

# UCL Citizen Science Academy

Community-based and  
practice-led training  
empowering communities  
to lead change



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# About the UCL Citizen Science Academy

**The UCL Citizen Science Academy is an initiative to deliver community-based, practice-led research training to empower communities to lead change through social action and shaping policies that impact their livelihoods.**

The Academy is based at the Institute for Global Prosperity (IGP) at UCL and has been designed to make participation in research inclusive and accessible to people from all backgrounds.

The high-quality training programmes equip people with research knowledge and practical skills to get involved in local decision-making.

All our training programmes are linked to active real-world research projects and are delivered in non-academic, community-based settings.

We partner with voluntary sector organisations to recruit, employ and support our citizen scientists in all aspects of their work. Academy citizen scientists do not need any prior experience of research, work, or study in further or higher education.

The UCL Citizen Science Academy is part of the University's goal to build a sustainable and scalable infrastructure to support education, training, and recognition for citizen science outside higher education institutions.

# What is citizen science?

Citizen science is a term for a wide range of activities and practices involving members of the public in research that contributes to scientific knowledge. It recognises the invaluable and crucial role the public can play in providing insights a researcher may not typically have or can collect on their own.

Most commonly citizen scientists are involved in large scale data collection efforts – observing, surveying, mapping and transcribing data. For example, The Big Butterfly Count is a nationwide citizen science project helping researchers assess the health of our environment. Launched in 2010, it has now become the world's biggest survey of butterflies.

## Involving the public in social science

Citizen social science is an emerging area of citizen science that involves the public in research projects focused on complex questions about human behaviour and how societies are organised, for example understanding lived experiences of inequality and poverty, or how the beliefs people have about climate change influence their behaviour.

Citizen social science often uses different kinds of research methods such as participatory research, qualitative methods and co-production. Citizen social scientists get involved in identifying the research questions, designing the research and analysing the results to generate knowledge that helps to build effective interventions and social policies.

## Why it matters to us

At the IGP, citizen social science focuses on understanding what prosperity means and how opportunities to prosper and live well are influenced by different factors.

We believe that involving the experiences, knowledge, and expertise of local people is the key for change.

*"Our citizen social scientists work with IGP's academic researchers to design research that captures local experiences and reflects what matters to local people and communities."*

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Dr Saffron Woodcraft, Principal Research Fellow,  
Institute for Global Prosperity



# Inclusion, empowerment and impact: the Citizen Science Academy's principles



The Academy's principles and programmes build on lessons from the IGP's citizen social science projects in the UK, Lebanon, Kenya, and Tanzania, as well as the multiple citizen science projects running across various disciplines in UCL.

These core principles shape the design and delivery of every Academy programme:



**Community-based, practice-led:** applied projects linked to real-world research projects



**High-quality research training:** research ethics, methods, analysis and impact training



**Capacity-building:** partner with voluntary sector organisations to recruit, employ and support citizen scientists



**Inclusive:** making research available and accessible to people from all backgrounds



**Direct links to policy & practice:** creating a new kind of knowledge infrastructure. Citizens, academic researchers, policymakers, voluntary and community sector partners – all with different roles to contribute



**Focus on collaboration:** citizen scientists collaborate with one another, members of their communities, academic representatives, community partners, and policy makers



## Training

Rigorous, high-quality education and training programmes are ‘applied’, meaning they are linked to active research projects, and are delivered in non-academic, community-based settings. Citizen scientists join a training programme in research methods which involves:

- Practice-based workshops
- Qualitative data collection including in-depth interviews, focus groups, walking ethnography and photo-elicitation interviews
- Analysis and presentation of the research
- Writing up and producing interview-based stories

The Academy training programme are designed to make sure that people from all backgrounds and abilities can access and achieve the Certificate. The practical tasks and exercises reflect this commitment to inclusive teaching practices.

## Employment

Citizen scientists on Academy training programmes are employed and paid while they are learning and carrying out research.

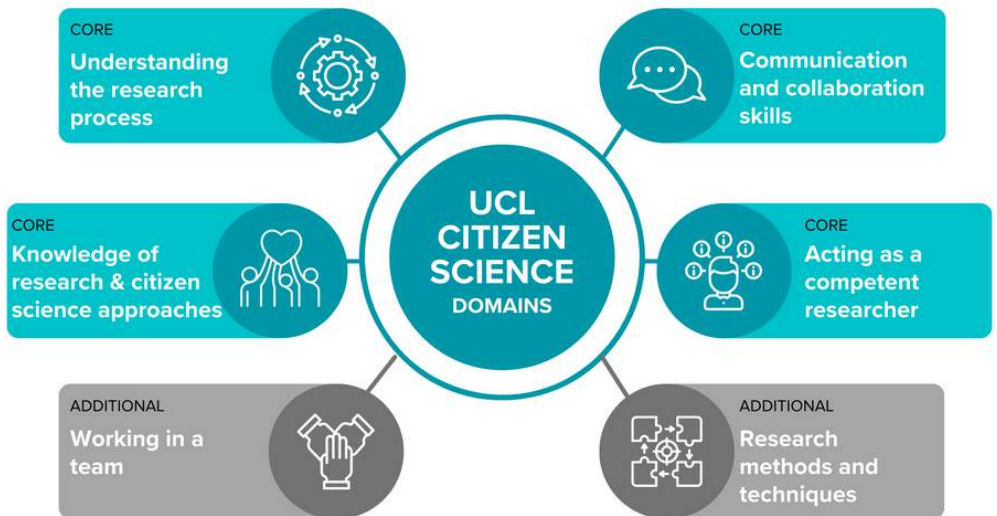
No prior experience of research, work, or study required.



# UCL Citizen Science Certificate

The UCL Citizen Science Certificate is awarded to citizen scientists who complete a training programme as part of UCL's Citizen Science Academy. The Certificate recognises the research and team-working competencies citizen scientists acquire, such as research methods, ethics, fieldwork strategies, and how to code and analyze data.

Academy courses include training in core competency domains that are relevant to all citizen science research projects, as well as course-specific competency domains that can be adapted to the specific method each research project requires.



# Who we work with

Our partners play an important role in shaping the design and the delivery of every Academy programme. They help us create a new kind of knowledge infrastructure. Citizens, academic researchers, policymakers, voluntary and community sector partners – all contribute in different ways.



We work with local authorities, government departments, voluntary sector organizations, NGOs, public sector agencies, business and industry partners.

Our voluntary sector partners recruit, employ and support citizen scientists.

Our project partners, communities, and citizen scientists identify research problems and questions to work on.



## Get involved

If you'd like to know more about the UCL Citizen Science Academy and our work or you're interested in collaborating with us and becoming a partner, please get in touch with our team at [procol.uk@ucl.ac.uk](mailto:procol.uk@ucl.ac.uk).



# Case studies



# Case study 1

## ***Prosperity in east London 2021-2031*** **Investigating Obstacles to Prosperity**

*Prosperity in east London 2021-2031* is a 10-year mixed-methods study tracing the effects of large-scale and long-term urban regeneration on local communities in east London. It is the first longitudinal study in the UK to track household prosperity - using IGP's citizen-led Prosperity Index and is based on qualitative research about the determinants of prosperity for individuals and communities. The study equips local residents with the tools to examine prosperity in their communities, producing citizen-centred insights on people's lived experiences of regeneration.

Managed by the IGP Prosperity Co-laboratory UK (PROCOL UK) in partnership with the UCL Centre for Longitudinal Studies, the study was co-designed with members of the London Prosperity Board – a cross-sector partnership between the IGP, UCL East, London government, public agencies, businesses, the third sector, and local communities in east London, to change the way decision-makers think and act for prosperity.

### **Partners**

London Prosperity Board, Compost London, Leaders in the Community, Hackney Quest, and UCL Centre for Longitudinal Studies

### **Research Questions**

The study aims to fill the gap in research regarding the unequal impacts of regeneration on prosperity, life chances, and quality of life amongst local communities in the long-term. The research looks at how regeneration affects the prosperity of people from different backgrounds and neighbourhoods, asking:

- Who benefits and how?
- What are the obstacles to prosperity for different groups?

# Where

The study examines the experiences of households in 15 areas in five boroughs of east London that are part of, or neighbour, large-scale and long-term strategic regeneration initiatives: Newham, Tower Hamlets, Hackney, Waltham Forest, and Barking & Dagenham.

The 15 areas in the study have been selected because they include 'established' low-income communities - places where households experience multiple forms of deprivation and inequality, as well as 'new' mixed-income communities - places where new housing development and job opportunities are attracting new residents.

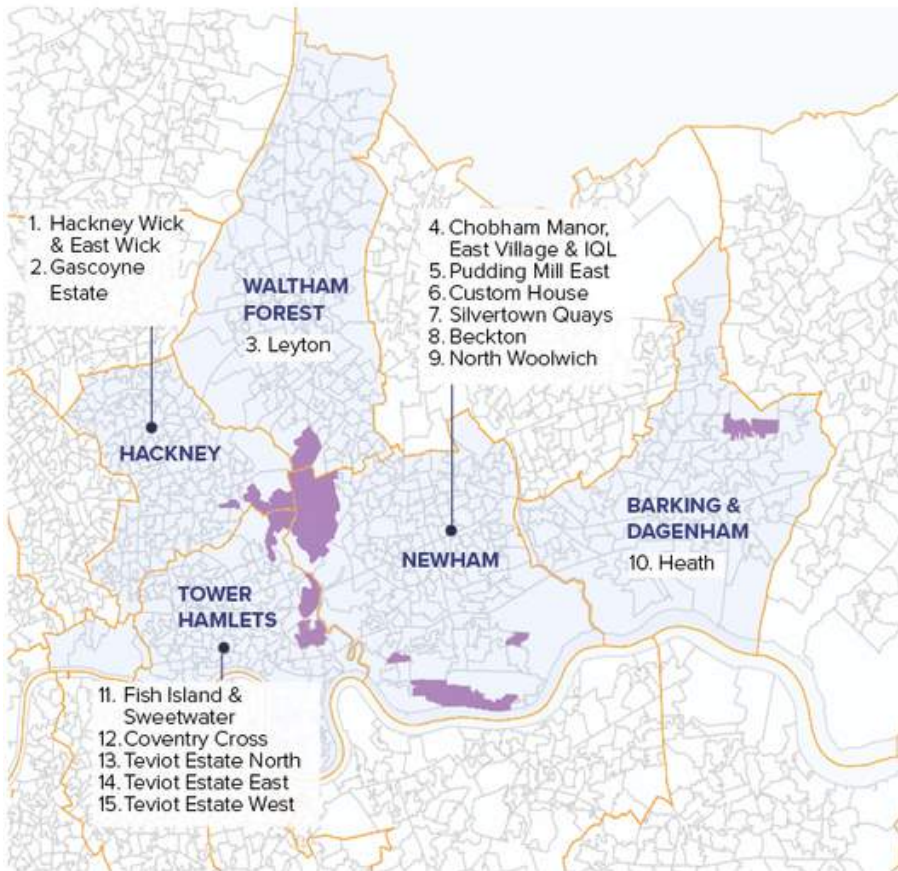


Figure 1 Map of *Prosperity in east London 2021-2031* research sites

# Training and Methods

The citizen social scientists participated in a 3-month structured employment and research training programme conducted by UCL's Citizen Science Academy.

The first wave of the qualitative research took place between September and October 2021. Ten residents from east London were employed and supported by community organisations Compost CIC, Hackney Quest, and Leaders in the Community. Citizen social scientists were employed and paid on a part-time basis.

The posts were publicly advertised, with no prior research experience required, and preference was given to individuals who had lived in the sites for over 5 years.

The citizen social scientists learned and carried out photo-elicitation interviews, observation and walking ethnography, analysis, research for impact and public speaking. They were taught the following methods and had opportunities to practice each of these:

- **Photography:** Photo-Elicitation Interviews (PEI)
- **Observation methods:** A x 4 – Actors, Artifacts, Activities, Atmosphere
- **Interview Skills:** Focus groups, individual interviews, active listening
- **Analysis methods:** Open coding, axial coding, selective coding
- **Complex systems:** Addressing wicked problems
- **Public speaking methods:** The art of storytelling



# Data

*Prosperity in east London 2021-2031* is a mixed methods study that combines data from the “Obstacles to Prosperity citizen-led qualitative research” and the “Citizen Prosperity Index household survey”. Data will be collected in three waves between 2021 and 2031.

Each wave will include a survey of over 4,000 households examining how people self-report their experiences and perceptions of prosperity, as well as in-depth interviews and group discussions focusing on understanding obstacles to prosperity for people from different backgrounds.

During the first wave the citizen social scientists carried out interviews, focus groups, walking ethnographies and generated video, audio, and visual outputs, which they analysed. In total, the citizen social scientists conducted close to 30 interviews and collected over 500 images, reaching out to approximately 40 community members through their research.

# Outputs

- **Zines:** short visual and textual publications (mini magazines) that weave together the qualitative research each citizen social scientist has conducted, highlighting key themes and messages on lived experiences of prosperity in their research
- **Walking tours:** citizen social scientists have led policymakers, developers, and local council partners on various tours of their research sites. *Example: Citizen Scientists-led walking tour of Gascoyne Estate, Hackney Wick & Fish Island*
- **Presentations:** to policymakers, academics, and community organisations. Example: *Terry and Twinkle’s presentation at the Olympic Legacy Conference 2022*

In 2023/24, the stories will be analysed to develop new thinking about pathways to prosperity for local communities.



## Case study 2

# *PROCOL Lebanon: Prosperity in the Age of Mass Displacement*

PROCOL Lebanon is an innovative research collaboration that works to speed up transitions to sustainable, prosperous societies in the context of mass displacement. It is about the prosperity of Lebanon in particular, but is also part of a larger agenda for developing sustainable ways to improve the quality of life of people throughout the world.

PROCOL Lebanon brings Lebanese and UK institutions and expertise together using cutting-edge research and innovation. Its research focuses on the themes of prosperity, the vital city, green futures, future education, and creating value. So far, PROCOL Lebanon has developed Prosperity indices for Hamra (Beirut) and Mina (Tripoli), a Vulnerability Index for Mar Mikhael (Beirut), and Quality of Livelihoods datasets for Ras Beirut and Mina.

PROCOL Lebanon's data on prosperity, vulnerability and livelihoods is used to catalyse positive social change through citizen-led interventions in the community, policy change, capacity building and education.

## Partners

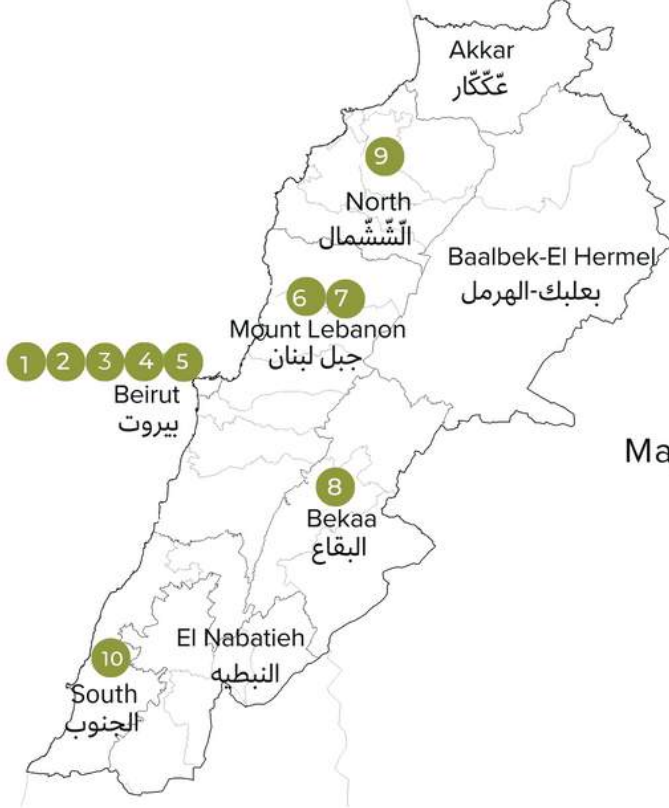
Partner organizations include educational institutions, NGOs, municipal bodies, academic and activist initiatives, artistic collectives, and individual initiatives.

## Where

Hamra and Ras Beirut are the most diverse sites in terms of social and economic diversity. They also host our main partners, the American University of Beirut and Centre for Lebanese Studies.

In Bourj Al Barajneh (refugee camp), Ouzai and Bar Elias, the research looked specifically at refugees' socio and spatial practices.

Karantina and Mar Mikhael were chosen as a result of the Beirut blast and our need to contribute to the response in the reconstruction and rehabilitation phase.



## Map of local collaborations

خريطة التعاونات المحلية

### 1 Hamra (2018-)

- AUB Neighborhood Initiative
- UN-Habitat Lebanon
- AUB Issam Fares Institute
- Jouwan Community Centre
- Goods of Our City
- Wirach
- Lebanese American University
- Lebanese University
- Search for Common Ground
- United Nations Relief and Works Agency (UNWRA)
- Ministry of Education and Higher Education (MEHE)
- Committee on the Elimination of Racial Discrimination (CERD)
- Multi-Aid Programs (MAPs)
- Jusoor
- Secutech

### 2 Ras Beirut (2021-)

AUB Neighborhood Initiative

### 3 Karantina (2021-)

- CatalyticAction
- Zayraqoun collective
- AUB Neighborhood Initiative
- Municipality of Beirut
- Beirut Urban Lab

### 4 Mar Mikhael (2021-)

- CatalyticAction
- Lebanese Spotlight
- Awla
- Mayyel
- Municipality of Beirut

### 5 Tarik Jdideh

Public Works

### 6 Ouzai

Beirut Urban Lab

### 7 Burj Barajneh (2017-2019)

- Samar Maqusi & Nick Tyler (UCL PEARL)
- Campji

### 8 Bar Elias (2018-)

- CatalyticAction
- Salam Ya Sham
- Multi-Aid Programs (MAPs)
- Lebanese Union for People with Physical Disabilities
- Municipality of Bar Elias
- Jusoor
- Al Amal School
- Sawa

### 9 El Mina (2020-)

- CatalyticAction
- Municipality of El-Mina

### 10 Saida (2017-2019)

Beirut Urban Lab

# Research Questions

Aside from the Syrian war that displaced 1.5 million refugees into Lebanon (a third of the size of its own population), the country has experienced long-term sectarian conflicts and regional instability.

- How can we understand prosperity in a context of crisis and conflict?
- What does prosperity look like when infrastructure and public services are under extreme pressures?
- How can we measure prosperity when livelihood insecurity and informal employment are significant features of everyday life?
- How can we design local initiatives that can drive social change at other scales?



# Training and Methods

The citizen social scientists were recruited in consultation with local partners. They were selected based on their knowledge of and interest in conducting research in their community.

Socio-economic and educational diversity was a key factor in the overall group recruitment configuration. They learned and carried out quantitative data collection (building survey, infrastructure survey, open spaces survey, household survey, Discrete Choice Experiments), interviews, focus group discussion, ethnographies, and proposal writing.

The research methods were taught in half-day or full-day training sessions. Training sessions included seminars led by the PROCOL Lebanon team and local partners based in Lebanon, as well as supervised practical trials among citizen social scientists and on field.





## Data

The citizen social scientists conducted semi structured interviews with local stakeholders, carried out focus groups and collected household data on various themes relating to prosperity, and collected quantitative data about buildings, infrastructure, and open space.

The data was analysed by the PROCOL Lebanon and Citizen Scientists who had interests in GIS mapping and report writing.

## Outputs

- **Reports:**
  - Hamra Neighbourhood profile
  - Mina prosperity report
  - Assessing vulnerabilities for urban recovery solutions in post-explosion Beirut report
- **Working papers:**
  - Lives and livelihoods in turbulent times working paper series
  - Ethnographies in Hamra and Ras Beirut
- **Citizen social scientists' artworks for conferences and refugee week**
- **Urban Interventions:**
  - Bar Elias participatory spatial intervention
  - Karantina participatory spatial interventions
- **Social Interventions:**
  - Goods of Our City Urban Garden
  - Jouwan Community Center
  - Wirach Platform
  - Mayyel Community Initiative



## Case study 3

### *Maisha Bora [Good Life] Study*

The Maisha Bora Study is an innovative, community-led research project exploring what prosperity means to people living in three unplanned (often referred to as ‘informal’) settlements in Dar es Salaam, Tanzania – Mji Mpya, Bonde La Mpunga, and Keko Machungwa.

The goal of the research is to develop new ways of understanding and measuring prosperity in unplanned settlements that reflect peoples’ lived experiences and what supports and what prevents people from living prosperous lives. The findings will be shared with municipal and city policymakers to identify priorities for action with community leaders and residents and to change policymaking.

### Partners

The Centre for Community Initiatives (CCI) is an NGO formed by Tanzanians with a desire to provide technical and financial assistance to communities living in unplanned settlements and the Tanzania Urban Poor Federation (TUPF). CCI strives to create inclusive cities with united and empowered communities of the urban poor who have the capacity to voice, promote, and negotiate for their collective interests.

Centre for Community Initiatives (CCI), Dar es Salaam, Tanzania

KNOW (Knowledge in Action for Urban Equality) Project

### Research Questions

The Maisha Bora Study is asking residents in unplanned settlements what it means to live a ‘good life’ and what supports and what prevents people from living well.

## Where

Dar es Salaam as the main commercial and cosmopolitan hub of Tanzania is one Africa's fastest growing urban centres. Around 70% of the population lives in informal or unplanned settlements, and the rate of growth of unplanned settlements is two times the average urban growth rate.

This project focuses on three unplanned settlements in different parts of Dar es Salaam – Mji Mpya, Bonde La Mpunga, and Keko Machungwa.



## Training and Methods

Training took place in three week-long sessions in Dar es Salaam in July and November 2019, and in early 2021. Training sessions combined collaborative workshops and applied fieldwork pilots and practice.

The first training session focused on research ethics and qualitative research methods for exploring lived experiences of prosperity, including running 2 focus groups to test the approach.

The second training session focused on coding and analysing qualitative data, identifying priority themes from the research, and co-producing the 'maisha bora' model.

The third training session focused on conducting the household survey, including exercises on survey sampling, GIS mapping, and using KOBO to collect and process household surveys.



## Data

The first part of the research involved 24 focus groups with residents in the three settlements, and interviews with local stakeholders. The citizen science team analysed the findings and developed a 'maisha bora model' to visualise community priorities. The research findings and model were presented to community members in a series of feedback workshops before being translated into new indicators to measure prosperity for settlement residents.

The second part of the research involved surveying over 1,000 households in the three settlements. The initial results of the household survey were presented at events with academic and policy researchers, and community members, NGOs, and ward and municipal officials in Dar es Salaam in April 2022. IGP and CCI statistical analysts are currently working on the Maisha Bora Index – Africa's first citizen-led prosperity measures – which will be launched later in 2023.

## Outputs

The team have developed a range of outputs including:

- **The 'maisha bora model'** representing what supports a good life for residents in unplanned settlements
- **A household survey** that can be replicated in other unplanned settlements in Tanzania
- **Training materials**
- **Research findings** that have been published in the academic journal Urban Planning, and translated into Swahili and published in a working paper.



## Case study 4

### *Mapping agrifood value chains in Mau-Cherangani complex*

Agriculture in Kenya is dominated by smallholder farmers who produce much marketed agricultural produce. Farmers sell their produce to consumers directly or to processors via middlemen (ie. traders, transporters, aggregators).

The goal of the research is to map existing agrifood value chains across Mau-Cherangani complex to identify opportunities for improved livelihoods for smallholder farmers. Integrating farmers into value chains will improve their access to markets, improve livelihoods, and access to nutritious food.

### Partners

The British Institute of Eastern Africa (BIEA), University of Eldoret (UoE), University of Nairobi, and the Counties of Narok, Bomet, Kericho, Nandi, Elgeyo Marakwet, Uasin Gishu.

### Research Questions

In line with the overarching objective of this study to map agrifood value chains in Mau-Cherangani complex, we asked:

- How are smallholder farmers connected to value chains?
- What are the livelihood challenges for smallholder farmers, especially women, and how can they be overcome?

## Where

The research was conducted in seven counties across the Kenya highlands and rift valley: Narok, Bomet, Kericho, Nandi, Elgeyo Marakwet, Uasin Gishu.

The counties have been selected as they are representative examples of various production systems (i.e., honey, tea, maize, poultry, dairy, coffee, beef, potatoes, sheep, and avocado) and long-standing, well-established ties of the citizen social scientists in their local farming communities.

## Training and Methods

Citizen social scientists were tasked with identifying opportunities for farmers participating in these value chains and challenges to value chain development.

The study took a mixed methods approach to data collection that combined value chain mapping and social network mapping and also employed a participatory method that involved various value chain actors.

## Data

Citizen social scientists collected quantitative data through a household survey. They also collected qualitative data through participatory value chain mapping, photographs of regenerative agriculture practices, diets and value chain activities.

The data will be analysed through qualitative thematic analysis of transcribed data. The photovoice data will be analysed through thematic classification of photographs and combined with the results of the thematic analysis of transcribed data. The survey data will be analysed for descriptive statistics and trends to understand factors that drive smallholder farming and participation in value chains.



# Outputs

The team have developed a range of outputs including:

- **Reports:** Summary of value chains (dairy, maize, poultry, coffee, tea, sheep, beef, potato, honey and avocado) that also show social networks between value chain actors
- **Publications:** The results will be prepared and submitted to scientific journals. In addition, a number of blog posts will be prepared from the collected and analysed data
- **Poster:** The results of the nutrition photovoice data will be presented as a poster at the Agriculture, Nutrition & Health Academy week ANH, in Lilongwe Malawi
- **Working paper:** Drivers of agricultural production and participation in agri-food value chains



# About us

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The Institute for Global Prosperity (IGP) is redesigning prosperity for the 21st century. Our vision is to build a prosperous, sustainable, global future, underpinned by the principles of fairness and justice, and allied to a realistic, long-term vision of humanity's place in the world.

The IGP believes that citizens and communities should be at the centre of efforts to reimagine prosperity. IGP's research is about working with residents and community groups to understand what prosperity means to local people and to bring their priorities into policymaking. We believe that involving the experiences, knowledge, and expertise of local people is the key for change.

The IGP has established three Prosperity Co-Labs (PROCOLs) in the UK, Lebanon and Africa, with each one conducting several major research projects. UCL's Citizen Science Academy is run by PROCOLs in all three locations.

## Contact

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