



# The adoption of a skills ecosystem approach to transition South Africa's food system to one which is just and resilient

**Nicola Jenkin**

Pinpoint Sustainability and Centre for Researching Education & Labour (REAL),  
University of the Witwatersrand

Transformations in food systems and agrifood value chains: How do work and employment come into play?

1<sup>st</sup> December 2022

# Introduction

For South Africa's food system to transition to one that is just, resilient and sustainable, it requires the appropriate jobs, knowledge and skills to do so.

- Research project in South Africa, funded by the National Research Foundation
  - Universities of Witwatersrand and Zululand, and Rhodes University
- 5 post-graduate students (masters and PhD)

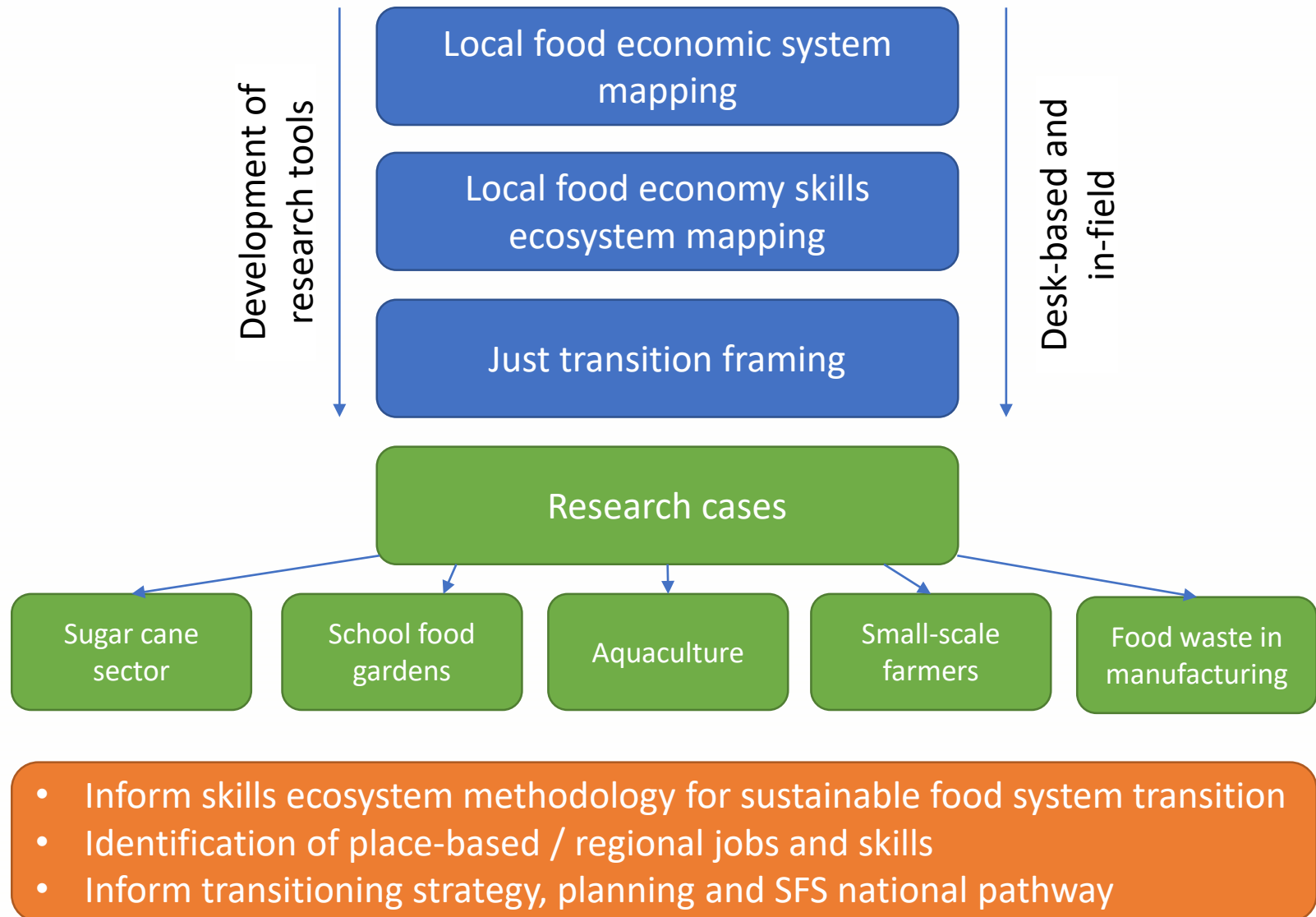
# Introduction

For South Africa's food system to transition to one that is just, resilient and sustainable, it requires the appropriate jobs, knowledge and skills to do so.

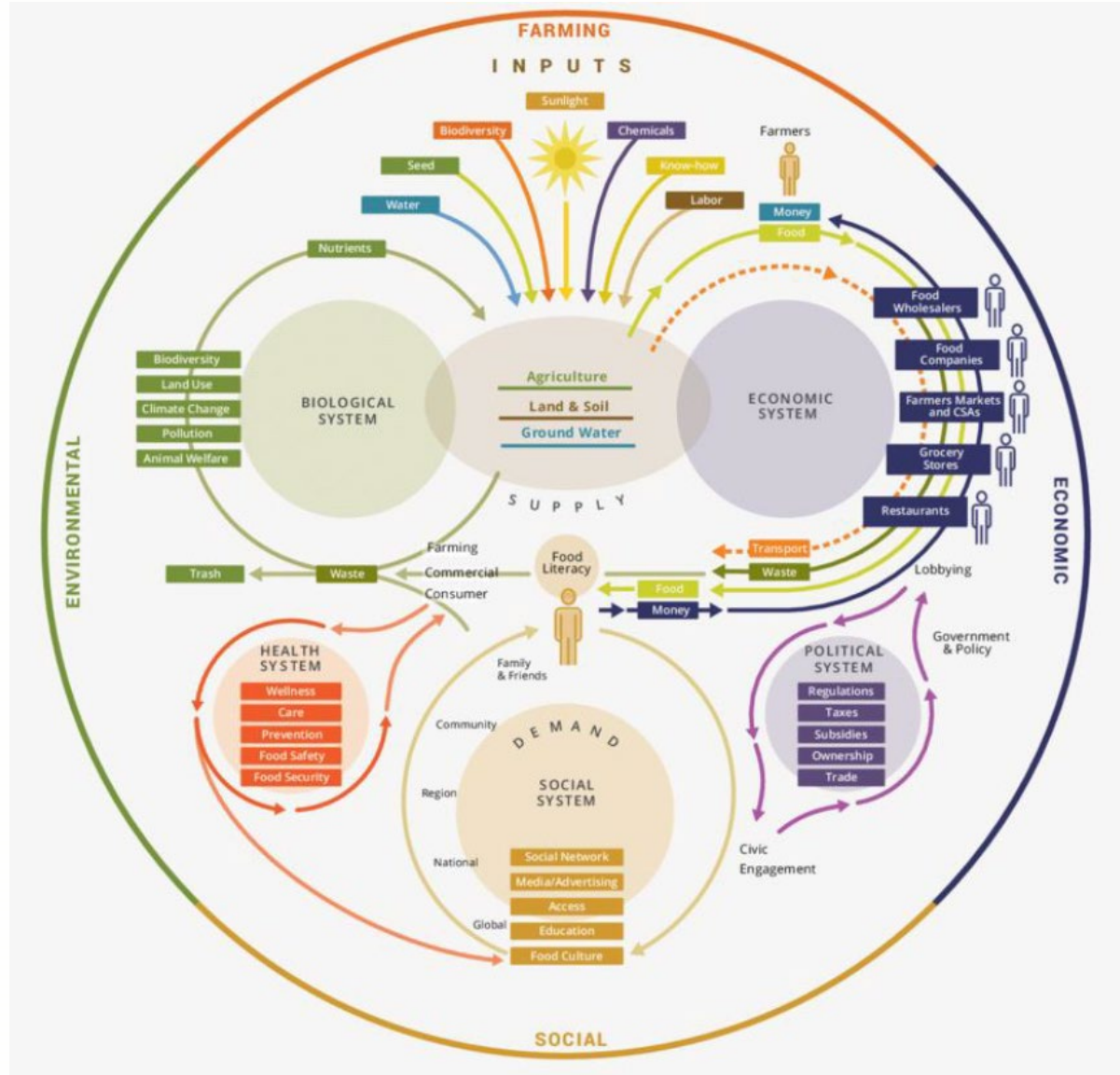
- Research project in South Africa, funded by the National Research Foundation – Universities of Witwatersrand and Zululand, and Rhodes University
- 5 post-graduate students (masters and PhD)
- Adopting a skills ecosystem framework to inform skills planning to aid in a just transition



# Skills ecosystem approach



# Local food economic system mapping



Source: (TEEB, 2018)

# Local food economic system mapping

Main food-types and activities in selected region

main  
food-types



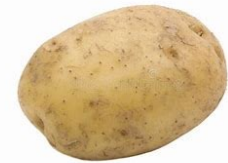
Fruit &  
vegetables



Cereals &  
legumes



Meat &  
Dairy  
(incl. fish)



Roots, tubers  
& oil seed

value chain  
stage



Production



Processing &  
manufacturing



Trade



Consumption



Waste



# Local food economic system mapping

Who are the main actors?

1	LOCAL FOOD ECONOMIC SYSTEM MAIN ACTOR MAP: EASTERN CAPE					
2						
3		Main food value chain stages				
4		Grown / produced	Processed / manufactured	Traded (incl. wholesale)	Consumed	Wasted
5	Core actors					
6						
7						
8						
9						
10						
11						
12						
13	Operational service providers					
14						
15						
16						
17						
18						
19						
20						
21	Support service providers					
22						
23						
24						
25						
26						
27						
28						
29						

## Core actors

Individuals and businesses actively involved in the production, processing, manufacture, and trading (selling incl. wholesale) of food. They handle food.

## Operational service providers

Individuals, businesses, and organisations that provide services and materials to the core actors in order for them to operate e.g. packaging suppliers; raw materials suppliers; machine & equipment suppliers; and utility suppliers.

## Support service providers

These are institutions that provide association membership support, government departments that are mandated to develop and implement policy and legislation, employee representation e.g. unions

# Local food economy skills ecosystem system mapping





# Skills ecosystem system mapping

Food-related and education policy



JOBS SUMMIT  
POLICY BRIEF SERIES

INSTITUTE FOR  
ECONOMIC  
JUSTICE  
RESEARCH  
POLICY  
ADVOCACY

August 2018

STREAM 2, POLICY BRIEF 1

## THE POTENTIAL OF AGRICULTURE AND LAND REFORM TO GENERATE NEW JOBS

Policy brief prepared for the Labour Caucus in the Jobs Summit Inclusive Growth working group by the Institute for Economic Justice (IEJ).

Stream: Inclusive Growth Stream, brief 1  
IEJ Collaborator: Ben Cousins, Amelia Genis and Jeanette Clarke  
Institute for Poverty, Land and Agrarian Studies, University of the Western Cape

### 1. BACKGROUND

1.1 Currently the agricultural sector, together with forestry and fisheries, contributes 2% to GDP and 5% to employment with a total of 840 000 workers. Between 30 000 and 50 000 medium- to large-scale commercial farmers contribute the bulk of produce to formal markets, and employ most workers. Perhaps 3000 of these farmers are black, but most black farmers are small-scale, either subsistence-oriented (around 2 million) or market-oriented (around 200 000) and operate informally. The contribution of the agricultural sector to GDP is greater than 2%, given the contributions of input ('upstream') suppliers and agro-processing ('downstream') industries.

Numbers employed in agriculture increased by around 10% between 2011 and 2018. The long-term trend in agriculture, however, is towards increased efficiency as a result of investments in efficiency and a shift to a higher proportion of non-labour inputs. Workers employed in agriculture are not, as a rule, doing work

on a casual and seasonal basis in picking and packing operations. Some crops, such as fruit and vegetables, continue to require labour for sensitive operations. These are picking, but mechanized harvesting is increasing. These days most fruit farms operate their own packhouses, but even there the number of workers are decreasing because of mechanisation and automation/automatisation.

1.3 Farmworkers are generally poorly paid and insecure, especially those who are employed casually or seasonally. A statutory minimum wage of R3169 per month or R146 per day is currently in place. Conditions on farms are rarely subject to inspection, however, and there is widespread non-compliance with labour law, even in the relatively wealthy farming areas of the Western Cape. Existing large numbers of farmworkers and farm dwellers still take place, some legally but some illegally. Farmers often complain that those whose farms are near tarred roads or good dirt roads receive regular visits from inspectors.

1.4 Rural land reform policy seeks to address South Africa's legacy of racial privilege and create a more equitable pattern of land ownership and agricultural production. Other objectives include securing the land rights of the



## EVIDENCE-BASED POLICY FOR SUSTAINABLE AND HEALTHY FOOD SYSTEMS

Thursday 13 October  
13:00-15:00 GMT  
15:00-17:00 SAST  
18:30-20:30 IST



UNIVERSITY OF  
KWAZULU-NATAL  
INNOVATION  
YAKWAZULU-NATALI

CTAFS  
Centre for Transdisciplinary  
Agriculture and Food Systems

LONDON  
SCHOOL  
OF HYGIENE  
& TROPICAL  
MEDICINE



# Skills ecosystem system mapping

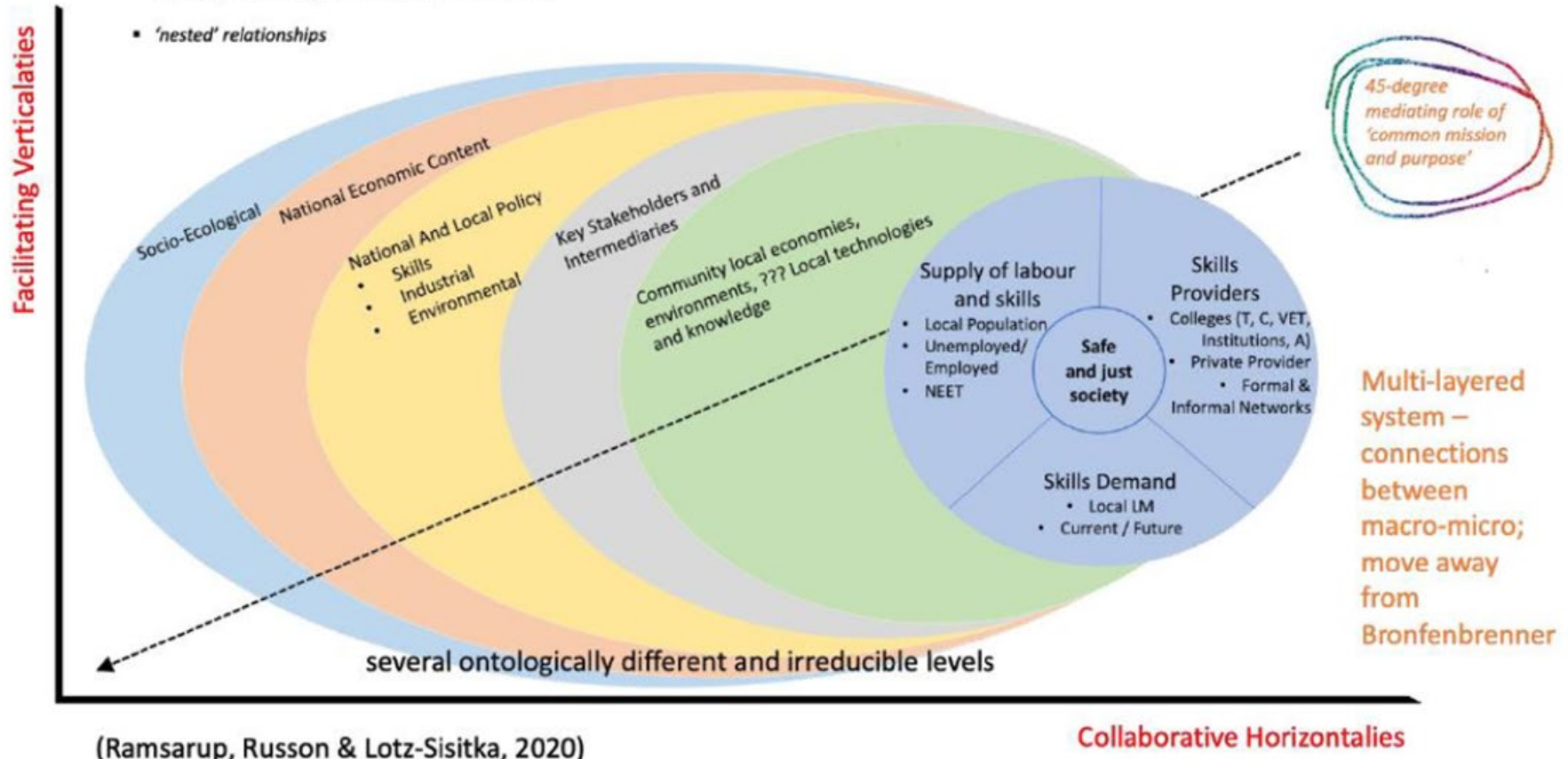
Identification of education and training providers



# Skills ecosystem system mapping

## Horizontalities and verticalities

- Also, broad social ecosystem contains different types of sub systems
- Layered; interlocking and ultimately collaborative
- 'nested' relationships



# Just transition of a regional food economy

## Considerations of justice

To transition a local food economy to one which is just and regenerative by 2050, various activities need to be considered:

### Procedural (participatory)

“A key underlying assumption in just transition discussions is that a just outcome can only emerge out of an inclusive process. It is embodied by the drive to achieve procedural (or participatory) justice.

It focuses on **facilitating an inclusive decision-making and implementation process, paying particular attention to enabling and empowering vulnerable and oft-neglected stakeholders to take part**” (Montmasson-Clair, 2021b, p. 10).

### Distributive

“Achieving distributive justice within a just transition context hinges on **addressing the direct negative impacts associated with the transition, such as loss of economic activity, employment and livelihood** (Montmasson-Clair, 2021a).

It relies on harnessing a set of (generally) existing tools to lessen or mitigate adverse impacts as well as generate counter-balancing positive forces (Makgetla et al., 2020)” (Montmasson-Clair, 2021b, p. 12).

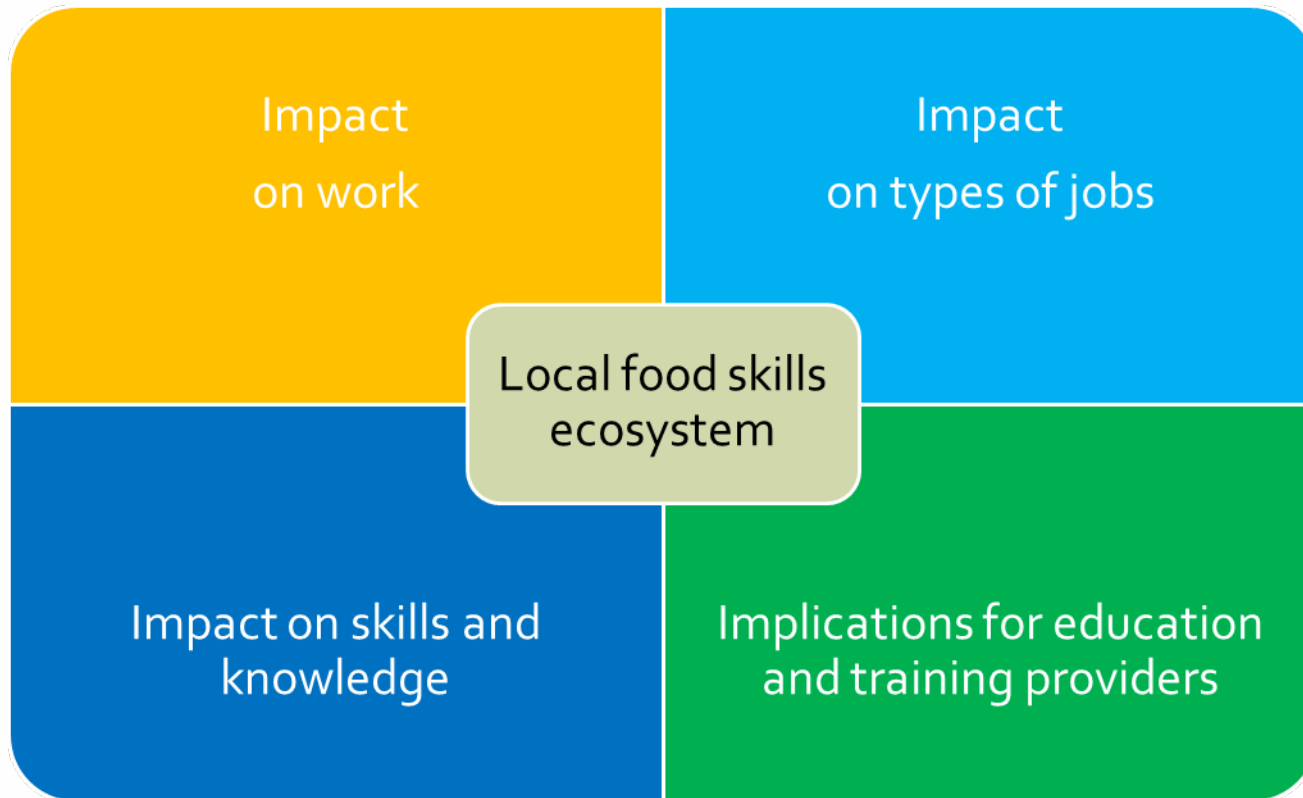
### Restorative

“Restorative justice is a fundamental pillar of the just transition agenda. ... It is a core pillar to improve the economic, social and environmental resilience of vulnerable stakeholders, activities and regions, as well as **address longstanding inequalities in gender, race and class**” (Montmasson-Clair, 2021b, p. 19).



# Just transition of a regional food economy

Implications on the skills ecosystem on a just transition pathway





## Overview

-

# Case study: KwaZulu-Natal

## Main food types / food system dynamics



Commercial  
Commercial



Subsistence /  
rural  
households

# Case study: KwaZulu-Natal

## Skills ecosystem

KwaZulu\_Natal Food-related education & training providers\_ .XLSX ☆ 📁 ☁

File Edit View Insert Format Data Tools Help [Last edit was seconds ago](#)



100% \$ % .0 .00 123 Calibri 10 B I S A

fx University of Zululand

A		B	C	D
<b>FOOD-RELATED EDUCATION AND TRAINING PROVIDERS: KWAZULU-NATAL</b>			Only list education and training providers that operate in your 150km local food economic system boundary.	
Name of provider	Location (e.g. closest village, town, city)	Course / Research programme [Course description e.g. short-course, in-field, Masters Programme etc]		Brief description of the course
University of Zululand	Kwadlangezwa, South of Empangeni	Bachelor. Agriculture (Animal Science )		Involves the study of animal breeding and genetics, physiology and the nutriti of all farm, equine and companion animals.
	Richards Bay	BSC Agriculture ( Agricultural Bussiness and Management)		The course fosuces agricultural production and science with a variety of busin disciplines, preparing you for entrepreneurial, management and leadership ro in the agricultural sector.
		BSc. Agriculture ( Plant Science)		This is an agricultural Science and Technology course. Plant science covers an enormously broad area, incorporating many biological disciplines from genetic through molecular and cellular biology, to whole organisms.
		Bachelor of Consumer Science ( Extension and Rural Development )		The Course focuses on Agribusiness management, Food and agrciultural policy and Rural Development
		Bachelor of Consumer Science ( Hospitality and Toursim)		The Courses focuses on Catering, hotel management restaurant management toursim management and food and beverage management
		Diploma in Hospitality Management		Study invloves food and beverage management, and Culinary studies
		Diploma in Logistics Management		This is a course in bussiness management domain , it focuses in concepts of logistics and the shaping of the modern supply chain management
		Diploma in Transport Management		Transportation Management is to provide both theoretical knowledge and practical skills in the field of Transportation Management in various sectors
		Thank you		
<b>Universities of Technology</b> (e.g. Tshwane University of Technology)				
Durban University of Technology	Pietermartizburg (Umshwathi Municipality	Diploman in Consumer Sciences in Food and Nutrition		Graduates will be able to display competences in the integration and applicati of scientific-based food and nutrition theoretical and practical knowledge and culinary skills in food production, food retail and food service; with the aim of improving consumer



# Case study: KwaZulu-Natal

## Core transition jobs identified



Field data collector



Food processing worker



Agricultural extension officer



Agricultural insurance officer



Warehouse worker



[Food] waste manager



Food & beverage waiter



Food packer



Small-scale fisher



Horticultural worker



Supply chain officer



Truck driver



Thank you

Dr Nicola Jenkin

[nicolajenkin@outlook.com](mailto:nicolajenkin@outlook.com) /  
[nicola@pinpointsustainability.co.za](mailto:nicola@pinpointsustainability.co.za)