex B(5): Categories of essential services: 5. Grocery stores, including spaza shops.

they are on the formal sector and the need to bolster local food systems for the sake of food and nutrition security, health, and vibrant local economies (Cape Town Triangulation Workshop, 2020). Urban farmers in Cape Town did not get permits to continue cultivating their gardens and selling their summer harvest, resulting in considerable food waste. Most did not know the permit application procedures and locations or gave up after days of unsuccessful attempts (Buthelezi, 2020). In April 2020, the Department of Agriculture, Land Reform and Rural Development announced a R1.2 billion COVID-19 Agricultural Disaster Relief Fund for small-scale farmers. It offered financial support to urban farmers during the lockdown, but only for those with an annual turnover between R50,000 and R100,000: a figure that is far from small-scale urban farmers' annual turnover (estimated at a tenth of the mentioned indicator). Civil society's engagement with the Minister prompted a second round of applications with amended and simplified criteria for a more diverse array of micro-producers, urban farmers, and agro-input suppliers who had not previously been recognized by government. Small-scale fisherfolk received permits to resume fishing activities only in June. In December 2020, the Department began offering support to 'subsistence producers', including organic inputs upon request. The latter is a ground-breaking development.

In the meantime, government and society had realised that lockdown regulations would deepen hunger in the country as many lost their livelihoods and children lost access to school lunch programmes (which often provided underprivileged children their only meal of the day). In response, local and national governments embarked upon food parcel and food voucher provision, but were criticised for patchy and corrupt implementation. A variety of other responses emerged to address the crisis, including local, self-organised social networks linking affluent communities with low-income communities to provide food and sanitisers (van Ryneveld, 2020). New coalitions, such as the C19 Coalition, working in solidarity across a broad spectrum of issues have formed, sharpened the analysis of underlying social ills, and called for the transformation of a flawed agro-food system that did not respond to the purchasing and consumption needs of the poor. Others, such as the Cape Town Together (CTT) Food Growers, fostered exchange and co-learning between farmers. The FoodFlow team stepped in as an urban produce buyer dedicated to restaurants and, since March 2020, circulated food back to food insecure communities in the form of food parcels. The Western Cape Economic Development Partnership (EDP) became an important convening group during the lockdown in terms of food relief. Having worked closely with local and provincial governments, they convened a food forum that hosts regular meetings to foster exchange of knowledge and enhance local resilience.

1.2 Research context

This study examines the state of food security in five communities after the first COVID-19 lockdown, scrutinises agency in local food systems, and provides a food justice perspective from St. Helena Bay and the Cape Flats. It was initiated by members of the fisherwomen collective Weskusmandjie in St. Helena Bay and the Urban Farmer Research Club of Cape Town along with their affiliated networks of community kitchen chefs, fruit vendors, and local food activists in wards in the neighbourhoods of Gugulethu, Mitchell's Plain, Khayelitsha, and Mfuleni in Cape Town. Both of these groups have been engaged in community research since 2017 and were involved in the present research study as co-researching partners. Their members were involved in all phases of the project (alongside academic counterparts and other partners) from the study design, phrasing of the research questions, data collection, interpretation and contextualisation of the findings, and the scaling of results. The group's ownership of the research process allows them to influence processes and food governance from the ground up. In a joint statement, the members of Weskusmandjie and the Urban Farm Forum summarised their intention to use research to drive change:

Through research we realised how widespread issues that many of us experienced indeed were: Hunger is a bigger challenge than the virus. We are aware that our government is failing the communities in the townships if we do not speak in the language of technocrats... We need the study to determine the statistics of the need of the community and we want to learn more about strategies to combat hunger, and to understand the greater picture. The study creates a space of discussion, and a space of cohesion. We want to change the narrative on food security, we want to be part of dialogues, and we want to be part of the solution.

- Members of Weskusmandjie and Urban Farmer Forum, July 2020

Other project partners are the Heinrich Boell Foundation (HBF) Cape Town, Solidaridad Southern Africa, and the INKOTA-netzwerk e.V. in Berlin. Haidee Swanby was actively involved in the facilitation of focus group discussions and contextualisation of the results; Dr Jane Battersby acted as the study's academic advisor.

The Centre for Rural Development (SLE), through its post-graduate programme, implemented the co-research process with five post-graduate students, building on an existing research network in Cape Town. The mixed-methods study was launched to understand the food security situation after the lockdown and provide a snapshot of data, observations, and voices from food systems actors on their

challenges and strategies in the light of the COVID-19 pandemic. The study includes a representative digital household survey and provides community perspectives on agency in food systems and the potential for a just and resilient post-COVID-19 food system.

To conduct research on and in their local food systems, co-researchers voiced multiple research needs. The first being the need for data on the state of food security during COVID-19. The second being understanding of community coping mechanisms. Lastly, understanding what agency means in the contexts of food injustice, exclusionary policy making, and historical marginalisation in these local food systems; and how agency and having a voice within food governance processes can expedite change. This entails ownership of the research process: defining the own research needs, avoiding data mining, and changing the narrative around issues of food security through results dissemination.

1.3 Project objectives and outcomes

The overall objectives of the study are to provide current food security data from the research sites and to critically examine marginalised communities' perspectives of agency. To reach the overall objectives, three outcomes guide the research:

Outcome 1: Co-researchers and partners gained deeper understanding of the state of food security during the COVID-19 pandemic in the Cape Flats and St. Helena Bay's food systems.

Outcome 2: Co-researchers and partners gained deeper understanding of food justice and agency in local food systems and discussed a vision for just and resilient post-COVID-19 food systems.

Outcome 3: Co-researchers were actively involved in project decisions, data validation, and results dissemination to Cape Flats and St. Helena Bay households and to governance actors.

A set of guiding research questions was formulated:

Table 1: Guiding research questions

No.	Guiding research question	Sub-questions
1.	How have COVID-19 measures impacted the state of food security in the Cape Flats and St. Helena Bay households post-lockdown?	What is the current prevalence of household food insecurity?
		Who are the food insecure?
		What coping strategies have been adopted at the household level?
2.	Which food justice patterns can be identified in South African food systems in light of COVID-19?	How does place influence the state of food insecurity?
		What role does labour play in local food systems?
		How do power, politics, and empowerment influence local food systems?
3.	What could just and resilient post-COVID-19 food systems look like?	What should be changed in the current system and who should be responsible?
4.	How is agency perceived and applied in the context of food systems?	How can agency be operationalised and measured for food security research?
		How strong is Cape Flats and St. Helena Bay community members' agency?
		How do socio-economic characteristics and food security status relate to agency?

The study is organised as follows. Chapter 2 (see p. 13) provides the conceptual framework of the research and describes underlying concepts. Chapter 3 (see p. 22) provides relevant background information on the research sites and sheds light on the particularities of the township food economy and the fish sector in South Africa. Chapter 4 (see p. 41) describes the chosen methods, sampling, and limitations. The results in Chapter 5 (see p. 60) are organised according to the research questions. The findings are discussed in Chapter 6 (see p. 117) with emphasis on two notions that came up in the process: the understanding of food as a common, rather than a commodity, and local food committees' calls for community voice in food governance processes.

This study was conceptualised by the SLE study team and the co-researchers, some of whom contributed chapters and text. Though we strived to write in a unified style from one voice, direct quotations from co-researchers (italicised in text) are provided to exemplify their involvement, attitudes, and passions which cannot easily be expressed by scientific prose. To protect their personal privacy, their names are not provided, but their gender and role in the food system is noted.

Some sub-chapters stand out of the content of the study but shed light on questions that were important to the group. These sub-chapters are titled 'Perspectives'

and discuss critical and anti-racist approaches in science (see p. 11), the SLE team's reflections on co-research (see p. 18), the co-researchers' reflections on the process (see p. 20), and the enumerators feedback on the data collection (see p.58)

***PERSPECTIVE: How to conduct anti-racist research?*³**

The research team at SLE consists mainly of White team members affiliated during their post-graduate study with a predominantly White institution based in Europe. By researching, consulting, and working in the South, post-graduate trainees are provided with qualifications to obtain leading positions in the development or academic sectors. A critical reflection on this position of privilege forced the team to reflect on their own racial biases (which were referred to by the trainer as 'non-preconceived race lenses').

The study itself is rooted in the food justice theory, and therefore, the project has a clear prerogative: to actively challenge structural discrimination, including racism (Alkon & Agyeman, 2011). Looking further, theory on anti-racist research approaches describes the guiding elements of counter storytelling and participatory approaches and challenges the reproduction of racist social structures (Hylton, 2012). Thus, theory advises us that anti-racist research must make racism explicit and that researchers must be aware of the role they play in society. White people must actively challenge the status quo that they profit from, and for this to be possible, self-reflection and acknowledging one's privilege (brought by skin colour or institutional background) is critical to ultimately changing behaviour and power structures (Tißberger, 2017). The ethnic terms "Black", "Coloured", "White", and "Indian" are still widely used in post-apartheid South Africa, although they are increasingly contested. Apartheid-era laws designed and imposed a social hierarchy of these "race groups". We use the term "People of Colour" as an umbrella term for Black, Coloured, and Indian South Africans, as used in the broader South African context (Durrheim et al., 2011). A widely accepted blanket term in the discourse (from the Berlin perspective) is BIPOC, an acronym for Black, Indigenous, and People of Colour.

³ This text builds on an interview with Dr. Boniface Mabanza Bambu, KASA

12 Introduction

Dr. Mabanza Bambu, trainer at the SLE, challenged the post-graduates in a workshop session to reflect and discuss their individual privileges, roles, and relationships to race and racial concepts. It became clear that a satisfactory cookie-cutter anti-racist approach which we could apply to our study does not yet exist. However, we came to recognise that becoming anti-racist is not immediate and requires ongoing self-reflection; anti-racism would be (and must be) a recurring theme in our research.

The main function of research projects like this, where community members are the subjects and authors of the research, should be to enable people to seize the potential of their own context to change it. A critical reflection, therefore, is to acknowledge local wisdom, observational, traditional, and indigenous knowledge as of equal importance as conventional research findings and not downgrade it as life experience. Furthermore, research should make specific, lived difficulties that a community has identified for itself more visible and concrete. A community must also be central in developing its solutions, rather than having researchers unknown to their context dictate solutions to them. The problem of race is not solved by not addressing it—as long as racism is a part of society, it should be spoken about.

2 Conceptual framework and research approach

The study builds on the interdependent concepts of food systems and food and nutrition security. It introduces the theory of food justice as a lens to analyse and interpret results to unveil structural inequalities and uneven power structures that constrain local food security, agency in food systems, and the right to food while deepening processes of marginalisation.

The central logic of our framework acknowledges food security along its six dimensions as an outcome of a well-functioning food system. Food system change stems from broader external drivers. This study focuses solely on the COVID-19 pandemic as an outstanding external shock impacting local food systems and all related system components. Dealing with the topic within marginalised communities, this work is highly interested in the dimension of agency. Focussing on this dimension lays bare the political aspects of food and shifts the narrative from looking at questions around access to food toward equity and justice within food systems. Considering the central element of systems thinking (that a change in one system component leads to a change in other systems components), the interplay between food systems and food security is complemented by governance. In return, poor food security outcomes call into question governmental responsibilities to ensure the right to food for all. In a final step, the analytical frame of food justice theory was added. It was chosen as an analytical lens to understand underlying factors that create inequalities and uneven power structures in local food systems. The following conceptual framework served as theoretical guidance throughout the study.

14 Conceptual framework and research approach

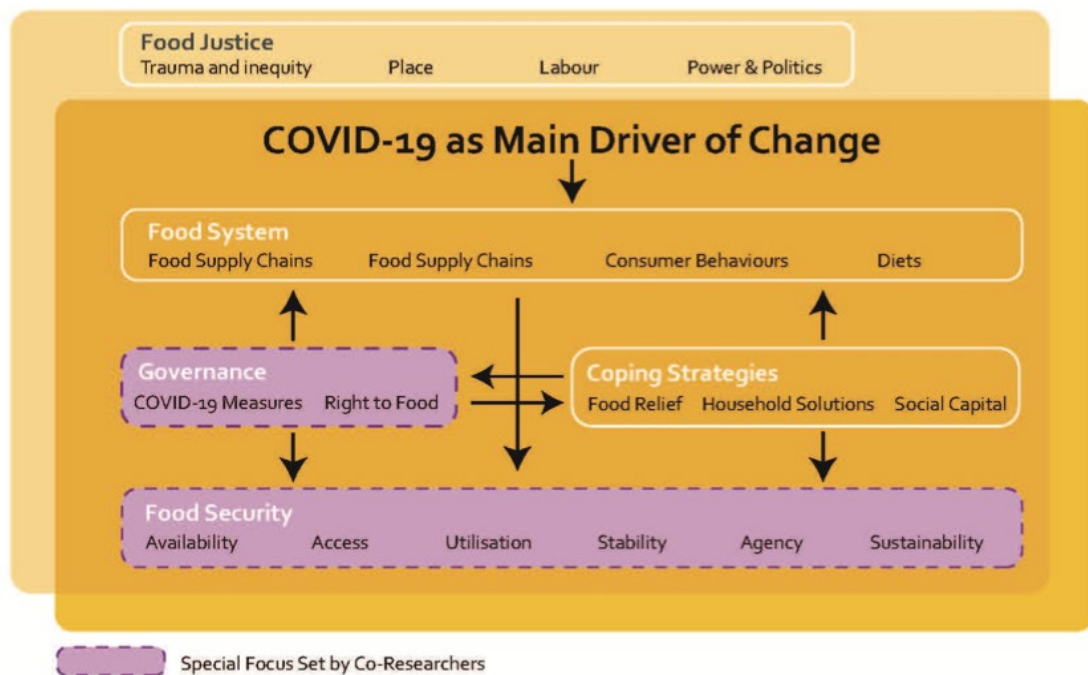


Figure 3: Conceptual framework for this study

2.1 Food systems

To assess the impacts of COVID-19 on the complex web of economic, social, and political food spheres of the Cape Flats and St. Helena Bay, this study utilises a systems approach. Solving and understanding problems around food are based on complex interactions among multiple processes. The transformation of food production and consumption, therefore, requires a holistic analytical view of these multiple processes (Ballamingie et al., 2020; Ericksen et al., 2010). A particular strength of system-based thinking is its capability to track the dynamic and interdependent nature of relationships between components and actors in systems, including trade-offs and feedbacks (Ericksen, 2008; Ingram, 2011; IOM & NRC, 2015).

Food systems are commonly referred to as the set of activities involved in the production, processing, distribution, preparation, and consumption of food (Ericksen, 2008). These complex systems are influenced by many elements such as the environment, people, inputs, processes, infrastructures, institutions, etc. and produce various socio-economic and environmental outcomes.

In the HLPE's concept (HLPE, 2014; HLPE 2017), influencing elements are called drivers of the food system. The HLPE (2014) recognises four main drivers. First, drivers can be of a biophysical or environmental character, for example, natural resources and ecosystem services as well as climate change. Second, they can be political or economic in nature such as leadership, globalisation, foreign investment

and trade, food policies, land tenure, food prices and volatility, conflicts, or humanitarian crises. Third, socio-cultural drivers impact food systems through culture, religion, rituals, social traditions, and women's empowerment. Finally, demographic drivers such as population growth, changing age distribution, urbanisation, migration, and forced displacement are taken into consideration.

2.2 Food security and nutrition

HLPE situates food security and nutrition in a context in which “all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (HLPE, 2020, p. 10). This definition is a significant departure from common food relief programming in that it recognises that food is connected to our upbringing and culture and individual decisions ultimately shape diets in terms of quantity, quality, diversity, safety, and adequacy.

Compiling these concepts, we understand that food systems need to be productive and prosperous to ensure the availability of sufficient food. They need to be equitable and inclusive to provide access to food for all people. They need to produce healthy and nutritious food to ensure nutrient uptake and utilisation and they need to be resilient so as to foster stability in the face of shocks and crises. But they also need to be empowering to ensure all people and groups actively shape the food systems by taking and implementing joint decisions (Oettle, 2020). Lastly, they need to be regenerative to ensure sustainability in all its dimensions.

2.3 Food justice

This study analyses and interprets research results through the lens of food justice to explore structural inequalities and power dynamics within the food systems of the Cape Flats and St. Helena Bay. Inspired by the work of Cadieux and Slocum (2015) and building on previous research with a group of co-researchers (Paganini & Lemke, 2020), the study aims at exploring consumers' position in the research sites and how this position is linked to their access to nutritious and culturally appropriate food, decisions on where and what to consume, and the factors and power dynamics influencing these decisions. In the study context, COVID-19 puts an additional burden on food justice, whereby the justice aspect in South Africa is already diminished by marginalisation as “historically disadvantaged individuals

and communities... often lack agency with respect to food security and food systems, and often experience disproportionate levels of food insecurity” (HLPE, 2020, p. 8).

Food systems are not ‘racially neutral’ (Alkon & Agyeman, 2011, p. 332). They are influenced by structural inequalities and uneven power relations. While our study sought to evaluate food system responses to the COVID-19 pandemic, it would be senseless to do so without simultaneously recognising these structural inequalities; therefore, we applied a food justice perspective to “understand how inequalities of race, class and gender are reproduced and contested within food systems” (Glennie & Alkon, 2018, p. 1). The food justice theory is embedded in questions around historical marginalities shaped by policy, historical legacy, and prejudices (Cadieux & Slocum, 2015; Massey, 1993). The following criteria underpin the food justice perspective employed in our study:

- **Place:** Place is shaped by its complexity and uniqueness and is created out of changing and uneven relations of power, processes, and connections. In this, we included questions on equitable ways to access, manage, and control land and other resources.
- **Labour:** Having a job, employment, or other waged labour plays a crucial role in one’s life, both socially and economically. The aspect of labour is particularly important in food environments supported by informal work.
- **Power and politics:** Food and food systems are influenced by power dynamics, dependencies, privilege, and exclusion. Recognising trauma and inequity helps to understand structural relations of power as necessary to confront race, class, and gender privilege and acknowledges the historical, collective traumas in local contexts.

2.4 Agency and the right to food

This study aspires to put sustainability and agency at the centre of the food security and nutrition discourse. We focus on agency which, to our knowledge, has not yet been considered in food research. In doing so, we have designed metrics to quantify agency. Sen (1985, p. 206) defines agency as “what a person is free to do and achieve in pursuit of whatever goals or values he or she regards as important”. Applying this to food systems, agency impacts food production in terms of how and what food is produced as well as food consumption in terms of consumers’ capacity to make food choices and their ability to engage in processes that shape food system policies and governance (HLPE, 2020).

Achieving agency requires access and control over the resources required to produce or consume food as well as the rights to access accurate information on food and food system dynamics and the ability to secure these rights. Therefore, agency tackles individual and community capabilities and freedoms within a legal jurisdiction. As stated by HLPE (2020, p. 8), “the concept of agency in food systems is deeply connected to human rights, including the right to food.” De Schutter (2014, p. 3) defines the right to food as “the right of every individual, alone or in community with others, to have physical and economic access at all times to sufficient, adequate and culturally acceptable food that is produced and consumed sustainably, preserving access to food for future generations.”

Formally, the right to food is embedded in the Constitution of South Africa (Republic of South Africa, 1996, Section 27(1)(b)) which proposes preconditions for just and sustainable food systems in South Africa. In practice, however, the right to food is severely challenged by grave food insecurity among marginalised communities, broken food systems, aggravated food injustice patterns, and a lack of governance processes enforcing the right to food. In adding agency to the previously technocratic understanding of food security, the right to food and community participation in food governance processes gained conceptual acceptance.

2.5 The co-research approach

This study is designed and grounded in the concept of a co-research project. It follows an existing co-research process and serves as a baseline study for the expansion of community research in cooperation with civil society organisations and research partners in the Western Cape.

Early contributions by Freire (1970) on learning processes and problem-posing methods of oppressed and marginalised groups built the foundation of what is widely known as participatory research. Initiated by Chambers et al. (1989), the ‘farmer first’ approach acknowledges small-scale farmers as active agents in technology adoption and research. Following these lines of thought, our study adopts a participatory co-research approach which includes learning in, with, and from communities; the strive for social change; and the democratisation of the knowledge process (Paganini & Stöber, 2021). The co-research approach involves actors who normally have passive roles in research processes (Pingault et al., 2020); it shifts focus from ‘reporting on’ to ‘working with’ marginalised communities (Cadieux & Slocum, 2015, p. 2). While acknowledging the own White privileges within the SLE

team, our research is "guided by a feminist, antiracist, and anti-colonial commitment" (ibid, p. 2). Engaging in co-research with the communities and giving equal consideration and voice to their knowledge and experience are central for this research. Also, the approach seems especially applicable in the context of food. As outlined by Pingault et al. (2020, p. 291), "Food security is a complex and multifaceted issue that requires a holistic, participatory and transdisciplinary approach to transform food systems at different scales, as well as the integration of different forms of knowledge."

In co-research, community representatives partake in all steps of a project cycle. In close collaboration with the researchers, they identify expectations and research needs. The concept of co-research demands that right from the beginning and the participating communities are, in this case, the driving forces that determine the subject of the study. At inception, all participants are made aware of the project duration and deliverables; they then co-generate a research environment, co-analyse research data, co-understand research findings, and co-develop outputs. Mutual exploration, triangulation, and ownership of results is a key aspect of co-research.

This process reframes the conventional role of the researcher, instating the researcher as a community facilitator and, hence, seeking to provide agency over the research process for all who are involved, while safeguarding academic integrity through their meta-perspective. A key aspect of co-research is ownership (Paganini & Stöber, 2021); the approach is, therefore, process-oriented with a strong aim to foster the co-creation of knowledge. Doing so "...will facilitate the cross-fertilisation of ideas, enable co-ownership of the research process and of its results, and stimulate innovation" (Pingault et al., 2020, p. 293).

PERSPECTIVE: Reflections from five SLE post-graduate students on the co-research process

This research project involved five post-graduate students from the SLE programme. Normally, SLE students put their newly acquired skills and knowledge into practice in a six-month empirical study that includes field work in a foreign country; however, due to COVID-19 travel restrictions, this year's cohort was unable to be a part of the research team on the ground in South Africa.

Instead, the SLE team relied on digital means to become rooted in their research context and break down cultural barriers. Anthropologists and sociologists have questioned the plausibility of researching the 'other' for years and illustrated

the arrogance and impossibility of researching cultural contexts that the researcher is not part of. The travel restrictions facing the SLE team allowed us to respond to this criticism: restrictions necessitated a change in research methods and the involvement of a transdisciplinary collective.

Key to this collaboration was the involvement of the very people who were brought up and lived within the proposed research sites, who could best identify research needs and lend their voices to their community members. The SLE post-graduates feel lucky to be part of this bigger research team which had been involved in previous mutual learning processes and trust relationships with SLE. This group comprises academics and civil society partners on site as well as community representatives involved in food production through urban farming, small-scale fishing, and community education. These local representatives are not only practitioners of their trade who struggled through food challenges during COVID-19, but multilingual (Xhosa, Afrikaans, and English) activists who moderate workshops, facilitate processes, conduct surveys, and mobilise communities. The SLE post-graduate s are privileged to work with these community researchers as they bring voice and dignity to their neglected communities.

Since global travel restrictions prevented in-person collaboration, the project needed to re-envision the project management and the role of the community researchers. Firstly, the mandate for the project is with the co-researchers. This means that they have a dual role as the group demanding services from the SLE team, but also being involved in carrying out these services. The SLE post-graduates would, therefore, become service providers supporting the project partners in achieving their own goals rather than extracting information and demanding services from them. To do this, they first had to understand the co-researchers' and partners' needs, demands, and expectations. This involved facilitation, communication, and coordination between stakeholders to create an environment where contributions are both welcomed and equally weighted. A kick-off workshop was organised to discover partners' roles and expectations and to formulate joint research needs. While the co-researchers already knew each other and enjoyed pre-established social relations, the SLE team members were outsiders and initially did not find those relationships immediately visible or understandable. Throughout the year, phone and Zoom calls were held to check progress and assign tasks to meet targets. Ongoing communication was safeguarded via several WhatsApp groups and always provided the team with food for thought.

In our remote reflections of who we are and where we are coming from, it became strikingly obvious that it is not the SLE team who is involved in the daily fight for just and resilient food system in South Africa.

PERSPECTIVE: Community members' reflections on the co-research process

When I was thinking about this whole co-research, what came into my head was the kwanzaa: the annual celebration that is celebrated in African American culture. It's celebrated over seven days and for each day there is a principle. On the third day they celebrate ujima. It's a collective work and responsibility. So that actually came into my head when thinking about this whole research. On the third day, the ujima is to build and to maintain the communities together and make our brothers' and sisters' problems our problems and solve them together.

With the research being co-research, it's a participatory method. I become part of the research; I'm not just a subject of the research. It's a joint contribution to findings. I got to give an input and I had a kind of ownership to the whole research. It, sort of, paints a clearer picture of what is actually our livelihoods situations. And it does bring us closer to our communities. I'm part of identifying a challenge, I'm part of identifying a problem, and I'm also part of coming up with a solution.

- Female community farmer in Cape Town

The co-research process produced a collaborative group of food producers and fisherfolk who take ownership of their narratives, activities, and relationships. Even after the conclusion of the project, the range of information that continues to be shared by this group is vast, ranging from personal life events to advice on pests, marketing, pricing, access to resources, policy, events, and more. These interactions are anchored in a sense of agency and dignity and are laced with careful discernment for the usefulness of innovations coming in from the outside.

Participating in collecting data meant putting "skin in the game" for the co-researchers. They reported that it was not an easy task to collect this data from the community and spoke of the shame that comes with poverty and shared, historical hardship. Going to the heart of that vulnerability was tough. Yet, sharing their research findings and thinking through the historical roots of their poverty and oppression at triangulation meetings enabled the co-researchers to build solidarity and compassion. They pledged support to each other in their desire to move from the notions of poverty and victimhood to showcase their strengths and solutions-focussed mindsets.

The co-researchers also raised the role of nature in energising activities. The voice of the youth in this process was very strong and the links across age groups was enriching. The youth's clarity, confidence, and ability to conduct deep political analysis was remarkable. While the group's activities will probably continue on their own, it will be powerful to continue a relationship to support in ways that emerge from their analysis toward building resilient local food systems. Powerful, as a way forward is grounded on co-created knowledge and a mutual learning process.

3 Research context

The following chapter describes the food and fishery systems in the Cape Flats and St. Helena Bay with emphasis on the food justice aspects of place, labour, and power. This section draws heavily from literature review and key informant interviews conducted by the five SLE students; however, in the triangulation, co-researchers added perspectives to allow local knowledge beside literature to dominate.

3.1 A food justice perspective on food systems in South Africa

To understand food injustice is to understand intersectionality in the system. In a system that, until a little over two decades ago, has functioned on injustice. That is, a largely White minority group had access to basic human rights and could function as such (as humans, that is), while a largely Black and Coloured majority group could not function to the same level of human capacity.

What I am reaching for here is that there is no difference between black-skinned or coloured-skinned or white-skinned humans. The difference is how the system continues to treat them. This system, which by law once said that humans with black skin could not own property or could not access a kind of education or kind of job, would come to shape the livelihoods of everyone. If your mother is a Black cleaner (whether a cleaner that was clever in school or a cleaner too smart to be a cleaner), she functions on a cleaner's salary to provide for you... Food at home will diminish as the month progresses. Until perhaps you're left with rice, mealie meal, and cabbage. If your mother wants to start a garden, where will it be? She does not have a yard; she does not have the time. Travelling from Cape Town to Khayelitsha at peak traffic allows only a little time of rest before it is bedtime and a new day begins.

The above is a scenario, a relative one that can be turned this way and that. Food injustice in South Africa starts as a human injustice. The injustice, in itself, is an old one, older than my parents and my parents' parents. It really strikes the question of freedom into pieces. If you are really free, how is it that you cannot even choose the kind of food that you eat? If you are really free, how is it that you do not know how your food is made and do not understand half the words on the ingredients list?

Food injustice in South Africa is the 4.3 million people who are unemployed because what will they buy food with? It is the "no" in no land, no job, no money, no education, no hope. Until when?"

- Female food activist

3.1.1 Food system context

The South African food system is described as a corporate-driven (Greenberg, 2017; Thow et al., 2018), export-oriented agriculture sector earning billions operating side-by-side with local food insecurity and hunger, thus creating the illusion of overall national food security (Zgambo, 2018). It is a food system shaped by neo-liberal, globalised value chains, climate change, social segregation, and urbanisation processes and one that fails to implement the constitutional right to food (Pereira & Drimie, 2016).

The majority of South African households rely on income for their food security and live hand to mouth, day-to-day as money is available. Most secure their food needs through bulk purchases of staples from formal retailers, while buying daily supplies from spaza shops and informal food retailers (Solidarity Fund, 2020a). Informal and small-scale traders are a critical node in the food system in townships and informal settlements, supplying some 70% of low-income households with their daily food. This is mainly because they are in the neighbourhood and accessible after hours, sell fresh produce cheaper than the retailers, and offer credit and small, affordable units of goods (Battersby et al., 2017). Food relief is also a critical part of the normal food system; for example, the National School Nutrition Programme (NSNP) provides food daily to 9 million children.

In the 1980s and 1990s, South Africa followed global deregulation trends and pursued market liberalisation (Greenberg, 2017; Haysom, 2016). Deregulation reduced state control of private agricultural production while liberalisation meant opening the economy and trade to global markets (Greenberg, 2015). State regulation gave way to market forces over the agricultural supply chain resulting in concentration of production and capital in the agricultural food sector (Greenberg, 2017; Haysom, 2016; Moore, 2010; Pereira, 2014). The reduction of state control over food supply chains and the opening of markets led to highly concentrated and vertically integrated formal value chains and, therefore, to corporate structures alongside informal food systems (Greenberg, 2015). The introduction of the Marketing of Agricultural Products Act (MAPA) in 1996, as well as the amendment of the Cooperatives Act in 1993, led to privatisation of previously farmer-owned co-operatives (Greenberg, 2015; 2017).

Increasing food prices and price volatility due to international market dynamics put mainly low-income households at risk of not being able to meet their basic nutritional needs (Greenberg, 2015; Pereira, 2014). Paired with increasing urbanisation, these factors resulted in malnutrition among South African children along with an increasing rate of obesity, overweight, and non-communicable diseases

among older children and adults (Misselhorn & Hendriks, 2017; Pereira, 2014; Tawodzera, 2016). 25.2% of the country's population was living below the food poverty line of R441⁴ per person per month in 2015 prices (StatSA, 2019). This study revealed further that more than half (56.1%) of households with younger children that experienced food insecurity are located in urban areas, while 43.9% are in rural areas (ibid).

South Africa has introduced several national policies and programmes to address food and nutrition security at the household and individual levels (Misselhorn & Hendricks, 2017). The National Development Plan 2030 addresses food security to combat poverty and inequality and sets the goal of achieving food security by 2030 (Boateema et al., 2018; Oxfam, 2014). The National Policy on Food and Nutrition Security (NPFNS) (2017) provides a legal framework to meet the constitutional right to food, as captured in the South African constitution (Boateema et al., 2018; Oxfam, 2014).

Since 1994, school feeding has been very much embedded in South Africa's food system and currently plays a crucial role in providing a warm meal a day to over 9 million children nationwide. Its importance for children's food security became apparent when the schools closed as a response to COVID-19. The NIDS-CRAM survey found that in South Africa only 25% of respondents reported a child in their household received a school meal in the previous seven days, compared to 80% pre-COVID-19 (Spaull et al., 2020). According to Deveraux et al (2018), the Department of Basic Education runs the National School Nutrition Programme (NSNP) which aims at enhancing education by providing a food incentive to get children to school. In the Western Cape where our research took place, the Peninsula School Feeding Association (PSFA) uses government funds and limited private funds to supply around 170 schools with meals. When schools closed as a means to contain the spread of COVID-19, the unintended consequence was that the school feeding programme also closed, which had a dramatic impact on the children attending "poorer" schools that provide meals for every child in attendance. Through a politicised series of events, including civil society organisations suing the government and the High Court ruling against the government, the school feeding program was reinstated in a limited capacity and, in July, school grounds reopened to provide children with meals.

In two interviews with FAO officers, the team learned urbanisation is rapidly increasing and by 2050 there will be 9 billion people living on Earth, with about 70%

⁴ Equivalent to 25€ in March 2021

in urban areas. This overburdens urban food systems in terms of food security and safety. It also brings new challenges to local governments who must consider how to strategically integrate resilient food policies into urban planning using a systems approach which recognises the interconnectedness and interdependence of system components. Urban food systems must be viewed from farm to fork with urban consumers as key players. To address the resilience of those systems, the main entry point should be local governments (interviews at FAO, October 2020).

This study was conducted in urban and often-contested spaces. So, while focusing on food, it is essential to unpack the broader urban system and how food and the urban system connect (Battersby & Haysom, 2016). In South Africa, the informal food sector is a significant part of the urban food system with more people being employed in the informal food sector than in the formal (Wegerif, 2020). Informal food markets provide affordable and accessible food, especially to low-income households (Greenberg, 2015; Skinner & Haysom, 2017). Informal food vendors obtain produce from fresh produce markets in cities, small-scale producers, large-scale farms, and channel-processed foods. These products are traded in spaza shops or through street vendors in public spaces (Greenberg, 2015; Wegerif, 2020). Spaza shops are popular since they sell items on credit and in small quantities that are easy to store with limited storage facilities (Greenberg, 2015; Skinner & Haysom, 2017). Informal food retail is a crucial livelihood strategy to foreign migrants (Skinner & Haysom, 2017).

3.1.2 Food justice: Place, labour, and power

We understand food justice as a place-based concept; hence, food security status is significantly shaped by where a person lives and the spaces they move. Regarding dwellers' participation in governance processes, it is particularly the urban space where place most shapes the intensity of participation (Paba & Perrone, 2010; Perrone, 2010). The risk of food insecurity is high for people living in congested and overcrowded informal urban settlements where conditions are already unsafe and unhealthy (Alkon, 2012a). Those with limited access to essential health and sanitation facilities, food, and adequate infrastructure are not only inappropriately equipped to maintain the pandemic's hygiene requirements (Adewoyin & Odimegwu, 2020), but are likely to suffer higher morbidity and mortality consequences (FAO, 2020).

Spatial segregation processes during colonialism and apartheid determine South Africa's settlement and planning patterns (Strauss, 2019) and are still apparent in Cape Town's cityscape. Under Dutch and British rule, administrative land registration systems were introduced to indigenous territories (Harrison et al., 2007;

Strauss, 2019). Spatial planning practices aiming to create 'White-only' spaces with access to infrastructure and services in urban areas resulted in dense settlements and unsafe and unhealthy living conditions for Black and Coloured residents (Harrison et al., 2007; Strauss, 2019). At the end of the 19th century, several policies were introduced that exclude People of Colour from regulated land allocation and settlement in both rural and urban areas; these formed the basis for forced removals (Harrison et al., 2007; Strauss, 2019) and pushed Black and Coloured citizens into homelands and urban periphery. Millions of Black South Africans were forcibly removed from their land and cities and relocated to townships in the periphery of cities, Black homelands, and Coloured reserves under the Natives Land Act, 1913 and the Native Trust and Land Act, 1936 (Hall, 2014). Under the Black (Urban Areas) Consolidation Act 25 of 1945 and the Group Areas Act 41 of 1950, race zones were established and multi-ethnic use of those territories prohibited (Harrison et al., 2007; Strauss, 2019). Homelands or Bantustans were areas designated by the apartheid government for resettlement of Black South Africans. As a result, Black South Africans lost their electoral and residential rights. These townships were in the urban outskirts and meant to temporarily accommodate residents (Harrison et al., 2007; Rogerson in Knight & Rogerson, 2019; Strauss 2019). Rapid growth and migration to cities in the 1980s resulted in informal settlements within townships, where most of the urban poor still live today (Harrison et al., 2007; Strauss, 2019).

There is probably no other component within a food system that indicates food injustice as evidently as in the unequal distribution and thus restricted access to land. In South Africa, this roots back to the violent appropriation of territories by colonial powers and the exacerbation of land eviction and expulsion of urban quarters during the colonial and apartheid era.

In 1994, after the end of the apartheid era, 86% of South African agricultural land was White owned, while 13% of the state-owned homelands were assigned mainly to Black people (Karriem & Hoskins, 2016). The Reconstruction and Development Programme (RDP) of the first post-apartheid government of 1994 attempted to combat the rural poverty and inequality that resulted from land dispossession. This land reform intended to foster small-scale agriculture among People of Colour and eradicate rural poverty through job creation (Hall, 2009; Karriem & Hoskins, 2016). Between 1994 and 2011, only 7.2% of agricultural land was redistributed to poor and landless Black farmers (Karriem & Hoskins, 2016). Land reforms have also failed to successfully promote small-scale production as an alternative model for commercial agriculture (Greenberg, 2013). Instead, the South African government continued to support the dominant large-scale commercial agricultural sector as a solution to guarantee food security (du Toit, 2009). Today, 67%

of the total land in South Africa (122 million hectares) is still White-owned commercial agricultural land, 15% is communal land that is predominantly state-owned, and 10% has recently been allocated for redistribution (700,000 ha) (Walker & Dubb, 2013; PLAAS, 2020). Support for small-scale production has been implemented in poverty reduction programmes, such as the support of food gardens as a welfare strategy, for example, in urban areas in Cape Town (CoCT, 2007; CoCT 2013). For many urban farmers, land is an issue which cross-cuts equality and justice, as the following quotation shows:

It is painful being a landless farmer in my country of birth.

At 61 years of age, I don't know what it is to hold a land title in my country of birth. That is my colonial legacy; the same legacy that left our White peers with almost 90% of the South African landscape, especially productive farmland.

As an adult, I tried to own property. I remember very well the application refusal. That was painful in my life. I lost my dignity. Painfully. I lost self-respect. But, that is all history now.

Opportunity came for me to work with my grandfather on a rural farm, growing all sorts of vegetables and fruits. He run a butchery. I reconnected with the soil and grew vegetables and opportunities. One day, I was offered the chance to lease land on school grounds for farming. I applied with the desire not to become rich, but to claim legacy for the education of the young ones. That is a legacy that I desire to leave for my children, my neighbours' children, and my country's children. That legacy that I, personally, will never get to own unless our government redistributes land.

I want to be able to say, "Here comes the time I have my own hectare!" My children would benefit. I could get food from even a hectare. It would be a peaceful land. And there would be a piece of paper that I can transfer to my children. It's my dream and, with the dawn, it is gone again.

- Male land activist in Cape Town

Another crucial component of food justice is access to labour and a labour market that pays fairly. Socially, having a job means dignity. In terms of food security, it is, therefore, not only important to have work, but also to be in a job that provides security. Globally and nationally, work in service sectors and other insecure, temporary, or seasonal farming and processing jobs are often done by low-wage workers, women, People of Colour, and migrants (Alkon, 2012b).

Participation in the South African labour market depends on several factors such as education, gender, age, ethnicity, and place (Sulla & Zikhali, 2018). The South African employment sector consists of a formal and an informal sector. One

third of the South African labour force is employed formally (ILO, 2018). Being employed in the informal sector means no access to employment-based social protection services (Skinner & Haysom, 2017). The informal sector's crucial role in the food system is unrecognised and remains unattended in national, regional, and local food policies (Skinner & Haysom, 2017; Skinner, 2019). The majority of the urban population in South Africa relies on informal sector activities and casual labour (Battersby et al., 2017). This labour force has access to limited or no assets or savings and their monthly income depends on the continued operation of their businesses (Adewoyin & Odimegwu, 2020).

Post-COVID-19, South Africa had a labour force participation rate of 54.2% in the third quarter of 2020. The unemployment rate was 30.8% and the employment rate was 37.5% of the total employable population (Stats SA, 2019). A significant challenge is that South Africa faces high youth unemployment rates with 31.5% of people aged 15-24 unemployed in 2020 (Stats SA, 2019). Unemployment rates are the highest among Black South Africans, followed by Coloured South Africans (Stats SA, 2019). In 2015, Blacks were 17% less likely to find employment and 16% more likely to hold low-skill jobs than Whites, who earned 80% higher wages (Sulla & Zikhali, 2018). Generally, women face higher rates of unemployment and receive smaller salaries than men. The female unemployment rate was at 46.8% in 2020 (Stats SA, 2020). Urban areas provide more employment opportunities, especially in the formal sector (Sulla & Zikhali, 2018). Low-skilled agricultural labour and jobs in the informal sector have the lowest wages.

3.2 Fisheries in South Africa

The South African coastline stretches more than 3,000km along the highly productive marine ecosystems off the coast of Northern and Western Cape to the less productive, more diverse maritime areas of Eastern Cape and Kwazulu-Natal (FAO, 2018). Fishing communities all along the coastline struggle to legally access marine resources, remain excluded from high-income species value chains, and face high rates of poverty, food insecurity, and unemployment (Nthane et al., 2020; Schultz, 2016; Sowman et al., 2014; Sowman & Niel, 2018 Sunde, 2016).

Since the 1497 landing of Vasco da Gama in St. Helena Bay, the area has been troubled by fishing rights conflicts. The struggle deepened with the exclusion of Coloured and Black subsistence fishers from marine resources during colonial times when the fishing sector was industrialised and culminated in the loss of Black fishing rights during apartheid era (Sowman, 2006; Sunde, 2016).

The fisheries sector in South Africa consists of aquaculture and capture fisheries which include commercial, subsistence, and recreational sub-sectors (DAFF, 2020). The sector is regulated by the Department of Environment, Forestry and Fisheries (DEFF), the Marine Living Resources Amendment Act No. 5 of 2014, and the Policy for Small-Scale Fisheries (DEFF, 2020). Fishing rights are allocated through the Individual Transferrable Quota (ITQ) system that also regulates the Total Allowable Catch (TAC) (FAO, 2018; Isaacs & Hara, 2015). The TAC for the commercial sector is nearly 4,000 tonnes per year and applies to all actors engaged in commercial fisheries. The subsistence sector, which includes small-scale fishers and interim relief permit holders, receives 276 tons (DAFF, 2020). Interim relief permits⁵ are annually allocated fishing permits for certain species (Schultz, 2016).

The commercial fisheries sector emerged in the early twentieth century with the establishment of industrial fisheries under control of the British Commonwealth. During this time, export-oriented deep-sea trawling and crawfish canning were the dominant branches of production (Crosoer et al., 2006). During apartheid, export volumes fell dramatically due to sanctions imposed on the apartheid regime and South Africa became a net pelagic importer in the 1980s (ibid). The transition of the South African commercial fisheries after the apartheid era was characterised by re-integration into the global economy alongside the deregulation of the state's power in the sector (ibid). Today, South Africa is a net exporter of fish. With an export value of USD 598 million in 2017, species such as tuna, lobster, whitefish, abalone, squid, and fishmeal are exported to Japan, Europe, United States, China, and Australia. Approximately 27,000 people are employed in the commercial fishing sector in South Africa (FAO, 2018).

The small pelagic fishery, active in sardine, anchovy, round herring, and mackerel, is the most important commercial branch in terms of catch volumes. The catch is processed into canned products, fishmeal, and fish oil. Around 50% of the vessels are controlled by the companies Oceana and Marine Product which founded the South African Pelagic Fishing Industry Association (SAPFIA) that holds most of the fishing rights for pelagic species. Of the 10,000 employed, half are contracted on a

⁵ The interim relief permit allows the catching the following species: snoek (100 fish per fisher per day), yellowtail (25 fish), cape bream (42 fish), other white-line fish species (number not available), and a small allocation for West Coast rock lobster (75kg during the entire lobster season from November until March) (Key informant, F8, 2020).

seasonal and temporarily basis (FAO, 2018; Nielsen & Hara, 2006). The hake industry contributes 45–50% to the total catch value and provides full-time employment for more than 8,000 people. Two companies, Irvin & Johnson and Sea Harvest, dominate hake fishing. Since the introduction of Marine Stewardship Certification (MSC) in 2000, the global whitefish market has significantly benefitted South African hake exports either wholesale or as value-added products. It is also distributed to supermarkets and consumed locally in South Africa (FAO, 2018; Nielsen & Hara, 2006). Another important species for the commercial fishing industry is the rock lobster, mainly destined for the export market to China (FAO, 2018; Schultz, 2015).

3.2.1 Small-scale fisheries

Approximately 28,000 households and 30,000 people in 147 fishing communities along South Africa's coast are engaged in the small-scale fishing sector (DAFF, 2020; Isaacs & Hara, 2015; South African Government, 2020b).

The Marine Living Resources Amendment Act No. 5 of 2014 defines a small-scale fisher as

a member of a small-scale fishing community engaged in fishing to meet food and basic livelihood needs, or directly involved in processing or marketing of fish, who— (a) traditionally operate in near-shore fishing grounds; (b) predominantly employ traditional low technology or passive fishing gear; (c) undertake single day fishing trips; and (d) is engaged in consumption, barter or sale of fish or otherwise involved in commercial activity, all within the small-scale fisheries sector. (MLRA 2014, Section 1).

The overall economic value of the small-scale fishing sector is unknown due to a lack of reliable data (Sunde, 2016). However, the industry is considered necessary in contributing to food security and income (Isaacs & Hara, 2015; Sowman et al., 2014; Sunde, 2016). In the context of marine ecosystem diversity, fishing communities in South Africa have developed specific fishing practices suitable for their local contexts (Clark et al., 2002; Schultz, 2016; Sunde, 2016). In the more commercialised small-scale fishing sector in the Western and Northern Cape, species such as snoek, yellowtail, cape bream, or West Coast rock lobster are caught by traditional boats. Different shellfish species are harvested mainly for household consumption. Activities in the Eastern Cape and in KwaZulu-Natal are subsistence-oriented and focus on inter-tidal species like octopus, limpets, and black and brown mussels or on inshore fish species caught by line (Schultz, 2015). In the Western Cape, the sector is still overlooked and the small-scale fisheries policy that was facilitated in 2007 is still not yet implemented.

3.2.2 Restrictions in the small-scale fishing sector

The first wave of restrictions on fishing activities arrived with the Dutch occupation in 1652 and affected the Western Cape area (Sunde, 2016) predominantly. When the British took over in 1805, the restrictions were lifted but imposed again during the industrialisation of the fishing sector around 1900. With the Sea Shore Act of 1935, the state created legislative and policy mechanisms that imposed fishing restrictions on Black and Coloured subsistence and artisanal fishers and favoured White commercial fisheries (Sunde, 2016). During apartheid, discriminatory processes against Coloured, Black, and Indian South African subsistence fishers continued based on the Sea Fisheries Act of 1940, Sea Fisheries Act of 1973, and Sea Fisheries Act of 1988. Spatial segregation politics and the establishment of marine protected areas in the 1970s brought dispossession and subsequent loss of access to tenure and marine resources to coastal communities (Sunde, 2016).

In 1988, the Individual Transferrable Quotas were introduced by the South African government. The aims were economic efficiency and regulation in the fishing sector by distributing 80% of the TAC to established companies and 20% to new entrants (Isaacs, 2011; 2012). As a result, marine commons became private property for already privileged commercial companies. Small-scale fishers were further marginalised in these neoliberal processes of consolidation and unequally distributed fishing rights (Nthane et al., 2020; Sunde, 2016). Until 1994, small-scale fishers were legally excluded from fishing rights (Sowman, 2006; Isaacs, 2011). Post-apartheid policies aimed at reforming the fisheries sector to redistribute fishing rights to marginalised communities resulted in the Marine Living Resources Act (MLRA) of 1998, which recognised subsistence fishers legally (Isaac & Hara, 2015; Sowman, 2006;). Until today, a large number of artisanal and small-scale fishers are still excluded from fishing rights under the ITQ system (Isaacs & Hara, 2015; Sowman, 2006;).

3.2.3 Fishing rights as human rights

Small-scale fishing communities in the Western and Northern Cape formed the umbrella network Coastal Links in 2003. The Artisanal Fishers Association and Legal Resources Centre, a class action suit against the Minister of Environmental Affairs and Tourism at both the High Court and the Equality Court, was launched in 2005 with Masifundise Development Trust's support. Their claim for the recognition of fishing rights as human rights resulted in an order from the Equality Court in 2007 to develop a policy that would ensure equitable fishing rights and provide interim relief permits until the promulgation of the policy (Isaacs & Hara, 2015; Sowman, 2006; Sunde, 2016).

The Small-Scale Fishing (SSF) Policy was gazetted in 2012 after a five-year participatory process with representatives from government, fisher communities, academia, and NGOs (Isaacs & Hara, 2015; Sowman, 2006;). The policy commits to recognising the rights of small-scale fisher communities to catch. Alongside the Marine Living Resources Amendment Act No. 5 of 2014, the policy is the legal framework to allocate fishing rights to small-scale fishers in the form of collective rights to Community Based Legal Entities (CBLEs). Based on a human-rights approach, it follows the FAO Voluntary Guidelines' approach for securing sustainable small-scale fisheries (Sunde, 2016). The policy is aligned to poverty alleviation, food security, and socio-economic development among marginalised fishing communities and reflect a paradigm shift from ITQs to a system of collective rights allocation (Isaacs & Hara, 2015; Masifundise Development Trust, 2012; Sowman et al., 2014; Isaacs & Witbooi, 2019). However, since the implementation of the SSF Policy in 2016, the process of rights allocation has been very slow (Nthane et al., 2020). A large number of small-scale fishers, for example, women engaged in shellfish harvest, remain excluded from access to marine resources as the system of interim relief permits only allows a limited number of people to fish and harvest a limited tonnage of marine species. (Isaacs & Hara, 2015; Sowmen et al., 2014; Sunde, 2016)).

Since the interim relief permits only allow a percentage of small-scale fishers to catch, black markets have evolved, particularly with crayfish. This has resulted in a black market where fisherfolk (and others) sell poached crayfish or abalone. Fisherfolks perceive the lack of permits as an insult to their livelihood strategy that criminalises fishing activities that they have engaged in for generations. This situation worsened during COVID-19, when it became difficult for fishers in the Western Cape and Northern Cape to fish; fishers in the Eastern Cape and KwaZulu-Natal could not fish due to the delay of permits due to lockdown for their coops and were without income since lockdown. This was addressed by government's distribution of one food parcel per family during the lockdown. It contained a few food stuffs and, among them, canned fish—a rather humiliating donation.

3.3 Research sites

This research emphasised urban spaces and was conducted in five sites in the Western Cape. We worked in four wards in the Cape Flats, namely Mitchell's Plain, Khayelitsha, Gugulethu, and Mfuleni (see figure 5). A fifth research site was St. Helena Bay, a fisher settlement on the west coast, approximately 150 km north of Cape Town. The sites were selected by participating co-researchers who live in these communities and documented the impacts of lockdown from a farming perspective (Buthelezi et al., 2020; Paganini et al., 2020). The research sites differ in demography, history, and culture; however, all the Cape Town sites are shaped by characteristics of the city environment: contested spaces in township areas with partly informal settlements and confined built environments. St. Helena Bay adds a new perspective to the research, located in a rural area and predominately shaped by fishing activities.



Figure 4: The research was conducted in four sites in urban Cape Town and in rural St. Helena Bay. The map was created by the study team. Map source: Open Street Map, 2020.

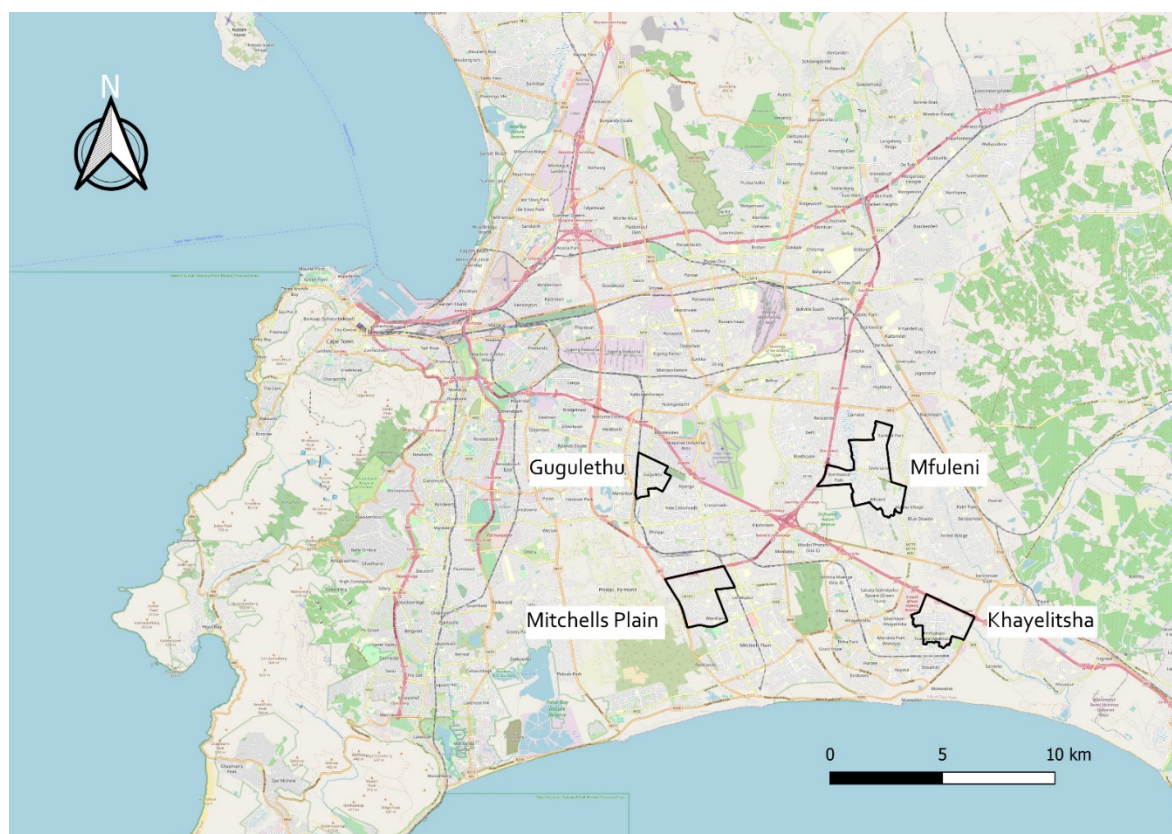


Figure 5: The four research sites in Cape Town. It is important to note that the research took place in wards within the four mentioned neighbourhoods. Wards within the townships differ in formality and demographic strata, hence, the results are not generalisable for the township. Source: Open Street Map, 2020.

Mitchell's Plain is a predominantly Coloured neighbourhood in Cape Town, founded in the 1970s and one of the largest townships in the city. The population consists predominantly of Capetonians who were forcibly resettled to the city outskirts and migrants from nearby towns in the Western Cape who migrated to Cape Town in search of employment. Gugulethu, Khayelitsha, and Mfuleni are predominantly Black neighbourhoods. Gugulethu was founded in the 1960s and is the home of a population that mainly grew up in Cape Town or in the Western Cape Province. Khayelitsha and Mfuleni were founded in the mid 1980s and mid 1970s and are both established neighbourhoods inhabited by Capetonians and migrants mostly from the Eastern Cape. Mitchell's Plain and Gugulethu are approximately 15 km from the city centre (30 min by car), while Mfuleni and Khayelitsha are about 30 km from the centre (45 min by car).

St. Helena Bay is a small town in a less-densely populated area along the West Coast. Household income in the area is higher than surrounding areas because of the presence of private weekend estates owned by a wealthier stratum. Our survey was conducted in the community of Steenberg's Cove in St. Helena Bay and does

not reflect the demographic of weekend homeowners. Census statistics (see Table 2) and the respondents' sampling overview (see Table 5) summarise the socio-demographic characteristics of these research sites. The data is drawn from 2011 census (a new census is planned for 2021); they display considerable differences between the sites.

Table 2: Socio-demographic characteristics of the research sites

	St. Helena Bay	Gugulethu	Mitchell's Plain	Khayelitsha	Mfuleni
Size	264 km ²	2 km ²	5 km ²	4 km ²	7 km ²
Population	5,515	25,004	36,876	32,031	41,989
Median age	32	28	27	24	25
Racial majority	Coloured (63%)	Black (98%)	Coloured (91%)	Black (97%)	Black (78%)
Household income (Average annual)	R 57,300	R 29,400	R 57,600	R 30,000	R 30,000
Household head	Male (72%)	Female (57%)	Male (64%)	Male (56%)	Male (65%)
Highest educational level attained:					
Primary	22%	10%	12%	16%	12%
Secondary	37%	43%	47%	47%	47%
Matric	29%	38%	36%	32%	34%
University	7%	6%	4%	1%	4%
Place of birth:					
Western Cape	79%	84%	95%	41%	46%
Eastern Cape	5%	10%	1%	51%	46%
Outside South Africa	3%	2%	1%	2%	3%

Source: Census 2011 (Stats SA, 2011).

3.3.1 Cape Flats

The Cape Flats are located at Cape Town's periphery. Populated with townships in the 1920s, The Cape Flats are built on a low-lying, flat area situated east of the city centre. The area stretches between the Cape Peninsula in the west, the Wine-lands in the east, and False Bay in the south and merges with the residential areas of Cape Town in the north. A former military area and dumpsite, the Cape Flats are not a very inviting settlement area. Strong winds and sandy soils characterise the area. The Cape Flats are densely populated and the neighbourhoods within the Cape Flats differ in infrastructure and formality.

The Cape Flats are sandy, flat, shrubby areas. They used to be under water a few hundred thousand years ago, but are now dunes and built communities. There were forced removals of Black and Coloured people from inner city areas to these dunes. The city was to be reserved as a White-only permanent residence. The Cape Flats would become home to a majority Black and Coloured population. Here, populations come and go to the city for work—the taxi rank in Cape Town is packed to the brim between 4pm and 6pm during the week. The city is not home to those who help keep it on its feet. Who help to keep the houses clean, the grass cut, and the

children fed and bathed. Those people live here where the wind blows sand between the shrubs.

- Female food activist

The segregation of Cape Town into wealthy suburbs, inner-city districts, and marginalised peripheral areas comes along with ongoing stigmatisation of the urban poor in post-apartheid cityscapes (Houssay-Holzschuch, 2017; Parnell & Robinson, 2013; Wilkinson, 2000). The food system interplays strongly within urban spaces: the way traffic is organised shapes food pathways, the location of supermarkets determine diets, and the availability of electricity and water influences the way people prepare food (Battersby & Haysom, 2016; Haysom, 2015; Haysom et al., 2017). Food systems in the townships are strongly influenced by a complementary informal sector (Haysom et al., 2017). Cape Town's food system is characterised by the local government's perceived lack of mandate (Haysom et al., 2017). Charman et al. (2020) asserts that the power resulting from spatial planning and inner-community dynamics and hierarchies constrain options for participation in urban governance processes.

People living in the Cape Flats source food from supermarkets, street vendors, or spaza shops within walking distance (many dwellers lack other transport). Spaza offer basic food, cleaning products, candles, cellular airtime, and other household items for sale. They are small shops built in informal shacks or into the living area of family homes and, thus, have little potential for expansion and investment. Spaza are fundamental to the township economy (Tawodzera, 2019) since they sell items in smaller quantities and allow customers to buy on credit (Battersby et al., 2017). Battersby (2020) claims 80% of all spaza shops are owned by foreigners which leaves them prone to conflicts spurred by xenophobia.

Mitchell's Plain has two main commercial food outlets (Westgate Mall and Mitchell's Plain Town Centre) offering supermarkets, fast food restaurants, and fruit and vegetable stalls. Mitchell's Plain's food culture centres around home-cooked meals consumed within families and extended families; it is not surprising that the neighbourhood offer very few street stalls or take-away options.

All areas of Gugulethu, Khayelitsha, and Mfuleni have access to supermarkets, but spaza shops are more common in the food environment. Street stalls are also common and sell prepared food such as grilled or fried meat. Additionally, almost all schools in these areas have food gardens that are cultivated by one or more farmers. Most food from these gardens is marketed to restaurants and through social enterprises such as EthicalCoop (until 2018), Harvest of Hope (until 2018), and Umthunzi (until early 2021), though some is sold locally.

Activists, civil society, NGOs, academics, producers, processors, and chefs act within Cape Town's food system. This melting pot of ideas inspires cooperation, conversation, and collaboration, but also competition and dependencies, particularly among producers (Paganini & Lemke, 2020). Urban agriculture plays a prominent role within the food system, with hundreds of urban farmers cultivating food gardens on public grounds and thousands of urban dwellers practising backyard gardening on tiny spaces (Engel et al., 2019; Kanosvamhira, T., & Tevera, 2019). These activities have social benefits such as community building, environmental education, and ecosystem services. Although urban agriculture adds diversity to growers' diets, the income it generates is a net loss for most of urban farmers (Paganini et al., 2018).

3.3.2 St. Helena Bay

St. Helena Bay is located in the Saldanha Bay Municipality 160 km north of Cape Town, with 11,500 inhabitants who speak Afrikaans as a first language (Schultz, 2015). The economy of St. Helena Bay has shifted from being a productive fishing industry toward an economy marred by unemployment. In contrast, small-scale fishing activities, both formal and informal, and social grants are significant sources of income (Schultz, 2015). St. Helena Bay underwent rapid industrialisation of the pelagic inshore fishing sector in the 1940s and deindustrialisation in the 1950s (Schultz, 2015; van Sittert, 1993). These processes led to decreasing wages and less employment, making living conditions increasingly precarious. In the 1950s, falling fish prices on the international market reduced catching amounts and the emergence of pelagic industries in other countries made the sector unprofitable, resulting into rapid deindustrialisation after 1956 (van Sittert, 1993).

St. Helena Bay is home of small-scale fishers and the large fishing companies. We had discussions regarding a market for seaweed. We have applied but were unsuccessful. We also would want to bring out the value of the shellfish and were unsuccessful. It is difficult to sell if you do not have the rights for it because then it is regarded as illegal although it was a tradition all the years. You need to have the rights from the Department of Fisheries. We have this dream that small-scale fishing co-operatives would look at highlighting the plight of women.

- Fisherwoman

The highly productive Benguela Current Large Marine Ecosystem harbours rich fishing grounds (Sowman, 2006). However, environmental factors such as algal blooms and oxygen depletion cause mortality among marine species, particularly the West Coast rock lobster (Tunley et al., 2012). Such environmental factors could be linked to climate change as well as overfishing, and in response to that, a Marine

Protected Area along the coastline of St. Helena Bay has been established (Schultz, 2015).

Today, the three fishing factories Lucky Star, Sea Pride, and West Point employ more than 1,000 people from the area of St. Helena Bay. Controlling all stages from catching to distribution, these factories mainly produce canned pilchards and sardines for mostly Coloured South African consumers and for export as well as fishmeal for export markets in oversea countries (Oceana Group, 2020; Saldanha, 2020; Sea Pride, 2020). Both, women and men participate in post-harvesting fishing activities on the basis of seasonal contracts and weekly payments. Men are predominantly employed full- or part-time in harvesting activities on privately-owned or factory-owned vessels. Regulations of the interim relief permits formalise small-scale fishing activities through middlemen. However, fishing is a seasonal and temporary activity for many labour forces. Further, small-scale fishing activities, and thus income flows, depend on weather conditions as they rely on low technology equipment such as traditional boats used for line fishing (Schultz, 2016). One of the most substantial impeding factors however is the absence of fishing rights.

Fishing-related activities cannot solely be seen as sources of income and employment. For generations, people in St. Helena Bay strongly identify themselves with fisheries (Cardoso et al., 2005; Schultz, 2015). Despite the community's strong identification with the sea, there is a negative perception, especially among young people, of fishing activities due to the difficult working conditions. This leads to declining youth engagement as young people are discouraged from working in the sector (Key informant F8, 2020). Traditional fishing practices such as net fishing have been lost in the context of dispossession during colonial and apartheid times; most food-related traditions remain vivid. Preservation of fish by drying and preservation in salt or spices and pickles are still commonly practised. Traditional recipes include curries, pies, or soups. However, consumption of lobster and abalone has become rare due to limited-harvest permits (Key informant F8, 2020).

Shore-based activities are based on subsistence permits that do not allow commercial activities. They are carried out predominantly by women and children who collect white and black mussels, limpets, and periwinkles for household consumption. These shellfish are sold frozen, cooked, or pickled to the community. Shore-based activities are particularly relevant in the context of unemployment (Key informant F8, 2020; Schultz, 2014; Sowman & Cardoso, 2010).

Snoek catches provide the highest source of income for St. Helena Bay's small-scale fishers. The famous snoek-run around Easter is a socially and economically important event in the area and attracts tourists, recreational fishers, as well as

commercial fishing vessels. After being sold to middlemen called *langanas* at the landing site, snoek finds its way to markets and low-income consumers in the region or is sold to factories where it is further processed. Prices offered for the species by *langanas* are subject to considerable price fluctuations that can impair profitability. While the snoek species provides an economically important value chain in the Western Cape, small-scale fishers usually receive a low share of the proceeds (Key informant F8, 2020; Schultz, 2016).

Cape bream is sold by small-scale fishers either to the community, factories, or *langanas* who sell mainly to high-end restaurants or markets in Cape Town. A small group of small-scale fishers in St. Helena Bay started selling cape bream via the ABALOBİ Marketplace, an app created by the social enterprise ABALOBİ (Xhosa for fisher). The aim of ABALOBİ is to address social justice and poverty alleviation among small-scale fishing communities (Nthane et al., 2020). Selling through this app allows fishers to approach consumers and restaurants in Cape Town and Johannesburg. According to the NGO management, this allows stable and higher prices for the small-scale fishers as well as traceability and awareness of the origin of the catch for the consumer (Key informant F3; F7, 2020). ABALOBİ therefore acts as a platform, not as an intermediary.

The illustration of the local fish systems in Figure 5 shows the interrelated streams of product and cash in St. Helena Bay and was created with the input of members of the fisherwomen collective, Weskusmandjie. At the centre of the illustration are small-scale fisherfolk who fish and catch based on an interim relief permit. Fisherfolk characterise their community as either engaged in small-scale fishing activities, labourers in the fish factory, employed in other activities, or among the significant number of unemployed people. They describe their main challenges as being that they can obtain few and small vessels, little funding goes into the sector, there is lack of transport, and there is little or no access to own markets. There is no reliable data on the percentages of the food flows, but fisherwomen estimate that most of the products go to fish factories on site or via intermediaries to Cape Town. They assume most products go via intermediaries to overseas export markets. A very small amount of the catch is sold via the ABALOBİ marketplace; however, this generates the highest profit, followed by direct sells to the immediate community. Most products go to local factories and intermediaries, while lobster is caught to supply an export market.

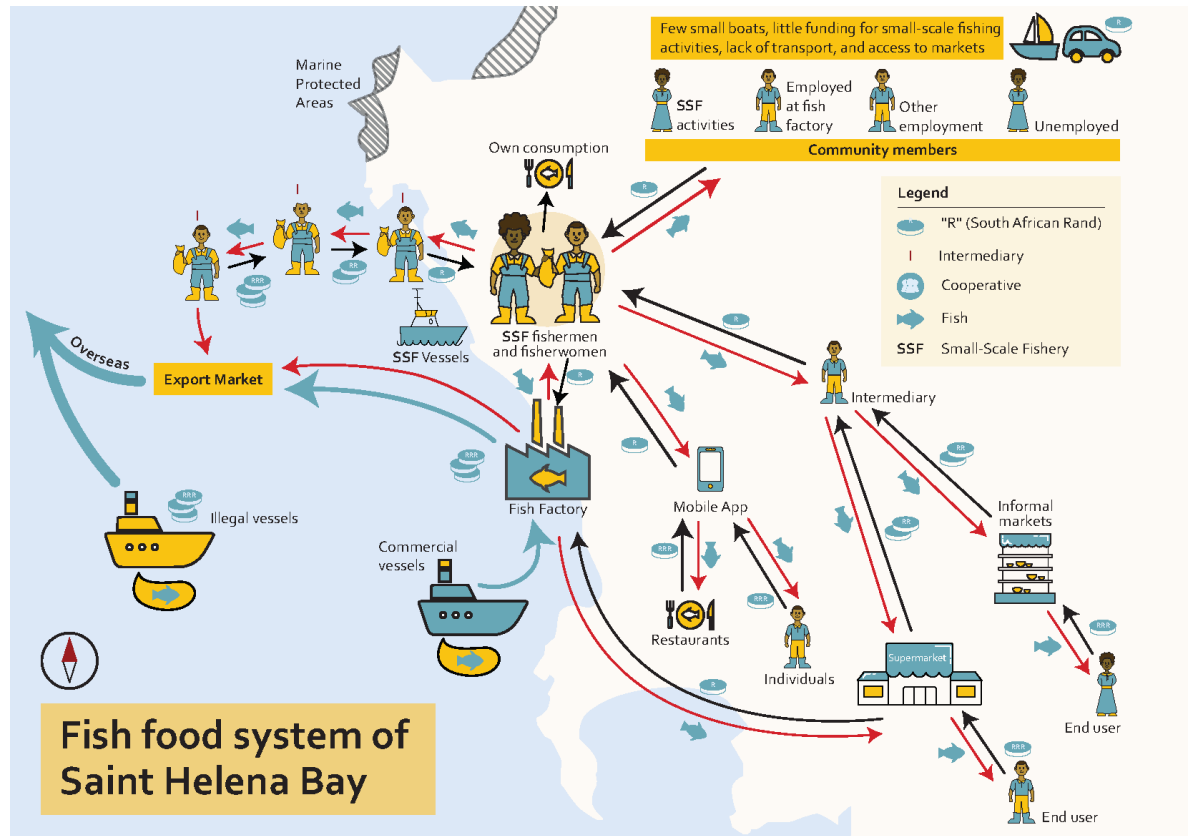


Figure 6: Fisheries value chain in St. Helena Bay. The black arrows indicate the flow of money, while the red lines indicate the flow of catch.

4 Methodology

The methodology was designed and adapted by co-researchers and the SLE team who worked together remotely due to worldwide travel restrictions during the COVID-19 pandemic. The active role of co-researchers in planning, coordinating, and implementing the methods have made it possible to obtain results while assuring quality through constant triangulation and contextualisation.

4.1 Research approach

This study employed two approaches concurrently: (1) an empirical mixed-methods approach and (2) a co-research approach (introduced in section 2.5).

The mixed-methods approach employed qualitative tools and findings to explore quantitative results for validation and vice versa (Bryman, 2006). The co-research approach enabled remote and digital research. It also facilitated an immersion into community and allowed the team glimpses of the local context and its response to COVID-19. Similarly, it allowed the whole team to receive regular feedback and adjust methods to better meet the partner organisations' research needs. Lastly, the approach proved useful in the dissemination of research results within a larger community audience.

4.2 Methods of data collection

The data collection was shaped by COVID-19 protocols and the impossibility of the SLE team traveling. We used a combination of five quantitative and qualitative research methods in three research phases (Table 3). These were developed in a joint process with co-researchers and the SLE team. Enumerators were part of the data collection; students from the research sites conducted the questionnaires and mapped the food environment. Enumerators and co-researchers worked closely in the research sites.

- Household surveys ($n=1824$)
- Food mapping in all five research sites
- PhotoVoice ($n=50$)
- Four on-site focus group discussions (FGDs)
- Semi-structured key informant interviews ($n=34$)

4.2 Methodology

Table 3: Research questions and data collection method

Guiding research question and responsibilities	Method of data collection				
	Phase 1 Sep-Oct 2020	Phase 2 Sept-Nov 2020			Phase 3 Nov 2020
	Household survey	Food mapping	Key informant interviews	PhotoVoice	FGD
How have COVID-19 measures impacted the state of food security?	√		√		√
Data Collection	Co-R, E		SLE team		Co-R, Study team
Data Analysis	SLE team		SLE team		Study team
Analysis Interpretation	Study team		SLE team		Study team
Which food justice patterns can be identified in South African food systems?		√	√	√	√
Data Collection		Co-R, E	SLE team	C, Co-R	Co-R, Study team
Data Analysis		SLE team	SLE team	C, Co-R	Study team
Analysis Interpretation		Co-R	SLE team	Co-R	Study team
How could just and resilient post COVID-19 food systems look?			√		√
Data Collection			SLE team		Co-R, Study team
Data Analysis			SLE team		Study team
Analysis Interpretation			SLE team		Study team
How is agency perceived and applied in the context of the food systems?	√		√		√
Data Collection	Co-R, E		SLE team		Co-R, Study team
Data Analysis	SLE team		SLE team		Study team
Analysis Interpretation	Study team		SLE team		Study team

The table indicates the methods used to gain information about each research question and who conducted each process: Co-Researchers (Co-R), Enumerators (E), Community members (C), post-graduate researchers (SLE team), or the study team (Study team) including partners and the project coordinator.

4.2.1 Household survey

The central findings of this study draw from a quantitative household survey that generated results from each of the five research sites. The results give a representative picture of food security in the communities. The study also examined

agency by developing a new index (AM, Agency Module) and aimed at gaining a deeper understanding of local coping and sharing mechanisms.

Sampling strategy and population description

With a sample size of 1,474 households in the Cape Flats and 350 in St. Helena Bay, the survey is statistically representative with a confidence level of 95%. Data was collected in four wards of four townships differing in their population strata, year of establishment, and formality. Eight local enumerators were supported by co-researchers to implement the survey and conduct the interviews. Each enumerator was in daily personal contact with one team member in Germany (buddy principle) via WhatsApp to debrief the day and flush out technical issues or specific questions requiring further interpretation. The data was uploaded to the KoBoToolBox daily.

Respondents' participation was solicited via community social media channels (WhatsApp groups and Facebook). They were encouraged to share the interview URL link through other channels. Respondents were all over 18 years old. Elderly participants were targeted via telephone call; however, as the following table shows, very few respondents in the age group of 65+ took part, corresponding with the general population strata in the research sites (see table 2). Face-to-face interviews were carried out by approaching dwellers in public spaces (Cape Flats) or door to door (St. Helena Bay). We recognised that the population that appears in public is not representative of the whole population; it may rule out, for example, women who are likely to be at home cooking at certain times of the day. As such, the daily debrief allowed the team to monitor the sampling and focus efforts on gaining a sample which is representative of the Census population with regard to gender and age. Many co-researchers are engaged in urban farming or fishing. To avoid creating bias, the enumerators did not make use of their farming or fishing social channels when soliciting survey recipients. However, in Gugulethu, the survey was shared among the newly established G.U.F.I. network, which led to a higher number of backyard and urban farmers. In St. Helena Bay, the enumerators mostly interviewed members of the fishing community. The area is also inhabited by more affluent holiday homeowners, who were not interviewed. Black South Africans, who live in St. Helena Bay's nearby township of Laingville were not interviewed by the enumerators. Hence, the findings from St. Helena Bay mirrors the reality of the fishing community, which mainly lives in Steenberg's Cove.

The sampling of this survey mirrors the strata described in the context chapter (see table 2). As also described by the general population strata, the differences in the wards are visible in household income, educational status, but also in migration

status. In our sample, the high numbers of university graduates compared to the Census data (see table 2) is noteworthy. This was because the enumerators in Mitchell's Plain and Gugulethu recruited participants through university networks such as students' WhatsApp groups.

KoBoToolbox was used as a digital data collection tool. The Harvard Humanitarian Initiative (n.d.) developed this app for research in challenging environments, e.g. in humanitarian crises (Henze et al., 2020). Before the data collection started, the enumerators attended a one-day virtual training to gain understanding and practical insights in how to conduct interviews using the KoBoToolbox. The online training covered the aim of data collection, the survey structure, and how to pose questions. A training manual written in non-academic language was provided to each enumerator and all enumerators role played a telephone interview with one of the researchers in Germany.

The survey was piloted with 30 respondents to test the questions, technology, and results-transfer process. Table 4 explains the survey components and their purposes. The following sections shed light on the food security component and the newly developed Agency Module.

Table 4: Survey components

No.	Components	Purpose
1.	Socio-economic status of the household	Disaggregated data by gender, age, educational level, household structure, and employment status
2.	Food Insecurity Experience Status (FIES) module	Food security status of the respondent's household in the last 30 days
3.	Agency Module	Individual agency before COVID-19 measures were implemented and after
4.	Coping strategies and other questions relevant to local food systems	Supplementary information and triangulation

The Food Insecurity Experience Scale (FIES) module

When considering tools to evaluate household food access, we discovered a household food security baseline survey using the Household Food Insecurity Access Scale (HFIAS) had been conducted in 2008 in nearby research sites. If we had also used the HFIAS, we would have produced data that could be compared across a decade; however, a deliberate decision was made to use the Food Insecurity Experience Scale Survey Module (FIES-SM) instead since it is more capable of producing reliable food insecurity prevalence estimates with only eight brief standardised

question. FIES also allows for disaggregation according to demographic characteristics and geographic location.

Developed by the FAO's Voices of the Hungry project, we used the FIES-SM to evaluate household food access. The FIES is a metric of the severity of food insecurity and can guide actions aimed at ending hunger by 2030 (SDG 2, target 2.1). This experience-based scale builds upon other food insecurity scales, such as HFIAS and the Latin American and Caribbean Food Security Scale (ELCSA). All these scales measure food insecurity based on people's access to adequate food (FAO, 2021).

The FIES module uses an eight-item questionnaire to assess individual or household conditions and behaviours which hamper the ability to conduct a healthy, active, and dignified life. The severity of food insecurity is modelled over one month based on these conditions (Cafiero et al., 2013; 2018). The eight questions are:

1. During the last four weeks, was there a time when you or others in your household were worried about not having enough food to eat because of a lack of money or other resources?
2. During the last four weeks, was there a time when you or others in your household were unable to eat healthy and nutritious food because of a lack of money or other resources?
3. During the last four weeks, was there a time when you or others in your household ate only a few kinds of foods because of a lack of money or other resources?
4. During the last four weeks, was there a time when you or others in your household had to skip a meal because there was not enough money or other resources to get food?
5. During the last four weeks, was there a time when you or others in your household ate less than you thought you should because of a lack of money or other resources?
6. During the last four weeks, was there a time when you or others in your household ran out of food because of a lack of money or other resources?
7. During the last four weeks, was there a time when you or others in your household were hungry but did not eat because there was not enough money or other resources for food?
8. During the last four weeks, was there a time when you or others in your household went without eating for a whole day because of a lack of money or other resources?

The survey reflects mild food insecurity (question 1 to 3) to severe food insecurity (question 7 to 8). Answers to these eight questions may only be answered with

“yes” and “no”. With the number of “yes/no” answers, it is possible to determine a raw score from 0 (all answers “no”) to 8 (all answers “yes”). This allows for the construction of a one-dimensional measure. By using Rasch modelling,⁶ this survey module can identify the probability of responses, as well as the overall severity of the latent trait of the respondent, which is food insecurity. Each item is assigned a specific severity which means that the probability of affirming a more severe item is lower when a less severe item was responded negatively (Nord, 2014). Scores from 0-3 are considered food secure, from 4-6 are moderately food insecure, and from 7-8 are severely food insecure. Additional to the suggested categories and for more precise analysis, we split the first category “food secure” in the two FIES categories “food secure” and “mildly food insecure”. The meaning of “moderately food insecure” is that in the last four weeks the respondent ate less than needed, skipped a meal, or ran out of food. Being severely food insecure means that during the same time span, the respondent experienced hunger or did not eat for a whole day due to lack of resources (Cafiero et al., 2018). Each respondent is assigned a food insecurity status, such that it is possible to compute the prevalence rate of food insecurity for the representative sample (Nord, 2012).

We applied the FIES within a significantly shorter time span (one month) to measure food security and food insecurity during the COVID-19 pandemic and lockdown periods. It is important to account for 12 months because of seasonal variations in food availability in the agricultural calendar (Cafiero et al., 2013). Previous studies in the Cape Flats showed that the impact of seasonal variations exists due to lack of resources to buy food from January to April when people travel during the festive season and transfer money to families in the rural areas. Data collection took place from mid-September to mid-October which are both months of average food accessibility (Battersby, 2011). A one-month time span is recommended by the FAO when measuring the results of a humanitarian crisis or shock (Cafiero et al., 2013). Data was collected during September and October 2020 when the COVID-19 lockdown protocols of March were relaxed. During September and October, citizens at the research sites were able to move freely; however, their loss of employment and the impact of that on informal businesses remained significant. Hence, the data should be understood as a snapshot of the state of food security in light of

⁶ FIES data is analysed by applying a set of statistical tools of the Rasch model. This model allows us to measure unobservable traits and characteristics, by examining its observable manifestations. Guided by assessing suitability of data sets, calculations, and statistical validation steps, the Rasch model constructs a measurement scale of food insecurity severity, which performance's is comparable across different survey context and populations (Cafiero et al., 2016; FAO, 2021).

the pandemic, but not a snapshot of the state of food security during COVID-19 lockdowns.

The Agency Module

Agency has been introduced only recently into the definition of food security (HLPE, 2020) and, to our knowledge, has not yet been quantified in a survey. The definition of agency introduced in section 2.4 shows that agency is multi-dimensional and can be experienced at different stages. Alsop and Heinsohn (2005) as well as Ibrahim and Alkire (2007), therefore, proposed a domain-specific measurement of agency. We identified five domains for inclusion in our assessment of agency, in line with HLPE: diet sovereignty, food production, food processing, food distribution, and voice in food policies and governance. For each domain, we developed a set of questions corresponding to the type of empowerment an individual can have within a domain. We asked the participants about their perception before COVID-19 and now. An increase in the calculated index would potentially translate into a higher status of empowerment or agency in the respective domain.

We perceive the first step of empowerment as having knowledge about the domains within a food system as a precondition for exercising agency and making informed decisions. The second step is having the power to choose or decide on food production, food consumption, and food governance. The third is the power to change the status quo as an individual or family based on knowledge of the domains. Finally, there is also the power to change the status quo that comes from being part of a group or community. The Agency Module (AM) is therefore a newly developed survey module consisting of five domains and four questions for each domain (Annex 1: Household survey) and is inspired by previous work on community participation by Ibrahim and Alkire (2007) and Alsop and Heinsohn (2005).

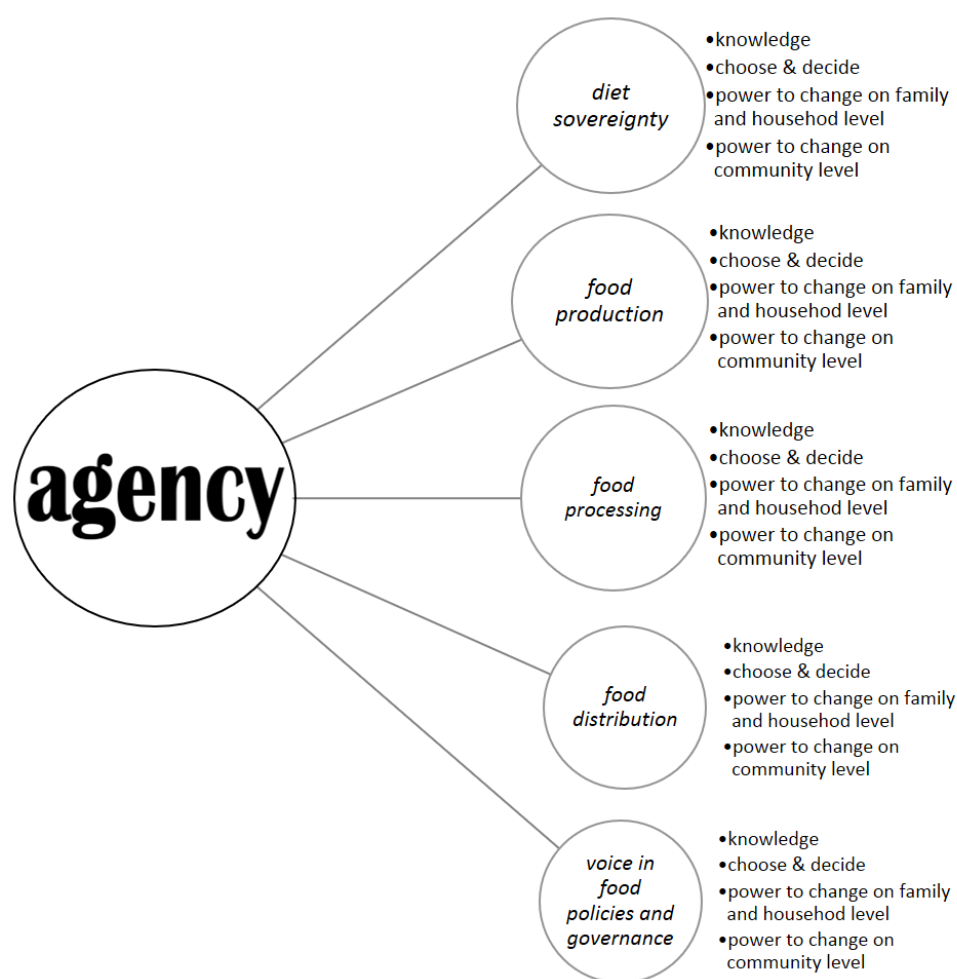


Figure 7: Design of the Agency Module

The adjusted Agency Module for the household survey consists of 16 questions and reflects on individual perceptions of own situations, but also on communal situations pre-COVID-19 and “in these days”. For all domains, we asked if the respondents considered themselves as having knowledge, having the opportunity to make choices (for example on what food one wants to eat or what products to grow), having the power to change at the household level, and having the power to make changes in the community.

Perceived agency in each domain can vary with the unique socio-economic, political, and environmental situation in a community or research site. A focus group discussion was conducted to weigh each domain’s importance relative to the other domains. By doing this, perceived agency could be captured more realistically. However, since we based the weighting exercise on only one focus group discussion, the approach should be seen as an assessment of the potential of integrating participatory qualitative methods into quantitative analysis.

The agency module allows us to calculate an index for agency and sub-indices for each domain. Each question has answer options that can be translated to values from 1 to 5 (Not at all, rarely, sometimes, most of the times, all the time) or 0 to 2 (0=I have no idea, 1=I have an idea, 2=I know). It is also possible to answer a question with '*this is not important to me*', since not all questions and domains might be important for a respondent. This does not mean that the respondent lacks agency, but that he or she actively decides that it is not important (Sen, 1985).

The aim is to calculate a number between 0 to 1 that describes 'Perceived Agency' as an index for each domain of agency: 0 being the lowest and 1 the highest possible result. First, we calculate sub-indices for each of the domains of agency. For example, for the domain of food production:

$$(InformationValue + ChangeValue) / MaxTotalDomainValue = SubIndexProd$$

Next, we include the "weight" that the focus group determined for a domain relative to the other domains and calculate the Agency Index:

$$SubIndexProd * weightProd = weightedIndexProd$$

$$SubIndexAvail * weightAvail = weightedIndexAvail$$

.....

.....

$$weightedIndexProd + weightedIndexAvail + \dots + \dots = AgencyIndex$$

If a question is answered as "this is not important for me", we exclude the question from the calculation of the sub-index. If none of the domains is important to a respondent, we exclude that respondent from the calculation of the *Agency Index*, but not from his or her other sub-indices.

$$SI_x = \frac{\sum_{i=1}^n V_x}{n}$$

The Agency Index is only calculated if SI_d and SI_{dt} and SI_p and SI_{pc} and $SI_v \neq 0$

$$AI = \frac{(SI_d w_d + SI_{dt} w_{dt} + SI_p w_p + SI_{pc} w_{pc} + SI_v w_v)}{5}$$

50 Methodology

$SI_x = SI_d \text{ or } SI_{dt} \text{ or } SI_p \text{ or } SI_{pc} \text{ or } SI_v$

n = Number of answered questions

V_x = Coded values of questions for SI_d or SI_{dt} or SI_p or SI_{pc} or SI_v

SI = Sub-Index

AI = Agency Index

SI_d = Sub-Index *dietary sovereignty*

SI_{dt} = Sub-Index *food distribution*

SI_p = Sub-Index *food production*

SI_{pc} = Sub-Index *food processing*

SI_v = Sub-Index *voice in food policies and governance*

w_d = Weight *dietary sovereignty*

w_{dt} = Weight *food distribution*

w_p = Weight *food production*

w_{pc} = Weight *food processing*

w_v = Weight *voice in food policies and governance*

4.2.2 Food mapping

Food system mapping is a method of spatially portraying local food environments.

In our study, we used Quantum Geographic Information Systems (QGIS). The food system mapping undertaken in our study is oriented to the work of Battersby et al. (2017) in which informal food retail was mapped in Philippi and Khayelitsha.

We used OpenStreetMaps to gain geographical visualisation and spatial information of the research sites (for example, administrative boundaries such as municipal and ward boundaries). OpenStreetMaps also allowed us to identify sites occupied by food system actors such as supermarkets, restaurants, and schools providing school feeding. The City of Cape Town's website was useful to access spatial data on officially registered Early Childhood Development Centres (ECDs). These sources were supplemented with data on informal food sources (for example, spaza shops, street vendors, community kitchens, and community gardens) provided by local co-researchers engaged in a mapping exercise.

Three enumerators were equipped with tablets to map food-related informal infrastructure in the designated wards. They moved through the research sites and saved geographical coordinates of food sources in their tablets. This data was validated by co-researchers and shared back to the wider community in focus groups

so co-researchers and ward residents could refine and supplement the maps. Because informal businesses have short lifespans and are highly mobile, the generated maps only portray a snapshot of the food environment at a given time.

4.2.3 Key informant interviews

German team members who were less familiar with the local context gained an understanding of the local food system through key informant interviews. Nguyen et al. (2015) describe this “sense-making” through interviews as the process of comprehending and breaking down a complex and dynamic situation or topic by gaining insight through concentrated information. The interviews explored the following topics:

- COVID-19 lockdown and food systems
- COVID-19 in the context of food security and marginalised communities
- Resilient and sustainable food systems post-COVID-19
- Agency as a 'new' dimension of food security

Key informants were selected through purposeful sampling of existing networks and by referrals. They were directly involved in the food system through involvement in food activities or indirectly through advocacy work, policy, or research. A total of 31 interviews were conducted: eleven from academia, three from policy, twelve from civil society, and eight from the food supply chain. When referring to these interviews in this study, we reference these categories as “A” for academia, “C” for civil society, “P” for policy, and “F” for food system actors such as retailers, farmers, fishers, or processors.

Six core interview questions were asked (see Annex 2: Guiding questions key informant interviews), though flexibility was provided to allow key informants to emphasise areas they felt were important as per Fontana and Frey (1994) and Smith (1995). Further sub-questions were identified and/or adjusted depending on the interviewees’ area of expertise.

All interviews were conducted digitally (mostly by two SLE team members) and in English between September and November 2020. Every interview was recorded (with consent) and later transcribed by an external service provider.

4.2.4 PhotoVoice

PhotoVoice is a qualitative method which allows researchers to “develop insights into the everyday lives and experiences of people” (Milne & Muir, 2019, p. 282). PhotoVoice was used by community members from the five research sites to

record daily challenges and solutions in their food situations. By generating visual data that can describe everyday realities and lived experiences, the limitations of the spoken language are surpassed (Plunkett et al., 2012; Milne & Muir, 2019). This tool gives voice to community members, enables them to document and reflect on issues of importance to them, and sheds light on the unseen (Wang & Burris, 1997). In the context of COVID-19 travel restrictions, this method was especially valuable to team members who were working remotely. In each site, ten randomly selected community members (five women, five men) who participated in the household survey were asked to use their cell phones to photograph one picture for each question:

- What are your daily challenges with regards to food?
- How do you improve your food situation?

The first question aimed at gaining insights into challenges that were not properly described through the other research methods. The second question aimed at capturing coping strategies and potential actions and activities that could improve marginalised communities' food situations. For each of the research sites, a total of 20 digital pictures were collected anonymously. The date, gender, and location of the photographers were recorded then photos were clustered by gender and research site. The co-researchers guided photo analysis by making sense of the pictures. In doing so, the photos were clustered into categories of challenges (personal challenges or structural challenges) which were linked to the spatial understanding of the food environment presented in the maps. In a second step, coping categories were categorised into asset-based, assistance-based, and consumption-related coping strategies.

4.2.5 Focus group discussions

During the focus group discussions (FGDs), results from the household survey, food mapping, and PhotoVoice were discussed by co-researchers and community members who indicated their interest in the further research process during the household survey. The FGDs aimed at triangulating early household survey data and making sense of the results. The SLE team prepared a short video of the household survey and food mapping findings using the programme SimpleShow. In-depth and comprehensive results contextualisation was enabled by collectively examining results (Powell & Single, 1996). Also, through interactively triangulating information from different primary data collection methods, a validation of complementary and/or contradictory findings was achieved (Carter et al., 2004; Heale & Forbes, 2013).

Two FGDs were conducted as part of the final research phase: one in St. Helena Bay⁷ with Capetonian co-researchers and one in Philippi⁸ with co-researchers and community members from Cape Town. Due to COVID-19 restrictions on the size of group gatherings, the number of participants was limited to 25 and co-researchers from St. Helena decided not to join the second session because of rising COVID-19 infection numbers. The FGD planning, recruiting, implementation, and facilitation was coordinated by the co-researchers and Haidee Swanby. The FGDs were held in English with information translated into Afrikaans and Xhosa. The agenda for all FGDs was the same in order to ensure comparability of outcomes. Results of these discussions were added to the results and discussion chapter as narratives.

4.3 Data analysis

Data was analysed through a combination of hypothesis-driven and exploratory approaches (Shih & Chai, 2017) by the SLE team; PhotoVoice and FGD were analysed by the study team. The co-researchers were presented the analysis and contextualised the findings. The quantitative data was analysed through a hypothesis-driven approach. The hypotheses were built by applying the food justice perspective introduced in section 2.3.

The household survey quantitative data was analysed using SPSS statistics, except the FIES-component data was analysed and statistically validated using RStudio IDE and the complementary RM.weights package. The household survey open-ended qualitative questions were analysed by content and coded following an inductive coding scheme (Fereday & Muir-Cochrane, 2006).

The data collected through key informant interviews was analysed using MaxQDA. For this, a hybrid process of inductive and deductive coding was used, following a thematic analysis (Fereday & Muir-Cochrane, 2006). First, the three food justice categories of land, labour, and power were searched for in all key informant interviews. There were no questions asked specifically on these criteria, rather it was to be seen which and how often they occur in the interviewees' explanations of local food systems. Based on the search results for the inductive codes 'Land', 'Labour', and 'Power', a deductive code system was elaborated to categorise

⁷ 18 November 2020 and 02 December 2020

⁸ 02 December 2020

size in-depth information. Two specific interview questions on agency and just, equitable, and sustainable future food systems were asked to every interviewee. These answers were also coded deductively.

The mapping exercise and PhotoVoice data were triangulated during the two FGD by co-researchers. Here, the co-researchers applied a place-based perspective; that is, they considered what the place they live in means for the food environment that was mapped and photographed.

4.4 Limitations of the methods

The following section provides a short description about the limitations of chosen methods, particularly emphasising that the study had to be conducted digitally. We also reflect on the ethical concerns that accompanied the study as the research phases happened during a pandemic.

4.4.1 Limitations of the research methodology

The main challenge was to organise and coordinate a remote, digital survey. Several technical limitations influenced the sampling of respondents. Participation was made available through social media channels and a URL link which required internet connection in combination with basic technical literacy. Hence, a functioning smartphone was a precondition for participation in the digital interviews, which was a major challenge in St. Helena Bay, where most of the interviews had to be conducted face-to-face. In Cape Town, smartphones are commonly used. This allowed researchers to reach more participants via digital means, however their willingness to participate was certainly affected by socio-demographic factors, such as age and literacy.

Participants who completed the survey using the smartphones were sent airtime reimbursements. Though the airtime was meant only as a compensation rather than an incentive, we were aware that participants may attempt to complete the survey multiple times to get multiple airtime reimbursements. To mitigate the risk of this occurring, the system software only allowed one reimbursement per phone number.

A limitation in the household survey arose from translation of questions. Intended wordings and the logic of questions within the household survey did not always directly translate from English to Afrikaans or Xhosa. To countervail this, sur-

vey modules were discussed and revised jointly by speakers of English and local vernaculars, as guided by an academic advisor with cross-cultural experience in Germany and South Africa.

We also recognise potential limitations stemming from stigma around speaking about hunger and malnutrition affecting inhabitants of the research sites as the following quote reflects.

Enumerators spoke of how difficult it was to do these questionnaires due to the deep shame people felt about their situation. They felt that a lot remained hidden and that food insecurity was underreported, particularly in Mitchell's Plain and Gugulethu where people's pride would keep a lot hidden.

- Female co-researcher

Face-to-face interviews were conducted by trained local enumerators who were familiar with the context and the difficulty of speaking about hunger. Nevertheless, respondents might have downplayed the extent of their food security status especially during face-to-face interviews and potentially while doing a phone interview. On the other hand, activists might have exaggerated the situation to underline an idea of necessary change. As in all surveys, it cannot be fully excluded that respondents and/or enumerators intentionally overestimate the seriousness of the local situation in accordance with their own view or presumptions of what researchers want to hear.

Since all key interviews were conducted via Zoom, MS Teams, or WhatsApp, the researchers who were working remotely were less able to create a trusting atmosphere conducive to intimate sharing of opinions and were less able to assess tone and gesticulation on a pixelated screen.

The mapping component relied heavily on the dutiful work of local enumerators who mapped informal food sources within their wards. To validate their work, findings were triangulated in FGDs. Additionally, given the fluidity and mobility of the informal food sector, the maps only portray a snapshot of what is there today. They cannot capture the dynamics or rapid changes in the food environment. Lastly, the wards are defined by clear boundaries and these boundaries may tempt the reader into drawing incorrect conclusions if they assume the boundaries are impermeable and do not reflect the food environment just a stone's throw from the ward boundary. For example, the map of Mfuleni Ward 108 does not show any formal food sources. It would be incorrect to assume from the map that the inhabitants cannot access formal food sources as, indeed, formal food sources are adjacent to the ward boundaries.

Digital methods, such as the key informant interviews, or remotely guided methods, such as the household survey and food environment mapping, were more efficient in terms of time, logistics, and finances than in-person methods. The SLE study projects are usually short-term research to provide five post-graduates the opportunity to conduct research. The pandemic forced the programme to adapt and rely on existing cooperation networks and encouraged critical reflection on relationships within research projects. This led us to question how those we research could be more involved in these projects. In doing so, this study expanded the traditional study team from the usual team leader and five students to a study team composed of co-researchers (community members who work as urban farmers, community kitchens staff, or as fishers) and institutional partners from South Africa (Heinrich Boell Foundation, Solidaridad) and Berlin (INKOTA Netzwerke e.V.). The larger team allowed the sharing of the research workload and a deeper study with more collected data from more methods. While this remote way of working saved travel time and allowed the project to benefit from the expertise of the teams on site, it also meant more steps were needed in coordination, analysis, and triangulation.

4.4.2 Limitations of working remotely via the co-research approach

Research based on digital communication channels has several advantages, but also disadvantages when it comes to contextualising and understanding. The project work had to stand up to technical disturbances that complicate communication such as dropped digital calls due to electricity load shedding or uncharged phone batteries.

In co-research, different team members have different roles and contribute different skills to the process. This is the very reason why multiple actors are involved: the co-researchers can cross-check against the local context. The remote research team validated the scientific process and framed it within theory. For example, it was not entirely possible for the SLE team to understand the results they were processing since they were not familiar with the context and politics of the research sites. On the other hand, it would not have been possible for the co-research team to develop certain methodologies without the input of the SLE team and other partners. All team members benefitted from reciprocity, especially during the contextualisation of the findings and the joint interpretation of the analysis.

We must also recognise that multi-actor projects face the challenges brought about by the actors' different interests. This held true in this study: five scholars aiming to conduct this study as part of their graduation programme; co-researchers

gaining results to support advocacy work; and partner organisations being interested in the results for their projects. The success of the study rests on the consistent connections with members of the co-researching community and the trust they built together. This demanded enormous amounts of time, effort, energy, and sacrifice from the co-researchers and trust from the remote study team.

The SLE research team is part of a short-term programme and the study project ran only for six months. However, they worked within an existing network of partner organisations who were engaged in on-going processes. This meant that the five post-graduate students were entangled in a complex project with pre-existing webs of social relations and politics and within an already advanced stage of research. Within this, the SLE team had to identify their own roles—a task which proved particularly difficult as they lost many opportunities for interpersonal exchange because of the travel limitations imposed on them.

4.5 Ethical considerations around conducting research during a pandemic

Researching during a pandemic brings challenges. First, we were obligated to consider the health and safety of all people who form the team. Thorough consideration had to be given to the logistics of safe project implementation. Research on the ground was conducted according to the South African government's hygiene and safety regulations. Enumerator training took place in small groups with participants meeting in different rooms and wearing face masks. Hand sanitiser and a thermometer to check participants' temperature were available. During the data collection, enumerators were provided with private transport facilities, and if possible, data collection was organised digitally. Focus group discussions were held in small groups to avoid large gatherings.

Before launching the study, an informed consent meeting was conducted with the co-researcher team. Expectations were discussed, goals were set, the interests of all parties were clarified, and concerns were acknowledged. The study was conducted under the ethical clearance guidelines of Humboldt University of Berlin and obtained a research permit by the City of Cape Town.

An ethical issue was raised by the community members themselves: data mining. Many of them had contributed interviews to numerous graduate research programmes and academic papers in the past. They did not want to contribute to a study that has no benefit to their community or that does not return results to their community. A shared understanding of the problem area was teased out during a

meeting in the run-up to the start of the study. Meeting participants aimed to come into an agreement with the communities. A closing workshop will take place at the end of the project to discuss the results, clarify the interpretation of the study results, and discuss the project's future through a triangulation and dissemination process. This seeks to support the community researchers in their tasks to share back the results to their community (scaling-out), and to local decision-makers (scaling-up). Co-researchers were also provided with factsheets summarising central findings of each research site.

Acknowledging the high costs of communication, the project provided all co-researchers throughout the project duration with airtime and data. The enumerators and two research coordinators were paid for their time.

PERSPECTIVE: Experiences from the enumerators

Enumerators and co-researchers provided feedback to the SLE team after the data was collected. In a co-research process, experiences shared by those who did the data collection is crucial; it tells about side conversations, feelings while doing interviews, and participants' reactions. One example is that people who decided to drop out of the interview did so when they were asked about the availability of food in their homes.

Enumerators were residents of the research sites and were not directly connected to food systems actors. Enumerators described positive experiences in the project as their own learning, relationship building, and understanding of their own communities' vulnerability and hidden hunger. Enumerators and co-researchers found that people are either happy to have someone to speak to about challenges or embarrassed, shameful, and sorrowful. All reported that they learned a lot more about their own community while doing interviews and appreciated the exchange, particularly in the contextualisation phase. They also all reported that the data caused agony and consternation:

Community research on us and by us is the best tool one can use to identify the needs of our community and develop solutions together to address those needs.

- Female enumerator in Cape Town

The main challenges in data collection identified by the enumerators were interviewing male participants (who were less willing to participate or stated that they are unable to give information on food), motivating respondents to reply to all the questions, and convincing people that it is community-driven research. Enumerators reported that many participants spoke about negative experiences they

had had with researchers from other projects and expected clear guidance from the enumerators as to what will happen with the results. Enumerators found that people wanted to talk more about food parcels and their experiences with corruption. Many referred to their desire for the constitutional right to food to be upheld in their marginalised communities. A general sullenness about politicians was observed. Enumerators reported that community members expressed a wish to learn more about their food system and how they could develop dialogues around food and implement community-driven solutions.

5 Findings

COVID-19 affected all parts of the food systems, while amplifying the “...social and ecological injustices that underpin it” (Key informant A1, 2020). Key informants expressed in various interviews that there was a sharp increase in the levels of hunger caused by the pandemic and the measures imposed to control it. The COVID-19 pandemic “...exposed vulnerabilities within our food systems, it revealed how severe and vulnerable low-income and poor households are” (Key informant C8, 2020).

The following sub-chapters address one research question per section. Each section provides results as well as supporting statements from community members and key informants. In the first section, we provide results from the food security household survey (Chapter 5.1). The second section describes coping strategies identified by the communities (Chapter 5.2). The third section shows how agency evolved during the pandemic and how the team understood the term (Chapter 5.3). The fourth chapter sheds light on the place and space the community lives in by providing food environment maps and snapshots from the PhotoVoice. The last chapter reconciles the findings from key informants against findings from the community data and co-researchers’ statements (Chapter 5.5).

5.1 Food security household survey

The following section provides state of household food security results from the five research sites in light of the COVID-19 pandemic. These results were drawn from the household survey and are explained per research site. Firstly, we give a brief description of the study population. Secondly, we provide the findings from the FIES section of the study, and thirdly, we scrutinise those findings along demographic characteristics. Here, we conducted regression analysis to draw conclusions about causal relationships between variables; that is, the relationships between food security and place, employment status, household size, and gender. Next, we describe the state of food security in the different sites and describe the main sources of food before and after the COVID-19 pandemic. Lastly, we provide the findings of the survey on coping strategies and close the chapter with triangulation of these findings from focus group discussions.

5.1.1 General findings

The following table gives an overview of the survey participants. The demographic data indicates the differences between the research sites. Except in the recently developed informal settlement of Makhaza in Khayelitsha, two thirds or more of the respondents have lived in the research sites for ten years or longer. The high number of university degree holders in Gugulethu is due to enumerators soliciting views from fellow students. As per Census, the education level in Mitchell's Plain is generally higher.

Table 5: Description of survey participants

	St. Helena Bay	Gugulethu	Mitchell's Plain	Khayelitsha	Mfuleni
No. of participants	n=350	n=387	n=367	n=360	n=360
Female	45%	57%	56%	66%	49%
Male	55%	43%	43%	34%	51%
Age:					
25 and younger	13%	19%	13%	11%	15%
26 – 35	25%	39%	20%	27%	40%
36 – 45	21%	21%	26%	32%	28%
46 – 55	26%	13%	23%	22%	8%
56 – 65	14%	7%	16%	9%	5%
Older than 65	2%	1%	2%	-	4%
Educational level					
Primary	37%	1%	4%	8%	7%
Secondary	61%	51.0%	59%	69%	74%
Matric	2%	29%	13%	12%	16%
University	-	18%	18%	3%	3%
living on site?					
0-2 years	3%	5%	0%	2%	0%
5-10 years	3%	12%	2%	22%	9%
More than 10 years	21%	18%	11%	59%	24%
Born here	74%	64%	87%	18%	68%
Unemployment rate	47%	66%	45%	73%	38%

In all sites except Mfuleni, every second person interviewed had no job at the time of the survey. We examined the types of work that employed people are engaged in and found differences in the four Capetonian research sites with more formal jobs in the more established wards of Mfuleni, Gugulethu, and, above all, in Mitchell's Plain. The high number in Khayelitsha is remarkable. The survey was conducted in an informal shack settlement, where many people recently established homes.

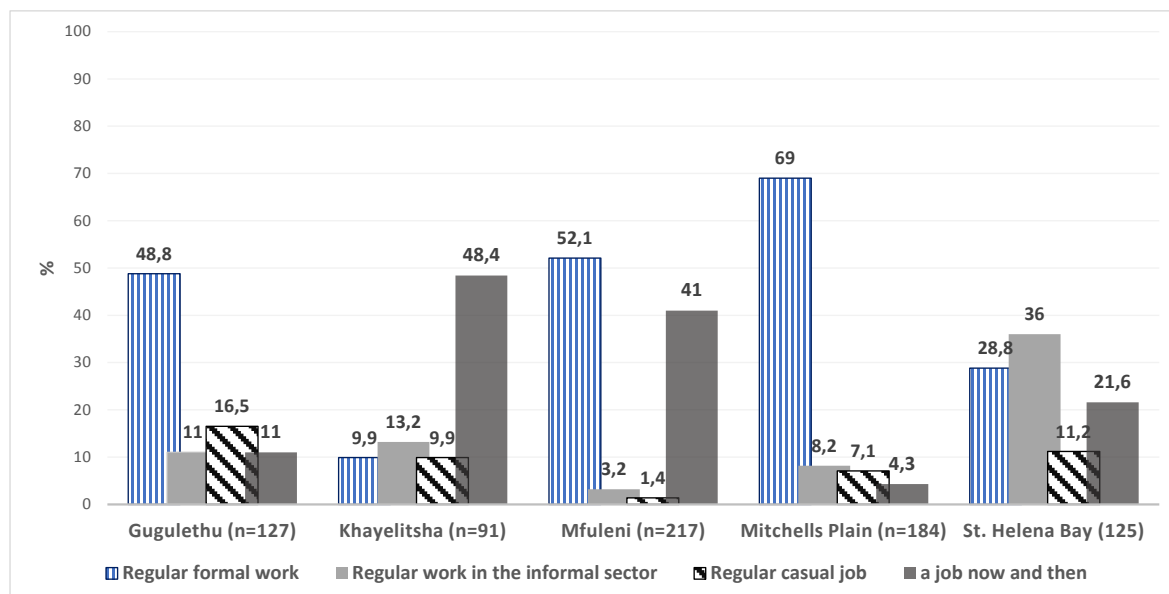


Figure 8: Employment status of respondents who indicated that they have a job

We also wanted to understand why people do not work. In all research sites, the main reasons mentioned were that people either cannot find a job or do not have a job because of the lockdown and the economic impact the COVID-19 pandemic, for example, closures of businesses that could, potentially, have employed some of the respondents. In St. Helena Bay (n=166), 56.6% of those who were unemployed indicated that they were unable to find a job, while 31.9% explained their unemployment status was a consequence of the lockdown. In Gugulethu (n=254), 45.7% said they could not find a job and 22.0% said their unemployment status was a consequence of the lockdown. These results were similar to those in Mitchell's Plain (n=173) (22.0% and 11.6%), in Khayeltisha (n=264) (18.6% and 43.9%), and in Mfuleni (26.2% and 18.4%).

The economic status of a person very much depends on a job someone has. Having, or not having a job often means, that a person is only a plate away from food insecurity. During a reflection session, a community participant described this:

Where you live relates directly to your job and to your economic status. If you live in an economically depressed area, your relationship with food is that it is fuel and you don't give much thought to the different types of food you have access to and how they affect your health. For a large part of the population on the Cape Flats that are food insecure, your main focus is to get as much food out of the funds you have available to you.

- Male community member

5.1.2 The state of food security

The study reveals that more than half of the surveyed households are food insecure (54.0%), with 30.6% severely food insecure. The most food insecure study location is St. Helena Bay with 89.9% of households food insecure followed by Gugulethu (64.0%) and Khayelitsha (55.5%). Mfuleni (15.0%) and Mitchell's Plain (18.0%) have fewer food-insecure households (for detailed calculation, see annex 4).

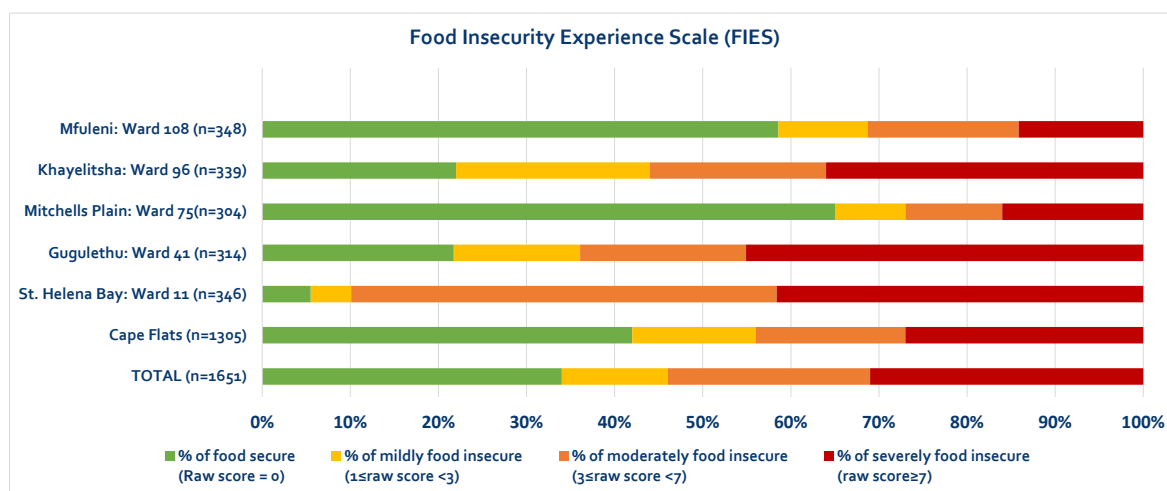


Figure 9: State of food security in the five research sites per ward. The Cape Flats data is a combination of the four research sites.

5.1.3 Who are the food insecure?

A striking finding is that a high proportion of the respondents in food-insecure households are working in a job that is related to food (Figure 10). These are people who work as urban farmers, backyard growers, fisherfolk, street vendors, spaza store owners or employees, food transporters, and workers from farms and processing units. Although the analysis in the following figure is not statistically significant and draws on randomly surveyed persons who work in a food-sector related job, a tendency is noticeable.

64 Findings

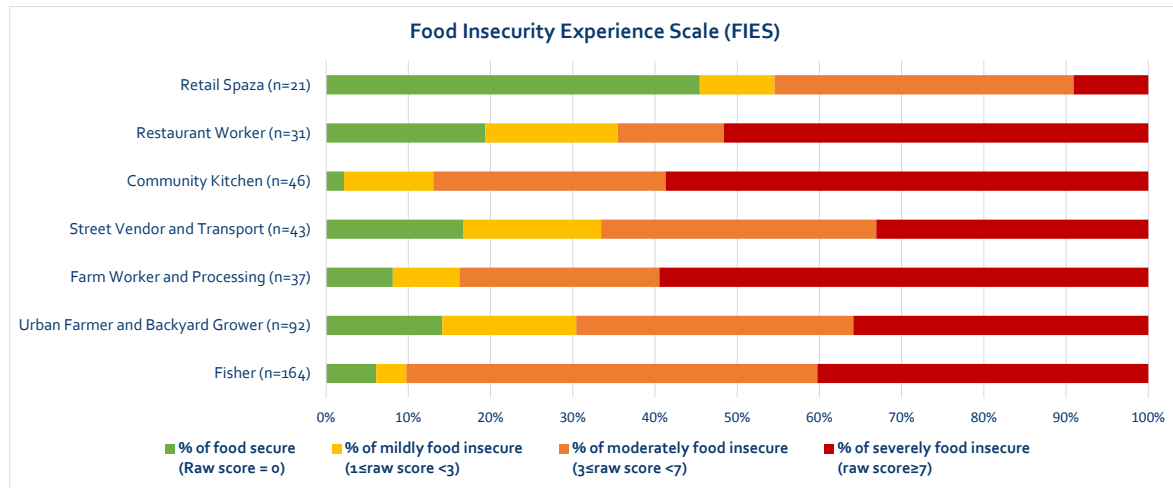


Figure 10: Food insecurity among respondents who work in a food related job

Linear regression analysis of socio-demographic characteristics

The following sections describe the respondents' socio-demographic characteristics and provide linear regression analysis to determine variables as predictors of severe and moderate household food insecurity. Food insecure households share several characteristics. Table 6 shows that woman-headed households are more likely to be food insecure than households headed by men or by both spouses. Woman-headed households are households without a male adult. The most common characteristic of food insecure households is unemployment. We compared informal and formal jobs and found the informal/formal nature of work is irrelevant; it is the employment status per se that counts. A household in which the respondent works in a food-related job (for example, urban farmers, backyard growers, fisherfolk, vendors, chefs in community kitchens, spaza store owners or employees, food transporters, and workers at supermarkets, farms, and processing units) is more likely to be food insecure.

Table 6: Characteristics of food insecure households ($n=1651$)

Variables	<i>N</i>	Food insecurity (weighted %)
Ward		
St. Helena Bay	311	89.9***
Gugulethu	201	64.0
Mitchells Plain	82	27.0
Khayelitsha	188	55.5
Mfuleni	109	31.3
Household size		
1-5 members	593	49.0***
≥6 members	292	67.7
Household head		
Female	416	62.7***
Male	332	49.0
Both	138	46.5
Employment of respondent		
Yes	238	34.5***
Formal sector	112	30.6*
Informal sector	126	38.9
No	587	66.2
Engaged in the food sector (respondent)		
Yes	429	65.7***
No	462	46.3
Food relief recipient		
Yes	219	77.4***
No	665	49.0
Chi-Square tests were conducted for evaluating the distributions. Significantly different: * $P \leq 0.05$, ** $P \leq 0.01$, *** $P \leq 0.001$.		

Multiple regression analysis on socio-demographic characteristics

A multiple regression analysis was run to test whether household characteristics significantly predict their food security status. Multiple regression is an extension of simple linear regression. It is used to calculate the value of a variable based on the value of two or more other variables. Being moderately or severely food insecure is coded as 1 while being food secure is coded as 0. The reference category variables are St. Helena Bay in the place section and female in the household head section. Table 7 shows that all coefficients are statistically significant (p -value > 0.05).

Table 7: Multiple regression for food insecurity status

Variables	Unstandardised coefficient (B)
Constant	0.948 (0.033)***
Ward	
St. Helena Bay (reference category)	
Gugulethu	-0.284 (0.035)***
Mitchells Plain	-0.561 (0.036)***
Khayelitsha	-0.358 (0.035)***
Mfuleni	-0.458 (0.036)***
Household size	
1-5 members	
≥ 6 members	0.114 (0.025)***
Household head	
Female (reference category)	
Male	-0.08 (0.025)***
Both	-0.096 (0.031)*
Respondent employed	-0.252 (0.023)***
Respondent engaged in the food sector	0.114 (0.024)***
Adjusted R-squared	0.283
Standard errors in parentheses.	
Significance level: * $P \leq 0.05$, ** $P \leq 0.01$, *** $P \leq 0.001$.	

On average, households in St. Helena Bay are significantly more food insecure than households in the Cape Flats. Here, we can assume that the urban space, albeit deeply marginalised, still provides more support in terms of food relief and social assets like community networks, faith organisations, or civil society than rural places like St. Helena Bay. This analysis shows that 'place' is crucial for food security. Living in Mitchell's Plain, for example, decreases the probability of being food insecure by 56.1%. On the other hand, being a member of a household in Gugulethu decreases the probability of being food insecure only by 28.4%.

Being employed decreases the probability of being food insecure by 25.2%. The model predicts people who work in a food-related job, such as urban farmer, fisher, vendor, or in a community kitchen and those living in large households are about

11% more likely to be food insecure. The model is relatively robust with an adjusted R of 0.283.

In conclusion, a food insecure household in the research sites is typically (in order of importance when all other variables are constant)

- an inhabitant of (rural) St. Helena Bay, followed by (urban) Gugulethu;
- a larger household (minimum five persons);
- jobless;
- engaged in a job which is related to food, such as urban farmers, backyard growers, fisherfolk, street vendors, chef in a community kitchen, spaza store owners or employees, food transporters, and workers at supermarkets, farms, and processing units; or
- a women-headed household.

5.1.4 A place-perspective on the state of food security

Table 8 presents the findings of the multiple regression for food insecurity status by research site. Those findings are contextualised in the following sub-sections.

Table 8: Multiple regression analysis per research site. The variable is related to the state of food security (FIES).

Variables	n	Food insecurity (%)	n	Food insecurity (%)	n	Food insecurity (%)	n	Food insecurity (%)	n	Food insecurity (%)
Ward	St. Helena Bay		Gugulethu		Mitchell's Plain		Khayelitsha		Mfuleni	
Food insecurity per ward	346	89.9	314	64.0	304	27.0	339	55.5	348	31.3
Household head										
Woman	120	90.8	166	69.3	59	50.8	159	62.3	160	39.4
Men	152	89.6	106	59.4	197	16.2	131	51.1	92	37
Both	72	88.9	37	56.8	45	42.2	47	46.8	96	12.5
Employment of respondent										
Yes	123	80.5	107	50.5	157	16.6	87	40.2	216	40.2
Formal sector	49	69.4	69	49.3	115	16.5	18	55.6	115	13
Informal sector	74	87.8	38	52.6	42	16.7	69	36.2	101	8.9
No	164	93.3	207	71	138	39.1	247	60.3	131	64.1
Food system actor										
Yes	202	91.1	162	67.9	150	20	106	75.5	33	75.8
No	144	88.2	152	59.9	154	52	233	46.4	315	26.7
Relevant food source is farming, fishing, or foraging										
Yes	194	94.3	96	75	20	50	29	86.2	11	63.6
No	147	84.4	170	64.1	251	23.9	304	52.8	308	31.5
Food relief received										
Yes	101	90.1	60	70	28	57.1	47	83	47	66
Governmental	75*	91.8	21*	71.4	3*	33.3	7*	85.7	2*	50
Non-governmental**	21*	90.5	36*	66.7	30*	60.0	40*	82.5	85*	58.8
No	245	89.8	246	62.6	276	23.9	290	50.7	301	25.9
Household size										
1-5 members	259	89.6	182	53.8	235	20.4	231	56.7	304	27.6
≥6 members	87	90.8	127	78.7	67	49.3	106	51.9	44	56.8

*Frequency and percentage derived from a multiple-choice question ** Including NGOs, civil society, and community-based organisations

The state of food security in St. Helena Bay

Most livelihoods in St. Helena Bay depend on fishing or fish processing and are, therefore, directly related to the main sector in the area. Despite—or because of—this relation, the research site displays the highest food insecurity prevalence with 89.9% of households being food insecure. The extremely high food insecurity prevalence limits nuanced findings when looking at socio-economic variables and their relation to food insecurity. The gender of the household head, the engagement in the food sector, and the household size do not have a statistically significant impact on household food insecurity in St. Helena Bay. The statistically significant result with an explanatory value for food insecurity is the respondent's employment status. A person who is employed is 12.8% less likely to be food insecure as a person who is unemployed; having a formal job increases the likelihood of food insecurity to 18.5% probability (see annex 3 for calculation).

The state of food security in Gugulethu (Ward 41)

Of all the research sites, Ward 41 of Gugulethu has the highest prevalence of severely food insecure households. Of the four Cape Town research sites, it has the highest prevalence of moderate food insecurity. It is also the research site with the highest number of respondents who reported receiving food relief. In Gugulethu, the gender of the household head and engagement in the food sector do not have significant impacts on household food insecurity. The statistical analysis explains differences in food insecurity as by employment and household size. A person in Gugulethu who is employed is 20.5% less likely to be food insecure than a person who has work. Household sizes of six or more persons have a 24.9% higher probability of being food insecure (see Annex 3).

Food insecurity is high in Gugulethu because we lack support from our local ward government and our city government lacks visibility. They are not on board with supporting local food solutions, to mention one: community gardens. Winter planting was delayed because we did not receive permits to go to our gardens; summer planting was delayed because seedlings were not delivered on time.

- Female food garden activist

Staying at home during lockdown in a township means running around for food. Imagine those families who lose their breadwinner, who has lost a job due to COVID. In Gugulethu, we care for 11-15 family members. This means mothers send their children to travel to wards where community kitchens are. We are sending kids around to queue for food.

- Female urban food activist

These comments on access to food come from Gugulethu: a community which managed to organise some very localised solutions during lockdown and also a community that is experienced in engaging with supportive policy and civil society actors. Community kitchens played a major role in Gugulethu, mushroomed in the first lockdown, and were supported by civil society. As co-researchers from Gugulethu indicated, community kitchens always played an important role in Gugulethu as a source of food. Even before the lockdown weeks, community kitchens provided some hundred plates of food daily.

The state of food security in Mitchell's Plain (Ward 75)

Mitchell's Plain has the lowest rates of food insecurity of the Capetonian research sites. Although people in Mitchell's Plain are less likely to be food insecure, the unemployment rate is high. Unlike residents of other wards, those who have jobs in Mitchell's Plain are more likely to be employed in the formal sector. The analysis shows that men in Mitchell's Plain are 34.6% less likely to be food insecure than women. The household size is also an indicator for higher probability of food insecurity (see Annex 3).

Compared to other research sites, Mitchell's Plain hosts only a handful of large community gardens, yet many dwellers engage in backyard urban gardening activities. Urban agriculture was introduced in Mitchell's Plain with a different intention than in neighboring communities: health and social cohesion. Therefore, only a very limited number of people rely on home-grown food as a main food source. The interest in gardening was revived during lockdown. However, co-researchers on site report growing interest in urban agriculture to strengthen health and diversify nutrition:

Urban farming in Mitchell's Plain is an activity mostly conducted by elderly in backyards. They are unemployed and with gardening, they hope to add some food to the table or, at least, do something good for their own health.

- Female urban farmer

The state of food security in Khayelitsha (Ward 96)

We found the highest unemployment rate in Khayelitsha. Being employed decreases the probability of being food insecure by 20%. Food insecurity, however, is 29% more likely if persons in Khayelitsha are involved in a job related to food. It is 34% more likely if dwellers rely on farming or backyard gardening as a main source of food (see Annex 3). The ward in Khayelitsha that we conducted the study is an

informal settlement and many young people moved from other areas of Khayelitsha to this ward. Co-researchers report that many of these young people rely on jobs in the informal economy:

When the informal economy breaks down, like in March, many dwellers depend on the gates and facilities of community kitchens. Khayelitsha also has its ups and downs. Corruption in the provision of grants, food parcels and support given by the councilors depends very much on the party you vote for. The grant system has little to do with human rights. Hence, the majority rely on themselves to run their own small businesses rather than rely on tortoises (government).

Corruption is one of the factors that influence the food relief organised under the SASSA⁹ center. Some people in charge kept food parcels in their houses without distributing them and when they rotted, they gave them to people who were confused about what to cook with rotten food.

There is just so much to be said about this dilemma and our dignity. The community kitchens—most of them run by our grannies—have to address the plight of poor homeless children. This is a human disaster and the failure of a state who has written into its constitution that it is responsible for the food security of all South Africans.

- Female urban food activist in Khayelitsha

The selected research site in Khayelitsha forms the interface between settled housing areas and new, informal settlements. Respondents in the Khayelitsha site were mostly people who are either active in urban agriculture and have received training to grow food in backyards or informal street vendors and restaurant workers.

One of the COVID coping strategies used in Khayelitsha was to organise own businesses, particularly selling cooked or fried food. This business attracted very low profit and insecurity, especially in the months of housing and services protests.

The state of food security in Mfuleni (Ward 108)

The comparable low rate of food insecurity in Mfuleni (compared with Khayelitsha and Gugulethu) is to be understood with a great deal of caution and cannot be generalised beyond the ward in which the survey took place. Ward 108 is one of the oldest wards in Mfuleni and the population is settled, hence, most occupants

⁹ South African Social Security Agency

live in established houses and rely on support from their community and neighbourhood. The analysis, however, reveals the same dynamics as identified in the other research sites. People who are employed are 53% less likely to be food insecure, while dwellers who have a job that is related to food are 49% more likely to be food insecure. Similar to Khayelitsha, people who rely on farming as their main source of income are 32% more likely to be food insecure (see Annex 3). The results provided in the survey from the ward in Mfuleni clearly show that one cannot generalise food security in the Cape Flats.

Location dynamics are different. In an old location where there is proper housing structures, there's a lot of stigma and shame to admitting struggle. Keeping up appearances is more important and there's 'what will people say' syndrome. We are classed as living in 'poor communities' or 'underprivileged', because there's a lot of unemployment and big responsibilities for those who have employment. People in informal settlement know suffering. They live in dire conditions and always appreciate help. Many in the informal part of Mfuleni live from hand to mouth, so because people have different pay days, it is difficult to keep the money as it comes and save it.

- Female community activist in Mfuleni

5.1.5 Food sources

A central assumption of the study team before starting the survey is that COVID-19 would change people's main food source due to restrictions on some branches of the food environment, such as the informal sector. To understand this, it is important to understand grocery shopping habits within communities. Co-researchers explain, that in all research sites, most families buy staples in bulk in supermarkets early in the month (or upon receiving social grants or a pay cheque). Most people frequent street vendors to source fruits and vegetables. In the spaza stores, people buy bread, milk, sweets, chips, and small quantities of products.

Figure 11 draws on the household food security survey and displays that in all locations, food is still predominantly sourced from supermarkets, followed by spaza shops and street vendors. The pandemic has hardly changed this. In Khayelitsha, Mfuleni, and St. Helena Bay, spaza shops and street vendors became slightly more important food sources. In Gugulethu, the results pertaining to the number of people who indicate own production as main source of food might be influenced by the network of recently trained new food growers and livestock keepers who completed the survey. Food parcels and community kitchens (see figure 11), a new

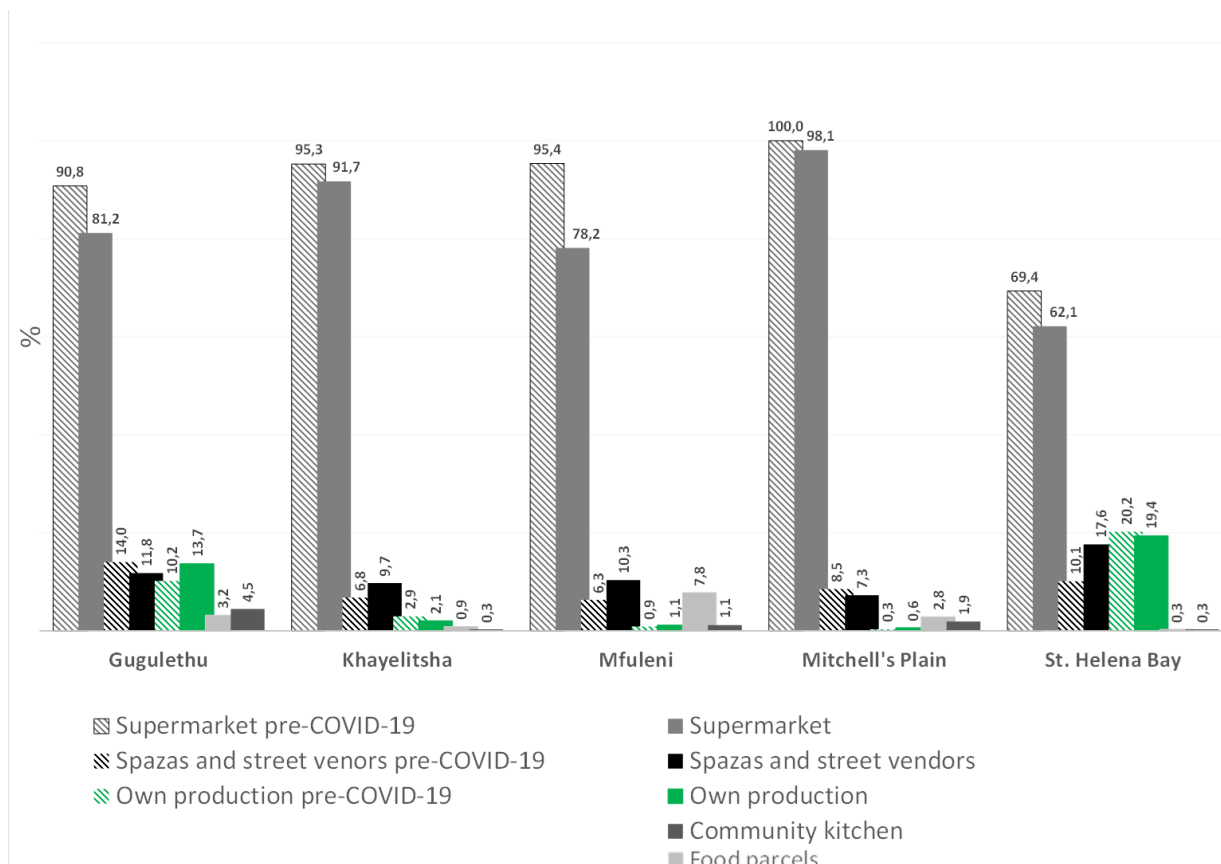


Figure 11: Respondents' main food source pre-COVID and during the pandemic (September) is supermarkets. New food sources such as food parcels and community kitchens play a smaller role.

source of food for many, play minor roles as main food sources and complementary sources. However, both played a strong role in the discourse on food relief.

The reliance on spazas did not change as dramatically as one would have expected after the short period of closings in the early lockdown weeks. In Gugulethu, 3.5% of the respondents started to grow their own food and in Mfuleni, 0.2%. For Gugulethu, this is partially explained by sampling bias, with interviews being done within farming networks but also the work done by G.U.F.I during the lockdown weeks that has inspired many to start gardening in their homes.

5.2 Coping with food insecurity during the pandemic

Asesefa Kisi et al. (2018) researched household food insecurity and coping strategies in Ethiopia and clustered coping strategies into three categories: (1) asset-based coping strategies; (2) assistance-based coping strategies; and (3) consumption-related coping strategies. We applied the same categories to cluster the findings of the household study.

Asset-based strategies are used when a household lacks money or other resources to increase the household's short-term liquidity and access to food. These strategies are based on "repayment or relying on an individual's livelihood resources"¹⁰, such as borrowing money or food from neighbours or family, purchasing food on credit, relying on community ties, producing vegetables, opening a business, or selling household assets. Assistance-based coping strategies are non-repayable and short-term food relief or social grants, such as food donations, vouchers, and parcels. Consumption-related coping strategies are intra-household strategies to cope with the lack of food. This could be a change in the individual's consumption patterns, such as reducing dietary diversity, reducing the number of meals or limiting portion size, reducing adult consumption to increase food availability for children or the elderly in the household, skipping meals or not eating for an entire day (Scoones, 1998; Asesefa Kisi et al., 2018).

¹⁰ According to Scoones (1998) there are four livelihood resources: natural, economic, human, and social capital.

Table 9: Coping strategies of food insecure respondents

Type of coping strategies	Frequency	Percentage
Asset-based		
Borrow food	388	43.5%
Purchase on credit	257	28.8%
Assistance-based		
Receive donation from family/neighbours*	424	49.9%
Receive food assistance**	219	24.8%
Consumption-related		
Reduce dietary diversity	321	36.0%
Reduce number of meals	378	42.4%
Limit portion size	283	31.8%
Reduce adult consumption for children	270	30.3%
Do not eat an entire day	100	11.2%
Frequency and percentage derived from one multiple choice question if not indicated otherwise ($n=891$).		
* Results were drawn from a separate question ($n= 891$).		
** Results were drawn from a separate question ($n= 884$).		
Since respondents might have multiple answers and because results were retrieved from different questions and sampling sizes, total percentage does not add up to 100.		

Table 9 shows that when food supplies are insufficient or there is a lack of resources to buy food, food insecure people cope by receiving donations from family/neighbours (assistance-based), followed by borrowing food (asset-based) and reducing consumption (consumption-based).

An additional open-ended survey question on potential solutions to food insecurity was answered by only 273 respondents. Most of those who answered this question ($n=56$) gave suggestions related to starting their own food garden or making more use of marine resources. Yet only a handful ($n=9$) of those who suggested a garden were already involved in urban agriculture. Others indicated that borrowing food and purchasing on credit ($n=31$) or finding a job ($n=31$) are solutions to combat hunger. 45 people said that assistance was crucial to cope with food insecurity, such as family donations or support from relief from feeding schemes or top-up grants. Respondents suggested a consumption-related change of limiting portions or meals per day ($n=31$) or buying cheaper products ($n=31$). Most of the answers given in this question were individual household solutions; however, enumerators reported that interviewees asked how they could engage as a community and where they could go regarding these questions.

The following paragraphs explain the coping strategies that were used in more detail (Table 9). We draw on the answers of 891 respondents, hence a bit less than a half (48.8%) of the overall study participants.

5.2.1 Asset-based coping strategies

Many respondents engaged in activities to increase their short-term liquidity. Among these activities, selling home-prepared meals and baked goods, selling non-food products, finding a second casual job, and starting a small business were often reported. Co-researchers reported a quick community response to developing coping strategies, such as street WhatsApp groups to coordinate distribution of small donations such as cash, rice, and cooked meals, when needed. On a very local scale, people supported each other, especially during the first three months of the lockdown. During this time, community efforts centred around building safety nets for the most vulnerable and starting businesses in their communities, which were often related to selling household goods, growing vegetables, or preparing food for sale. These kinds of community safety nets were reported mainly from the Cape Town sites; whereas, in St. Helena Bay, entrepreneurial activities were hardly mentioned.

Urban agriculture is not a new activity in Cape Town, nor has it proved to be a new strategy for combatting food insecurity and creating income. Community food gardens existed before the pandemic and varied in the degree of formality and retail focus. Around a hundred larger food gardens cultivate a wide variety of crops in Cape Town, mostly on school premises. Thousands of backyard gardeners have been trained by several organisations to grow vegetables on a few square meters. The majority of urban farmers sell their crops to markets outside their community, such as restaurants or vegetable boxes. Some farmers have established community markets in the past years.

Growing food as a coping strategy during lockdown was widely supported by community networks and food relief organisations. During lockdown, initiatives such as the “Cape Town Together Food Growers” evolved around food garden creation, knowledge exchange, and support. However, it is crucial to understand that these food gardens were not producing staples; many did not even produce the crops community kitchens needed for their work such as spinach and other leafy greens, sweet potatoes, spring onions, or carrots. Instead, they produced the types of vegetables that were demanded by their pre-pandemic markets in the city: vegetable boxes and high-end restaurants. These markets fell apart during the lockdown and many farmers lacked permits to travel to their gardens during the lockdown. Hence, a question that was discussed in the focus group discussions was:

Why should more people be encouraged to grow food when existing farms lack markets and logistical systems to keep the crops within the neighbourhood?

One co-researcher, who is also an urban farmer, critically reflected on the nexus between urban agriculture and food security:

We've been telling researchers and politicians for years that the way urban agriculture is promoted in this city will not allow us to combat hunger. How could we? On small spaces, we can't grow staples. And, the vegetables we have won't feed the thousands around us! Our mission is to improve our neighbours' diets; our mission is to green the spaces and to educate people.

During COVID, many people started to think, "We simply should grow more," or, "We simply should recruit more farmers and hunger will be gone." That is false. Hunger is a consequence of the place we live in, of being unemployed, of being Black or Coloured. The government and NGO sector would help us if they buy food from our gardens for food parcels. That would catch two birds with one stone: we can generate income and our neighbours would get fresh vegetables, instead of Indian and Chinese GMO maize that has expired. If you want to see change, support the connection of urban agriculture to local clinics, local school feeding programmes, local community kitchens, and local food parcels. That is the change we want to see, and this change happens when civil society and government starts to talk to us, and not about us.

- Female urban farmer

5.2.2 Assistance-based coping strategies

South Africa largely outsourced its relief efforts to the private-sector-funded Solidarity Fund. During the first lockdown, various formal and informal actors started to provide food parcels, which made it difficult to quantify the number and quality of distributed food parcels. In the Cape Flats, people reported receiving maize, sugar, and oil in government food parcels. The demand for food parcels far exceeded the state's capacity to provide and transport the amounts of food needed. Cape Town alone needed half a million of parcels (Key informant C1, 2020).

The government's reaction was to procure resources through established structures in the formal economy. "However, there is a risk of reinforcing the highly concentrated nature of our food system by essentially buying in bulk from these large corporations" (Key informant A11, 2020). It was estimated that about one third of the parcels that were delivered came from government, but community demand far exceeded what government was able to put in (Key informant, A2, 2020). The state's parcels were distributed via ward councilors, which, in some communities,

created a sense of mistrust and fear of corruption. This mistrust from the community toward wards was mirrored by the government who showed some mistrust for the system as well:

So, our challenge as local government is to decide how to support. When parents get these food parcels, they would take those groceries or items in the parcel and they would go and sell it. So you never knew who you gave the parcel to. Even though you know the mother out there is struggling, but you have to look at the drug-addictive son or daughter that would take those things and go and sell it. But the city, we got together and as councillors we received parcels that we had to distribute amongst our residents.

But the city has also put aside millions where we offered NPOs [non-profit organisations] and NGOs. But you know, you have these guys that just rise up today because they see there is an opportunity to get some funding and the money is not put to use for the correct reason. So that is a big stumbling block, where our people are not being compliant. And couldn't benefit from where our mayoral committee for urban management has put about 4 million Rand aside to say, "Right, here is money; get your NPOs in your wards."

- Ward Councilor

This quote reflects the different perceptions critical actors have on aid and relief. Donors often expect that people should be grateful for donations because they were provided with help. However, our dialogues with community members from four Cape Town areas revealed that people would like to participate in discussions on charity and call for more dignified way of "giving" and more participation in food governance. In the case of St. Helena Bay, community members asked for development funds and projects that economically support community members.

Actively asking family members or neighbours for food donations was frequently reported. A coping strategy that was widely used toward the end of the month before lockdown was to buy food on credit. Receiving meals from feeding schemes such as community kitchens, school feeding, and food vouchers and parcels were named; begging was mentioned a few times. Key informants and co-researchers emphasised people's heavy reliance on very small SASSA COVID-19 grants (350R monthly¹¹), on social security grants top-ups (for elderly people), and on social assistance.

¹¹ Currency conversion in April 2020, 350R equivalents 20€

Food Relief

The survey revealed that 16.7% of the respondents indicated their household received food aid or food relief since the implementation of the COVID-19 control measures, such as food parcels, food vouchers, or food provided by community kitchens.

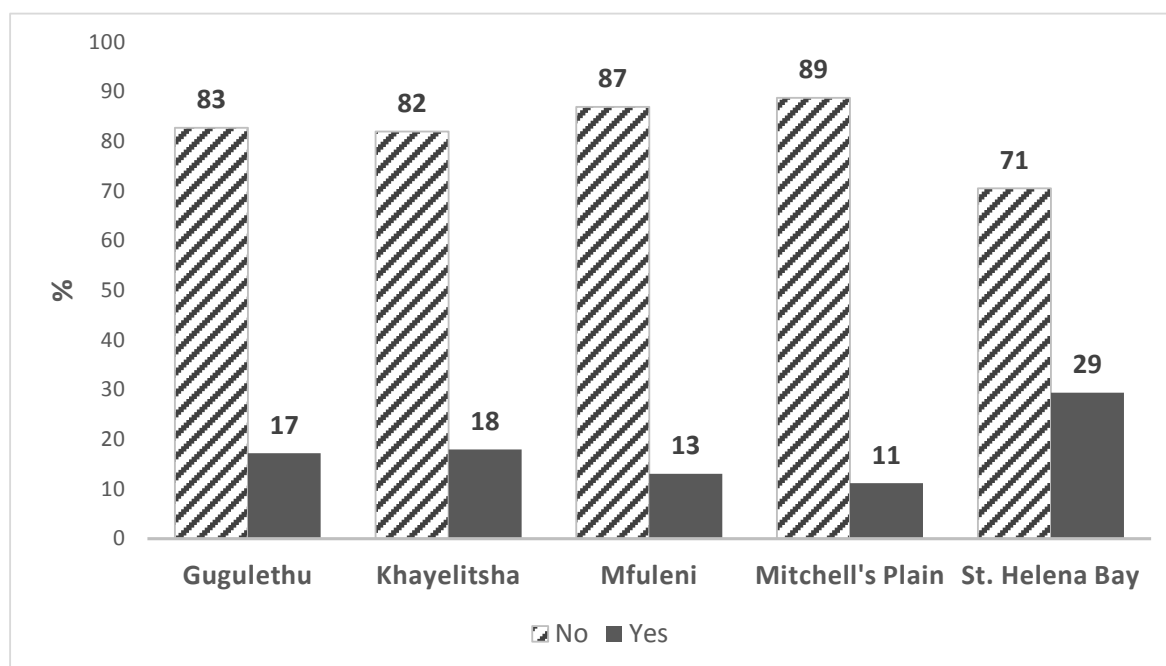


Figure 12: Number of participants who received food relief between March and September 2020.

Food parcels in St. Helena Bay area arrived once during the lockdown and were provided by the Department of Environmental Affairs (Environment, Forestry, Fisheries). Valued at R120¹², they contained rice, fish oil, peanut butter, and canned fish (*blikkie vis*), something that was perceived as “insulting” by the co-researchers. Other sources of food relief were civil society organisations, such as the Community Action Networks (CANs), NGOs, and faith-based organisations. FoodFlow was mentioned as the main NGO source. This initiative bought crops from urban farmers who lost their primary markets (restaurants) during lockdown and packed the crops into bags and shared them back to poorer communities. Co-researchers reported multi-fold challenges with food parcels. A central question was raised by co-researchers on the kinds of food provided through food relief:

We have to talk about food parcels. At the beginning of the lockdown, this was the talk of town. Some were getting parcels, some did not. And those who got realized that this was not food. It was calories, hand-outs. Who talks about this? Certainly not those who send junk food in food parcels. Food aid does not foster development.

¹² Currency conversion in April 2020, 120R equivalent 7€

Imagine a community with so many community gardens that could feed the communities. Here, local councilors and governments could offer support.

- Female urban farmer

The following table gives an overview of the source of food relief that was provided to those who participated in the household food security survey.

Table 10: Source of food relief

Food relief source	Frequency	Percentage
Government	111	37.5%
Civil society	50	16.9%
NGOs	83	28.0%
Faith-based organisation	96	32.4%
I don't know	15	5.1%
Frequency and percentage derived from a multiple-choice question ($n=296$). Since respondents might have multiple answers, total percentage exceeds 100%.		

Cape Town Action Networks (CANs)

Under the umbrella of “Cape Town Together” (CTT), thousands of volunteers from Cape Town formed neighbourhood platforms, Cape Town Action Networks (CANs). The CANs emerged at a time of acute need. They emerged with the first lockdown in March, 2020 as a rapid response that is neither state- nor NGO-driven but brings volunteers together in times of crises. These community-driven, volunteer-based networks act on the neighbourhood level all over the city and respond to the challenges that emerged during the pandemic through different forms of action and information sharing.

CANs are community-organised networks encouraging and enabling local people to self-organise for solidarity and collective action, such as organising grocery shopping for neighbours who are high-risk patients, organising masks or sanitiser, or sharing information. The rapidly evolving civil society movement supported and provided a rapid response to the lockdown and the immediate food crisis. At the peak of the first lockdown, around 160 active CANs were interlinked virtually on the Cape Town Together platform (Key Informant, A2, 2020; Key Informant, C1, 2020). Their operation varied immensely from neighbourhood to neighbourhood, as decided by each CAN. Every CAN was different, as different people shape their programming, and ways of support and collaboration. CANs in more affluent areas of the city pared with those in low-income neighbourhoods and fundraised money, food, or other goods and shared those with CANs in impoverished areas. Volunteers met to pack food parcels, organise and prepare food for community kitchens run by CANs in poorer neighbourhoods, or distributed sanitiser and masks to those

in need. The CANs also developed and translated information materials in different South African languages to inform citizens of how to protect oneself from the virus and what hygiene protocols to follow.

Food and goods were channeled into poorer communities through collaboration between CANs. For example, Key informant C6 (2020) reports on the Observatory CAN facilitating food delivery to the Mfuleni CAN. The people of Mfuleni were so desperate for food aid that “there were fights within the community about who would get the food and about who was allowed to distribute the food. So, the lives of CAN people in Mfuleni were threatened” (Key informant C6, 2020). This anecdote shows how the CANs were able to prioritise the neediest communities and their volunteers’ willingness to put themselves at risk to help the poor.

Despite the strict lockdown, including a curfew and limited physical meetings, the CANs allowed residents who historically would not have come together (those with different economic and cultural backgrounds and lived experiences) to connect through social media. Joint platforms to facilitate co-learning (such as the Cape Town Together platform and sub-groups) brought people together. Key informants described the CANs as a place of solidarity and a movement that brought historical societal segregation and structural inequalities to the forefront (Key informant, A4, 2020; Key informant, C3, 2020). The immediate economic shock and job losses during the first lockdown led to realisations about the deep inequalities in the country. An observation from the local team was rather critical:

My personal observation of the CANs was that politically, the wealthy didn’t understand structural inequality, didn’t understand that they can contribute only because of a profoundly unjust history. So, for the most part, this was welfare rather than solidarity... it was a difficult process to witness, even as there was much relief given and people gave from their hearts.

- female FGD participant

It is essential to understand the CANs as a phenomenon of time and an impressive accomplishment of civil society during a barely understandable crisis. The CANs are an emergency measure. Civil society, individuals, and neighbourhood networks stepped in when state funds and food relief failed to provide relief from an immediate shock. But it is also important to understand how powerful this movement is. The CANs are locally rooted in the community, have an unregulated bottom-up structure, provide support that is responsive to the needs of the own neighbourhood or the paring CANs, and build cohesion through collaborative cross-learning within the Cape Town Together network. This has great potential beyond

COVID-19 to create a transformative understanding of the inequalities in society and the inequalities and brokenness of the food system.

Community kitchens

We use the term community kitchen in this report as an overall description for soup kitchen or communal feeding schemes. We consider community kitchens to be local structures that provide meals in their immediate neighbourhoods in marginalised areas of the Cape Town. In St. Helena Bay, community researchers knew of only one community kitchen. It is run as a private initiative. The presence of community kitchens in South Africa is nothing new, but their popularity grew exponentially during the first COVID-19 lockdown. The Economic Development Programme (EDP) estimated that 90% of community kitchens were set up during and developed in response to COVID-19 (Key informant, C1, 2020).

Community kitchens are often connected to mosques or churches, to schools or ECDs, or to community centres. Often, these kitchens are run by volunteers (mostly women) and receive food through faith-based organisations or government social development support. This food is mostly sourced via Cape Town's food retail market (Epping) or sometimes donations from large-scale or medium-scale farmers from the Philippi Horticulture Area, a vegetable production site in the Cape Flats. Financial supports for community kitchens came through the EDP, through the CAN network, as well as partnerships with the brewers' collective. The District Six Committee Initiative also delivered litres and litres of soup to kitchens.

In community kitchens, chefs prepare thick soups or starchy stews, based on pap, potatoes, marrows, and beans. Small-scale urban farmers in the township very occasionally supply these kitchens, but the community kitchens lack funds to pay the farmers and the farmers can't afford transport to bring produce to the kitchens nor do they have enough crops to become regular suppliers. Community kitchen chefs, however, reported during the contextualization of the findings, that they would like to source locally grown food:

What we miss in the soups is leafy greens or carrots. We want to provide nourishing food to the people who come here. Of course, we know about the farmers in the schools; many of them farm almost next door to our kitchens. They don't donate food, because they can't afford to donate or because they promised the food to the White market in town.

Female community kitchen chef

Regardless of whether community kitchens were newly established or pre-existing, their output had to increase significantly due to COVID-19. Chefs reported

that during the first weeks of COVID-19 restrictions, they were serving 200 to 300 people, where they fed 10 to 20 people previously (Key informant C10, 2020). It was reported that before lockdown, people walked long distances to community kitchens to avoid being recognised by neighbours. With lockdown and its implicit travel restrictions, this behaviour changed. Some families sent their children to queue. Other community kitchens reported that the kitchens became shelters for women who had experienced domestic violence during lockdown. The incidence of gender-based violence increased as women were prevented from fleeing abusive situations under lockdown conditions.

An interesting assistance-based coping measure was reported: a saving scheme, in which people save money in clubs. The following quote was selected by the study team because it shows, on the one hand, the stark challenges individual face when there is no food at home and, on the other hand, the ever-present South African humour in times of a crisis.

The whole year, we wait for years' end, when Stokvel¹³ pays out, especially this year. January is normally the season of hunger; but this year, the hunger did not end. Of course, the first product everyone had to cut out of the diet is meat. But we have something good to replace meat: cabbage. One cabbage can feed you for a whole week. You can have cabbage with pap and the next day you can have pap with cabbage. Thanks, we still have cabbage.

- female food security activist in Mfuleni

5.2.3 Consumption-related coping mechanisms

Survey participants were asked if they have started using a new source of food because of the pandemic and lockdown measures. Community kitchens and food parcels were mentioned by survey participants as a new source of food (see figure 13). Although farming or gardening were mentioned as a coping strategy, only 35 people (n=1403) who participated in the survey indicated their own production as a new way to source food. This is an interesting finding, as it shows that urban farmers see their own production as a commodity to generate income, rather than as a food source.

¹³ Stokvel are saving clubs in South Africa. They are self-organised credit unions or saving schemes where members contribute a fixed amount of money which will pay out at the end of the year. In the Cape Flats, the pay-out often consists of meat.

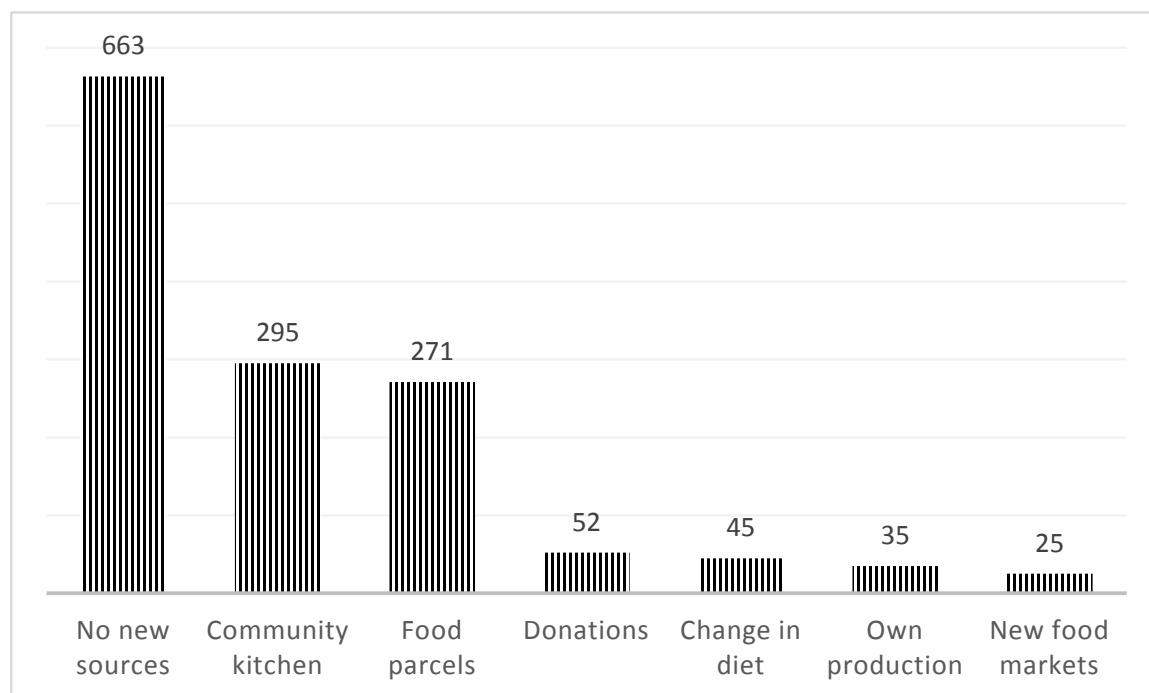


Figure 13: New food sources used during COVID-19 lockdown and mentioned by survey respondents (multiple-choice question, n=1,403)

Respondents in the household survey reported very diverse consumption-related coping strategies, while stressing the importance of these as cost-cutting measures. All referred to decreasing quantity of food, often combined with reduced quality. Some said they limited 'luxury' items, for example, by buying less-healthy foods and reducing meat consumption. Similarly, people limited consumption of the Xhosa community's beloved *Umngqusho* (made from beans and samp), since it requires a long cooking time and, thus, an unaffordable amount of electricity to cook this dish. Others considered lockdown as an opportunity to cook more consciously. The pandemic led people to reflect on their own health and physical strength and looked to food to strengthen their health. In Cape Town, people start to consume more fresh vegetables instead of canned products. In St. Helena, dietary changes were not reported, mainly because of the lack of fresh produce.

5.2.4 Coping with food insecurity – multiple and community solutions – a perspective from the focus group discussions

Two Focus Group Discussion (FGD) were held in December 2020 to discuss the research results with co-researchers from the five communities. The aim of these FGD was, first, to share early survey findings and collect feedback and, second, to reflect on the food environment mapping exercise along with the interpretation of the selected PhotoVoices. This allowed the study team to contextualise

the findings from a place-based perspective. It is important to note that co-researchers chose a multiple-response approach to identifying coping strategies in the PhotoVoices rather than a ranking. In doing so, co-researchers chose ten photographs which showed coping strategies that were promising to them. Certain coping strategies could work well for some, but not fit the daily routine, abilities, or social capital of others. Hence, co-researchers suggested a combination of asset-based coping and consumption-related coping mechanisms.



Figure 14: PhotoVoice pictures selected by co-researchers. The photos show backyard food production; a nursery; making use of marine resources; community kitchens; friendship and joint efforts to enhance community gardens; cash, as a much-needed resource; the logo of the only civil society organisation in St. Helena Bay as the voice of communities; and a water tank supplied by a relief programme in Cape Town. The photos illustrate community coping strategies.

Fifty randomly sampled community members provided photographs demonstrating their coping strategies. Co-researchers selected the ten most meaningful photographs by contextualising and interpreting them in a focus group discussion. These are described below.

Participants indicated that COVID-19 had amplified their wish to grow food locally for autonomy and health. One picture shows a nursery and represents small-scale food growers' dependencies on large-scale seedling providers versus recently established nurseries that could supply surrounding neighbourhoods with seedlings. Social capital, especially from family and the community, played an essential role in providing support and assistance to community members to start gardens. They also reported that they had become more interested in the quality, nutritional value, and their food source and many changed their eating habits to include more

fresh vegetables and herbs while some became vegetarian. This was explained by both health concerns caused by a global pandemic and lack of cash to afford animal protein. They were also aware that purchasing food (vegetables) locally keeps money within their community and supports the local economy, while rejecting sub-standard industrialised food. They became sceptical of food that comes from the industrial system and some stopped buying tins and processed food.

The co-researchers linked issues of access to infrastructure (such as land, water, refrigeration, and agricultural inputs) and training to their food environment. In doing so, they compared maps of the different sites. It was agreed that food needs to be understood holistically and the many existing food gardens should fit into a broader sustainable model that includes recycling, water harvesting, compost toilets, and ecological production. While reflecting on the food solutions sent by randomly sampled community members, co-researchers also observed that many see in own production an obvious solution to obtain food, which requires investment, skill, resources, and passion, particularly in the arduous environment of the Cape Flats that is shaped by sand and sun, blowing winds, and the nutrient-poorest soil in the whole city. Hence, the water tank photo depicts a very crucial resource: water to meet the irrigation needs of backyard farmers, life-saving clean drinking water, and water for washing and sanitising during a pandemic.

The idea of using marine resources in attaining food agency was particularly strong in St Helena Bay. Training and appropriate technologies for diversification and intensification of processing through solar drying local fish (snoek and harders), pickles, and other items such as shells and bamboo ornaments were of interest to fisherfolk co-researchers for both home consumption and resale.

The principle of collaboration and support is central. A key observation while doing research is the lack of knowledge of how to raise one's voice, where to raise one's voice, and how to gain agency in food governance processes. Participants of the FGDs discussed the ancient concept of *Stokvel* (a saving system in communities) as well as volunteering to support collaboration. Volunteering was seen as an option for skills development, healing contact with nature, and access to food. In St. Helena Bay, the participants chose the PhotoVoice logo of *Weskusmandjie* to illustrate the importance of forming collectives. People want to have more choices around food aid. Community feedback on food parcels was critical. Recipients said the parcels contained food that was innutritious, culturally and economically inappropriate, and partly rotten. Extreme examples that recipients considered as an affront were canned fish for fishers, sugary junk food to city dwellers, and GMO maize meal for organic farmers. They questioned donor's understanding of what food is,

who got the tenders for these packages, how that shapes what goes in there, and if there were opportunities for corruption in that process. There was a strong call for future relief to include supply of fresh and nutritious foods from local growers and for a fundamental power shift in our food system. Interestingly, in both workshops, political activism as a proposed solution was ranked by participants as very low on their priority list, yet, in discussions, participants emphatically voiced their desires for solidarity across groups and for better understanding of policy. They recognised that food security activities could be better leveraged through policy (yet did not feel empowered to address that).

Funding and charity coming in from outside was acknowledged, but it left a feeling of patronage within the group, particularly in the Cape Town group, where people are used to donor competition in urban agriculture and donor fatigue as a risk. Here, co-researchers called for participation in food governance. In St. Helena Bay, where aid projects have not taken root, people wanted donations.

5.2.5 Visions for a just and resilient food system

The pandemic context allows us to understand crises as opportunities to rethink the status quo of the food system. This chapter draws on household food security survey participants' remarks on the three major changes that they want to see realised in their communities' food systems.

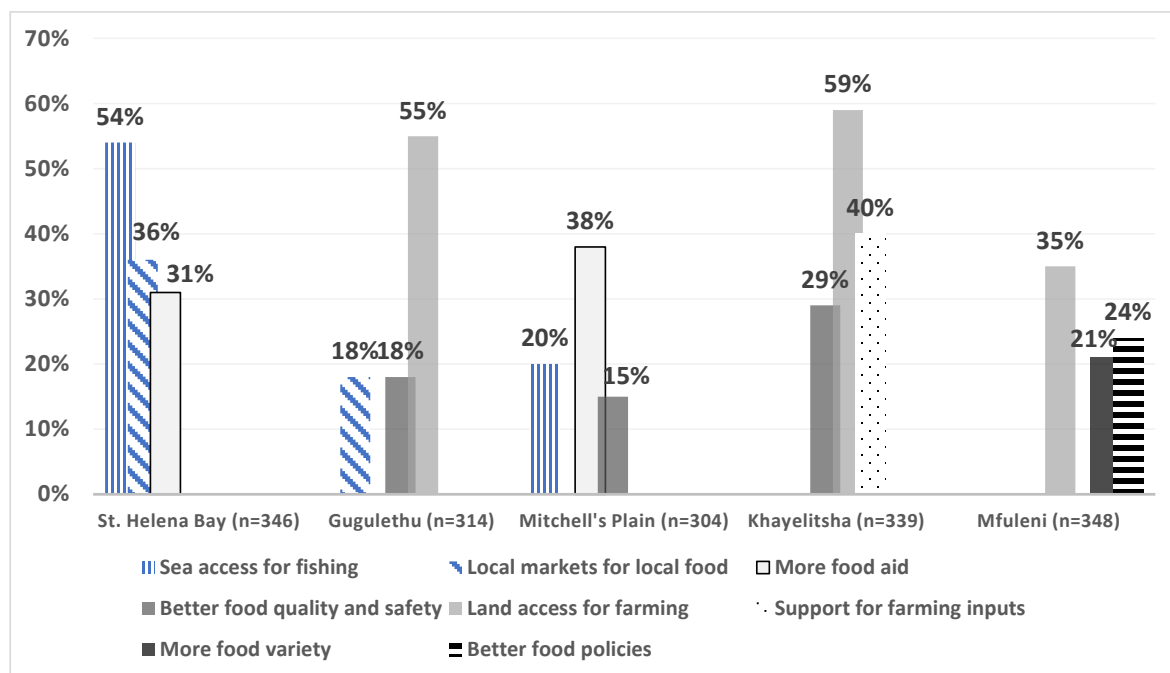


Figure 15: The top three changes community members want to see in their food system

The access to land and marine production sites was mentioned by participants from all research sites; the most food insecure locations (St. Helena Bay, Gugulethu, and Khayelitsha) ranked it as a top priority. Both Gugulethu and Khayelitsha have farming and food garden communities, however, with little security in land tenure. St. Helena Bay and the surrounding area has long coastlines, however, only few residents obtain fishing permits via quota to sustain their livelihoods.

Receiving more food aid was only mentioned in St. Helena Bay and Mitchell's Plain. There was little food relief distributed in both of these areas.

A call to improve food governance processes came from the Mfuleni community.

I can only imagine a just and resilient food system for Cape Town if four aspects are put in place. Urban agriculture is economically viable for small-scale farmers in the Cape Flats and can supply local markets. Number Two, we have people dying from unnecessary diseases like diabetes and cancers related to nutritional deficiency because there is no healthy food available in the townships. Cape Town's food system will be just and resilient only when it provides health to all Capetonians. Number

Three, improving environment. The Cape Flats and townships look like deserts. What an environment for future generations, with these highly toxic and contaminated spaces! Improvement is green. Number Four, we need education and participation. Municipal government is making decision without local participation. How can Cape Town have a resilient food system when the voices of the many aren't heard?

- Male land activist

5.3 Agency in food systems

Agency was recently introduced into the HLPE's definition of food security. We asked community members in the household survey and key informants to describe how they perceive agency and its role in a food system. In a second step, a survey was developed to measure agency. This chapter provides the findings.

Although the statistical difference in results gained before and in light of COVID-19 is minor,¹⁴ we can see voice and perceived agency increased in all four Capetonian research sites and a decreased in St. Helena Bay. This is partly because the Cape Flats is a much more politicised space than St. Helena Bay, with decades of experience in political struggle and resistance led by many civil society players.

¹⁴ for calculation, see the sub-chapter on operationalisation (p. 127)

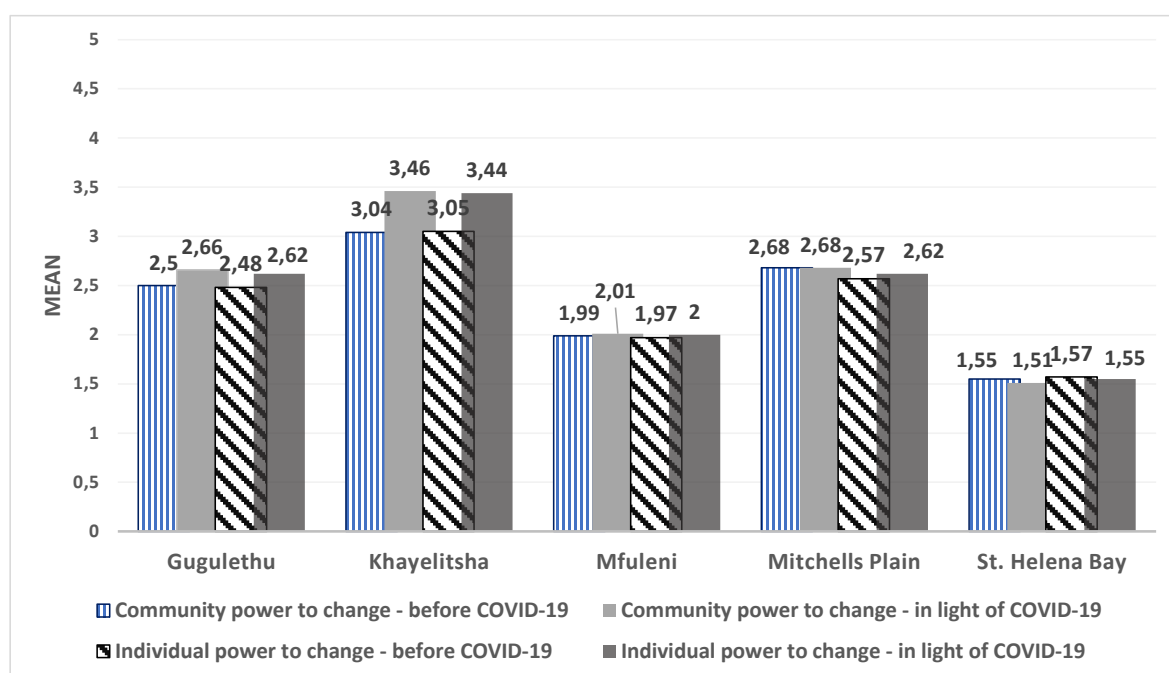


Figure 16: Respondents' perception of their power to change their food security status

5.3.1 Perceptions of agency

Agency is a renewed concept within the dimensions of food security, defined by HLPE. This study tried to discover what various actors understand about agency. These understandings feed into our own sense-making of the term, the concept, and what it means for the future work of the study team.

Community perspective

To collect community perceptions on how agency can be exercised, we posed a non-obligatory open-ended question in the household survey: '*I feel I can change the food system by...*'. A total of 525 respondents explained briefly how they or through whom they are able to change the food system. While 92 respondents explained that it is impossible to change anything, 242 respondents didn't know how, even though some of them would like a change. The remaining 191 answers are represented in a word cloud that includes all words that were used to answer the survey question and were mentioned at least twice (see figure 17). Only 191 respondents (10.5% of the overall survey with 1,824 respondents) felt they could change the food system.

Community members were asked how they could change the food system. The majority of those who answered this question said that they do not know how:

I can't change it because the government in our country does not allow one to take part in choosing food that the person really wants.

- Female research participant

The following word cloud illustrates the main messages provided by those who had ideas about how to foster change:



Figure 17: Communities' perspective on how to increase agency ($n=191$). The thicker the font size, the more often the word was used.

Those who answered this question provided striking insights. Starting a food garden was mentioned frequently within the fisherfolk community, while rarely by Capetonians. This is interesting as many organisations and government programmes have supported urban agriculture in Cape Town for decades, but not in St. Helena Bay. Co-researchers from St. Helena Bay explain that the call for food gardens is a direct response to the lack of fresh food. Starting a food garden as way to change the food system was only mentioned by a handful of the research participants in Cape Town. In a reflection session, we concluded that many people don't

see own production as a game changer; it is rather perceived as an asset to supplement the diet with fresh crops or as a health-related activity.

The most common answer from St. Helena Bay was that fishers want to sell more fish in their own community rather than continue to sell to factories (for canning) or intermediaries who sell fish in Cape Town.

In the four Cape Flats sites, collective action, eating local, and community work were mentioned the most frequently. Some respondents and co-researchers interpreted proposed collective action as a step toward food sovereignty and a rephrasing of the food narrative from production solutions to the right to food as a fundamental right. Many community members mentioned they need more information about the food system and sought information on where to go and to whom they could address their concerns. The enumerators' observations were congruent: they reported that many respondents asked what they could do and where they could learn more. Community work, collective action, and sharing were mentioned more strongly in Cape Town than in St. Helena Bay.

Both co-researchers and key informants saw the rise of the CANs in Cape Town as clear-cut solutions. The establishment of CANs fostered collective action: supporting community kitchens, packing food parcels, sharing information on hygiene measures to prevent the spread of the virus. Curfews and social distancing hampered physical interaction, but communication through neighbourhood WhatsApp groups created solidarity.

Co-researchers reported on their communities' frustrations over lacking and slow support from government (for example, the slow materialisation of the 350R SASSA grants top up). Survey answers suggest that people perceive changing government and policies as impossible. Other community members were more encouraging and suggested discussing the right to food and establishing local platforms in which the constitutional right to food could be discussed and put into practice. Few respondents mentioned the more concrete proposal for food committees or food policy councils. The establishment of localised committees was mentioned mainly in relation to mismanagement of food relief and a perceived powerlessness to make decisions about what food was made available. The following quote reflect this:

I can change the food system by...] informing people about a meeting about food rights. Where we discuss ways of fighting because we are given old, tasteless food that doesn't cook well. Share our ideas and come up with a solution that will be acceptable to government about our food rights and people's health.

- Response from household survey

In all research sites, respondents relate a change in the food system to job creation or an own attempt to search for a job. Answers related to own consumption pattern relate either to eating less or cheaper foods, which is less an answer about how to change the food system, than a mal-coping strategy in a crisis. Eating more vegetables, eating local, or eating healthier were less-frequently given answers. Being in the midst of a global health crisis made people reflect on their dietary patterns and how healthier food consumption (eating vegetables was understood as healthier) could foster change. Few respondents also suggested asking local supermarkets to sell either locally grown food or healthier food, in general. Few vendors who were interviewed mentioned that they could sell locally grown “township-veg” to support local food systems.

Key informant perspective

The word cloud draws on community members’ responses to the question asking how they can change the food system. Their answers were concrete examples of how agency could be put into practice. Key informants provided insights on how they understand the term agency. We share four statements that reflect their answers.

In many interviews, the interviewees started their description of agency with an explanation of why we need agency then concluded agency is a means to foster change because of the severe food crisis which exposed inequalities and a need to change the current situation. In our understanding of agency, having information is crucial and a first step to build agency, as reflected here:

South Africa is often described as the protest capital of the world, meaning there are more public demonstrations than most other countries. What are those protests about? They are almost never about food. So, who are you going to protest against? If you’ve got a problem with food, who are you going to protest against? Are you going to protest against the supermarkets selling the food? Probably not. Are you going to protest against the local government? That doesn’t make sense. So where are you going to protest and who are you going to protest against? Do you have agency, when you protest, or when you know where to protest?

- Male key informant from academia

The onset of the COVID-19 pandemic brought an immediate need for food aid. Key informants, particularly from civil society, reflected critically about food relief and the risk that the programmes render marginalised groups dependent. Being aware on these dependencies and taking a decision to change was found crucial:

So obviously in the onset of a crisis you feed people. You must just feed. And that's fine. But I am saying it is that situation of feeding, just feeding without trying to build enterprises in, or agency in, went on for a very long time. And that is another South African thing, is that we expect poor people to do more for poor people than what rich people will do for poor people. And so, people must stay poor as long as they are helping their community. And that is a mindset.

- Female key informant from civil society

Food relief and food relief programmes became key entry points to discuss food security. Feeding schemes are extremely popular aspects of food and nutrition security programmes (for example, the school feeding scheme feeds almost nine million children in the country), as are social grants programmes, on which many rely. Key informants reflected on food vouchers, food parcels, and community kitchens and their relation to agency:

I think agency is about choice. I don't know why people should have to be grateful because someone was kind enough to deliver them their constitutional rights. You know I see absolutely no reason why the poor should be stigmatised in that respect. It is also the reason why I think that food vouchers and food parcels are deeply humiliating to the poor.

- Female key informant from civil society

The following quote reflects the concept behind different stages of agency. While the previous perspective spoke about choice, the following quote goes a step further and speaks to having a voice. Perceiving oneself as having a voice, having a voice, and being able to express opinions and influence and shape debates are different forms of agency. Strong agency in communities creates space for critical and rich debates that might influence policies.

Agency, I think it implies the ability for consumers to have a voice and not just have a voice, but for their voice also to influence policy in terms of what types of food are produced or, how they are produced, how they are sold, what is made available to people, how prices are set. And how job opportunities are shaped. So, it would imply the need for government structures and for policies that could enforce that. Because currently, as I've already indicated, most of the decisions are really made behind closed doors in the corporate sector. So, I think there need to be transparent spaces for critical debate, which influence policy but which need to be insulated from corporate interference. And I think it is something which requires capacity to hold quite robust and critical debate because there are different interests at play.

- Male key informant from academia

5.3.2 Measuring agency

This chapter presents the results from the household food security survey's Agency Module, which measures agency metrics. The sub-indices and the Agency Index represent the mean of the respondent's perceived agency in five different domains (see Table 11). *Food processing* and *food production* are regarded as the domains in which the highest level of agency is perceived. The domain in which the respondents perceive the least agency is *food distribution*.

A digital focus group discussion with co-researchers determined the weight of each domain.¹⁵ With limitations, this allows for the inclusion of a view more closely related to the community on the importance of each domain of agency. The *food production* sub-index is multiplied by 1.052, while *voice in food policies and governance* is multiplied by 0.923. Even though the weights are different, the impact on the Agency Index is minor based on the decision of the focus group, showing that the selected domains were all seen as relevant and important by the focus group.

Table 11: Sub-indices of the domains of agency

Domain	N	Mean	Std. Deviation	Weight
Dietary sovereignty	1,792	0.322	0.284	1.012
Food production	1,790	0.47	0.194	1.052
Food processing	1,824	0.507	0.328	0.972
Food distribution	1,718	0.25	0.245	1.042
Voice in food policies and governance	1,782	0.356	0.23	0.923
Agency Index				
Agency Index (weighted)	1,671	0.375	0.164	

There is a positive relation between having a perceived agency and living in a food secure household (Table 12). Respondents who live in food secure or mildly food insecure households have significantly more agency than respondents in moderately and severely food insecure households. This proves that there is a relation between food security and having a sense of having agency in the food system. Therefore, the quantitative operationalisation of agency in the Agency Module has potential for future refinement. Furthermore, it indicates that the newly introduced dimension of food security agency is related to the FIES, which measures the dimension of food access of an individual or household. In conclusion, having agency in the food system increases access to food and vice versa.

¹⁵ See chapter 4.2.1 and 4.2.5 for a more precise elaboration of the weighting exercise and its limitations.

Table 12: Agency and the FIES ($n=1534$)

FIES	<i>n</i>	Mean of agency
Food secure	531	0.4117
Mildly food insecure	178	0.4035
Moderately food insecure	359	0.342
Severely food insecure	470	0.3256

The following figure displays a more detailed look into the research sites and respondents' agency, differentiated by their state of food security (see Annex 4 for calculation). The results show that people who are food secure have more agency (except in Khayelitsha) with food secure participants from St. Helena Bay in particular showing significantly higher agency than the food insecure. The highest prevalence of agency is amongst food-secure respondents in Mitchell's Plain.

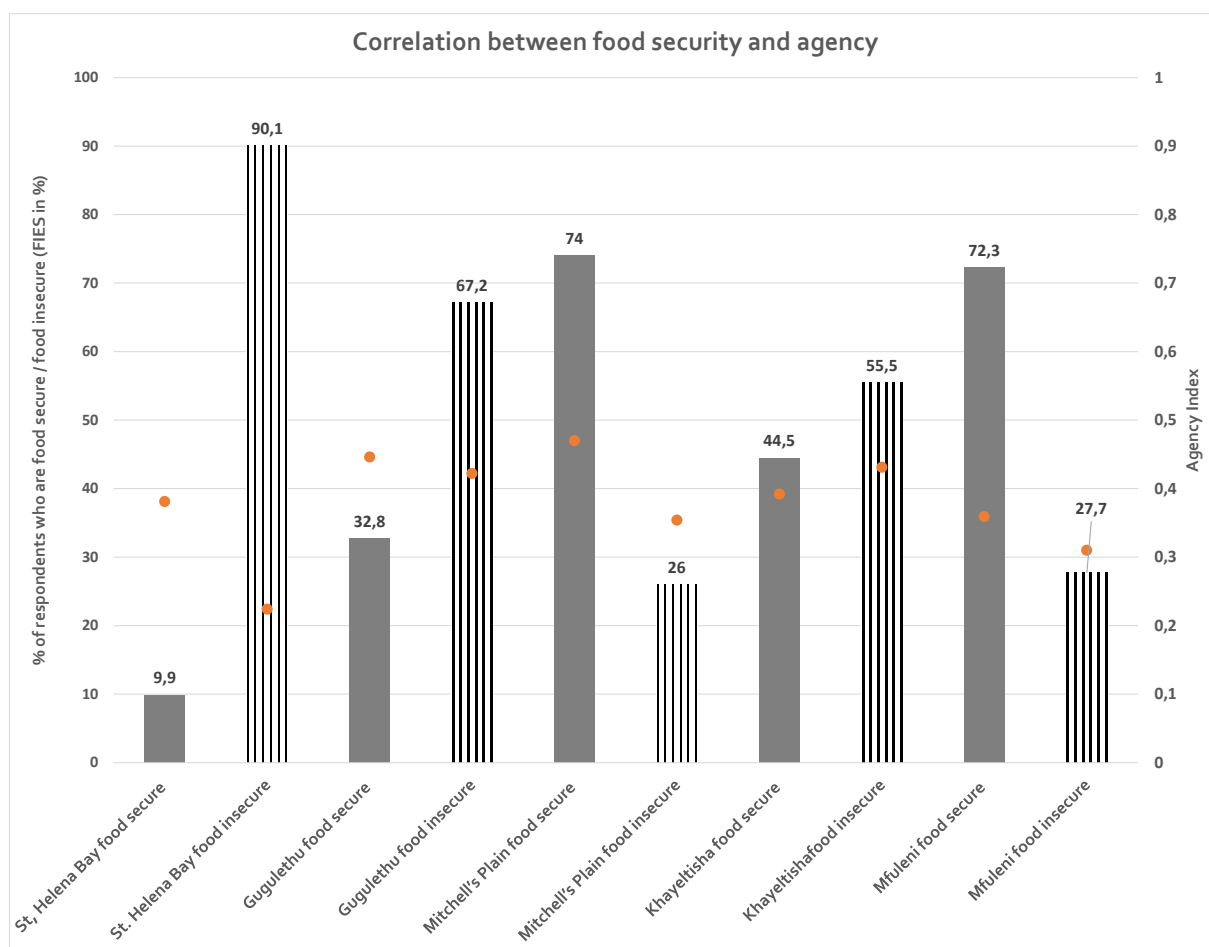


Figure 18: The measure of perceived agency differentiated by the state of food security. The dots indicate the perceived agency, the higher the dot, the more perceived agency a person has. The bars indicate the percentage of respondents who are food secure (grey bars) or who are food insecure (striped bar) according to the FIES analysis. Except in St. Helena Bay, the perceived agency does not substantially differ between food secure and food insecure people in the respective research sites.

Perceived agency varies with several socio-economic and food-related characteristics (see Table 13). Socio-economic characteristics such as age, gender, and employment status only play a minor or no role on agency. Variables which strongly influence agency are education and the place in which the respondent lives. Having a formal job or working as an urban farmer, fisher, vendor, community kitchen owner, or spaza shop owner increases agency as well. Respondents who live in a household in which the responsibility for grocery shopping is shared, perceive themselves to have significantly more agency than respondents who live in a household in which only women are responsible for this. Respondents perceive themselves as having less agency when purchasing food on credit. Counterintuitively, having to borrow food or receiving food relief has no significant effect on agency, but might be explained by cultural emphasis on social networks and stokvels.

Table 13: Agency and characteristics of the respondents ($n=1671$)

Variables	<i>n</i>	Mean of agency index
Age		
Youth (18-35)	722	0.384
Adult (36-60)	830	0.367
Elderly (>60)	119	0.368
Ward		
St. Helena Bay	347	0.2419***
Gugulethu	305	0.4447
Mitchell's Plain	345	0.4398
Khayelitsha	350	0.4090
Mfuleni	324	0.3437
Gender		
Female	914	0.372#
Male	755	0.378
Education		
Primary	194	0.27
Secondary	1,057	0.376
College	226	0.406
University	137	0.454**
Household head		
Female	657	0.366
Male	700	0.386*
Both	301	0.362
Employment		
Yes	703	0.387#
Formal sector	372	0.407***
Informal sector	331	0.364
No	890	0.377
Engaged in the food sector		
Yes	671	0.4***
No	1,000	0.357
Food Relief		
Yes	283	0.362#
No	1,376	0.377
Food source: farming, fishing, foraging		
Yes	343	0.338***
No	1,207	0.379
If possible, t-tests were conducted to evaluate the significance between two means or more means with one reference category.		
Significance Level: #Not Significant, * $P \leq 0.05$, ** $P \leq 0.01$, *** $P \leq 0.001$.		

5.4 A place-based perspective on the food environments

The following sub-sections provide a place-based community perspective of the food system in food environment maps and PhotoVoice pictures.

5.4.1 Place-based perspective from the communities

The following was written by a community member of Mfuleni. Her perspective sheds light on the contested space of the townships and what it means from a community perspective to think about the connection between space and food.

The effects of apartheid have largely been looked at as societal and psychological. Access to food is a racial dynamic when we look at it in light of apartheid spatial planning. The relocation of largely Black groups from the so-called homelands to cities for work defines the first crack in the fragmented sense of place for many South Africans.

What Khayelitsha and Mfuleni have in common, for example (besides a largely Black low-income population) is a sandy soil and limited space. Anyone interested in growing food grapples with finding space and then with the soil. What a food garden can offer is fresh organic vegetables and psychological benefits of being in the garden. So where is the fresh food, if it is not in Khayelitsha or Mfuleni?

Here then comes the important elements of land and place. Progression to the temporary city shack from the brick homes of our homelands is seen as a progression to money or at least making money. There is this question of place or at least a sense of place: that you do not belong where you are. There is not enough space for you here to build your dream home, let alone enough space to produce your own food. Besides, the soil is not fertile enough. Your place is always in a context and the context is influenced by its historical present. The place determines what food you get and what food you do not get. It determines how far you travel for the food you want. It determines the quality of food that you have access to. It determines how much money you have to access the food you want.

- Female food artist

In our data synthesis, we combined two sources of data: food environment maps which draw on GPS data collected by community members and PhotoVoices that show communities' perceived food challenges.

The maps portray a snapshot of the diverse and ever-changing food environment through the lens of local co-researchers. Co-researchers and community participants used the maps to further understand how to pursue the local food system development. "If you follow our food in the mapping, you follow our money" (FGD,

December 2020). The following maps show the food environments of the five research sites: Ward 41 in Gugulethu, Ward 75 in Mitchell's Plain, Ward 96 in Khayelitsha, Ward 108 Mfuleni, and Ward 11 St. Helena Bay. The maps display four main places local residents source food:

- Bottom-up, community-based initiatives like community gardens and community kitchens
- Informal food sources like spaza shops and informal vendors (fruit and vegetable stands, meat and fish stands, and prepared food stands)
- Formal food sources like supermarkets and restaurants (mostly fast food)
- Education-based support systems like schools running feeding schemes and Early Childhood Development Centers (ECDs)

The first map is an overview of the research sites and draws partly on GPS data collected by the co-researchers and on official data about ECDs and schools.

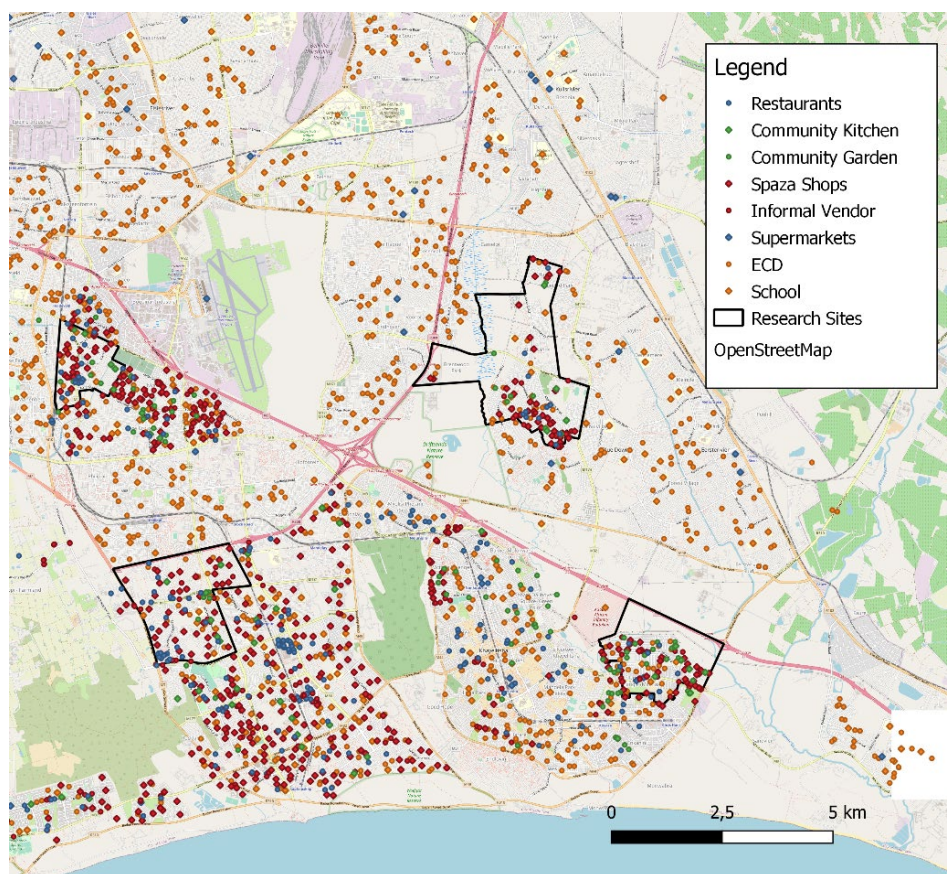


Figure 19: Following clockwise, the four research sites in the Cape Flats: Gugulethu, Mfuleni, Khayelitsha, and Mitchell's Plain. The map shows the perceived food environment of the local communities that engaged in a mapping exercise conducted by local enumerators who mapped food outlets.

St. Helena Bay

The following map shows the long coastline with the town of Paternoster on the left and the villages that form part of St. Helena Bay on the right, including the suburb of Steenberg's Cove on the lower right corner. The survey was conducted here, in the fisherfolk community of Steenberg's Cove. The area is marked by small settlements, holiday homes, and estates. In St. Helena Bay, there are two fish factories which are important employers, especially for inhabitants of the mainly Black township of Laingville, next to Steenberg's Cove. This area was not mapped by the local community. Steenberg's Cove is home to a Coloured fisher folk community. The participating community members stated their main source of food is supermarkets in the nearby town of Vredenburg (30 min drive, R20 taxi) and that they rarely purchase food in the sites shown on the map because they prefer to shop in bulk in Vredenburg as a result of their limited budgets.

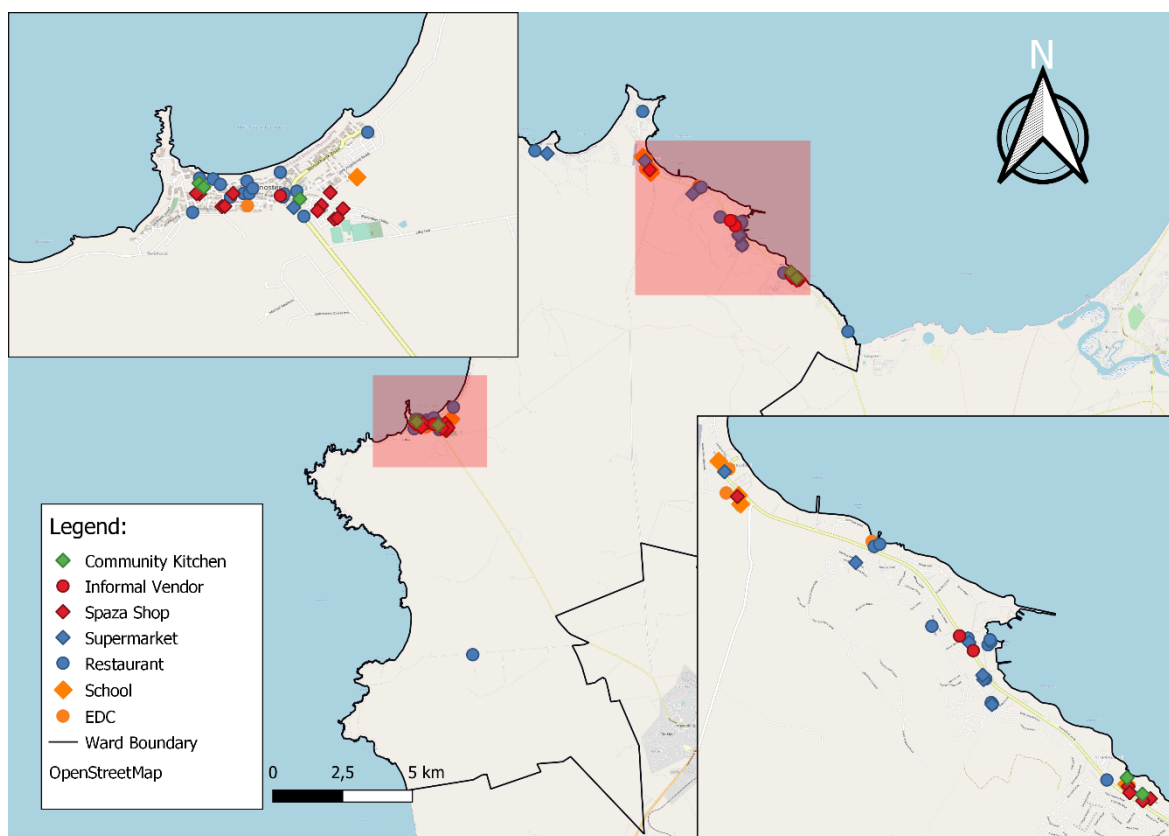


Figure 20: Food sources in Ward 11 St. Helena Bay

The following quote was provided during the survey by a co-researcher who wished to describe the food environment from a Steenberg's Cove perspective.

The whole of St. Helena Bay consists of small settlements. There are also big fishing companies around. Some are gated communities: they have security and are resorts for people with money (holiday homes). They majority in the area suffered from apartheid. There is one supermarket in Steenberg's Cove and some small Mini OK

bazaars and what people call 'house shops'. In the mini mall in St. Helena, there are restaurants and shops selling everything from cards to junk food to seafood and, of course, steaks. When fish and mussels are available, everyone goes to see if they can buy them. Because people only shop when they have money, we buy from small shops. When we have more money, we take a taxi to Vredenburg to buy in bulk, but this depends on government grants (the taxi is expensive). Unemployment is high; people live on basics; you can see this in the food environment, where people buy and sell less meat.

- Female community activist

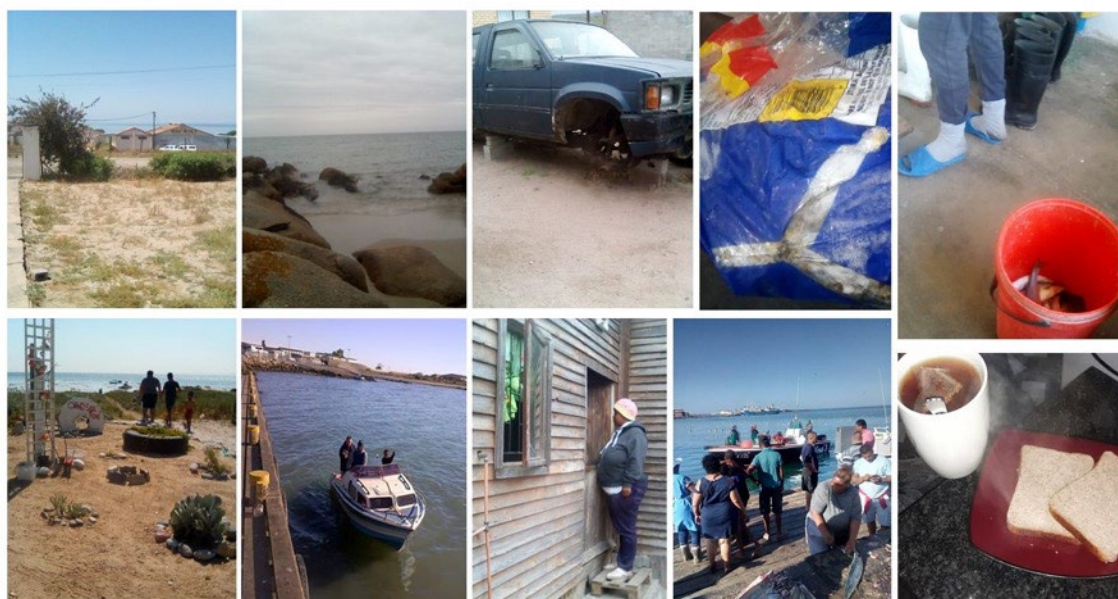


Figure 21: PhotoVoice pictures from St. Helena Bay which portray the main local food system challenges identified by communities

Co-researchers discussed the ten photos submitted by randomly selected community members and showed the main food challenges in the community. As a team, co-researchers discussed the photos and selected the most powerful ones and the ones that best characterise the place-specific challenges of each site.

In St. Helena Bay, PhotoVoice images show that community members face food system challenges linked to sea and land resources. Fisherfolk lack fishing permits and rely on a quota system and interim reliefs. This complaint dominated the participants' responses during the study phase and is reinforced by the submission of the photo of the small boat.

The fisher community was inspired by their co-research cooperation with urban farmers and considered starting food gardens in Steenberg's Cove, an area where fresh food is not available. While there is vacant land for community gardens (photographed), there is no agricultural extension service to the area, nor a source of farm inputs such as tools, compost, seedlings, or seeds. While the Capetonian

co-researchers were excited about the available space (pictured), the fisherfolk co-researchers adamantly supported the idea of a garden development programme to avoid the sale of the vacant land to investors of real estate.

Community members and co-researchers were concerned about the quality of food available in St. Helena Bay (as portrayed in the photo of the store-bought bread purchased in one of the photographed houses). The village lacks fresh produce and there are no food gardens or fruit stalls. Instead, the community relies on packed and processed food from spaza stores and cheap supermarkets in Vredenburg.

One photo shows people gathered on the docks, illustrating a day with a good catch. The photograph with grey sky shows unpredictable weather, which is a concern for fishers and can determine the day's income. Although living in a fishing community, established value chains from the boat to the factory limit the availability of fresh fish in the local community. The lack of reliable transport to grocery stores was photographed.

While discussing the photos, a co-researcher from St. Helena Bay reflected on the past:

Our food system used to be well in place. We had diverse farming systems, we slaughtered, grew veg, lived off the ocean feeding our families. There was no such thing as fishing rights; we harvested sustainably. Investors came, by-laws regarding livestock and fishing rights undermined our food system. We are now scared to break the law. Our barter system has disappeared. Our food system was killed by a government system. Government killed our culture, wisdom, and heritage.

- Female community member

Gugulethu

Gugulethu is one of the oldest townships in Cape Town, with a long history of political resistance and activism. It is also a hub for charity work with many active NGOs. The food environment in this research site hosts food gardens and community kitchens, though the study ward hosts fewer community kitchens than other areas of Gugulethu.

The food environment in Gugulethu, from my perspective, is mainly about street vendors, hookers (sex workers), and spazas. The food is coming straight from Ep-ping. The food comes from commercial, large-scale agriculture. In the townships, you don't have the organic food you have in the White suburbs. Buying food is a question of money in the townships. The Spars and the Shoprites are selling us junk food; they do not care about our health. Why do they care about the health of consumers in better-off areas?? Because they pay for it.

- Female food activist in Gugulethu

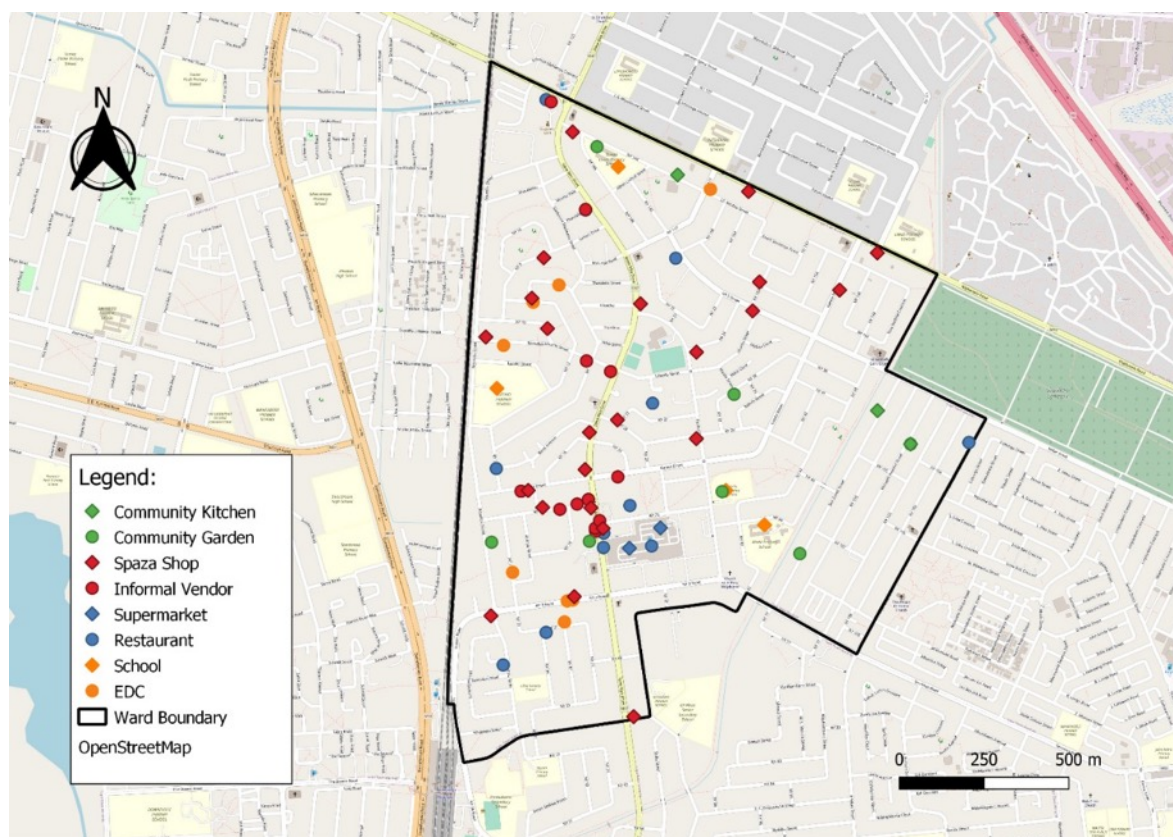


Figure 22: Food sources in Ward 41 Gugulethu

It is better to go to supermarkets because there you have everything: food, cleaning products, and cooked food. In the spaza stores, you can buy bread, but not much. So, we prefer supermarkets, but we need transport. It is R10 to go and R10 to come back. That is a lot of money. If I had money, I would go more often to the supermarket.

- Female consumer in Gugulethu



Figure 23: PhotoVoices from Gugulethu which portray the main local food system challenges identified by communities

In Gugulethu, PhotoVoices provide a more people-centered focus than a place-based one. Co-researchers chose the illustrated ten photos to portray the communities' perceived main challenge. Pictures emphasize the community soup kitchens with children waiting for food and people preparing food. The visibility of poverty in the photos raised the question (and ethical concern of publishing these photos). This was the only research site where community members sent pictures in which the current crisis was prevalent, such as the three pictures which all illustrates children. Co-researchers state that they perceive the Gugulethu community members as socially well networked, as they have lived in the townships for many decades. Community members reported that community kitchens were common in Gugulethu even before the pandemic. They said it was common to rely on those social networks, for instance, by sending children to relatives or local charity programmes for food.

Other photos show food stalls that provide prepared food such as braai stalls, but also a woman who prepares food outside her house for sale. Co-researchers reflected that meat consumption plays a central role in the diet of many and people would rather spend money on meat than on vegetables, despite being perceived as less healthy. Meat stalls are usually the first stall established when a new settlement is established. Depending on the season, meat is also cheaper than vegetables. The photograph from the supermarket was chosen as a comment on what healthy food

is and whether it is available in the townships. Although the same supermarkets exist in Gugulethu as, for example, wealthier parts of Cape Town, the study team observed that the product lines often differ.

One photograph shows a piece of empty land, which reflects the challenge of urban farmers, first, to obtain a long-term lease for their land and, second, to obtain inputs for their farming activities. These challenges hamper many urban food gardeners' ability to continuously produce enough vegetables to obtain a livelihood.

Mitchell's Plain

Mitchell's Plain is one of the largest townships in Cape Town. The food environment is dominated by two large malls, neither of which are located within the research study site. The research site we worked in (Colorado) is populated by a mostly resident Muslim community.

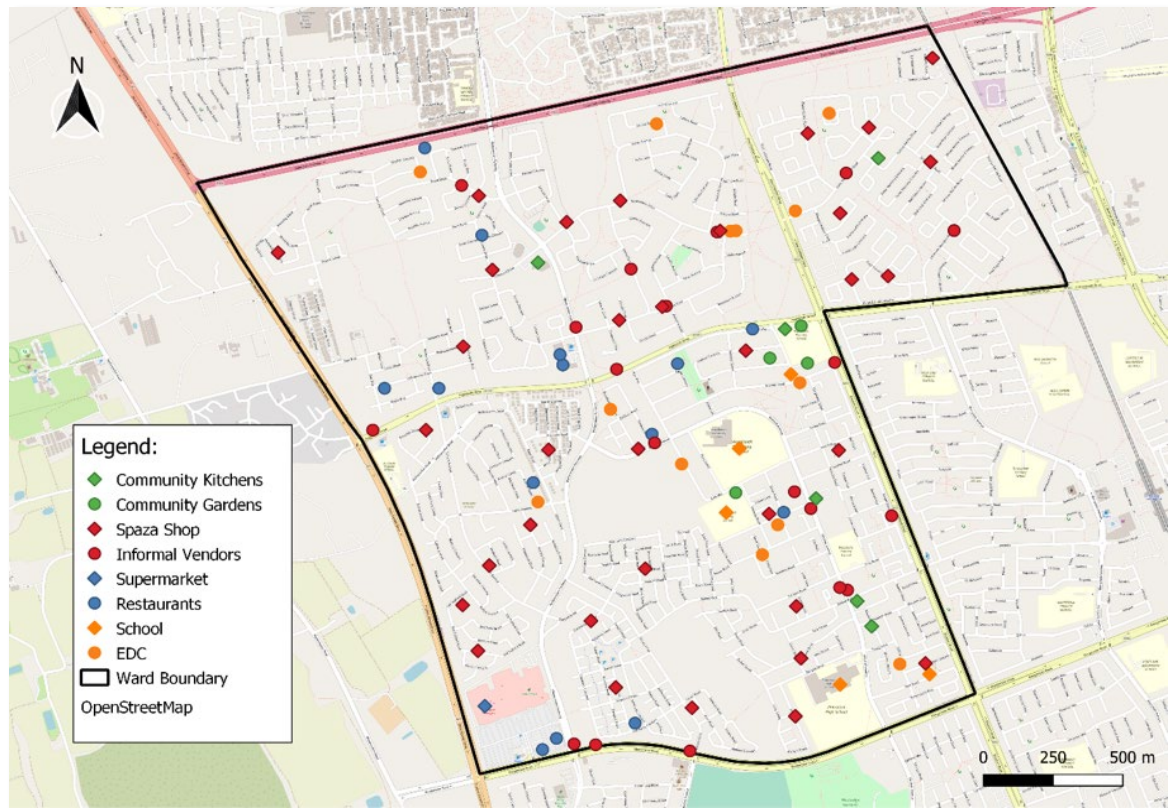


Figure 24: Food sources in ward 75 Mitchell's Plain

Co-researcher who described the research sites also mapped residents' food source and remarked on the differences between the Mitchell's Plain food environment and the neighbouring areas:

In Mitchell's Plain we prefer supermarkets: the big malls and large centers. Here, everything is available: all staple food, our meat. Mitchell's Plain is very much a

traditional area with male-headed households, be it in the Christian or Muslim communities. The melting pot of cultures, however, is the home-cooked food, something you can barely find in the streets, like in the African townships.

- Female urban farmer



Figure 25: PhotoVoice pictures from Mitchell's Plain which portray the main local food system challenges identified by communities

The photographs from Mitchell's Plain clearly show the contrasts of the South African food system and the challenges of participating in it, as well as the obvious assets that hamper participation: money and fuel. In Mitchell's Plain, the distances to supermarkets are long for many and the car is the main means of transport. Unlike in the Cape Town research sites, malls play a greater role as shopping hubs. These malls host several supermarkets and fast food restaurants. Empty shelves were photographed twice and co-researchers reiterated this was a reality during COVID-19 times when certain products were unavailable and people started hoarding. In Mitchell's Plain, food, its preparation, and consumption happen almost exclusively with families cooking traditional Cape Malay cuisine. Two other photographs show fast food restaurants. Co-researchers say that, although many people know that fast food is not healthy, it is still a treat to have fast food after shopping. The malls are understood to be safe spaces (with regard to high crime rates in Cape Town) and people spend their free time in shopping malls, especially on weekends.

A further challenge identified in Mitchell's Plain is the lack of infrastructure for urban agriculture. Although two organisations support this activity mainly with training and workshops, the few existing large food gardens lack support. Farming activities are not thought to be economically viable (despite support from NGOs

and governmental programmes) as farm income is insufficient to support re-investment in infrastructure such as shade nets, seedlings, or irrigation systems. Both photographs show that urban farming is not conducted year-round as seasonal variations (particularly the windy, hot summer days) impede farming activities.

Khayelitsha

The location we worked in has established streets, brick houses, shacks, and informal settlements. Makhaza is located on the edge of Khayelitsha and borders the highway, dunes, and wetlands.

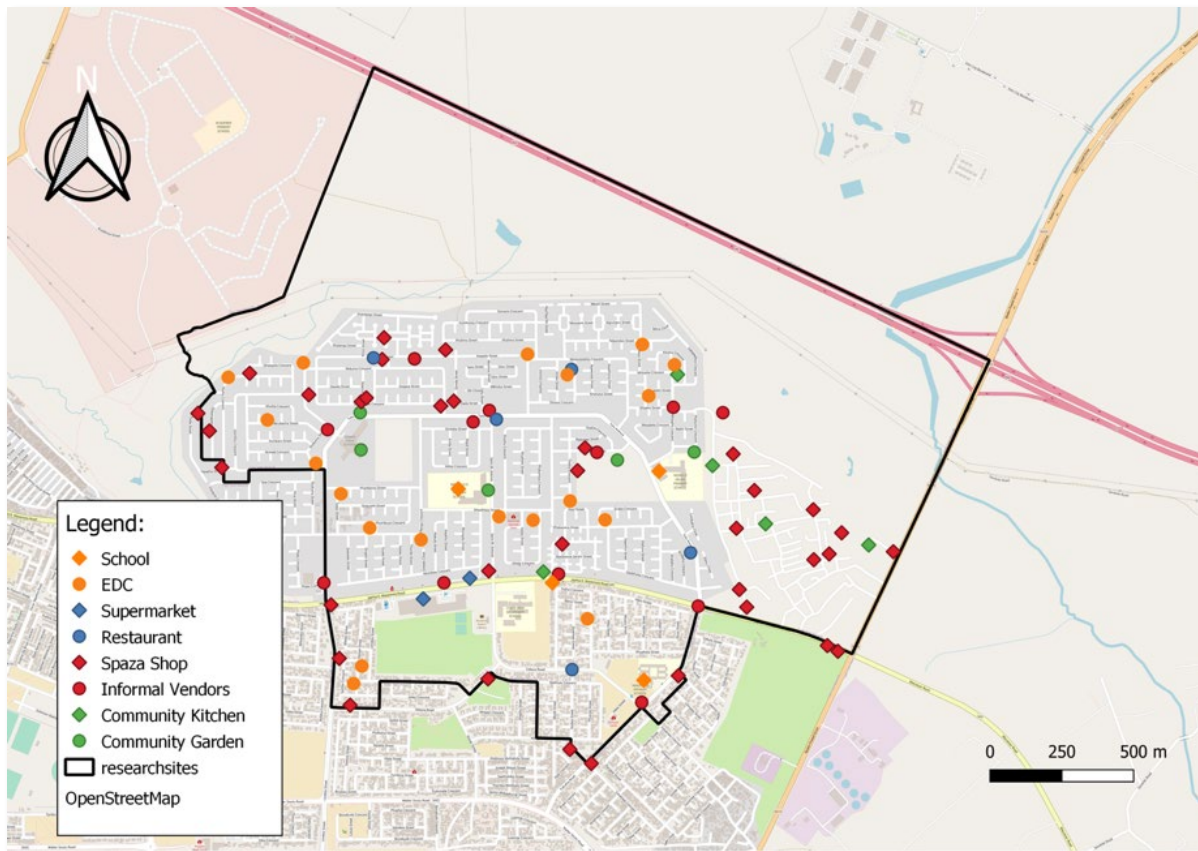


Figure 26: Food sources in Ward 96 Khayelitsha

The following description was provided by a research participant who wished to bring the entrepreneurial drive of many younger residents into focus. This was also highlighted by co-researchers during lockdown. Small businesses were established by carpenters, installers, and chefs after lockdown.

Cape Town is one of the most beautiful cities to visit. It also boasts one of the most unequal populations in South Africa. The food environment in Khayelitsha is one of inequality and history; envisioning solutions to these issues is another story. There are supermarkets, but they don't sell the food we want to eat.

We come now to entrepreneurship as a large solution to a large societal problem. After the shutdown and the second wave, there have been many job losses. This created a more food insecure environment than ever before. The job market is a lot more competitive with the demand for jobs increasing. Creating portals of support to engage young people into entrepreneurship will allow an income where there was none. It also creates the potential of turning townships into economic hubs that can self-sustain. The future is not only sustainable, but potentially self-sustainable!

- Female research participant



Figure 27: PhotoVoice pictures from Khayelitsha which portray the main local food system challenges identified by communities

PhotoVoice pictures sent from Khayelitsha show, at first glance, a strong place-based perspective. Examining the underlying challenges behind these photos, however, shows lack of infrastructure with broken water lines, illegal land-use in dumpsites, and limited space for livestock production. A photo of a street and empty space shows a former fruit and vegetable stall that was removed by the municipal government. Retail food is not visible, especially in the peripheral zones; however, there are local meat retail markets along streets and highways.

Asset-based challenges were photographed. The water tank photograph was submitted as a problem and as a solution. Access to safe drinking water is a challenge, particularly in the informal settlements where safety and security are challenges. Water sources (including toilets) are rare in private homes and often involve a walk, which is a security risk, especially for women. Photographers also show transport and energy as food challenges. Grocery shopping in supermarkets usually requires expensive transport. Energy also increases household costs and determines diets.

A typical food is *Umngqusho* prepared from beans, samp, and leafy vegetables requires a long cooking time, hence, its preparation is sometimes unaffordable to many due to high energy costs. Groceries bought in supermarkets was seen as a challenge by urban farmers who struggle to establish local markets for organically grown local products and compete with cheap supermarket vegetables.

Mfuleni

The neighbourhood of Mfuleni is closer to Stellenbosch than to the city centre of Cape Town. It is an established township with many residents living in this area for years. Residents report that the area has grown in the last few years as people migrated from the increasingly populated Khayeltisha or from Mozambique or Zimbabwe, where many established large squatter camps close to Mfuleni, especially in the year of COVID-19.

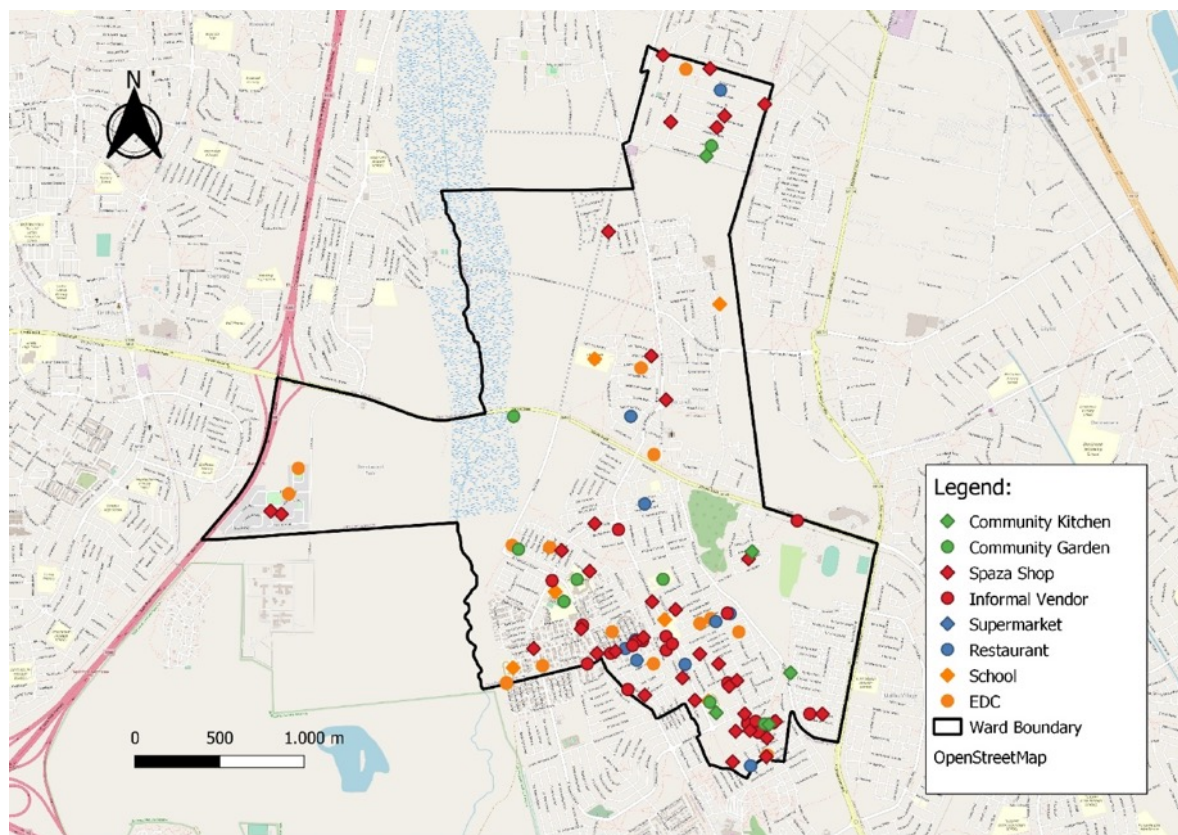


Figure 28: Food sources in ward 108 Mfuleni which portray the main local food system challenges identified by communities

Mfuleni's food environment depends on the demographics. Different people, like the poor, poor, poor, who live beyond the breadline. And the very first residents, who stay in proper houses. These houses are close to the supermarket in Blue Down area. These people earn, have cars, their kids are in private school. So, the bulk of the people buy at the two supermarkets. This is the centre of Mfuleni. Here is the taxi rank, the police station, the municipality, the clinic, the schools, the library.

Here you find everything. There is also a shopping mall in Zevenwacht. Everyone. E goes there at the beginning of the month and spend moneys on bulk food. And close to the Coloured area, there are other food resources and supermarkets. There is a whole lot of variety, and you can buy sour milk and meat. We have no restaurants, but food stalls selling tough chicken, pork, sausage, smiley (sheep head), and cow head take away. So, when we go out, we don't sit in a restaurant, we have a walk to the guy, get a chopped cow head for R40 and this is our outdoors. I think, "You don't even get a sparkling water in the White restaurants for this?" People in Mfuleni enjoy going out for supper as everyone does, but it is different.

- Female food justice activist



Figure 29: PhotoVoices from Mfuleni which portray the main local food system challenges identified by communities

PhotoVoices from Mfuleni tackle three main themes: assets, access to land, and the demand for community kitchens. Assets (cash) is a central challenge portrayed in the Mfuleni photographs. The cash-fork-empty-plate picture was photographed by a food activist who uses photography and words to unpack social injustice. She states in the photo caption:

It is simple: without money, a plate is empty. The place we live in determines what the work we do, what food we can source, and how much cash we have in our pockets. An empty plate is not our favourite food, but it is a frequent dish for many. Since COVID-19, many lost their jobs in the suburbs, so there is no more cash to fill the plate.

- Female consumer

Access to land for farming and food gardens was another central theme in the PhotoVoices from this area. Urban agriculture in Mfuleni is less frequently facilitated by NGOs than in other areas. As NGOs are better positioned to facilitate access to school land rentals than private persons, the issue of land access was seen as significant in this community. However, Mfuleni hosts a large livestock farming community who keep sheep, goats, and cows.

Community kitchens also played a big role in Mfuleni and were characterised by long queueing. Co-researchers reported that community kitchens not only attracted people from the within the neighbourhood, but drew in people from nearby informal communities and workers who wait at the highway for piecework. Three photographs show pictures of food that is consumed at home: the photos of tea and bread, porridge, and supper preparation. While co-researcher reflected on these photographs, they came back to the findings of consumption-related coping strategies and the abilities of many women to prepare a meal from little food. A central statement here was if people have to skip meals or reduce portions, they would first reduce the amount of fresh food such as vegetables before reducing the amount of meat. Vegetables are relatively expensive.

5.5 Consolidating the findings

As a multi-authored work, this study speaks with many voices and mirrors the unique writing styles, passions, and learnings of each contributor.

The present report was embedded in a larger project, in which the current authors contributed to varying extents to the different project phases. In the last phase of the study, the writing and contextualisation phase, the Cape Town team committed to an ongoing research process, to strengthening the existing network, and to use the findings developed with co-researchers, enumerators, SLE post-graduate team, study partners, and accompanying activists and researchers.

The previous chapter presented findings from the household food security survey, along with reflective quotes from the co-researchers. This subchapter will close the chapter on findings by adding another perspective: that of key informants from academia, civil society, and policy.

To become acquainted with the local South African context whilst in Berlin, the SLE post-graduate team members conducted key informant interviews. These interviews gave the SLE team insight into the local structural and systemic factors influencing food justice so that they had sufficient background knowledge to coax

out co-researchers' and community members' voices on the subject. However, after hearing and sharing those grassroots perspectives and contemplating co-researchers' reflective quotes (as provided in the previous section), we are impelled to share material from key informant interviews. These interviews echo and amplify the voices of co-researchers and the household survey findings. Structural challenges, such as high unemployment rates and unequal power balances were evident in the project sites and were mentioned by both co-researchers and key informants. In juxtaposing the two different data sources—household survey findings from community members' responses and qualitative key informant information—we argue that these structural challenges can't just be viewed as a result of a moment of crisis, but have deeper and wider systemic causes that worsened food insecurity. As stated in one of the interviews: "COVID didn't cause the food crisis, it revealed it and aggravated it. So, one needs to go back to the situation before the pandemic to really understand food systems' change" (Key informant C2, 2020).

A central finding of the survey is that while unemployed people are more likely to be food insecure, the food security status of those who are employed was not affected by their employment being formal or informal (see table 6). Key informants argue that mass unemployment and the large retrenchments ties people to low-paid positions and coerces them to economise on food. Unhealthy, calorie-dense, sugar- and starch-based diets supply the minimum daily caloric intake for those who are employed (Key informant A1, 2020; C1, 2020). Since hunger is tied to employment, it is seen as an individual problem and stigmatized as such. Indeed, popular discourse links hard work and courageous studying with employment and food security. Therefore, admitting to food insecurity casts one into a pool of lazy, undisciplined persons unworthy of paid employment and so the cycle continues (Key informant, A4, C4, 2020).

With inequality growing due to the pandemic and becoming visible, key informant interviewees stressed the importance of engaging powerful actors in discussions on just and local food systems. Unequal power structures are said to be rooted in the historical context of apartheid and dominant patriarchal systems. Key informants from academia and civil society reflected that when we speak about power, we have to think about powerlessness (Key Informant A1, 2020; Key Informant C3, 2020). Many of the more than thirty key informants were clear on the links between power, empowerment, agency, and food security. Developing agency necessitates returning power and voice to the people. Rights increase individuals' agency and the power to do things comes from having a range of assets, such as knowledge, a sense of having the power to speak, access to communication means

(such as airtime and reliable phones), or access to transport. In terms of food security, agency empowers people to make choices, gain access to food, and utilize it (Alkire, 2008; Vivero-Pol, 2017). Agency is envisioned as an exogenous factor in the life of marginalized communities. "Within society, it is about agency and you only have as much agency as you are able to think beyond where your next meal is coming from. But on the other side, there needs to be the political will from those in power to see that and shift it" (Key informant C7, 2020). To create this shift, one needs political influence, which, again, is associated with social assets. Key informants, academics, and policy actors iterated that relationships with politicians were important to being heard and influencing food systems. Whether it be urban planning, using their buying power to influence markets, their convening power to gather actors, or their legal power to sustain movement, political decisions are consequences of who holds power. Key informants from civil society and co-researchers feel that the policy space is often steered by academics and that these spaces could be more open to community voices (Key informant C5, 2020; Key informant C3, 2020). Co-researchers repetitively and emphatically stressed that multi-actor dialogues are challenges costing courage and expensive airtime to attend. There are intentional barriers to access because taking time to listen to grassroots voices threatens one's own superiority. But there is also a need for communities to actively search for these spaces, participate, and address concerns. This is easier said as done. As facilitators of such dialogues, we expect participants to be treated as equals working in partnership for a common goal, but this is not the case in reality. We also expect participants to trust that they are equal; however, co-researchers keep repeating that, this assumption does not hold true. The Economic Development Partnership (EDP), the loose network of Community Action Networks (CANs), the C19 People's Coalition, and the Agroecology SA Working group were mentioned by key informants as powerful actors and important new players to guide the transition of the current food system.

Almost all key informants were asked what must change in the current food system to achieve a vision of a more just and resilient food system. Some were optimistic, arguing that the COVID-19 crisis had created momentum and groundwork to rethink, reshape, and shift food systems toward just, resilient, and sustainable systems: "...sometimes we need a crisis to totally rebuild something... I wonder if the current crisis, adding to all of the challenges that have existed before, whether this can really be a new start, an optimistic start" (Key informant A6, 2020).

The two questions '*How do you envision a just and resilient food system?*' and '*Who should be responsible?*' were asked during the 31 key informant interviews. Al-

most all participants mentioned challenges that must be addressed, before elaborating their ideals of just and resilient food systems. The following clusters developed around participants' visions for just and resilient food systems and were clustered by the SLE team.

- *Strengthening local food systems*: It was often mentioned that strengthening local food markets, linking local production to local consumption, and supporting local businesses is key. Participants envisioned a replication of the private–public hybrid projects that South Africa employs in other sectors, e.g. healthcare, transportation, and education, with government playing an active role as the procurer of food for food relief schemes. Participants emphasised breaking up the commercial sector, supermarkets' power, and production and farm size.
- *Promotion of agroecology*: Guaranteeing food sovereignty based on strong agroecological principles, allowing the agricultural sector to be regenerative, and addressing climate change were topics mentioned within this theme. Key informants strongly underlined grassroots community facilitation of systemic change. Integrating communities' voices and involvement in decision-making were frequently mentioned.
- *Participatory multi-actor systems*: Participants sought food systems that co-exist at different scales (local, regional, international) with 'fair' interaction between actors and players.
- *Break power relations*: Creating dialogue around unequal power relationships (i.e. retailer–producer, government–society, and private–public) and injustices in the current dominant food system were discussed. Participants emphasised the need for system synchronisation, radical transformation, ending corruption, and integration of food into government mandates.
- *Understanding and enhancing agency*: Key informants mentioned education and consumer awareness around diets and diet-related non-communicable diseases, better understanding of food environments, and how vulnerable groups access food. They also mentioned societal and economic ownership as well as local food councils' domination of discussions on agency. Key informants articulated ideals on empowerment, including bottom-up approaches, grassroots democracy, and community capacity building for self-sufficiency.

The five main clusters from the key informants are general visions, while the ideas drawn from the household survey speak to place-specific challenges. Both

community members (see Chapter 5.2) and key stakeholders have similar arguments for momentum for change. Both argue that a transition can only happen if those who are excluded and feel excluded are part of the dialogue for change. Although statistical differences of the perceived increase of agency pre-COVID-19 and during the September 2020 survey is small, co-researchers and the study team observed and perceived the crisis in their communities as the pivotal force for change. Community members, who replied to the question on how to change the food system referred to community-led structures, such as community kitchens and local food committees. The household survey showed us that respondents want more information to better understand their food system, a place to go to voice their concerns and questions, and more participation and voice in the design of their local food systems, for example with regard to food choices and availability of the foods people would like to consume.

6 Reflections and responses from the study team

The following three subchapters contextualise and discuss the findings through the lens of the co-research process. Co-researchers used summary factsheets and a working paper (Döbler et al., 2021) written in accessible language to synthesise the findings and interpret them in various meetings, as a team, and in their communities. In this concluding chapter, we first reflect on the devastating food security results by exploring perspectives gathered during the co-researchers' contextualisation sessions. Secondly, we explore and reaffirm an agreeable definition of agency with co-researchers and note a slight increase in food system agency in the four Cape Town research sites. This increase shows us that, despite a challenging situation, something positive was discovered: people perceived themselves as having power to invoke change. Thirdly, based on the results and the co-researchers' lived experiences in the mutual learning process, we provide three suggestions to decision-makers, civil society, and communities. The team believes in strengthening localised solutions and using the own voice and own power to amplify agency and participation in food governance processes.

6.1 Intersectionality of food insecurity

South Africa's food system is steeped in colonial and apartheid legacy. While the constitution enshrines the right to sufficient food, the chronic presence of hunger and malnutrition in the country is testament to the "extent to which the transformative vision of [the] constitution has not been realised" (Cock, 2016, p. 1210). Race, class, gender, religious, and cultural identity are among the important factors that play a role in food security and daily food choices.

Food insecurity is one result of a malfunctioning food system in rural areas or urban peripheries in South Africa (Hendriks, 2014). The threat of food insecurity has been worsened by the pandemic through a sharp rise in food prices and an economic decline accompanied by a loss of many jobs (IPC, 2021, p. 1). The IPC Food Insecurity Analysis says that between September and December 2020, 9.3 million South Africans were in crisis, in an emergency, or in a catastrophic situation, projected to put 20% of the country's population in urgent need of food action in early 2021 (IPC, 2021). A detailed perspective on their analysis of the Cape Town figures and the Khayelitsha figures show that the cities' figures are above national average: the loss of employment and price spike put 15% of Capetonians and 30% of people from Khayeltisha at risk of acute food insecurity in early 2021 (ibid, 37f). This aggra-

vated situation was also apparent in the FIES data (despite a relaxed epidemiological situation) and was caused by loss of employment income and the impending closure of state support programmes such as the social grants top-up and the SASSA relief funds. This was compounded in Cape Town where increasing food prices were coupled with job losses (ibid).

Systemic food insecurity, and specifically lack of access to food, is not new in South Africa, but it has become more visible. Movement restrictions meant massive retrenchments; many people could not go to work, and pieceworkers, who rely on daily payments, experienced huge impacts on their household incomes. The situation escalated in the short run with the closing of spaza stores and the temporary ban on the informal street vendors. In the long-run, the significant losses of household income increased the levels of hunger. Small-scale urban farmers and small-scale fisherfolk were not allowed to farm and fish, resulting in massive wastage of fresh vegetables and the missed opportunities to plant crops for the next season.

While systemic factors underpin food insecurity in South Africa, a place-based lens reveals important specificities within each study site that are worthy of consideration. This study found that the highest prevalence of food insecurity occurred in rural St. Helena Bay in the fisherfolk community of Steenberg's Cove. Cock (2016) points out that Black, rural women bear the brunt of hunger in South Africa and that the majority continue to live in poverty, experiencing "multiple and interlocked forms of oppression along class, race and gender lines" (Fakier & Cock 2018, p. 7). The intersectional factors that describe the St. Helena Bay research site are complex, compounded by historically reduced income opportunities in the fisheries, sharpening vulnerability during COVID-19 restrictions.

"If we look at the forced apartheid evictions, thousands of fishers were and are still denied access to their customary fishing grounds. This resulted in fishers incurring more and huge expenses to get fishing permits. In the Western Cape, we have waited for decades for long-term permits for small-scale fishers. Fishers, well, most fishers don't ever want to do anything else but fish for a living because of who they are and because of their traditions. Hence, unemployment or informal, casual, non-permanent employment is widespread. Many of us don't have a fixed monthly income to cover living expenses including food, school, and health expenses."

- Fisherwomen in St. Helena Bay

This quote displays the difficulties of relying on the small-scale fishery as a livelihood strategy. The case of St. Helena Bay shows the clashing interest of culture and community heritage, versus an industrialised and monopolised sector, but also a societal imperative to protect the environment. Most former fishing grounds are now located in Marine Protection Areas. Fisherfolk have consistently fought for

more equitable and appropriate access to fishing permits and quotas, arguing that corporations are given preference even as they overfish and cause environmental damage (Isaacs & Witbooi, 2019). For most of the settled community in St. Helena Bay, particularly Steenberg's Cove, the right to access marine resources for survival and livelihood is a question of identity. This is exacerbated in the grotesque quota system of interim reliefs which prevent the security of long-term, stable livelihoods and discourage fisherfolk from taking up other formal work as permit holders may only hold part-time jobs. This is a tool of forced poverty.

Also, compared to the urban Cape Town sites, the community in St. Helena Bay lacks access to the various opportunities an urban environment provides, such as community kitchens, food relief from the CANs, and many social assets such multi-actor or neighbourhood networks that provide connection and support.

In Cape Town, place-based specificities were revealed. More formal settlements like the wards we worked in in Mitchell's Plain and Mfuleni where people are more involved in formal jobs are less food insecure than the wards in Gugulethu and Khayelitsha. In both of the latter sites, particularly in Khayelitsha, dwellers live in informal shack housing or squatter camps. Further, according to our results, food security was shaped by factors such as the size of the household, employment status, or whether the household is headed by a woman or a man. Within these results, we have to acknowledge the amount of unpaid labour that is done, particularly by women. This becomes more relevant when we look at who ran the community kitchens, who was in the neighbourhood CANs, and who carried the burdens of cooking, farming, grocery shopping, and care work. Grassroots women's movements have identified these burdens in the form of unpaid care work including the provisioning, preparation, and production of food; caring for the young, old, and sickly; and doing so within environments lacking essential services and necessitating long hours collecting water and fuel as a key challenge (Fakier & Cock, 2018). As women absorb the shock of the current food crisis, they are also in the "forefront of community mobilisation, local leadership and grassroots activism against the increasing plunder of natural resources, including land, water, forests, minerals and wildlife (the commons)" (Andrews, 2019, p. 56). They are at the forefront of advocating for the complete transformation of our food system, recognizing food as a nexus of political power and social, economic, and environmental levers (Andrews, 2019).

The serious situation in the COVID-19 pandemic and the worsening food insecurity crisis calls for rapid action and emergency relief. However, it is important to understand food security beyond mere numbers. The food sovereignty and right to

food discourse (Forum for Food Sovereignty, 2007; Handy, 2009; La Via Campesia, 1996, Pimbert, 2018) reminds us of the crucial aspect of dignity, upon which one community member reflected:

I was not even aware, that I have the choice, or that I could ask for other food than those we have in the townships.

Female, community member

Williams-Forson (2020) coined the term “Black Food Energy” to allude to the ways that food preparation, rituals, ingredients, etc. contribute to sustaining and reinforcing cultural norms and how this conveys something about our ethnicity and identity. For example, co-researchers celebrated the conclusion of this research project with an *umqombothi* (fermented maize and sorghum beer) party. This respected ritual engages everyone present in certain protocols, dress codes, songs, and togetherness in celebration and respect, engendering a deep feeling of self-respect and cultural pride. In another example, food plays an important nostalgic role as a woman remembers her childhood in Cape Town’s District 6, “The sound of the muezzin, the chiming of the bells of the church, even the snoek (local fish *Thyr-sites atun*) was like a symphony of music to my ears with the backdrop of Table Mountain”. District 6 was remembered as a *helpmekaar* (help each other) community, where no one went hungry and fish heads could be accessed for free at the Hanover Market and cooked in delicious *langsous* soup that could sustain the family (Smith, 2016).

These examples stand in sharp contrast to the feelings that emerged in the PhotoVoice research feedback on pictures of food parcels. Participants decried the parcels’ contents as “not food”, expressing a sense of outrage. They spoke about how people tried to hide their shame at receiving this assistance as well as their embarrassment when responding to the research questionnaire on household poverty, hunger, and education levels. This tapped into multiple indignities and injustices, past and present, that continue to oppress people along racial, cultural, and gendered lines. In the reflective work of this study, co-researchers and enumerators spoke about the shame that is associated with hunger. Tracey Ledger wrote in her book ‘An Empty Plate’ that food is private and very much associated with an individual problem that results from the narrative that says food insecurity is the individual household’s fault, rather than a systemic or societal problem (Ledger, 2016). Since this narrative runs deep and people do not want to expose themselves as being food insecure, it was quite common for respondents to be very reluctant to talk about hunger.

It was hammered into us, from my mother, from my community; it was echoed by everyone: Your hunger must not be written on your face. Your poverty must never show. My mother raised us to know that if you don't have something, you must accept that until the next paycheque. Having to go next door shows your poorness; you only ask close relatives or rather go to bed hungry. Poor people were teased. My mother was working for a family and brought food leftovers home from work; you get teased for that, because you cannot afford your own. They call it eating the scraps from the White person's dinner table.

The privacy is coming from the indignity of running out of food; it is shame. When it comes to shame, if you are transparent, people laugh at you. They gossip about you; they don't help you. So, most people don't want to be exposed and keep hiding their situation.

- female co-researcher

This shame does not only stem from current circumstances, but also endures generationally because colonialism and apartheid intentionally nurtured shame for the purposes of control and exploitation. This is evidenced in one of the most potent mobilising aspects of South Africa's influential #FeesMustFall movement¹⁶; their resurfacing of the phrase "Black pain" powerfully invokes the psychological oppression central to colonisation and ongoing structural injustice, as explored by Steve Biko and Frantz Fanon (Lewis & Hendricks, 2017). The co-ordinator of the pan-African movement, Alliance for Food Sovereignty in Africa (AFSA), Million Belay, was compelled to express his anger and pain at the news of the murder of George Floyd in 2020 by police in the United States, linking it to the attitude that historically justified the colonisation of Africa and the current neoliberal colonisation of African food systems and agriculture through the imposition of market led, technological solutions. "The knee on George Floyd's neck is the same knee that is on our neck. It is the same knee that justified colonialism on Africa. It is the same knee that sees Africa not for what it has, but for what it's lacking. Those who are putting their knee on our neck look at us as stupid, uncivilized, barbaric, clueless and disease ridden, to be controlled and directed by the all-knowing and powerful human race" (Belay, 2020). With so many interlocking layers of pain, co-researchers argue that the wider community and neighbourhood know about their neighbours' hunger. Yet still, people travel to other areas to queue at community kitchens to

¹⁶ #FeesMustFall is a student-led protest movement in South Africa rallying against student fee increases and calling for higher government fund allocation to universities.

protect their anonymity. Meanwhile, women from the community kitchens also report that the environment in the kitchens creates a sense of solidarity, which can also lead to destigmatisation of hunger. One of the resounding agreements that came out of the community analysis was, therefore, to nurture the development of locally designed food systems developed on principles of dignity for the most vulnerable and to understand food as commons, rather than commodities (Federici 2019; Pimbert, 2017, Vivero-Pol et al., 2018).

Hunger, food insecurity, and associated health burdens such as obesity, diabetes, and malnutrition are societal challenges that are barely addressed in communities through social work programmes, radio programmes, or campaigns. It is important to facilitate these conversations in a safe space while identifying the structural and discursive problems behind food insecurity, addressing those in joint advocacy work and providing a platform in seeking and sharing solutions. In doing so, communities require up-to-date data on food insecurity that is accessible and easily understood within the communities and regularly updated through community-led monitoring. At the time of publication of this study, the study team was in the process of designing a next phase that would include monitoring of the data. The aim here is to work further on ensuring that more community members understand and receive the available research results (scaling-out), but also to strengthen the partnership with the Heinrich Boell Foundation and Solidaridad Southern Africa to facilitate a strong consortium of strategic partnerships with local universities and decision-makers (up-scaling). This would allow relevant actors to work with the outcomes of this study and the planned next phase of in-depth analyses.

6.2 Gaining a sense of agency in food governance through co-research

This study forms part of a longer journey of co-research. Co-researchers continuously reminded us to talk with them, not about them and not without them. Community-driven, transdisciplinary research enhances a mutual learning process and a joint sense-making of our rapidly changing and challenging reality (Vanderlinden et al., 2020). Providing space to “the researched” to raise and answer questions is a step toward a decolonialisation of conventional knowledge systems. The joint sense-making of the findings through the process is “a key component of individual agency and collective adaptive capacity” (ibid, p. 2). This study was shaped by many individuals, by co-researchers, by the project partners, by the SLE team, and by the researchers who accompanied the process, all with different beliefs, experiences, and views. In our work on food systems, we dealt with many fuzzy concepts that

were unpacked in the last weeks of the process. Each person, situation, and place generated unique interpretations and Vanderlinden et al. (2020) reminded us that the existing interpretations may compete, complement, or even ignore each other. Transdisciplinary practice or co-research “require[s] carefully led negotiations and interactions” (ibid, p. 3) around concepts, as the understanding and analysis of those in transdisciplinary co-research becomes an important part of ownership, as the more silent or marginalised voices are discovered (Paganini & Stöber, 2021).

Hayes-Conroy and Hayes-Conroy (2013, p. 84) say that it is our “ongoing task of at once privileging the agency of everyday life while also acknowledging and explaining the structures that codify and limit that agency”. This study attempted to understand and measure agency while, at the same time, increase the agency of those who took part in this study. We embarked on a journey of co-existing ideas, misunderstandings, and joint understanding of what agency is (Alkire, 2008: Sen, 1985) or, in the words of the co-researchers, “it is the power of the people” (FGD, 2021).

We believe this collaborative research showed that research stimulates the ability to ask new questions without expecting easy answers. This is deeply valuable as it creates cooperation and enhances solutions. However, caution needs to be exercised in regarding participatory methodology as ameliorating the thorny issues of power within research relationships. Transparent and regular reflection on what co-research means in the ongoing relationship can only be healthy when including reflections on the norms of the academy and how the ontological basis of those norms may continue to entrench the hegemony that has an ongoing role in systemic poverty in South Africa.

While embarking in a process to understand agency, food aid and the questions of who drives it and how it is done were central themes in reflections with communities. Food aid was perceived as welfare and heroism rather than solidarity and faith in people’s agency. However, given the severity of the situation and the fragility of the crisis, difficulties will continue to be experienced in joblessness and food insecurity and short-term responses will still be required. The state’s inability to provide sufficient food has shown that there is need for subsidisation from either NGOs, philanthropists, wealthier consumers, or foreign funders. Cross-subsidisation needs to become far more normalised, especially during times when we cannot assume that those who are already struggling the most should resolve problems independently. In the long term, Vivero-Pol (2017) argues that we have to critically engage with the unfolding narratives on multiple dimensions of food (other than the economic ones) which are equally and properly valued. There is a need to re-

think food aid coordination and how to involve community members in this (Holt-Giménez & Shattuck, 2011).

To mention one example, government food parcels did not provide the kind of food one would buy if a person had the economic means to do so. Instead, low-cost, nutrient-poor calories were distributed. These parcels came through tenders paid by the public purse. Who benefited and why? This raises a question of utmost importance that relates back to discourse on food as a common and the co-researchers' statement that community-led food committees could have been game-changers during lockdowns by coordinating farms, community kitchens, and food parcels. Haysom (2016) argues that a paradigm shift in food governance needs to be more people-centred and take a pro-poor approach, as the ability to engage in food governance is uncommon in African cities. Advocating for food as a public good and as a common means to address the colonial history and structural adjustment of neoliberal policies that resulted in a normalisation of food poverty (Ferando et al., 2020).

This study found that agency increased in the communities in light of the COVID-19 pandemic. Community actors discussed how an inclusive and participatory approach building from communities upwards may be the most effective means to realise food governance in practice. A critical transformation of food systems is required to allow marginalised communities to advocate for their active participation in their food systems or, in other words, obtain power and community-power within their food systems. About 10% respondents of the survey felt they could change the food system. This may sound insignificant, but it is actually quite remarkable considering these are people who have lived under years of racial oppression and stigmatisation and may not yet know their worth and ability to produce change through collective action. It would be interesting for future research to adapt the newly developed Agency Index to different stages of agency, as suggested by the International Food Policy Research Institution's Women's Empowerment in Agriculture Index (WEAI) which categorises three types of agency: intrinsic agency (power within), instrumental agency (power to), and collective agency (power with) (Alkire et al., 2013). Our attempt to provide a tool to measure agency and compare it with individuals' and communities' perceived agency is a statistical and conceptual attempt to unpack agency. The project's challenge was more to come up with a common understanding of agency, and while doing so, think about how one enhances agency in a food context.

Agency is impacted by policy, the sheer power of corporates in the national food system, the sidelining and criminalisation of the informal sector, and the invisibility

of small-scale producers and fisherfolk. This comes across as fairly benign. This system was created by people, but it was created by particular people for a particular purpose and follows hundreds of years of plantation-style food systems. This speaks to the recognition of intersectionality in the research—hundreds of years of oppression based on ethnicity, class, gender, sexual orientation, world view, as well as hegemonic beliefs about what constitutes progress. In a research area like the Western Cape, particularly in Cape Town, and in the highly politicised fisheries sector, dialogues on food and governance processes are perceived by co-researchers as contested. The criticism from producers and fisherfolk communities has become increasingly voiced: talks are held about them, but do not include them. Structures led by community voice could form part of a powerful response to the lack of policy support by amplifying the voices of many when approaching government officials responsible for the implementation of food and nutrition security policy. We come to this in more detail in the next section.

The study found that those with better education had higher perceived agency; the same goes for people who have employment. An encouraging finding is that those who obtain a job related to food, such as small-scale farmer, fisher, vendor, or cook in a community kitchen (and who were found to be severely more at risk of food insecurity) have higher perceived agency. We approached agency by understanding it from a multi-fold perspective, asking about knowledge, choice, voice, and perceived power to change the food system. This might explain the higher agency of people who work in food-related jobs; simply said, they know what they do and how to change. However, co-researchers suggested that the power to change is the most important component and is often hampered by their own perceived powerlessness. An interesting detail in the results is the difference between rural St. Helena Bay which experienced no increase in the perceived power to change over the study period, while all four sites in the urban research sites of Cape Town perceived an increase in their power. The fisherfolk community in Steenberg's Cove describes itself in a miserable setting without prospects for the future, with no funding coming to their communities. Fisherfolk in that area have a livelihood strategy that is hampered by the delayed implementation of the Small Scale Fisheries Policy, threats of climate change on marine populations, and lack of state support in providing economic alternatives that meet the culture of small-scale fishing communities. We argue that the increase of agency in the Cape Flats is related to the peoples' greater networks, civil society movements, deep-rooted struggles, and politicised environment of the contested urban space. On the other hand, community networks, community kitchens, co-learning platforms for farmers, and food sharing have strengthened the desire and power to act.

6.3 A way forward – from charity to solidarity

The COVID-19 pandemic not only revealed the seriousness of hunger, it also exposed potential food solutions and civic engagement. To become agents of transformation, a common theory of change which builds on co-created knowledge about the local food system, its drivers, support systems, and fault lines is important. In enhancing food security, we call for an understanding that food aid is an emergency relief: a bandaid. We should be addressing the root causes in a community-led and collectively accepted manner. Three main visions were developed from this co-research project to build toward a long-term goal of more just and resilient food systems.

6.3.1 Vision: Understand systemic causes of food security to increase individual agency

We learned about deep struggles to put food on the table, heart-breaking stories of women who give their bodies for food, and the levels of (silent) violence people face in their searches for food. Sharing these experiences was perceived as a painful process for co-researchers, but powerful in the same way, leading to a few “a ha!” moments during contextualisation sessions and the consolidation of our common theory of change.

A first “a ha!” amongst enumerators, co-researchers, and the study team was that hunger is not an issue created by individuals, but societies; yet individuals (both male and female) carry the burden of guilt and shame associated with hunger. This is a profound injustice, given that their situations, when dealt with individually under a cloud of shame and secrecy, are very much uncontrollable and unsolvable.

The co-researchers came to understand that food insecurity and household hunger is systemic rather a result of personal incapability. While participants focussed their energies on coping strategies which addressed their personal capacity to produce food (planting food, selling food, or making use of marine resources), these solutions do not address the systemic nature of the problem. Co-researchers who had been involved in years of research on food justice had a greater understanding of systemic issues and encouraged community dialogue and advocacy work to overcome shame and stigma and to address food insecurity through societal change. This requires us to think about how to change a deeply entrenched narrative, but also to think about the words we use. This is echoed in the communities’

strong recommendation that soup kitchens be renamed community kitchens to shift the welfare narrative and allow communities to take control of the food in these kitchens for building healthy and vibrant local economies. The power to label things is a political question and something we should look at in our research practice: who is naming things?

Urban food systems should be talked from a consumer perspective. Food consumption in South Africa is largely commodified. People buy food or they are given food. Very few people grow food as an act of food sovereignty. Although there are efforts to increase both urban and rural food production, it is problematic to assume that those already struggling the most should resolve problems independently. It is crucial to understand that planting food is not a response to immediate hunger: a cabbage takes three months to grow, a bunch of spinach takes six weeks, and potatoes require three months. It is daily work that needs space, skills, and passion. Although this author team is partly actively engaged in farming and are passionate about growing food as a means of food sovereignty, we caution placing urban agriculture on a pedestal as a key response to immediate food crises, especially in a city like Cape Town where land is scarce, water is a limited resource, soils are nutrient poor, and strong winds and sun make farming a challenge. It is, however, interesting to observe that the establishment of food gardens is encouraged by policy actors and by CANs, yet existing food garden sit vacant and their produce goes to waste as a result of poor marketing logistics.

An adaptive approach to doing community research allowed us to critically reflect on the findings and allowed participating co-researchers to involve more and more people in dialogue about the co-development of theories of change. This is inspired by Vanderlinden et al.'s co-research work that states, "Along the way, we reflected, and are still reflecting, on a world that changes, and on the ways we and our partners changed along the way" (2020, p. 3).

Once pioneering community members started to break down myths around shame, unlock reasons that hunger persists as a systemic challenge, and initiate dialogue on food security and agency, we could dive deeper into the findings and share them with a wider audience. Community programmes, local radio, social media, and social work have been successfully employed in the Western Cape in the past. For instance, programmes for HIV, gender-based violence, and water conservation have set precedence for community-led intervention. In fact, in 2018, community efforts in water saving achieved a push-back of *Day Zero* in Cape Town. Based on the study's findings, the project team argues that the hunger pandemic

will require an even greater joint effort including multiple actors to expose the systemic causes behind food security.

6.3.2 Vision: Strengthen existing localised solutions: Our multidimensional perspective on community kitchens

Food insecurity was addressed by different actors. Community members developed coping strategies on the household level, but also jointly, for example, when establishing community kitchens. Neighbourhoods, NGOs, faith-based organisations, and government provided support through food parcels, (food) donations to kitchens, and voucher programmes. Co-researchers and other local food systems actors, many of whom were working in community kitchens, elaborated on their new understanding of their local food system. Contrary to a horizontal value-chain approach which moves from farm to fork, we put community kitchens instead of food gardens into the centre of the solution space as anchors for local food systems. Gennari and Tornaghi (2019) inspired us with their work on the transformational potential of community kitchens toward an agroecological urbanism: “The reasons for implementing community kitchens -and making food production and consumption a collective responsibility- today still have characteristics in common with the past experiences but depend also on the new needs of contemporary cities in times of austerity, overcrowded cities, climate and environmental crisis” (p. 86). The authors call us to root the exploration of community kitchens in “agroecological ethics of soil stewardship and farmers’ sovereignty, aspects which are largely disregarded by conventional food approaches, and especially by wasteful and farmer-screwing supermarkets approaches” (p. 81). Linking small-scale producers or fisherfolk with local community kitchens, ECDs, local clinics, or school feeding systems are neither new recommendations nor solutions that have been developed solely as a result of the COVID-19 pandemic. However, the pandemic has shown the importance of resilient and autonomous commodity flows that make food available beyond supermarkets and the corporatized food regime which determine prices (Ollove & Hamdi, 2021). The data triangulation of this study has shown that it is not an easy undertaking to link urban farmers to community kitchens or ECDs. The major challenge is that it requires external funding and a turnaround in the organisation of food garden production systems.

The example of G.U.F.I. (Gugulethu Urban Farmer Initiative) shows the potential benefits and challenges of this undertaking. G.U.F.I. is a network of urban farmers who initiated close cooperation during the first weeks of lockdown to help community members establish backyard gardens. Interested Gugulethu residents were

instructed by experienced G.U.F.I. urban farmers. They shared seedlings, labour, and their strong sense of solidarity in supporting their community.

The G.U.F.I. teams also supplied community kitchens with produce to help feed families. Since their own urban gardens had been planted to meet the demands of urban markets at the time the COVID-19 restrictions were announced, they were not ready to meet the community kitchens' constant needs and product preferences; however, they were able to network with a Seapoint CAN (Seaboard CAN) who had mobilised funding for food aid. While G.U.F.I. members shifted their garden production to continuous systems to support the community kitchens, the Seaboard CAN supplemented their donations. In April 2020, almost twenty community kitchens fed families; a year later, one central community kitchen and one-sub kitchen still provide 600 meals per day.

Community kitchens could essentially replace G.U.F.I.'s pre-COVID-19 traditional markets (urban markets) with G.U.F.I. benefitting from a stable market and low transport costs and the community kitchens benefitting from custom contract grown produce. Besides a rethinking in crop production, crop cycles, and crop selection, a long-term productive partnership between community kitchens and urban farms will require external funding to keep the system running and cover logistical costs such as transport and communication. Kitchens and urban food gardens should formalise their working relationships through contracts and create a joint strategy for sustainable funding. For example, provincial government urban agriculture subsidies could be redirected to community kitchens under the condition that the kitchens buy food from urban farmers.

Many community kitchens that were started during the first lockdown had to close due to a lack of continuous funding. Civil society donations and corporate donations dwindled, while state funds were only available as a short-term relief until April 2021. This threatened the sustainability of community kitchens. Community kitchens ran out of cash to buy food only months after their establishment. Hence, although civil society's joint efforts through the CANs, the private sector, municipalities, and province addressed food security in the first month of lockdowns, these fragile but promising linkages require funding combined with long-term programme support on local food system scale to foster autonomy. This has been successfully shown by the FoodFlow Initiative. One example of potential long-term support is the BBEE programme which could channel corporate funding to community kitchens through project partners such as Cape Town's VPUU.

However, although bottom-up approaches and community-driven solutions are powerful, for a critical transformation of food systems we need decision-makers to

create an enabling environment. The municipal government must undertake purposeful and food-sensitive localised planning and a holistic, local governance strategy that thinks in terms of the township food economy, rather than merely in projects (see Haysom et al., 2020; EDP & HSRC, 2019; Cities Support Programme, n.d.). The township food economy holds immense potential for innovation, engagement, and production. Unfortunately, current bylaw restrictions restrict many local food production and marketing activities. The co-research group wishes to launch their next co-research step in 2021 to deepen the understanding of the township food economy and its potential and challenges. The team aims at piloting in four sites (Gugulethu, Makhaza, Mfuleni, and Ocean View) and cooperate closely with community kitchen managers.

It is crucial to rethink community kitchens to transform their current charity approach to become places of solidarity and food that does not just satiate, but also nourishes the mind and soul. Community kitchens can play a multifunctional role and enhance cohesion. Here lies a great change to de-stigmatise the community kitchen from its current feeding image. We imagine these kitchens as a place of learning, communication, sharing, healing, and recreation. Terms such as feeding schemes or soup kitchens imply poverty, while a more positive wording such as community kitchens or community restaurants must be used to foster dignity in the spirit of building alternatives models. Reinvention of the community kitchen as hybrid models delivering food provision services, local produce marketing, and other key programmes identified by the community as priorities to the community (such as gender-based violence education, women/children shelters, for example).

Worldwide, there are multiple models for similar initiatives such as the strong movement of popular restaurants (*olla popular*) in Latin America (Abarca, 2007; Barrig, 1990; Estrella et al. 2020; Hartley, 2020; Immink, 2001; Kogan, 1998). This movement could serve as inspiration of communalization of food for responding at economically and socially hard times (Federici, 2019). Community kitchens exist in many urban slums in Latin American cities and are mostly run by women, who mobilise own resources and turn them into big pots to food for everyone (Pinto, 2020).

Co-researchers also suggest a franchise model, where a fine-dining restaurant can adopt a community kitchen in a poorer environment. Or, a similar dish could be prepared in both places, with the richer consumer paying for two meals, and one being served to someone who is unable to pay for it. The practicalities of this would need to explore scalability and recognise that the elite market is extremely small in comparison with the needy. Subsidisation will be necessary in all cases, either by

the state, philanthropists, or wealthier consumers. We could think far more creatively around how community kitchens could underpin local economic development, for example by channelling relief funds to local kitchens, and using them for food and service training. Alternately, hybrid kitchen models (income generating and subsidised) could be created as places where people access a range of community services (ECD or job search support, for example).

6.3.3 Vision: Enhancing collective agency and community voice to participate in food governance processes

A central challenge is how to transform food systems in an increasingly volatile food security situation. A key issue identified by the co-researchers is reclaiming the food narrative and playing an active role in food governance processes. The state is perceived by community members as incoherent and failing its own people. Between the spheres of local and national governments, there are conflicting policies, conflicting ideologies, and conflicting agendas that hamper short-term solutions and long-term commitments. The transformation has got to go beyond calling on the state although of course, the government needs to be part of change. In this research, we learned that many beautiful things are happening to foster resilience in food systems and take steps towards justice: buying local, catching fish, planting food on a patch of land or growing vegetables in the backyard, packing food parcels, collaborating in community kitchens, campaigning for social justice, working toward better policy documents, publishing research findings, and developing community programmes. There are plenty of options to get one's hands dirty and brain running, but, although small is beautiful, the question is: is one of these single solutions transformative? We argue that we still remain in the parochial bubble of our own being and doing when undertaking these small acts, without addressing systemic challenges, their linkages, and their drivers of change. But in collaboration, these small solutions and the many active and inspiring people we have met along the way have a more powerful voice when joined in action.

The co-researchers' central suggestion is to work toward an own narrative and ownership of community-led discourse. Having a voice and obtaining power to change are considered fundamental for the co-researchers to foster change.

The co-researcher critique is that policy works in silos and decision-makers don't talk to each other. This critique is replicable to the civic engagement on grassroots scale, survey participants call for more information where to go to get information and exchange. Despite a significant increase in solidarity during the early COVID-

19 months, organisations and projects could improve exchange and cooperation. Food security is a national government mandate, however, it requires all involved actors' cooperation to achieve it. A collaborative food governance approach processes in communication, collaboration, and cooperation. This is easier said than done, particularly considering how disempowering some top-down players could be. It is also challenging for many grassroots actors to engage in governance spaces and dialogues. This collaboration requires a hybridization of views, languages, opinions, and desires. As barriers, co-researchers mentioned technical constraints (being connected with a smartphone from the windy garden compared to a good office connection), language and expressions (many co-researchers speak English as second or third language), and the lack of self-confidence to speak in a setting which is often dominated by well-educated people who determine the agenda. Although important and valuable contributions to overcome these settings have been made since COVID-19, for example by the important work of the EDP who convened a food forum that brings local and provincial government, academics, and civil society to the table.

The South African government has developed a National Food and Nutrition Security Plan (2017-2022) which includes the establishment of a multi-sectoral and multi-stakeholder Food and Nutrition Council at the national level, cascading to provincial and district levels. The food committees are envisaged to oversee, coordinate, and implement programmes and services that address food and nutrition security.

Co-researchers' advocacy for such food councils, which were renamed in the study process to food committees, links back to the right to food. The right to food is the right of every individual, alone or in community, to have physical and economic access to sufficient, adequate, and culturally acceptable food that is produced and consumed sustainably, hence, providing this also to future generations (De Schutter, 2014). The Right to Food is enshrined in South Africa's constitution, but has never been tested in court to date. Section 27.1(b) compels organs of the state to ensure the progressive realisation of the right to food. Linking the right to food to the dignity of participation is a nexus co-researchers argue for. The theory of change is that through food system dialogues amongst actors at very local levels (in food committees at ward level), it will be possible for these actors to identify key challenges, priorities, opportunities, and action plans for more democratic and localised food systems and to implement these in principled and collaborative ways. In doing so, local actors will be able to respond effectively to obstacles, gaps, and opportunities in the production and distribution of food to meet the diverse needs in their localities and to build durable democratic models for planning local food

systems. These will lead to improved food access and dietary diversity and greater inclusion in economic activity for local actors and end users. Food committees as imagined by the study team are micro-level networks that focus on food sovereignty across all sorts of things including farmer-to-farmer training, stokvels, cooperatives and small businesses, solidarity, and advocacy. Also, these dialogues in food communities on the local township level foster exchange and collaboration among local actors: food garden producers, community kitchen chefs, spaza store owners, informal vendors, ECD staff, teachers, activists, food artists, input producers, waste managers, and of course, consumers.

In this study, the co-researchers and enumerators interviewed 1824 people, many of whom sought a platform to talk about food. The newly developed connections between the established co-researcher group and the neighbours they met through the research allow the core team of co-researchers to grow and establish relationships beyond their farming or fishing peers and cooperate with vendors, chefs, and activists. A clear theme that came out of the study was the need for collaboration to bring together people who have different stories as they journey in transforming their communities.

Food committees are a potential vehicle or cross-sectoral platform to engage local food system actors in dialogue, plan specific interventions to improve local system governance and outcomes, and develop community-based models for democratic food systems governance. The CANs have shown a huge potential for these kinds of cooperations. A food committee in St. Helena Bay will probably look very different from one in Mfuleni or Gugulethu. The members determine the agenda and programme. While one committee could focus on technical work and training, others could be shaped by artists and use food as a means to talk about intersectionality, while others work toward the establishment of small entrepreneurial structures. These specific flavours will make a great city-wide / provincial platform of committees fostering local food system change through community-led processes in organised engagement on a local level. Potential lies in the communal power to engage and challenge the government on the one hand, but of equal importance, create a space to talk about food, engage with food, and develop new links with existing community-driven solutions.

7 Conclusion

The COVID-19 pandemic revealed the fragility of food systems in the Cape Flats and St. Helena Bay's Steenberg's Cove. This study scrutinises the state of food security and found a devastating picture of hunger and vulnerability. Food insecurity

affects mostly larger households (minimum five persons), woman-headed households, households affected by unemployment, and households where the main income earner is engaged in the food sector. On the other hand, the study revealed that there is a momentum for change. People had a sense of having slightly more agency over their food systems after the COVID-19 lockdowns and the study explored that. The in-depth research revealed that the crisis boosted solidarity and cooperation within societies to combat hunger, particularly on a very localised, neighbourhood scale. Food relief was a major activity during lockdowns and co-researchers describe community kitchens as asset-driven solutions; however, the food parcels were understood as food aid that would not combat hunger, but deny recipients dignity and decrease their self-esteem (an important prerequisite to agency).

The study identifies how pre-existing food injustice; lack of access to food, land, and permits; and lack of a decent political voice in shaping food governance processes exaggerated the effects of the pandemic on food security. Local food committees reimagined society and recognised that people want to access nature, want healthy bodies, want strong community relations, want pleasure, and want to dismantle the narrative of shame that overshadows hunger. Co-researchers argue that structural injustice persists and is visible through the lens of food security. COVID-19 has deepened this desire to change, laying bare the fragilities of concentrated food systems and pointed to the necessity of community resilience and autonomy. Local food committees were envisioned by the study team as spaces where people exchange and learn; where actors coordinate neighbourhood food systems and exchange between gardens and kitchens and between kitchens and schools or ECDs; where food relief is coordinated; and where an alliance of powerful voices claim space in food governance.

The study underlines the necessity and importance of community members becoming central to research and processes to identify solutions. This study was grounded in the idea of co-research. Communities from Cape Town and St. Helena Bay led the design of this study and significantly contributed in the contextualisation of the findings. Through this interactive process, the study team documented food security, but also the co-researchers' needs and aspirations. They have created concrete project proposals and built solutions and responses to the current food crisis in solidarity and in pursuit of future political debate. Both co-research and the transformation of food systems are processes, often slow work, but moving. Along the way, we reflected, we learned, we paused, we moved, and we found the resolve, solidarity, and strength to forge forward.



Figure 30 This photograph was sent by an anonymous community member from Gugulethu who participated in the PhotoVoice exercise. We were asked to share this photo as an inspiration for food and community cohesion.

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144 Bibliography

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9 Annexes

Annex 1: Household survey

No.	Question	Response Options
1	In which ward do you currently live?	Enter ward number of ward
Component 1: Respondent profile		
1	How old are you?	Enter age
2	What is your gender?	Female Male Diverse I don't want to answer
3	What is your level of completed education?	Primary school (grade 1-7) Secondary school (grade 8-12) College University degree Other I don't want to answer
4	Do you have a job/work?	Yes No I don't want to answer
4A	Which of the following best describes your main form of work?	Regular work in the formal sector Regular work in the informal sector Casual job in the formal sector Casual job in the informal sector Self-employed I run a business I don't want to answer
4B	How often are you paid for your work?	Daily Weekly Monthly Every now and then I don't want to answer
4C	What is the main reason you are not working?	I can't find a job I am not looking for a job Lockdown Self-isolating Poor health Business temporarily closed I don't have permit to go to work I'm on enforced leave No transport I am a student Other I don't want to answer
5	Would you consider yourself a citizen of Cape Town/St. Helena Bay?	Yes No Not sure I don't want to answer
6	How many years do you live in Cape Town/St. HB?	I was born here I moved here 0-3 years ago I moved 3-5 years ago I moved 5-10 years ago I moved here 10+ years ago
7	How many people live in your household (including yourself)?	Enter number

8	Who is the head of the household?	Female-headed Male-headed Headed by both Other I don't want to answer
Component 2: Household Food Insecurity Experience Scale (FIES)		
9	During the last four weeks , was there a time when you or others in your household were worried about not having enough food to eat because of a lack of money or other resources?	No Yes I don't know I don't want to answer
10	During the last four weeks , was there a time when you or others in your household were unable to eat healthy and nutritious food because of a lack of money or other resources?	No Yes I don't know I don't want to answer
11	During the last four weeks , was there a time when you or others in your household ate only a few kinds of foods because of a lack of money or other resources?	No Yes I don't know I don't want to answer
12	During the last four weeks , was there a time when you or others in your household had to skip a meal because there was not enough money or other resources to get food?	No Yes I don't know I don't want to answer
13	During the last four weeks , was there a time when you or others in your household ate less than you thought you should because of a lack of money or other resources?	No Yes I don't know I don't want to answer
14	During the last four weeks , was there a time when you or others in your household ran out of food because of a lack of money or other resources?	No Yes I don't know I don't want to answer
15	During the last four weeks , was there a time when you or others in your household were hungry but did not eat because there was not enough money or other resources for food?	No Yes I don't know I don't want to answer
16	During the last four weeks , was there a time when you or others in your	No Yes I don't know

	household went without eating for a whole day because of a lack of money or other resources?	I don't want to answer
Component 3: Agency Module		
17	Before the COVID-19 lockdown, I felt that I could change my diet according to my preferences	Not at all Rarely Sometimes Most of the times all the time This is not important to me
18	These days, I feel that I can change my diet according to my preferences	Not at all Rarely Sometimes Most of the times all the time This is not important to me
19	I know how the food I eat is produced or made	Matrix: Fruits and veggies Meat and dairy Fish and seafood Bread, papa, rice and pasta lentils and beans oil and sugar X-Achse: I know I have an idea I don't know This is not important to me
20	If I want to, producing some of the food I eat is...	Impossible for me challenging for me doable for me possible for me not a problem at all not important to me
21	Before the COVID-19 lockdown, me and my community could influence what kind of food was available	Not at all Rarely Sometimes Most of the times all the time This is not important to me
22	If we want to, me and my community can influence what kind of food is available these days	Not at all Rarely Sometimes Most of the times all the time This is not important to me
23	Before the COVID-19 lockdown, I knew where and how to voice my food related concerns and wishes	I did not know I was not really sure I had an idea I was fairly sure I was sure This is not important to me
24	These days, I know where and how to voice my food related concerns and wishes	I don't know I am not really sure I have an idea I am fairly sure I am sure This is not important to me
25	Before the COVID-19 lockdown, I could participate in decision-making	Scala: Strongly disagree Disagree Agree

	to voice my food related concerns and wishes	Strongly agree This is not important to me
26	These days, I sense that I can participate in decision-making to voice my food related concerns and wishes	Scala: Strongly disagree Disagree Agree Strongly agree This is not important to me
27	Before the COVID-19 lockdown, I could change the food system by voicing my food related concerns and wishes (Participation)	Scala: Strongly disagree Disagree Agree Strongly agree This is not important to me
28	These days, I can change the food system by voicing my food related concerns and wishes (Participation)	Scala: Strongly disagree Disagree Agree Strongly agree This is not important to me
29	Before the COVID-19 lockdown, my community and I could I change the food system by voicing our food related concerns and wishes	Scala: Strongly disagree Disagree Agree Strongly agree This is not important to me
30	These days, my community and I can change the food system by voicing our food related concerns and wishes	Scala: Strongly disagree Disagree Agree Strongly agree This is not important to me
31	I feel I can change the food system by...	Open question
32	What kind of food related changes would you prioritise in your community?	Ranking of first 3 choices: Land access for farming sea access for fishing support for inputs for farming local markets for local food more supermarkets better food quality/food safety More different kinds of food More small local food businesses More food aid Better policies for food security Other Skip question
33	If you selected "Other", please describe shortly what	Open questions
Component 4: Coping strategies and other food related questions		
34	What is your relation to the food sector?	I am a fisher I am an urban farmer I am a farm worker I process food I am a street vendor I own a spaza shop I transport food I work/volunteer in a community kitchen I own a spaza shop I work at a spaza shop I work at a supermarket I work in a restaurant

		Engaged in other food related activities No direct relation to the food sectors Skip question
35	Who usually buys the food in your household?	The women The men The children Mixed responsibility I don't want to answer
36	Where did your household get most frequently food from before the COVID-19 lockdown?	Supermarkets Street vendor/spaza Farming Foraging Fishing Food parcels/food banks Donations from family/neighbours Community kitchen School feeding Other I don't want to answer
37	Where does your household get most frequently food from now?	Supermarkets Street vendor/spaza Farming Foraging Fishing Food parcels/food banks Donations from family/neighbours Community kitchen School feeding Food relief/aid Other Already mentioned above Skip question
38	What new food sources have emerged due to COVID-19 in your ward?	Open question
39	Did your household receive food relief/aid?	Yes No I don't want to answer
39A	From what kind of organisation did your household receive food from?	Government/public institution Civil Society (i.e. Community kitchen etc.) NGOs Community-based organisations (i.e.: Church) I don't know Skip question
39B	In what month(s) do you recall this happening more frequently?	Matrix: List months from March to September X-Achse: Rarely (1-2 per month) Sometimes (3-10 times per month) Often (more than 10 times) I don't recall
40	Do you think the government assist you?	Yes No Skip question
40A	What kind of government assistance do you expect?	Open question
40	What does your household do, if there is not enough money or other resources for food?	Borrow food or rely on help Purchase food on credit Limit portion size at meal times Reduce adult consumption for children Reduce number of meals eaten in a day Change kinds of foods eaten (reduction of dietary diversity) Not eat an entire day

		Other/none of them apply Skip question
41	Have you or someone in your household developed any solutions to improve your food situation during the lockdown?	Yes No Skip question
41A	With whom did you develop solutions?	Family Neighbours Local NGOs CANs Government Market actors Church/mosque Other
41B	What kind of solution did you develop?	Open question
42	Would you like to receive a text message with the results of this survey?	It can take up to several weeks until you receive the text message
43	Who filled out this digital survey?	Myself Through the help of an enumerator
43A	How did you conduct the survey? (don't read this question out loud)	Via telephone Face to face Other
44	Where are you now?	Please turn on your GPS. It would help us but it is not mandatory to complete the survey.
45	Thank you for participating! Please insert your phone number so that we can send you airtime vouchers	
46	And please insert your provider so that we can send you airtime vouchers. When sending the data, please wait for some seconds to assure it is fully submitted	CellC Vodacom MTN Telkom

Annex 2: Guiding questions key informant interviews

1. What role do you play in the food system?
2. How would you characterise the food system pre and post COVID-19?
3. What are the fault-lines in the food system?
4. How has the COVID-19 pandemic and its related measures impacted food security?
5. How do you imagine a just, resilient and sustainable post COVID-19 food system?
 - Who should be responsible? (politics & government, civil society & grass-roots, NGO etc.)
6. How would you describe agency in the context of food systems?

Annex 3: Multiple regressions

St. Helena Bay

Variables	Unstandardised coefficient (B)
Employment of respondent	
Employed	-0.128 (0.038)***
Being formally employed	-0.185(0.072)**
Standard errors in parentheses. Significantly different: *P ≤ 0.05, **P ≤ 0.01, ***P ≤ 0.001.	

Guglethu

Variables	Unstandardised coefficient (B)
Employment of respondent	
Employed	-0.205 (0.056)***
Household size	
≥6 members	0.249 (0.054)*
Linear regression analysis to determine variables as predictors of household food insecurity. Standard errors in parentheses. Significantly different: *P ≤ 0.05, **P ≤ 0.01, ***P ≤ 0.001.	

Mitchell's Plain

Variables	Unstandardised coefficient (B)
Household head (reference is a female headed household)	
Male	-0.346 (0.062)***
Employment of respondent	
Employed	-0.226 (0.05)***
Engaged in the food sector (respondent)	
Yes	-0.138 (0.05)**
Relevant food source is farming, fishing, or foraging	
Yes	0.261 (0.101)*
Food relief	
Yes	0.332 (0.086)***
Household size	
≥6 members	0.288 (0.059)***
Linear regression analysis to determine variables as predictors of household food insecurity. Standard errors in parentheses. Significantly different: *P ≤ 0.05, **P ≤ 0.01, ***P ≤ 0.001.	

Khayeltisha

Variables	Unstandardised coefficient (B)
Employment of respondent	
Employed	-0.201 (0.061)***
Engaged in the food sector (respondent)	
Yes	0.291 (0.056)***
Relevant food source is farming, fishing, or foraging	
Yes	0.335 (0.095)***
Food relief	
Yes	0.323 (0.076)***

Linear regression analysis to determine variables as predictors of household food insecurity. Standard errors in parentheses.

Significantly different: * $P \leq 0.05$, ** $P \leq 0.01$, *** $P \leq 0.001$.

Mfuleni

Variables	Unstandardised coefficient (B)
Employment of respondent	
Employed	-0.53 (0.043)***
Engaged in the food sector (respondent)	
Yes	0.491 (0.081)***
Relevant food source is farming, fishing, or foraging	
Yes	0.321 (0.143)*
Food relief	
Yes	0.4 (0.07)***
Household size	
≥6 members	0.292 (0.73)***
<p>Linear regression analysis to determine variables as predictors of household food insecurity. Standard errors in parentheses.</p> <p>Significantly different: *$P \leq 0.05$, **$P \leq 0.01$, ***$P \leq 0.001$.</p>	

Annex 4: FIES Results

	% of food secure (Raw score = 0)	% of mildly food insecure (1≤raw score <3)	% of moderately food insecure (3≤raw score <7)	% of severely food insecure (raw score≥7)
TOTAL	34%	18%	18%	31%
St. Helena Bay (Ward 11)	5%	9%	44%	42%
Gugulethu (Ward 41)	22%	20%	13%	45%
Mitchells Plain (Ward 75)	65%	13%	6%	16%
Khayelitsha (Ward 96)	22%	27%	15%	36%
Mfuleni (Ward 108)	59%	19%	8%	14%
Cape Flats	42%	14%	17%	28%

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