Insights Into The Food Value Chains In Saldanha Bay Municipality (March 2022)

A Research Study Done By The Green Connection

Contents

Introduction To The Report

Broader Project Outline

By combining elements from Doughnut Economics, together with the economic planning from the Transition Towns network and a commoning governance system, the overall projects seeks to build a local, alternative development model we have called 'The Koeksister', in keeping with its South African roots.

This project involves assessing options and possibilities for change and transition in multiple facets of life within the SBM communities as outlined by the social foundations inspired by the Sustainable Development Goals. These include; food, health, education and employment, housing, education, and political life. The facet of transition towns adds the dimension of a focus on local economic development and local ecology amongst others.

With this as a background an initial piece of work is to develop an economic 'blueprint' for the food sector in Saldanha Bay Municipality, (SBM). As part of this research, we are tracking the extent and depth of food value chains within the SBM.

Purpose And Scope Of This Report

In this current, first phase of the project, we explore ways of producing and distributing food that has positive environmental outcomes, increases community wealth and resilience and provides long-term livelihoods. This work needs to take both the ecological ceiling and the social foundations into account.

This report is one foundational aspect of this process.

Food is a shared bond. The tasks of sourcing, preparing and enjoying food is something that is common to most communities. Access to food is a right recognised by international law. In keeping with the thinking underpinning Doughnut Economics, we want to ensure that the food which can be accessed by the residents of SBM contributes minimally in terms of its carbon cost, and one of the easiest ways of doing this, is to source locally produced food. Increasing the density and frequency of local economic transactions has the additional benefit of increasing the depth and resilience of the local economy[1], as well as decreasing the economic "leakages" into the wider, provincial, and national economies.

Planned and Actual Methodology

Secondary data resources that provide detailed information at a municipal level is generally lacking in South Africa. There are occasional sources of data, (and where possible, we have used these) but there are few, regular, verifiable sources. Many data sources speak to data at a provincial level, but few disaggregate this to a district level, especially when it comes to aspects of life that are perceived as having a wider and greater focus than local responsibility, such as food value chains.

[1] While no figures are available for South Africa, it is estimated by CPRE that UK businesses that sell at least 25% local content create one job at a third of the cost of larger chains.

As a result, while we were able to access some secondary data sources that formed an economic background to our research, we had to collect primary data related to our focal point – the production, processing, and consumption of food within the SBM.

To this end we designed two survey instruments – one focussed on the domestic purchase and consumption of food, and a second focussed on SBM located businesses involved in the food value chain – these included businesses involved in the production or sourcing of food (e.g., farmers, fisherfolk, foragers, etc.), those involved in the processing of food (e.g., bakers, butchers, etc.) and finally those involved in the provision of food (e.g., retailers, restaurants, guest houses, hotels, etc.). It was recognised that some respondents may straddle these groups, and opportunity was given for them to self-select the group with which they most closely.

A third data collection method was used, to conduct key informant interviews, either in person on telephonically, with business respondents.

Data was collected in the last two weeks of January 2022, by trained enumerators, who also assisted in piloting the instruments. Data was collected electronically and uploaded to a cloud directory either on completion of each interview, or at the end of each day.

Resultant Limitations And Caveats

Limitations and caveats of this research include:

- Only four of the seven main centres in the district were surveyed, including Langebaan; Saldanha; Vredenburg and Hopefield. This may result in a bias away from the smaller, more rural centres.
- The enumerators had limited success in accessing businesses. The survey results reported here cannot be regarded as definitive or representative, but rather illustrative of the food related businesses in the communities surveyed.
- Many businesses were reluctant to share financial data, or had insufficient or inadequate records of their business. As a result, financial data that is reported is not representative.
- No businesses were identified to participate in the key information interview process, and as a result this research process elicited no data.
- The personal domestic data is skewed towards the Coloured population of the district and so similarly should not be regarded as definitive or representative of the district as a whole, but can be seen as illustrative of the communities surveyed.
- No verification of personal spend was conducted, as a result there may be both under and over reporting of financial food spend, because of self-reporting bias.

Structure Of The Report

After this introduction there are two further sections to the report:

- The findings of the report are divided between:
    - A summary of findings related to the food value chain businesses
    - A summary of findings of domestic food purchases and consumption

- The report concludes with some suggestions for next steps.

Findings

Geographic Context

Saldanha Bay Municipality (SBM) lies 140 km north of Cape Town in South Africa's Western Cape province. It is home to approximately 120 000 people, (Quantec, 2020). The areas has a slightly lower GINI coefficient than South Africa, and the areas Human Development Index has been increasing gradually since 2008 (0.6) to 2018 (0.731), (IHS Global Insight, 2018)

In 2018 the district's unemployment rate was 15.7% which was significantly lower than that of the Western Cape (17.7%) and South Africa (27.5%) at that time (Quantec, 2018).

Data on food sources within the district is not readily available but approximately 70% of low-income households in South Africa source food from informal traders and small-scale traders (Greenberg, 2017). Research shows that in poor Cape Town neighbourhoods 94% of households' source food in bulk from supermarkets, 68% from spaza shops and 62% from small shops. Both spazas and small shops are likely to replenish their supplies from larger bulk stores that offer discounted prices (Crush, Caeser, & Hayson, 2018).

Child and adult hunger rates in the district and the province are similar at about 10% or 11%, (StatsSA, 2021).

Business Related Findings

Location and Size

Of the 36 businesses surveyed 45% were locate in Vredenburg, 22 % were from Saldanha, 20% from Langebaan and 14% from Hopefield. Because of this asymmetry between the towns, no further data disaggregation has been conducted. 75% identified as informal businesses, 22% as small formal businesses and 3% (1 business) as a medium formal business. The businesses on average employed 1.7 people, including the owner or respondent. About half of these employees were women.

Position In The Food Value Chain

Most of the businesses (28%) identified as a producer of value-added food. A quarter of the respondents identified as wholesalers or retailers, with 15% (5 businesses) each identifying as catering businesses, a primary producer of food,[2] or a takeaway food outlet.

On average the respondents reported that **about 10% of their food production went to food waste**, with the main causes being identified as expired food, and the quality of the produce.

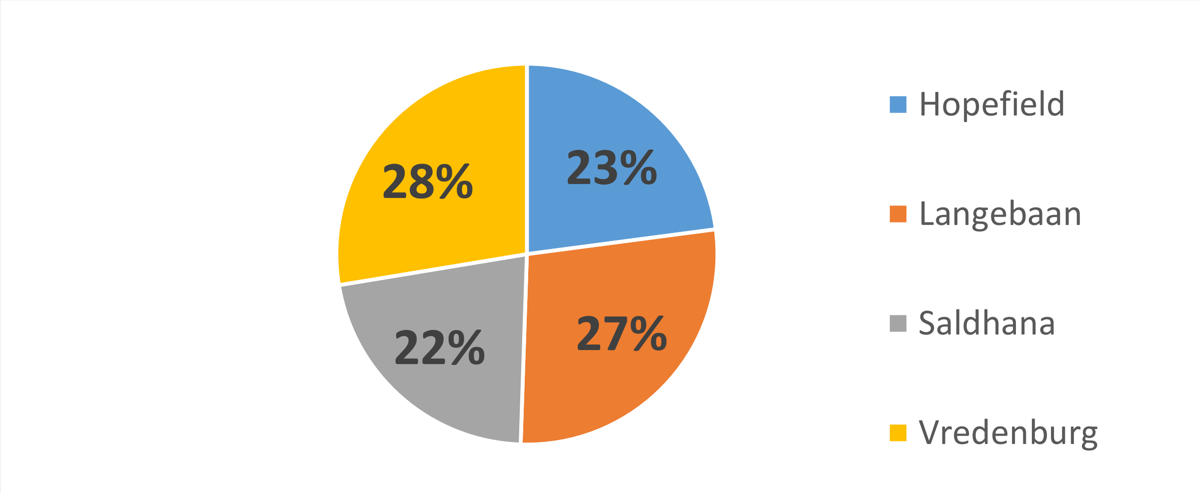
The respondents reported that on average about 63% of their food related purchases were made within SBM, with convenience (55%) being listed as the main reason for this preference. Cost, established relationships, and the quality of inputs were distant second reasons, varying between 17% and 22% of responses. Ethics was a distant third with only 8% (3 businesses) reporting this as a consideration. Similar percentages were reported for the reasons these businesses bought from other suppliers within the province.

83% of the businesses reported being interested in deepening their local supply chain involvement for a variety of reasons including: convenience, quality, quantity, and reliability.

[2] This unusual skewing is possibly as a result of the high number of respondents from Vredenburg. Four of the five respondents reported as being fisherfolk.

Domestic Related Findings

Our researchers conducted 192 surveys in total and asked households about their domestic food purchase and consumption habits. The respondents are more or less equitably distributed between Hopefield, Langebaan, Saldanha, and Vredenburg.

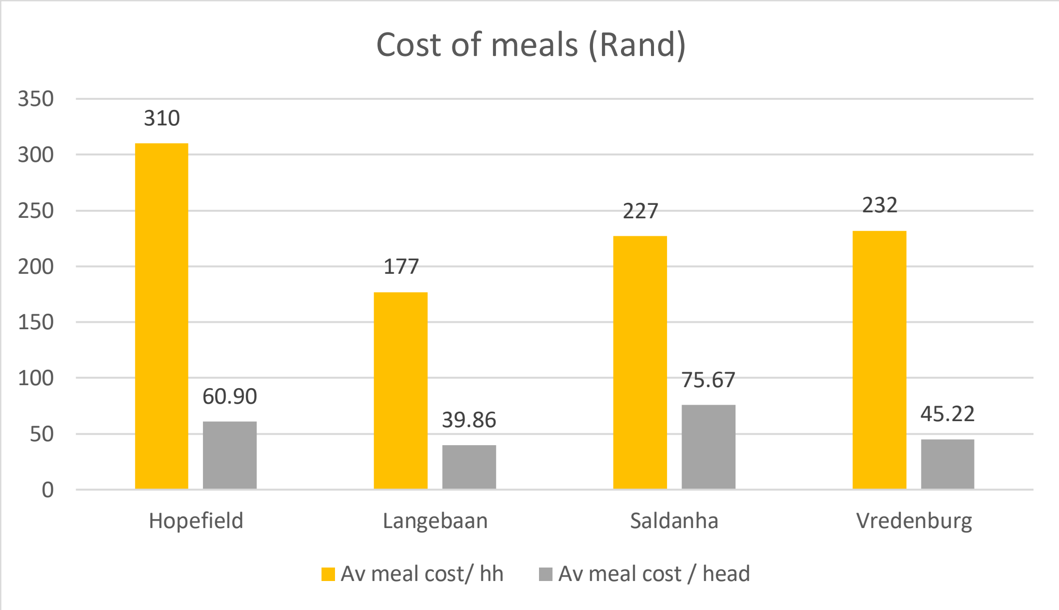


Food Consumption In The Municipality

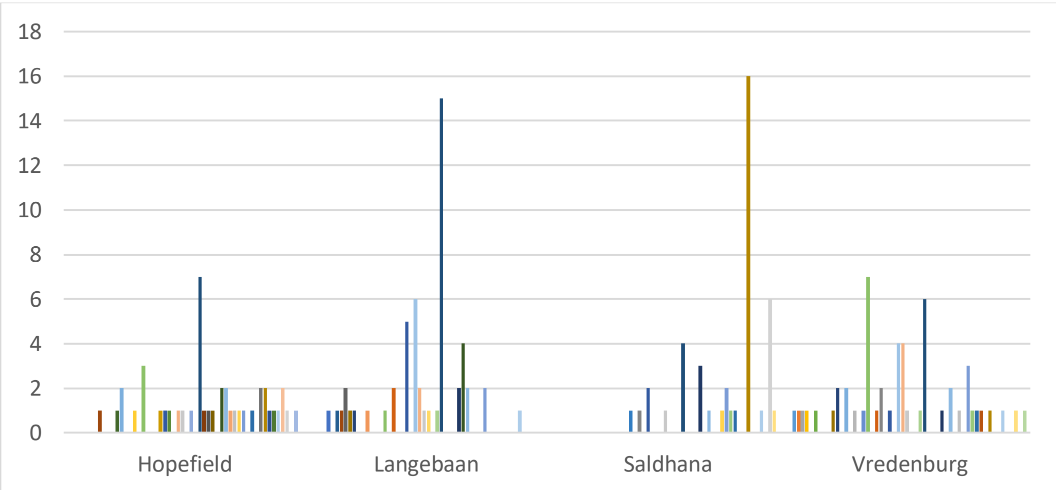
The average size of the household (HH) of the respondent is five people. But varied between an average of 3 in Saldanha, to over 5 in Hopefield and Vredenburg. The survey did not ask the age of the individuals. The main meal of the day being reported as the evening meal and households reported serving about three meals a day to each household member. All data related to costs and ingredients in the household then referred to the meal the respondent identified as the main meal of the household.

Main Meals In The Household

Respondents were asked to estimate the average cost of the main meal served by their household to all the household members. Estimates varied widely from a high in Hopefield of R310 to a low in Langebaan of R177, possibly reflecting the larger HH sizes of Hopefield and Vredenburg. Household estimates were then divided by the size of the HH to determine the cost of the main meal per head. Here the costs in Saldanha were higher by almost a quarter over Hopefield costs, and by about a third over Vredenburg costs. This would suggest that HH in Saldanha are using more costly ingredients to feed smaller HH than the respondents in Vredenburg and Hopefield. Langebaan however, does not fit this model with both lowest costs per head and lowest costs per household, suggesting that the smaller Langebaan HH are using less expensive ingredients.



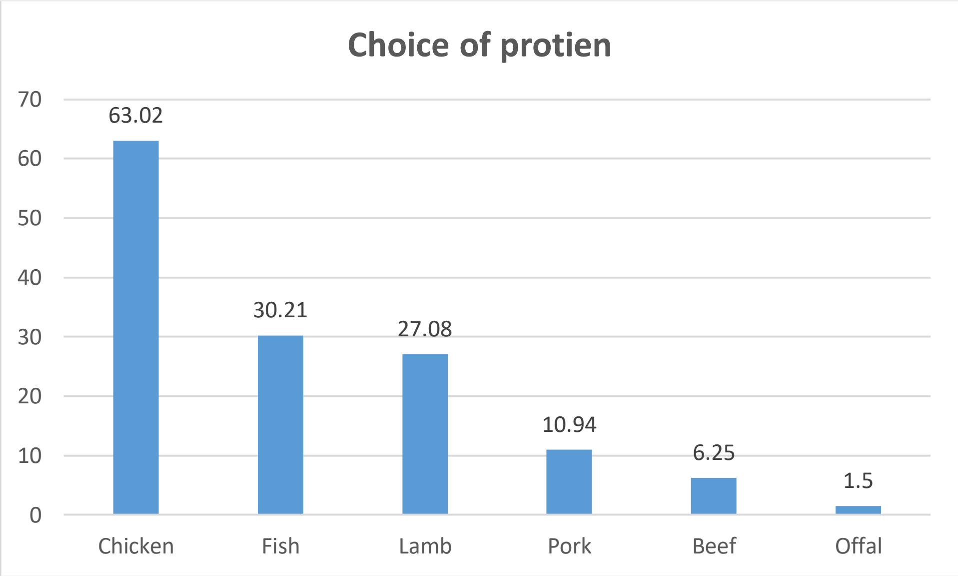
When the individual HH data related to meal costs per head is plotted, Saldanha appears to report a tendency to far higher food costs than the other three locations.



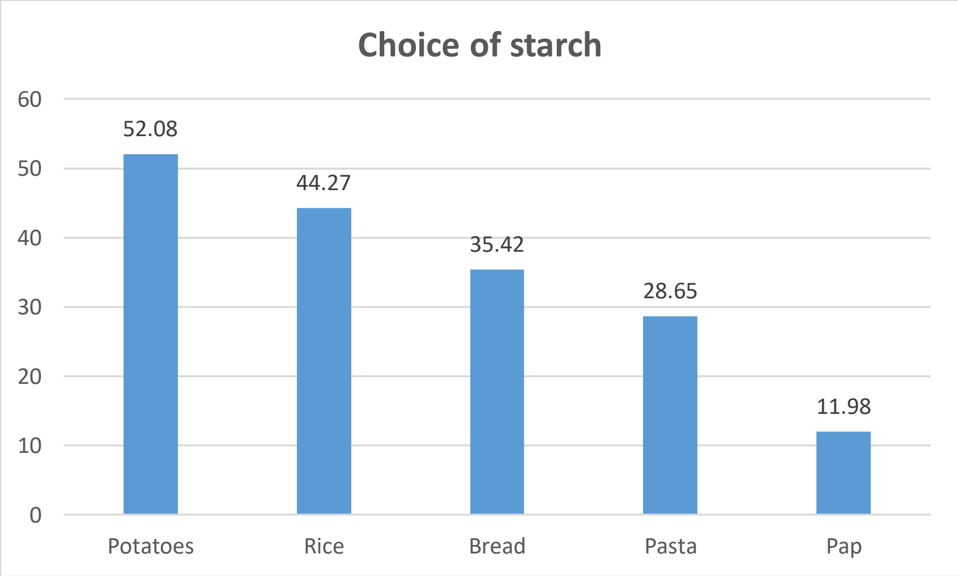
Ingredients of main meals

Respondents were asked to list the ingredients of a typical main meal for their household. Multiple choices were permitted so percentages shown do not add up to 100%

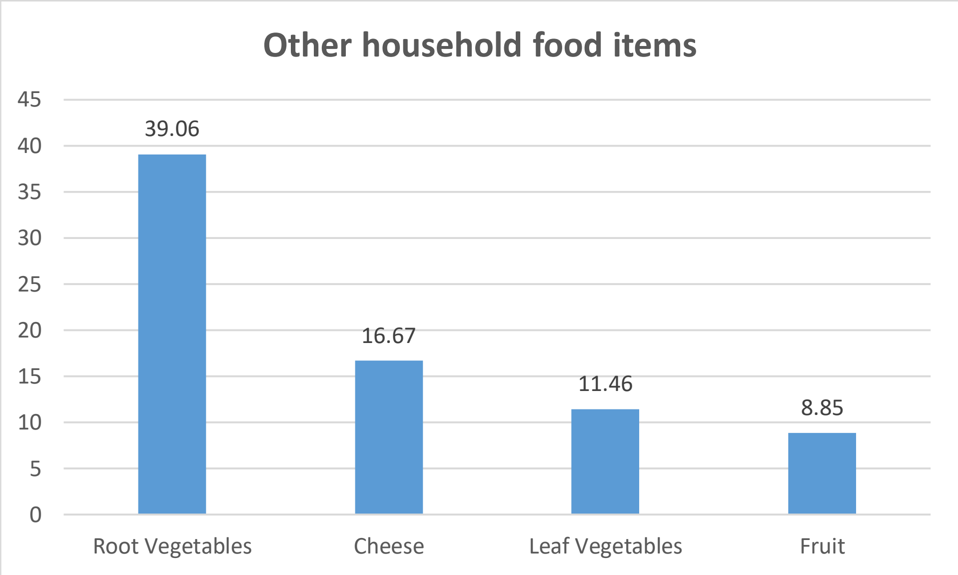
The most popular form of protein was chicken with nearly two thirds of the households identifying this as an ingredient for their main meal. Other protein choices were less popular with fish recording just over 30% popularity. Only 6% of households suggested they used beef as an ingredient in this meal. The spread of protein choice across the district was consistent with all four towns reporting chicken as a preferred protein. Langebaan households also reported a high preference for fish, in contrast to the other towns. Lamb was popular source of protein in Vredenburg. Pork and beef were not popular choices across the district.



Regarding choices of starch, potatoes and rice were recorded as the most popular at 52% and 44% respectively. Bread and pasta recorded 35% and 29% respectively. Pap was the least popular choice at only 12%. Langebaan reported high preferences for all starch sources, Hopefield reported a preference for bread and potatoes, Vredenburg for potatoes and rice and Saldanha respondents preferred potatoes.



Respondents were asked to identify other ingredients of their main meal. Root vegetables were the most popular across the whole district. Langebaan showed the most diversified preferences for cheese, leafy vegetables and fruit as part of this meal, while the other three towns reported low inclusion of these ingredients in their main meals.



Other Household Food

Respondents were asked a variety of questions regarding the normal food ingredients they had in their household at that time. They were instructed not to mention food that they might have because of a special occasion.

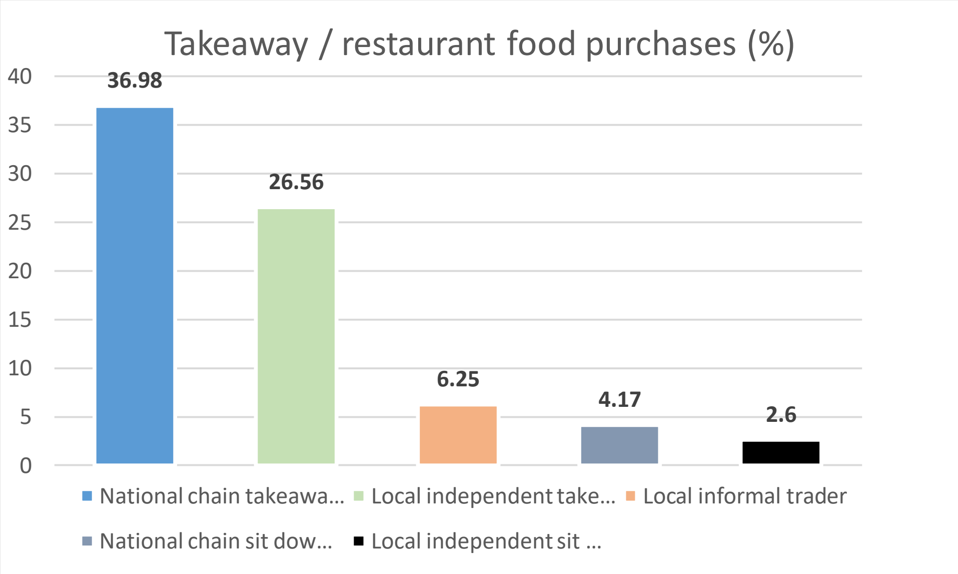
With regard fruit and vegetables that is readily available in the households, almost all respondents reported having potatoes, onions, apples, bananas in their house at any point in time. Other popular fruit and vegetables included tomatoes, carrots, oranges and peaches. Similarly with other household food items, respondents reported having carbohydrate dense foods including bread, pasta, rice, and maize meal in the house. Frozen vegetables were more often reported than tinned foods, and dried foods (lentils, beans) were mentioned by only a quarter of the respondents.

88% of respondents reported NOT growing their own vegetables at home. 24 households reported growing vegetables. The most common reason for not growing their own vegetables was time and space constraints. Only 2 households reported keeping chickens.

Takeaway And Restaurant Food

Households reported on average, one person eating one takeaway or restaurant meal in the week before the survey. 111 households across the sample reported spending an average of R25 on takeaway food in this time.

National takeaway chains proved to be the most popular, although as quarter of the respondents purchased their meal at a local independent takeaway business. Sit down restaurants were the least popular with only 7% of the respondents reporting to eat at these businesses in the last week.



Food Spend

Respondents were also asked where they purchased their food and approximately how much they spend on food and how often they shopped for food. Several items are purchased on an almost daily basis, with other items purchased several times a week, weekly, or monthly. The more frequent purchases tend to be bought at local independent retailers, with the less frequent purchases being made at large national chains.

Bread and milk are the most common daily purchases across the district, with some respondents also reporting daily purchases of polony, eggs, and cold drink. The less frequent (several times a week) shops include bread and dairy (milk, yoghurt, cheese, eggs) and some dry groceries. Fruit and vegetables are also frequently reported as purchases during these shops. Meat, fruit and vegetables are mentioned more frequently as purchases on the weekly shops, along with an increased mention of tinned and dry groceries (e.g., pasta, noodles, and flour). Meat is most frequently mentioned as a purchase during the monthly shop.

Respondents report shopping at larger national chains more frequently for their weekly and monthly shops, and with smaller, local and independent shops for the daily and more frequent purchases. This is in keeping with the figures cited in the introductory context to this report.[3] While not identical, similar ratios of households purchasing from local and independent retailers appear to be applied within the SBM. Larger, less frequent, and possibly bulk purchases are made from supermarkets, otherwise, spaza shops and small shops are frequented for daily necessities.

[3] Research shows that in poor Cape Town neighbourhoods 94% of households' source food in bulk from supermarkets, 68% from spaza shops and 62% from small shops.

The total domestic spend was calculated to reflect a monthly figure. It was calculated like this:

- The daily spend was multiplied by 20 (making an assumption that households may not purchase items every day of the month.
- The “several time a week” purchases were multiplied by 8. This conservatively assumes that the households would purchase these goods at least twice a week.
- The weekly purchases were multiplied by four, conservatively assuming four weeks in a month.
- The monthly purchase spend was multiplied by one, assuming a single spend per month.

These figures were then totalled to provide an estimated household spend on food, including neither takeaway food, nor food purchased by individuals which was not for household consumption. This we feel provides a conservative estimate of household food related spend by the respondents.

On average, households report spending almost R8000 Rand a month on purchased food groceries.

However, this **spend varies widely between the towns**, with a low average spend of R4500 being reported in Saldanha (possibly related to smaller household size) and a high average spend of over R11000 being reported in Hopefield, (possibly related to larger household size). Taking household size into consideration Hopefield continues to spend more on food with an average spend per person of R2650 per month, while Saldanha and Langebaan both report spending R2037 and R1922 respectively. Vredenburg reports figures more closely aligned to Hopefield with an average per person spend of R2205. The average of these multiplied by the average household size of 4, provides an estimated spend monthly spend of R8800.

Extrapolation Of Food Spend

Using the lower food spend figure per individual of R2000, as a conservative estimate, households in the district spend approximately R240 million on food every month (R2000 * approx. population of 120 000). Of this about a third or R80 million (or about R4 million per day) is spent on daily necessities over the course the month. According to survey respondents the bulk of this money is spent in local, neighbourhood, independent stores. National chains in contrast are responsible for roughly one fifth of the total direct spend from households, (about R48 million per month). As a caveat to this is must be noted that it is likely that smaller independent stores likely buy in bulk from national chains and act as distribution points in their neighbourhoods for a small mark-up.

If we split the remaining food spend (weekly and several times a week) equally between the independent stores and the national chains, then independent stores receive approximately 56% of total food spend or R134 million, while national chains are responsible for R106 million direct household spend.

What Can We Do With This Data?

Given these figures it is obvious that **there is a significant opportunity to leverage the position of the local independent retailers to provide their communities with locally sourced goods.** Currently these stores are responsible for sales related to daily necessities of their communities' households – bread, dairy, (milk, egg, cheese, yoghurt) and other commodities. The businesses that we were able to speak to reported that about 60% of their food input related spend was from local suppliers. However, these included local food wholesalers or who, we think, are simply acting as middle men for large national suppliers.

The main motivation of these stores regarding their purchases, is convenience and cost, with reliability and quality being listed as additional qualities that they would look for in increasing their local spend.

If local suppliers are in a position to meet the cost and convenience requirements of these smaller retailers, they would significantly increase their chances of redirecting spend from national chains and suppliers.

It is unlikely that these local retailers would currently consider increasing their local spend because of ethical considerations.

Redirecting even 10% of the food related spend currently under the national supermarket chain umbrellas (R10.6 million) would add considerably to the deepening of the local food economy, decreasing food vulnerabilities of the local economy, reducing the reliance on national food networks, possibly decreasing the carbon footprint of the food consumed in the district as well as increasing the resilience of the district economy.

What Can We Do Next?

Communicate

While reluctant to commit to conducting more research, without consummate action attached to it, more business-related data is needed. It is suggested that a campaign to build awareness of the intention to deepen and widen the local food value chains is started. This will serve several purposes:

- Increase awareness and interest of the initiative amongst local businesses
- Identify challenges and obstacles that have not been identified by the current research and communications to date
- Act as an opportunity to gather more pertinent data
- Initiate potential supplier opportunities between local suppliers and local retailers
- Draw in businesses in the food value chain who have not been exposed to the initial communications of the koeksister campaign.

During this time, and using ongoing communications with the local businesses as a means, more data can be collected to determine price points, mark-ups, and timeframes, for example as requirements that need to be met by local suppliers to local retailers. Simultaneously the list of possible products for on-selling to the local consumers can be expanded beyond the current, limited list.

Areas For Action

Food waste

Business respondents in this, current research reported that about 10% of their food production results in food waste. It is not clear what happens to this food waste, with only one of the respondents reporting that they utilise the food waste from their business in their own, domestic kitchen. There is an immediate opportunity to:

1. **Assist these businesses to decrease their food waste, and by doing so, increase their profitability** and their commitment to the overall koeksister programme. This might be considered in a number of ways including:
    a. Working with businesses to more accurately calculate their food related forecasts, to minimise production
    b. Facilitate cooperation between businesses to more accurately calculate their food inputs and share these. This is particularly relevant for businesses which purchase highly perishable food inputs.
    c. Consider ways in which businesses might better preserve either food inputs, or produced food for later use and consumption
2. **Utilise this food waste** in a manner that better fits the koeksister model, **whether this is redistributing the waste that is still consumable to households in need**, **ensuring that the waste is disposed of in a manner that reinforces the ecological ceiling** of the district, **or linking businesses where one might be able to utilise another's food waste**.

Household food production

Almost none of the household respondents reported growing their own fruit and vegetables, or keeping household poultry, for either meat or eggs. It is suggested that **there is an opportunity to partner with organisations with established practices in these areas to advocate using local institutions for households to increase their own food security and build their own resilience by taking responsibility for at least some of their own food production.**

References

Crush, Jonathan, Mary Caeser, and Gareth Hayson. 2018. *The State of Household Food Security in South Africa.* Canada: Hungry Cities Partnership.

District Health. 2018/19. *District Health Barometer.* Accessed February 24, 2022. https://www.hst.org.za/publications/District%20Health%20Barometers/District+Health+Barometer+2018-19+Web-21-92.pdf.

Education, Department Western Cape. 2017/18. *Western Cape Education Department 2017/18 Annual Report.* August 14. Accessed February 24, 2022. https://wcedonline.westerncape.gov.za/documents/annual-report17/WCEDAnnualReport16-17.pdf.

Greenberg, S. 2017. *Corporate power in the agro-food system and South Africa's consumer food .* Cape Town: PLAAS, UWC and Centre of Excellence on Food .

IHS Global Insight. 2018. "IHS Markit." *IHS Global Insight.* February 24. Accessed February 24, 2022. https://ihsmarkit.com/products/global-economic-data.html.

Isaacs, M, and M Hara. 2015. *Backing small-scale fishers: Opportunities and challenges in transforming the fish sector.* Rural Report No.2, Cape Town: Institute for Poverty, Land and Agrarian Studies Rural Status.

Paganini, N, and S Lemke. 2020. "There is food we deserve and there is food we do not deserve." *Local Environment* 1000-1020.

Quantec. 2018. "Easydata by Quantec."

—. 2020. *EasyData by Quantec.* January 1. Accessed February 23, 2022. https://www.easydata.co.za/reportset/RR/.

—. 2018. *EasyData by Quantec.* November 1. Accessed February 23, 2022. https://www.easydata.co.za/reportset/RR/.

Saldanha Bay Municipality. 2019. "Financial Statements: B Schedule."

Statistics South Africa. 2018. *Labour Market Dynamics in South Africa.* Statistics, Pretoria: StatsSA.

StatsSA. 2021. "General Household Surveys." Statistics, Pretoria.