



DESIGN THINKING WORKSHOP:

SOCIAL ENTREPRENEURS AND
CO-CONSTRUCTION WITH
BENEFICIARIES - APPLYING THE
EXPERIENCE OF ABALOBİ WITH
SMALLHOLDER FARMERS IN
THE CAPE METROPOLE

DESIGN THINKING FOR SOCIAL ENTREPRENEURS

REPORT ON WORKSHOP HELD
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ORIBI VILLAGE, CAPE TOWN.

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Western Cape Food System: Building Action and Networks through T-Labs

This workshop report has been produced as part of the Western Cape Food System work: building action and networks through T-labs convened by the Southern Africa Food Lab at Stellenbosch University working closely Abalobi and Oribi Village.

ABOUT SOUTHERN AFRICA FOOD LAB

The Southern Africa Food Lab was established in 2009 to promote creative responses to the problem of hunger through multistakeholder dialogue and action.

The Lab team is one of unprecedented diversity in the region, comprising stakeholders from corporate, grassroots, NGO, academic, and government sectors, all working together to transform the food system from farm to table. Over the past decade the Lab has successfully facilitated collaboration and dialogue, not just raising awareness, but effectively catalysing action to foster innovations and experimental action towards a thriving, just and sustainable food system.

www.southernafricafoodlab.org

ABOUT ABALOBI

ABALOBI is an initiative by the small-scale fishing communities themselves, to own the process of implementing the policies they fought for.

Through the development of an integrated small-scale fisheries information-management system and mobile app suite, the ABALOBI initiative aims to enable small-scale fishers to drive and be integrated into information and resource networks – from fishery monitoring and maritime safety to local development and market opportunities.

www.abalobi.info

ABOUT ORIBI VILLAGE

Oribi Village is an innovative movement that promotes and supports local social entrepreneurs based in Cape Town and its surrounding townships, driven by social and environmental responsibility.

Oribi Village's mission is to enable and connect ideas and individual actions to ignite a collective movement towards social and environmental changes.

www.tribivillage.com



BACKGROUND

South Africa is one of the world's most unequal nations characterised by unacceptably high levels of poverty, unemployment and inequality with a large proportion of the population affected by food insecurity and malnutrition with an increasing burden of non-communicable diseases resulting from poor diets (Enhörning and Malan 2019; Matsha et al. 2019). Inevitably, it is the poor who are most impacted.

The persistence of hunger and malnutrition in South Africa relates to a range of complex and interrelated issues spanning environmental, health, economic and socio-political domains. Ensuring that a growing population has access to a healthy, affordable and environmentally sustainable diet is undoubtedly one of the region's greatest challenges.

The Western Cape province of South Africa is home to over 5.8 million people (STATS SA 2017). The province's food system is in crisis (Drimie & Pereira 2016) with many households lacking access to adequate food and many children at risk of malnourishment, despite having a well-established food system compared with the rest of the country (ACDI 2016, Mbhenyane 2016).

The Western Cape is especially susceptible to the impacts of climate change, particularly decreased winter rainfall, increased temperatures and more frequent droughts (ACDI 2016). It is also shaped by the trends that characterise South Africa's agrarian sector, notably the dualism between large-scale commercial farming and under-resourced smallholders, large corporate company domination over food value chains, and increased food waste (Pereira 2014). Most of the urban dwellers in the province rely on their rural counterparts and the retail sector (both formal and informal) for their food supply (Battersby 2016).

Ensuring that a growing population has access to a healthy, affordable, and environmentally sustainable diet will undoubtedly remain one of the greatest challenges facing the country. Addressing food insecurity in South Africa requires innovative responses that fundamentally reconsider its causes, particularly because challenges facing the food system cut across issues, sectors, and scales.

Over the past three and a half years, the Southern Africa Food Lab has worked to bring together actors in the Western Cape food system from across the spectrum – from producers through to those concerned with nutrition, from government and business to NGOs and academia. Using a transformation lab process, the intention has been to better understand issues in the system in order to be able to set an agenda for transformative action. Three Transformation Labs preceded and, in many ways, led to this workshop.

Urban organic or agro-ecological smallholder farmers produce a significant amount of healthy foods, contributing positively to the diets of their customers. However, these smallholder farmers face numerous risks to their businesses beyond climate-related impacts, including a lack of logistic organisation leading to impacts of over-production of certain crops and resultant waste, a lack of cold chain facilities, compromising quality and persistent market insecurity.

On the other hand, small scale fishers in the region, who also face climate-related risks, have seen significant benefit to improvements in their logistics fostered largely through the involvement of local NGO Abalobi. Abalobi has worked with fishers to co-create technology and logistics to address the challenges of small scale fishers, many of which are mirrored by smallholder farmers.

The design-thinking workshop was intended to ultimately strengthen smallholder farmers in the Cape Metropole and beyond by identifying challenges and discerning practical next steps to be undertaken. This was achieved through a critical look at the Abalobi system and by relating such solutions to the farming community. Mutual learning, personal reflection, networking and strategic analysis allowed for a constructive workshop which should lead to practical outcomes in the future.



DESIGN- THINKING WORKSHOP

In early October (2019), a group of thirty actors involved in the local food system gathered at Oribi Village in Gardens, Cape Town for a design-thinking workshop focused on strengthening the contribution of smallholder farmers to a more sustainable and healthy food system in the Western Cape. Farmers, small-scale fishers, community gardeners, packhouse representatives, established businesses, and clients including restaurateurs, chefs and cooking networks were brought together with the aim of identifying and addressing the logistical challenges faced by the smallholder farming community.

Facilitated by Dr Scott Drimie, Director of the Southern Africa Food Lab, the workshop fostered networking and strategic thought in order to stimulate mutual learning and new connections. The idea was to bring together a collective of extraordinary people to network, engage and learn in order to identify practical steps to build practice around smallholder farming in the Western Cape.

“The Food Lab is delighted to be engaged with Oribi and Abalobi in a journey to disrupt the dominant food system,” said Scott. “We engage organisations like Abalobi and Oribi to have deep conversations that build ideas and relationships to move strategy forward. We need meetings where we really get to grips with the issues and the way forward.”

The morning was spent exploring the Abalobi process. With significant input from fishers, Abalobi has created technological and logistical solutions which improve the success of small-scale fisher businesses. In short, Abalobi uses technology to connect fishers to the market.

“Our process is transparent, participatory and engaged,” explained Dr Serge Raemakers, Co-founder and Managing Director of Abalobi. “Through our engagement with fishing communities something emerged which changed the chain. It changed the ways rights are allocated.”

Serge invited participants to delve deeply into Abalobi’s experience and take a critical look from the perspective of farmers and fishers to draw learnings that would make it useful for farmers.

Having given a broad overview on Abalobi, their principles and their history, Serge handed over to Chris Kastern, Abalobi’s Product and Traceability Manager, who spoke about the technology on offer to the fishers. This was followed by Jeff van Breda, Abalobi’s Logistics and Marketplace Training Co-ordinator, who described some of the considerations necessary to ensure successful logistics.

Serge then introduced fishers Hilda Adams and Nic Ladkin to share from their experience.

“I grew up both living off the land and the sea. I’m a second-generation fisher on my father’s side and my grandson is now a fourth generation fisher. On my mother’s side I’ve learnt to work the earth and grow food. With no electricity, we learnt to preserve food growing up. Today I represent fishers, working with government and playing a leadership role with various fisher organisations. We face many challenges including marine protected areas, oil and gas mining and climate change. One of the things we’re trying to do is bring value to previously undervalued produce like kruekel and limpets. I see this as reviving our indigenous heritage; this is the food we grew up eating, this is the food our children are eating, this is the food we value. We have to be part of our own economic growth. I believe that when you economically empower fisher women, you economically empower fishing communities,” said Hilda.

“I began fishing with my grandfather at the age of four. Today I’m a commercial line fisherman. I skipper a boat. I work with Abalobi because in doing so we’re adding value to ethically caught, high quality fish and connecting the fishermen with the restaurants. There is no middle-man and so the fishers are paid a fair price for their catch. As fishers we are grateful, we’re earning more. There is security in knowing where the catch goes and that the quality will be maintained,” said Nic.

Participants took some time to network and reflect over lunch after which they could choose to participate in one of three groups; one looking at the broad need to connect farmers to clients, one looking at technological opportunities and constraints and one looking at logistical opportunities and constraints.



GROUP 1: TECHNOLOGY

This group primarily explored two questions:

1. What is your biggest challenge as a producer?
2. What information do you think is important?

In answer to the challenges, the group identified four categories, namely production (how does one sell produce at a fair price and maintain a sustainable business), access to the market (not only in terms of a metaphorical “foot in the door”, but also physical access, transport, etc), visibility (how does one, lone smallholder gain and maintain visibility in the market while still managing a farm?) and collaboration (how can farmer work together for mutual benefit?)

In terms of what information is important, the group acknowledged that there was very little record-keeping on production, expenses, sales and so on. Farmers were uncertain about what information should be recorded and how it could add value in terms of tackling the challenges.

“If you have no data and no method, you’re kind of stuck. Last year we had a discussion with the farmers, we told them that we struggle to sell this type of veggies, so please don’t plant too much of them. This is not obvious if you don’t keep track of what you sell and how much you earn.” Kim, Umthunzi

“I try very hard to make the manual record easier, but in the garden it is not working. I love having data, for example to compare between two years... So I go home and do it for myself, but it is not feasible, I know it should be done in the garden.” Farmer

“If you can get technology to make things for you, it makes life easier.” Bianca Hansen, Toast Ale

The group concluded that one of the priorities in terms of information would be a digital marketplace where customers can see what is available. In addition, technology could be used for data access, data storage, production planning and production tracking.

Chris Kastern advised that existing tools should be explored first and if no fit is found, a new tool should be developed which is focused on the user experience.

Existing tools mentioned include:

- Kula agri
- Vodacom Connected Farmer
- PGS app



GROUP 2:

LOGISTICS

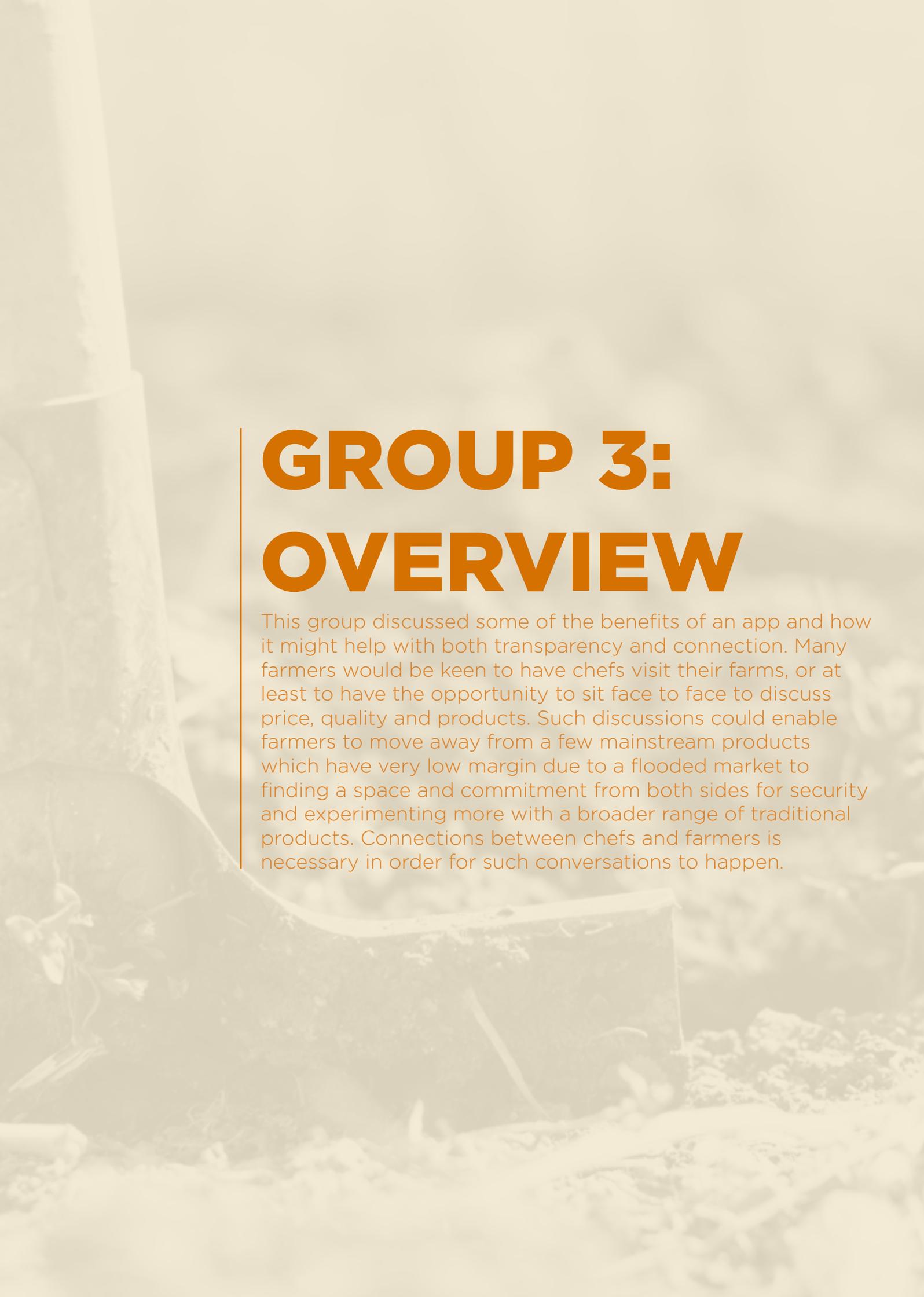
At present there is almost no traceability in the value chain. No one really knows where any given produce comes from and as a result there is no tangible incentive for quality. QR codes could make an impact in this regard. Who is responsible for declining quality? The farmer, the packhouse, the transport, the end user? In the absence of traceability, it's difficult to discern.

Technology could help ensure a broader range of vegetables are planted.

"Imagine an app where you say where you plan to plant what and the app responds telling you who else has planted what where. The app could even tell you when the crop will seed, when it will be ready for harvest and so on." – Jeff van Breda

Such technology would enable customers like uCook, for example, to plan according to what ingredients would be available and when. Such companies and chefs could also be encouraged to make a commitment to undervalued vegetables.

Additional challenges described by this group included the issues of surplus produce which remains unsold ("Are we simply growing to make compost?" – Mama Pat), the issue of market fluctuations, lack of cohesion between farmers, a lack of a production plan, and a lack of quality control.



GROUP 3: OVERVIEW

This group discussed some of the benefits of an app and how it might help with both transparency and connection. Many farmers would be keen to have chefs visit their farms, or at least to have the opportunity to sit face to face to discuss price, quality and products. Such discussions could enable farmers to move away from a few mainstream products which have very low margin due to a flooded market to finding a space and commitment from both sides for security and experimenting more with a broader range of traditional products. Connections between chefs and farmers is necessary in order for such conversations to happen.

REFLECTIONS ON THE WORKSHOP

Following the groups feedback, Scott invited participants to reflect on what they'd heard, discussed and learnt sharing on what excited them and what frustrated them.

"What has been bothering me today? You speak about what a long road you've been walking since you were young, but there's still a long road. That worries me as it's true of me. What excites me is that the fish and the farmer can go together. As we organic farmers are using compost, I tried an experiment from TV with snoek and with disprin in compost. My tomatoes last year were beautiful! That disprin kills all the tomato diseases. The fish heads were like fertilizer." - Mama Pat, Farmer

"What excited me today was that Jonathan spoke about surplus brinjal and a recipe book came from that crisis. The customer or restaurant or wholesaler, if they know the farmer and he is going to allocate that bed for that restaurant, you look after it like a baby and keep showing the customer. If you know for who you are sowing, you have a connection and can show how far it is. You know where it is going. The thing that frustrates me is that three quarters of us are urban farmers and now we have to go back to our own spaces. The app will take time. That said I believe there are things we must do in the meantime to address our challenges." – Washiela Isaacs, Farmer

"I was struck by the lack of training for everyone involved; the drivers, the farmers, and so on. People can be empowered through technology, especially with regards to quality control. There is so much opportunity!" – Jeff van Breda, Abalobi

"I was pleased about the fact that we're all in this room together. I think that's absolutely amazing. Often the various sectors are so separate. It's flippen amazing that all of us made the time to be here. What's daunting for me is that the road ahead is still very long. We've got to roll our sleeves up and get to it." – Loubie Rusch, Making Kos

"Something which stuck out a lot to me was why does produce need to go all the way to a restaurant only to be sent back? We need to change the way we approach roles and responsibilities. The driver could fulfil the Quality Control role. We need not be stuck in the same old process. We need to identify problems and solutions. We need to change the way we do the things we've always done." – Bianca Hansen, Toast Ale

"Networking could allow us to optimize." – Anna Shevel, Good Food Network

"Something that excited me is that the Abalobi app is in the hands of the fishers. This links immediately with the frustration of how far the farmers have to go. It is a long process to go forward to become small businesses." – Farmer

"We are going to have to have a meeting at our office to talk about veggies. There's so much resonance between what farmers have said today and what fishers have been saying over the years. I'm hoping that some time some day what we've put into Abalobi could have some merit for what the farmers want to move into. We've invested in the technology, now I want to see us sharing it in some sort of tech ecosystem." – Serge Raemakers, Abalobi.

MOVING FORWARD

In terms of concrete next steps:

- Abalobi committed to helping with market research. Specifically, they offered to ask their chef network for feedback regarding produce and interesting products.
- The Food Lab committed to engaging with SAOSO to learn more about what apps exist for smallholder farmers (particularly those working in urban agro-ecology). A summary of which apps exist, along with their strengths and weaknesses can be viewed in **Annexe 1**.
- Farmers were invited to revert to the organisers with suggestions of an agenda for a follow up meeting on a farm.

CONCLUSION

Hilda Adams concluded the workshop noting the power of being in a room with people who are positive. She spoke of her love for her natural heritage, how the value goes beyond the price to a love for the process and for the history and for the heritage.

“I’m motivated by being around people who want to bring change in the food system. We just keep going despite a government that is favouring the big companies.”



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Annexe 1: Overview of Existing Apps in the SA farmer space – Matt Purkis, SAOSO

1. **Khula** - One of the more popular apps on the market, the Khula app is a market access platform that provides the farmer an opportunity to upload his/her available produce onto the platform through a simple user Interface application. The platform is also geared to provide cold chain, logistics and agri-inputs to the farmers. (Market access)
2. **Food for Us** - This application is geared toward assisting in the localisation of food systems and reducing food waste at market. The app is gaining traction and the organisation is working with some large retail outlets in SA to grow the platform. The development of the app and the research component is linked to the Sustainability Institute. (Market access)
3. **Green Fingers Mobile** - This digital platform assists in managing farmer profiles, field extension officers and commercial transactions, with a focus on making farmers fundable. The app is gaining a lot of traction in Africa, although not so much in South Africa at this stage. The app also has a tree tracking aspect which is very useful for the regeneration of biomes by tracking the success rates of the trees that have been planted. This app has a lot of potential to grow and a very simple user interface. (Farmer management and trade)
4. **Field Margin** - This is a very useful app for farmers to manage their farms with on crop production and record keeping for farm purchases. It's not very active in South Africa at this stage, but has a lot of potential to assist farmers in better managing their land and businesses. The organization is looking for farmers to use the app in SA. (Farm management)
5. **Crop In** - This is probably the most comprehensive tool on the market from farm to fork. With farmer management, supply chain management, warehouse management and risk mitigation, Crop In is a very well-developed tool with a huge value proposition to organisations/NGOs that manage a high number of farms regionally. The series of applications and web-based back end management gives the user a full indication with live data supporting the dashboard a full description of the farm and the supply chain. This tool will be highly beneficial to retailers, aggregators, sector bodies. The downfall of Crop In for the South African market is the cost of the series of applications and the lack of developed supply chains. (Farm to fork)
6. **Start Farming** - This is an interesting app based on knowledge exchange for startup farmers offering a wide variety of information to the users that aim to give the farmers enough information to begin their enterprise. From Livestock production, hydroponic, crop and business advice, this app has struggled to gain traction with South African due to the age gap and a lack of technology access in the rural areas. (Information exchange)
7. **Kandu Connect** - This is a very useful series of applications with a farmer app, driver app and a market access platform. The combination of these three apps allows for farmers to aggregate produce and reach market as a collective. The series of apps has been tested namely in KZN with a group of producers on the South Coast. This series of apps is also used by NGOs with the hope that the ecosystem would fully take hold in the SA market, but lack of funding and support has it remaining in a niche. SAOSO wishes to support Kandu in their work as this app has been tailored for the Agro-ecological network. This app is the architecture that the SAOSO suite is being built on and SAOSO will go back to Kandu to find scope for collaboration.
8. **Good Food Network** - This is an ethical food directory for consumers and end users to source ethical producer or visit places that stock or promote ethical food. GFN is also beginning to test piloting the supply chain development aspect or E-commerce platform to link farmers to local markets, GFN is supported by SAOSO and hopefully can make a dent in the online space into the future.
9. **Open Food Network** - Purely an e-commerce site where buyers and sellers are linked on a database where food and produce can be traded with a very low % between farmer and buyer. This is a way to bring cleaner food into the online retail space. With the platform going quiet from 2016, it has recently had a revival and SAOSO has endorsed OFN as a platform that the network can use to trade between buyers and sellers at an ethical price for both farmer and consumer.
10. **Aparate** - This is a platform that connects farmers to agricultural businesses and organisations. This platform is not tailored for the African market as yet with very little value proposition to the farmer.

It seems that very few apps are tailored for the agro-ecological network. For the most part these apps don't service the overall development of an ethical food system. Crop In and Kandu Connect are probably closest to a systemic solution required to improve the outcomes of agro-ecological farmers in the country.

Annexe 2: List of Attendees

Amy Murgatroyd	uCook
Auriane Lamy	Oribi
Bianca Hansen	Toast Ale
Carolyn Cramer	Southern Africa Food Lab
Chris Kastern	Abalobi
Chris d' Aiuto	PEDI
Emma Hosking	Umthunzi Farming
Hilda Adams	Fisher
Jean-Christophe Taghavi	Oribi
Jeanne Scholz	Oribi
Jeff van Breda	Abalobi
Jeremy Jones	Farmer
Jonathan Japha	Black Sheep
Julia Harper	Southern Africa Food Lab
Khuthala Bokolo	Farmer

Loubie Rusch	Making Kos
Manelisi Maphukata	Farmer
Nic Ladkin	Farmer
Nomonde Buthelezi	Farmer
Patricia Gcilishe	Farmer
Ria Schhurman	Ubuhle Bendalo
Samuel Hlekiso	Farmer
Scott Drimie	Southern Africa Food Lab
Serge Raemaekers	Abalobi
Sibongile Sityebi	Farmer
Timothy Stirrup	Ucook
Vuyo Myoli	Farmer
Washiela Isaacs	Farmer
Wilweena Fortune	Farmer

