





"Permaculture has helped people connect back to their own land, knowledge and skills and helped bring communities together again through growing and learning."s

"We work together to produce something of value to the community."



RWANDA

### CONTENTS

Introduction	4
Methodological Approach	5
Seminars:	
Brazil	6
Nepal	8
Kenya	10
Scotland -	12
Uganda	14
Rwandā & Mexico	16
Conclusion	18
Themes & Observations	20
Partners	22
Acknowledgements	23

### INTRODUCTION

This programme focused on the role of local community activism in addressing climate change and related challenges faced by urban centres.

Following Purcell and Tyman's (2014) assertion that growing food can be a 'radical intervention' in city life, we explored the creation and development of community food growing including community gardens and the potential for these initiatives to create synergies for wider environmental change beyond local communities by influencing, stimulating and supporting behavioural and attitudinal change.

The principles underpinning community gardens (e.g. collaboration, cohesion, shared activity/goals) can be strong drivers to influence behavioural and attitudinal change in the urban environment (Lefebvre, 1990). The programme also explored how community food growing and community gardens can create positive impacts on health as well as space for diverse voices to come together in collective action to enhance rights, choices and decisions across the urban environments and reclaim residents' right to the city (Harvey, 2003).

The programme involved the collaboration of community activists, and academic partners from Scotland, Brazil, Nepal, Mexico, Kenya, Uganda and Rwanda through a series of participatory and creative online workshops. The workshops brought people together who are interested in community food growing and who have created and are involved in community gardens to learn from each other.

Consequently, the programme was able to document and compare the challenges and structural barriers faced by practitioners and community activists when trying to discuss the impact of global issues at a local level, and investigate what opportunities are available to create local environmental sustainability in a range of contexts.

Areas of investigation included:

- the nature of 'community' in community gardens
- community gardens' potential for building capacity and increasing communitarian bonds
- activists' role in working towards hegemonic change in relation to changing the behaviours and attitudes at a local level to achieve the sustainable development goals

This programme focused on the Scottish Universities Insight Institute's (SUII) goal of accelerating progress towards the UN Sustainable Development Goals through changing behaviours and attitudes with an emphasis on SDG 13 (Climate Action) but there are also strong links to other SDG's including poverty (SDG1), zero hunger (SDG2), good health and well-being (SDG3), and sustainable cities and communities (SDG11).

The programme also provided an opportunity

active in connecting with local communities,

to explore how universities can be more

and make bridges with diverse disciplinary fields, to increase capacity locally and internationally.

### METHODOLOGICAL APPROACH

Workshops were organised in each of the partner countries that then fed into the production of a short video and presentation. These outputs comprised the components of a monthly international seminar series over 7 months.

Key questions addressed during local workshops focussed on:

1. What defines "community garden" in the country context?

2. What are the wider social issues connected to the experiences of "community gardens" in each country?
3. What can be learned from these

experiences in relation to:

a) Food security

b) Community mobilisation

c) Educational practices

d) Environmental awareness and change

e) Just transitions to carbon zero and promotion of new energy systems

Influencing and changing behaviour

g) The impact of Covid-19 pandemic

Each nominated local partner was asked to organise local workshops, to work with the project team on the co-design of project activities, the seminar series, reports and other outputs.

The project approach followed three stages involving the gathering, sharing and exchanging of evidence and learned lessons from diverse international experiences that engaged community activism and environmental challenges.

Project partners were asked to discuss key areas of interest in line with the project themes and identify strategic topics for presentation and discussion during the international seminar series.

Each partner produced a 5 min video and 25 minute presentation available on the SUII website here: https://bit.ly/3KLDh5b

The key insights from the programme related to the importance of:

Connecting people (including children) with nature

Connecting to broader issues including urban space and ownership;

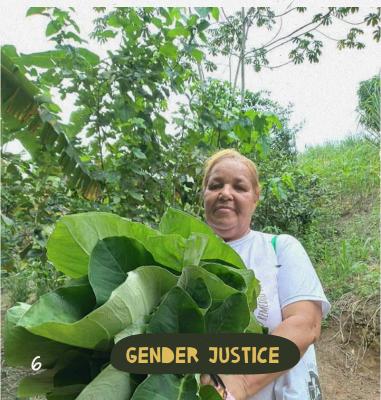
Mobilisation and the rights to the city, intersectionality, bringing people together and using community space as a moderator;

Looking outwards 'into' the community and the political areas of opportunity.









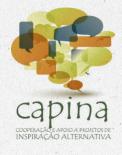
# SEMINAR 1 BRAZIL

In Brazil, the concept of "community gardens" does not fully capture the reality of the diverse and historical experiences of urban agriculture. Urban agriculture varies according to the territories, the people and their struggles. The examples of urban quilombos and resistance throughout our history to the present day, shows how agriculture can be a form of cultural struggle and insurgent citizenship.

The social function of community gardens is to fight for the right to land and to raise awareness of the importance of community gardens as a tool to fight against gender and domestic violence and those affected by drug trafficking. "Its more than planting, we are working with connections between the neighbourhood. The community space has the capability to expand beyond the backyard and help promote discussions where food and seedlings are the tools."

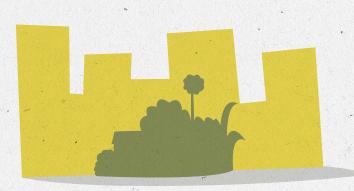
Every project involved in social and political movements change/engage and bring people together. The cohesion is built around historical struggles with many people from different social classes. But now people are coming together to grow food. Rights have been gained the hard way and we must maintain our basic social rights and complex networks and links across the City. We must keep traditions alive and seek ways of supporting farmers to cultivate in Rio de Janeiro.

CAPINA (Cooperation for Projects of Alternative Inspiration) and CEM (Serra da Misericordia Integration Center) presented a seminar together about their activities in Brazil. They shared their experiences highlighting different dimensions of urban agriculture and issues related to food sovereignty in metropolitan territories; activism, popular economies, struggle for social rights and for public policies, farmers Collectives and Community Kitchens, considering the political Brazilian context and focus on Rio de Janeiro Metropolitan Region's challenges.





# ACTIVISM, COMMUNITY GARDENS, FARMS COLLECTIVES AND COMMUNITY KITCHENS IN BRAZIL



Community gardens offer a focus point for people to meet, share and organise

Quilombos are communities founded by escaped slaves during Brazil's colonial past. There are 5 in Rio de Janiero.



Gardens can offer training, education and workshops



Gardens can offer support and alternatives in areas vulnerable to the drug trade







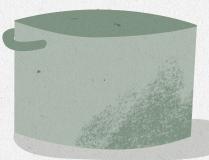
Fruit and veg stalls offer families and communities a source of income



Community gardens also host projects such as community mapping



Our urban agriculture is part of the fight for food sovereignty, social rights, and public policy in the face of structural racism, deforestation and legislative manipulation



Community kitchens fight domestic and gender violence









## SEMINAR 2 NEPAL

Nepal has been an agricultural country for most of its history and even now two thirds of the population is directly involved in agriculture. Although urbanisation is happening all around the country and some people have moved on to newer occupations for their livelihood, agriculture is still very much a part of people's lives. Knowledge is passed on from elders to younger people to enables them to practice agriculture even in the urban settings.

Women grow vegetables in their backyards using compost that they made from their kitchen waste. They use the produce to supplement their income or for their own consumption. Having a backyard vegetable garden is the expected norm in Nepal if they have the land. Free farm lands are hard to come by in urban areas however, so many people have resorted to rooftop farming ("Kaushi Kheti") instead where people grow different food crops in flower pots or old recycled buckets which is enough for their family.

Agriculture is also a community effort in many areas where a public or community land is used to cultivate crops which is then distributed among the people or sold to add to the community budget. Public lands such as those in schools are used for agriculture and the school children themselves are involved in cultivating flowers and vegetables. This effort is part of their regular schoolwork where they learn about nature as well as community collaboration. These community gardens teach young people as well as adults about cooperation for the common good and foster a communal bond. The potential for collaboration with local governments could ensure that community gardens have an even bigger impact.

Rooftops gardens are very popular in urban settings due to lack of growing space and this has helped people's physical, mental health and wellbeing. This has had a positive effect as neighbours inspire each other to grow their own rooftop garden. Training was provided about how to start rooftop gardening which also included making compost. PSD Nepal have also instigated community engagement activities to look at setting up community gardens on the back of the success for the rooftop gardening projects.

(Partnership for Sustainable Development, Kathmandu, Nepal).

### COMMUNITY GARDENS WORKING WITH SCHOOLS AND COMMUNITIES IN NEPAL

Talk on Wednesday 29th September 2021 by Bishnu Hari Bhatta from PSD Nepal



Bishnu Bhatta is one of the founders of PSD Nepal, a Nepali NGO dedicated to helping vulnerable people and communities in Nepal

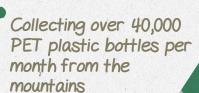


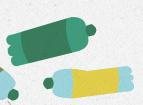
By instilling in young children the importance of environmental

stewardship we will plant the seeds for new generations to create a brighter future for themselves In the Friendship Garden the children plant and harvest food

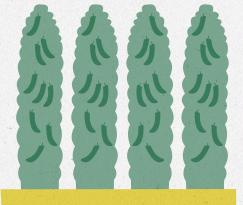


Planting trees and local plants and vegetables at schools





Plastic pavilion environmental education site in Lang Tang National Park



My neighbours also started planting after seeing my rooftop garden









## SEMINAR 3 KENYA

This is the story of PermoAfrica Permaculture training centre, which has seeded community growing initiatives across 40+ local villages.

PermoAfrica has become a demonstration and training hub for the Homa bay county region in Kenya. The on-going outreach program is providing many insights into how we can roll out permaculture across wider communities.

Permaculture has helped people connect back to their own land, knowledge and skills and helped bring communities together again through growing and learning. Permaculture is very good at drawing on local knowledge it reminds people of the skills that grandparents would have used, it invites a contribution of local knowledge and draws on what is unique to that local community. It also helps us focus on finding natural local leaders and empower them with the tools to then engage a wider audience, that is the formula.

PermoAfrica Training has help eradicate food poverty for over 1 million people! Paul had the drive and determination to see his germ of an idea set seed into fruition. In 2018 through crowd funding he was able to build a classroom and work with Elders to release land for this. The design for the space always took into consideration the local environment resources. For example, as it is a semi-arid area it is essential to think about water catchment and storage in the design elements. A food forest was also created, and the area now is an oasis of green and healthy produce. Paul has also managed to create wider networks and partnerships across the region.

The have run activities for learning on soil health and worm farming, fish farming, seed saving and created a seed bank. Here they also demonstrate approaches such as keyhole gardening and using what materials are available locally. PermoAfrica is now a hub connected to 40/50 surrounding villages it demonstrates the importance of learning how we can live globally and be relevant to your own local community

(PermoAfrica Training, Homa Bay, Kenya).





### PERMACULTURE TRAINING AND OUTREACH FOR LOCAL FOOD SECURITY IN KENYA

Talk on Wednesday 27<sup>th</sup> October 2021 by Steven Jones from Sector 39 and Paul Agola from PermoAfrica

The project started in 2011 - 14 with exchange trips between Wales and Uganda, then Kenya and Rwanda

PERMACULTURE PROCESS

We are in a world of many challenges

1

DEMONSTRATE that it works

EDUCATE by answering peoples questions



our biggest limits are seeds, tools & water



Sack gardens a quick, cheap and easy way to grow at home



give people the tools to REPLICATE it in their own way

It's about spotting those opportunities. No waste. That means people and time and other kinds of resources that perhaps we don't always think about.

Permaculture is a no waste system

Focused on using readily available and waste materials

PermoAfrica is a permaculture training centre in Homa Bay, Kenya



A keyhole bed is a uniquely shaped raised bed with a compost basket in the middle

After taking a course with Sector 39 Paul Agola founded PermoAfrica

PermoAfrica's mission is to end food poverty in Homa Bay (1 million people)









# SEMINAR 4 SCOTLAND

For this seminar, the presentation and short film came from a small number of community gardens based in Dundee and Fife in Scotland. People Learning about Nature in Tayport (PLANT), Strathkinness Community Garden in Fife, the MAXwell Centre, Kilchattan Bay Orchard and Community Garden, Gracemount Community Garden, Ninewells Community Garden, and Campy Growers in Dundee.

The presentation focused on how these community gardens create space for people to come together to grow food and learn more about their local natural environment. Each of the seven gardens discussed their work including how they aimed to increase people's health and well-being as well as raising awareness about the environment and the climate crisis. They encourage, support, and enable people to learn more about climate change and to change behaviour and attitudes by creating local opportunities to make a difference. The projects also discussed their community education work including their work with young people, food security and societal change, community orchards, community & zero carbon and soil health.

"It is important to empower people to eat better while making the whole city more resilient to climate pressures and also help to reverse biodiversity loss."

### Campy Growers, Dundee, Scotland

"I love the fact that it's become such a focal point in the community, that brings together a diverse range of volunteers who come together, socially, but also to work together to produce something of value to the community."

PLANT, Fife, Scotland







### SPACE FOR CONNECTION, LEARNING, GROWING AND WELL-BEING IN SCOTLAND

Talk on Wednesday 25th December 2021 by Alison Goodfellow, Alison Goodfellow, Kate Treharne, Colleen Allwood, Robert Bilson, Jan Davidson and Hugo Whitaker



We pasteurise apple juice and sell it, bringing affordable local juice to the community and raising money for gardens

Pollinator plants such as geraniums in orchards increases fruit yield

compost/ manure/ mulch

newspaper/cardboard

grass & weeds

existing soil

No dig gardening uses homemade compost and excluding light to control weeds allowing soil micro organisms, fungi and worms to flourish



social space where people can meet



A safe nurturing environments for children who need it most

Volunteers help walk children to the garden which can be a barrier for school classes



elder care, disabilities and

'outdoor classrooms' for local schools during the Covid-19 lockdown



Gardening offers people important exercise, improving mental and physical health

Cookery classes cook with fresh, local veggies









## SEMINAR 5 UGANDA

Partners for this seminar: Eastern Uganda Permaculture Organization Permaculture Association S39 Academy of Permaculture

Demonstrate – Education – Replicate, our mantra for success.

Ideas grew, for example, we use permaculture to design effective systems and developed a low energy stove. The stove uses less fuel, which is less impact on forests and less smoke which means better health in the community. Building the stoves requires quite a bit manual labour that brings the community together with amazing results that transform communities. Deborah went on to influence installation of 400 stoves in her community, every household now has a low energy stove!

Community gardens help create synergies, system thinking and better efficiency. Permaculture is design that meet the needs of communities as opposed to trying to make money.

It's a reawakening of things that people have been doing for centuries and we can help show communities how to do it themselves using resources that are common in the natural environment of their community.

The low energy stove sits within a mindset of permaculture design, to give the community information to bring about change themselves, by people from the community.

(Sector 39, Teso, Kumi, Eastern Uganda).

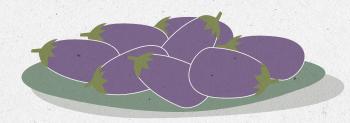






## TESO: A PERSPECTIVE ON COMMUNITY GARDENS FROM EASTERN UGANDA

Talk on Wednesday 26th January 2022 by Steven Jones from Sector 39 and Gerald Jagwe from the Eastern Ugandan Permaculture Organisation



Co-operatives sell surplus produce to get money for the community for education etc.

Steven Jones is the founder of Sector 39, a permaculture training centre that works locally and

internationally



Traditionally people in Uganda used to bring food together to share and eat as a community



We started through the Wales For Africa program teaching people permaculture design

> Clusters of students have been most successful in leading community change

We often work with people already engaged in other community work



Gerald Jagwe
studied with Sector
39 and went on to
co-found the
Permaculture
Research Institute
of Uganda

Learning to propagate trees rather than buy them



Uganda used to keep communal gardens and food stores in the past for food security



KUMI Happy Home is a collaboration between Wales, Uganda and Korea.

The LORENA STOVE uses 80% less wood than an open fire



Deborah has helped all 400 households in her community adopt this technology into their homes









# SEMINAR 6 RWANDA & MEXICO

Rwanda is the land of a 1000 hills. It is a small nation with a high population. There are issues of malnutrition within communities and a will to create a new positive legacy from the one of genocide. No food no life.

Rwandan Women's Permaculture have come together around building and maintaining a school garden in the their district in Southern Rwanda. The women have learned a lot about working with schools and in the process a strong mutual support group has formed. Rose Nibagwire, who established the group, is now preparing to link in with partners across East Africa through the S39 Academy of Permaculture to share learning and best practice and to build more educational teams for women and their families.

(Academy of Permaculture Community Gardens Rwanda).



Rwandan Women's

Tampico's community gardens are working to shift attitudes by allowing people without access to private gardens the opportunity to learn gardening skills and grow vegetables, trees and ornamental plants. Participants learn about the effort required for food production and the effects of climate change. They plant and conserve trees, which are increasingly rare outside private gardens in Tampico. They also become more interested in native species and caring for biodiversity in the natural areas of the city. Once participants have these experiences, they contribute to further raising awareness about these issues in the city.

Our environmental education programme Tampico al Futuro 2030 works with schools focusing on community growing, actions to mitigate climate change and the importance of biodiversity in the fight against climate change. We developed a series of workshops around growing food from pumpkins, melons, chillies, corn etc with a first generation of students. It's difficult to access pockets of land. The metropolitan area has grown so much there is little space for growing, it's very limited. So, it's important to work with people to demonstrate how quickly and easy it is grow food using quick crops such as radishes. It is important to involve parents too through growing things at home in pots' (Tampico City, Mexico).

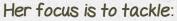




### WOMEN'S PERMACULTURE IN RWANDA

Talk on Wednesday 23rd February 2022 by Steven Jones from Sector 39 and Rose Nibagwire from Rwandan Women's Permaculture

After studying at uni and with Sector 39 Rose Nibagwire started her own local program



- kids poor nutrition
- soil corrosion
- water catchment





Kids were mainly eating maize and beans which are high in carbs but low in vitamins

Growing food offers a variety of nutritious fruit and vegetables







Permaculture in the UK by developing partnerships with local farmers to introduce permaculture on unused bits of land

### GARDENS AS CONSERVATION IN Talk by Victor Cobos from Gobierno Municipal TAMPICO, MEXICO

Gardens in urban areas let people see and understand how food is grown



We start with radishes because they are fast and give people an early sense of achievement to keep going



The project involves 54 schools so far

Tampico al Futuro 2030 works with schools focusing on community growing, actions to mitigate climate change and the importance of biodiversity in the fight against climate change.



We give box garden kits for people to grow food at home



The programme brought together a range of academics, community workers and activists involved in community gardens and community food growing projects from across the globe.

We exchanged research knowledge, as well as examples of good practice which have had a positive impact in local communities and focused on the connection of community gardens and community food growing with wider issues of climate change, urban space and the rights to the city.

Projects involved in the programme had reclaimed land within their communities as collective means of production, questioned land distribution/policy, raised awareness of the distribution of resources, increased food security and fought for the recognition of the importance of communally accessible greenspace dedicated to gardening and food production.

The projects focused on behaviour and attitudinal changes, personal development and promoted a human rights perspective, with a focus on 'shared community' in community gardens, community gardens' links to building individual and communal capacity and the importance of bringing diverse elements of communities together including different generations to share knowledge and learn from each other.

The programme demonstrated what can be achieved by community activists and their role in encouraging and enabling others to change behaviours and attitudes at a local level to achieve the sustainable development goals. Community garden and food growing experiences were a trigger for dialogue to stimulate critical awareness and the political areas of opportunity that can influence behaviour change.

## THEMES AND OBSERVATIONS

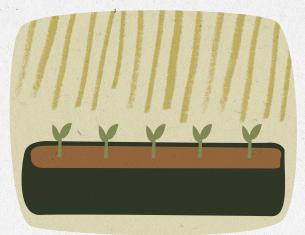
The main themes across the projects were:

Community gardens and community food growing as spaces of dialogue where sharing knowledge, expertise and experiences can bring people together to enable an intersectional approach on environmental issues.

The importance of drawing on local resources including generational skills and utilising and sharing knowledge that was already in the community but might have been forgotten.

The sharing and development of permaculture techniques suited to the local environment with a 'no waste' ethos.

Encouraging and enabling people to get involved in local events linked to community mobilisation and wider community action linked to land ownership, climate change and urbanisation.





The importance of working with children to (re)connect them to nature. Children were seen as the gateway to working with families and the wider community.



The role of women in local communities and the projects' role in empowering women in the community and enabling economic, political, and social autonomy.

Building community cohesion and well-being and the role of community gardens and food growing in combating social isolation, food insecurity and socioeconomic inequalities particularly during the Covid 19 pandemic.





## BENEFICIARIES & FINAL COMMENTS

The primary beneficiaries of the programme were the community activists, gardeners and families who are working with the secondary beneficiaries, the wider community, to address climate change and related challenges faced by urban centres. The programme was driven by their experiences and voices and enabled the sharing of wider practice knowledge, academic research, and international examples of good practice.

We brought diverse voices, some of them unfamiliar to Scottish community activists, practitioners and policy makers together and discussed cross-cutting issues that impact on (and being impacted by) environmental changes.

As a result of the programme, experiences in Scotland have become more inclusive of

diverse voices, giving local community gardens opportunities to connect local issues with wider urban/global issues in a more meaningful way. The programme has offered kinship with like-minded people working in a variety of international contexts.

We hope that we have also mobilised participants to think of community gardens beyond individualised/localised resources that are traditionally associated with outcomes such as 'mental wellbeing' and 'community cohesion'. Although these are relevant, the programme demonstrated that community gardens have an unlocked potential and national and international experiences provided meaningful insights that will help reshape the way community gardens operate and are considered by policy makers and social activists.

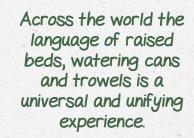
### COMMUNITY GARDENS BEYOND COMMUNITIES

6 SEMINARS 7 TALKS 8 COUNTRIES 17 PARTNER ORGANISATIONS



The effects of climate changes are bing felt across the world from Scotland to Nepal

Working with women was a were the driving force behind many of the projects.





Container gardening is popular across the world as way for people to grow at home in gardens, rooftops, compounds, doorsteps, windowsills and anywhere you can fit a pot.

> Communicating with children is a major part of the work of most of the community gardens



It's not just growing plants either, gardens are also focusing on seed collecting, storing and sharing, as well as cooking and eating together



Different gardens have different roles in their communities and even to

### PARTNER ORGANISATIONS



CAPINA (Cooperation for Projects of Alternative Inspiration) is a Brazilian organisation dedicated to helping workers and society. <a href="https://www.capina.org.br/">www.capina.org.br/</a>



PLANT (People Learning About Nature in Tayport) is a Scottish community group based in Fife. tayportgarden.org/



CEM (Centre for Integration Mercy Hill) is a Brazilian non-profit in Rio de Janeiro promoting agroecology and food sovereignty in urban terratories.

www.serra-cem.org/





The Maxwell Centre is a Scottish community-led green space in Dundee. maxdundee.org.uk/community-garden/



PSD Nepal – Partnership for Sustainable Development is a Nepali NGO helping vulnerable people in Nepal. www.psdnepal.org/



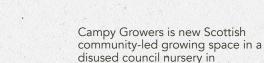
Ninewells Community Garden is a Scottish community garden in the grounds of Ninewells Hospital in Dundee.

ninewellsgarden.org.uk/



Sector 39 is a Welsh permaculture design academy working with schools, refugees, individuals and communities.

www.sector39.co.uk/



Dundee.



Permaculture Association is a British permaculture network dedicated to promoting permaculture.

www.permaculture.org.uk/



Tampico City, Gobierno Municipal is the local government of a regional Mexican city with interest in green spaces and gardens. tampico.gob.mx/



PermoAfrica is a Kenyan training group helping disadvantaged people in Homa Bay through teaching permaculture.

permoafricacentre.wordpress.com/



EUPO (Eastern Uganda Permaculture Organization) is a permaculture learning hub in the Teso region of Uganda. facebook.com/Eastern-Uganda-Permaculture-

Organization-108107550918559/



Rwandan Women's Permaculture is a Rwandan non-profit working with schools and communities to design permaculture for food security.

facebook.com/Rwandan-Womens-Permaculture-109234084742286

## **ACKNOWLEDGEMENTS**

Thank you to all of the partner organisations involved, the volunteers and the participants. The fantastic work of these gardens would not be possible without them.

Thank you to those who presented including, Juliana Torquato Luiz, Bishnu Hari Bhatta, Steven Jones, Stella Amuge Rose, Rose Nibagwire, Paul Odiwour Ogola, Alison Goodfellow, Kate Treharne, Colleen Allwood, Robert Bilson, Jan Davidson, Hugo Whitaker, Gerald Jagwe, Mary Chan, Andrea Salazar Martin del Campo (translation) and Victor Cobos.

And those who supported the seminars including:

#### **Lead Partners:**

Jenny Glen (lead) – Lecturer, Community Education, University of Dundee Dr Fernando L. Fernandes – Reader, Community Education, University of Dundee Dr Nina J. Morris – Senior Lecturer, Schools of Geosciences, University of Edinburgh

### **Programme Team:**

Steven Jones - Director and Lead tutor, Sector 39 Ltd, Permaculture Wales/ Africa Bishnu H. Bhatta - Director, PSD Nepal Cecila JF Elizondo – Research Associate, University of Manchester Juliana Torquato Luiz – Sociologist, CAPINA, Brazil Ana Santos – Community Activist, CEM, Brazil Angela Houghton – Note Taker Daisy MacGowan – Illustrator and Designer

Finally, thank you to the Scottish Universities Insights Institute for funding the project.

**To cite:** Glen, J., Morris, N.J., Fernandes, F.L. (2022). Community Gardens Beyond Communities. Final Report. Scottish Universities Insight Institute: Glasgow, UK.

Illustrations by Daisy MacGowan. Copyright © Daisy MacGowan 2022.







