

THE CONTRIBUTION OF ALLOTMENTS TO THE PLANETARY HEALTH AND SOCIAL CHANGE

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INTRODUCTION

Disasters and pandemics that have occurred in the last decade have led societies to seek collaborative, sustainable and adaptable solutions to respond to profound social changes. The results of the surveys conducted by different institutions show that especially with the COVID-19 pandemic, the feeling of loneliness felt by individuals in the society has increased, and that encouraged the local governments to carry out various studies to increase the interaction between individuals in the society and improve public health.

The COVID-19 pandemic has spurred new approaches to social change, including increased interest in allotment gardening as a means of accessing urban green spaces amid lockdowns. Allotment gardening has become a powerful tool for improving people's health and well-being, as well as strengthening social relationships. This study explores the role of allotments in improving planetary health and examines strategies to increase the accessibility of green spaces, and thus social relationships for social benefit in a sustainable context.

The Health of Society

In recent years, societies are getting lonelier, and this increases the peoples' sense of insecurity. According to the Age UK, more than 2 million people in England over the age of 75 live alone, and more than a million older people say they go over a month without speaking to a friend, neighbour, or family member.¹

Another survey conducted by the UK Mental Health Foundation (MHF) in 2010 reports that the number of participants who feel lonely "often" or "sometimes" is mostly seen among the age group 30s and 40s. In addition to this 48% of the participants believe that societies are becoming lonely.² However, the loneliness is not an issue only observed among elderly, but it is also growing problem among younger generations. Nearly 88% of Britons aged from 18 to 24 say that they experience loneliness to some degree with 24% suffering often and 7% saying they are lonely all the time.³ At the beginning of the pandemic, levels of loneliness were almost the same, with 5% of adults in the UK saying they often or always felt lonely, but by February 2021 this had risen to 7.2%.⁴

When we consider these reports, it is obvious that a change is necessary in social life, especially in the relationships between individuals in the society. Alison Tonkin and Julia Whitaker (2019)⁵, both have research background in health and children, state that the public priorities that based on common values such as family and relationships need to be considered for changes. They emphasize the importance of social connections and relationships on people's physical and mental health and underscore their impact

on the health of the societies.⁵ Planetary health, which emerged as a field in previous years and gradually growing since then, explores the relation between the degradation of Earth's natural systems because of human endeavours and addresses its ramifications for human health.⁶ As the authors mentioned, the health of the society relies on the relations between individuals and their interaction with the environment as well.⁵

Since the humanity has been facing with various disasters, pandemics, they also cause deep changes on the society and social life. Societies are looking for more collaborative, sustainable, and adaptable solutions to continue their existence. According to Marjoribanks (2016)⁷, to respond positively to societal change, and to foster the conditions necessary for people to adapt and thrive, local action should be taken by the central government.

Social Change

Since the social innovation is essential for addressing complex societal challenges and fostering sustainable development, it involves the creation and implementation of new ideas, processes, and practices that improve the well-being of individuals and communities. Ezio Manzini (2015)⁸ describes the task of social innovation as a design action that *“seeks to make these ways of being and doing things (that is, the existence of these collaborative organizations) both possible and likely”*.⁷ However, it needs to be noted that a sustainable social innovation requires cooperation not only from governments but also from all parties involved.

Social innovation often arises from collaborative efforts involving various stakeholders, including government agencies such as councils, businesses, non-profit organizations, and citizens. Social innovation initiatives can lead to transformative change and positive social impact by tapping into the collective creativity and resources of different actors.

The local design decisions during the COVID-19 period observed in different formats in the context of social change. Lock downs and accessing to open spaces forced people to look for solutions. One of the solutions was seen as accessing the allotments in UK. However, findings from a survey conducted by the National Society of Allotment and Leisure Gardeners (NSALG), the leading national representative organization for the allotment movement in the UK, revealed that 40% of responding councils observed a significant uplift in applications to join waiting lists during April.⁹

RESEARCH ON ALLOTMENTS

In the literature there are various terms that are linked with allotments. For instance, the Food and Agriculture Organization (FAO) of the United Nations defines urban agriculture gardens as *“any gardens/areas of agricultural land within the municipal boundaries”* and they categorize these gardens as community gardens, which involve *“any piece of land gardened by a group of people, utilizing either individual or shared plots on private or public land”*.¹⁰ In the UK, allotments are defined in Allotments Act, 1922 as *“allotment garden is an allotment not exceeding forty poles in extent which is wholly or mainly cultivated by the occupier for the production of vegetable or fruit crops for consumption by himself or his family”*.¹¹

Allotments and Their Brief History in the UK

Allotments have a rich history dating back to Anglo-Saxon times, but their modern form emerged in the 19th century. In the beginning, the allotment demand came from the middle classes who were looking for a space to grow their own and to relax. These became an obsession in 19th century and the ones who have an allotment were seen as wealthy. During World War II, allotment holding reached its highest point because of initiatives like the ‘Dig for Victory’ and ‘Grow More Food’ campaigns. However, in the 1950s and 1960s, allotments experienced a decline as people increasingly turned to

purchasing food from new supermarkets and convenience stores rather than cultivating their own. Beside those, the widespread adoption of television sets, and increased car ownership all played a role in this decline.¹⁶

One of the most important developments in the history of allotments came with the Thorpe report of the 1960s. The report recommended significant changes, including rebranding allotments as “*leisure gardens*” and expanding their scope beyond food production to encompass recreational gardening. However the legislative changes were slow to materialize, and the Allotments Acts of 1922 and 1925 remained the primary legislation governing allotments in England. Nevertheless, the report reflected a growing recognition of the need to adapt allotments to changing societal needs and preferences.¹²

Despite periods of decline, allotments continue to hold significance in both urban and rural settings, valued for their contribution to community wellbeing, green spaces, and sustainable food practices.

Studies on Allotments Around the World

In the UK, The National Allotment Society works with government at national and local levels, other organisations and landlords to provide, promote and preserve allotments for everyone.¹² However, renting an allotment for generations and the increase in interest in gardening during the COVID-19 pandemic affected the balance of supply and demand. According to the findings of a survey by the National Society of Allotment and Leisure Gardeners, with the COVID-19 period, UK local authorities have been observing an increase in applications for allotment gardens, leading to waiting lists to get an allotment.¹³

The studies on impact of pandemic on allotment gardening show that despite the challenges faced in many areas, COVID-19 has also created opportunities. By allowing people to spend more time in their allotments, especially during isolation periods, it has increased interaction among the community and encouraged food independence by alleviating the problem in food chains.¹⁴

Genter et al (2015)¹⁵ conducted systematic research by using the allotment, garden, health and wellbeing, and selected 10 papers to investigate if allotment gardening contributes to health and wellbeing. Their findings show that allotment gardening has impact on health and wellbeing and therefore recommended as occupational therapy for people since it acts as a stress reliever.¹⁵

The research, that is conducted by Edmondson et.al. (2020)¹⁶ on UK cities mostly focusing on Leicester, shows that based on the numbers of allotments, nationally *1.7 million people being fed on a 5-a-day diet by allotment gardeners*. This study proves that the use of urban land for allotments can contribute over 2% of the fruit and vegetable diets of urban inhabitants in a typical UK city.

A survey conducted in Berlin, among 466 gardeners and 80 non-gardeners, also shows that the allotment gardens not only have a positive impact on food production, but it also has an important role on biodiversity conservation and social environmental interaction.¹⁷

Another research conducted in Oslo in 2016, highlights the increase in interest in urban allotment gardens resulting in a waiting duration of 10 to 20 years. The research findings show one more time that having a plot in an allotment garden has health benefits both physical and psychological.¹⁸

In Singapore, various urban horticulture programs have been implemented since the 1990s to encourage individuals and organisations. Among these initiatives, the Allotment Gardening scheme was introduced in 2016 by aiming to provide gardening spaces to individuals interested in gardening independently. During the pandemic, studies indicated the positive effects of gardening activities on mental wellbeing and connection with nature. After the success of the scheme, the National Parks Board launched the Gardening with Edibles program in 2020. This initiative encouraged citizens to cultivate edible plants at home during the pandemic by providing seed packs to participants. Feedback from participants revealed that engaging in gardening activities not only enhanced their mental resilience but also provided a sense of relaxation.¹⁹

The research carried out on behalf of Newcastle City Council and the Allotment Working Group in 2010 also mentions the benefits of allotments in their report as; cheap source of fresh fruit and vegetables, good form of exercise and recreation, opportunity to spend time outside and to enjoy nature.²⁰ In the UK Parliament (2023)²¹ records, the allotments and their contribution to society's physical and mental health is also highlighted. In the records the result of a survey conducted by RHS in December 2022 is published. The result of the survey shows that gardening has a positive impact on mental health, physical health and social wellbeing".²¹

There are approximately 330,000 allotment plots across the UK, most of which are council owned. The Parliament report includes reports from various provinces, emphasizing that gardening is an activity that supports the physical and mental health of society and also contributes to the economy.²¹

RESEARCH METHODS AND FINDINGS ON ALLOTMENTS' BENEFITS ON HEALTH AND SOCIAL CHANGE

In this study, to gain an understanding of allotments benefits on health and wellbeing, surveys, interview and participatory research have been adapted as research methods. Interviews were conducted with allotment owners before the survey and considering the common statements of the participants and the understanding gained from previously published research, it was seen that the participants waited for a certain period of time to own an allotment and managed to become an owner in many ways.

These findings formed the basis of the survey designed to gain a deep understanding of the topic. The use of allotments during the COVID-19 pandemic, the activities carried out by the participants on their allotments, and the benefits of gardening according to the participants, were investigated through the survey. The survey was completed by 71 participants, comprising 50 females, 20 males, and 1 who preferred not to disclose their gender.

According to the results of the question asked about visiting gardens or doing gardening during the COVID-19 pandemic; 25% visited their own allotments, 45% engaged in gardening activities in their own gardens, and 8% visited allotments belonging to friends or parents.

Ownership of allotments was prevalent both before and after the pandemic, with a noticeable increase in applications during the pandemic. Prior to the pandemic, 24% of participants owned allotments, while 2% applied for one during the pandemic, 5% applied and owned during the pandemic, while 16% became allotment owners after the pandemic.

Participants were presented with statements regarding allotments and asked to select one or more options. The result is shown in Figure 1.

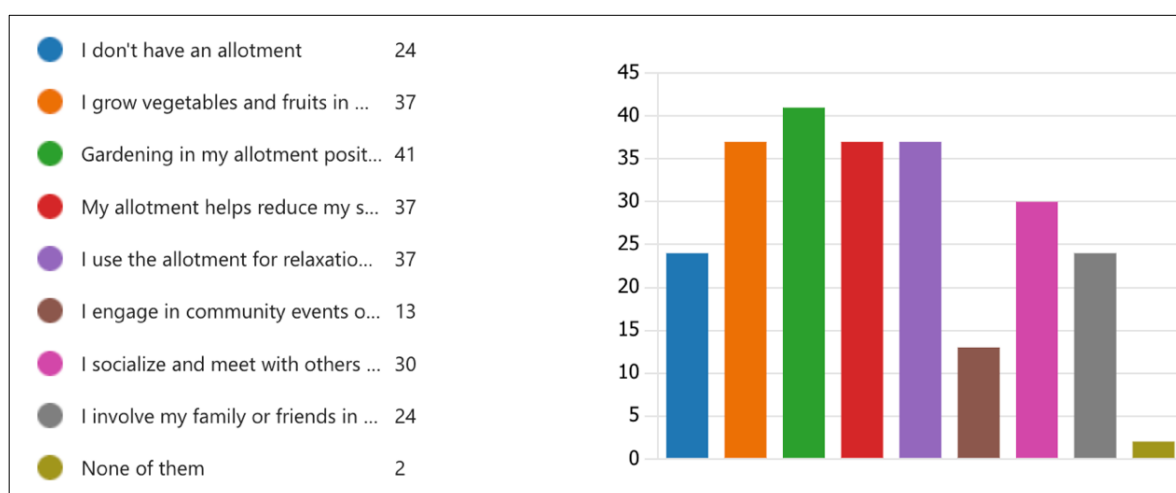


Figure 1. Survey question "If you have an allotment which statement or statements are true for you?" result.

According to the survey results, most of the participants believe that gardening in their allotments has a positive impact on their mental health and they find allotments useful for relaxing, having good time and socializing with other people. The activities the allotment owners carry out in their allotments are determined as illustrated in Figure 2.

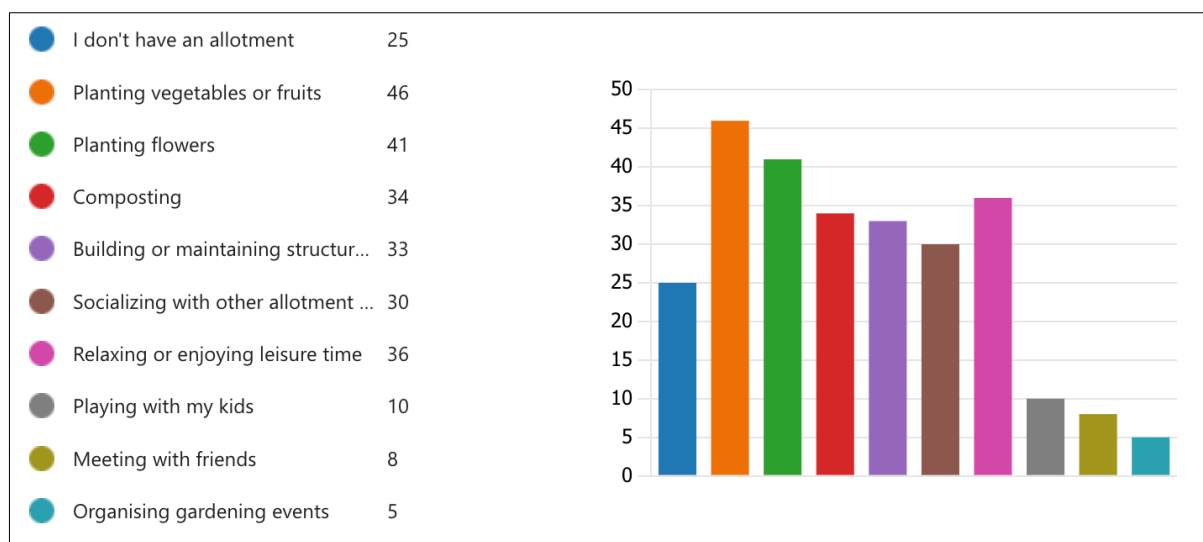


Figure 2. Survey question “If you have an allotment, what kind of activities do you carry out in your/your friend’s/your parent’s allotment?” result.

In addition to the survey, interviews are conducted with the allotment owners. Interview 1²² is conducted with an academic staff (46) who has a wife and son and wanted to own a green garden for his wife who needed a peaceful and quiet place to work during the summertime. They used to have a communal garden with neighbours, and they applied for an allotment to have their own garden. They were in a waiting list during the COVID-19 period and then had their own garden in August 2023. They have been raising some fruits, and lavender for bees in their allotment. They usually visit their allotment during the weekend and do some activities such as gardening, having a picnic and studying. They think the place itself and the activities are both good for their health and wellbeing. Interview 2²³ is conducted with another allotment owner. He also highlighted the waiting list but stated that they were called to have their own garden at short notice. They said the soil was not suitable for growing plants, so that they prepared planting beds and filled them with different soil to cultivate various vegetables and fruits. The responses from the interviewees predominantly drew from personal experiences, offering insights into various aspects such as the duration of wait times for obtaining an allotment, how individuals utilized the opportunity to participate in allotment gardening, and the motivations behind acquiring an allotment, among other factors. Apart from the interviews, participatory action research was conducted to observe the activities in the allotments, how these activities affect human health and encourage the interaction between individuals²⁴.

The participatory action research was conducted during an event which has been organised by an allotment owner. The organizer has been gardening his allotment with his family especially the weekends to have fun, eat healthy food and supporting his and his family’s health and wellbeing by spending time outdoors. He created Facebook and WhatsApp groups to provide an interaction garden to the community who interests in gardening.²⁴

In this 2-hour community gardening event, 9 participants/volunteers engaged in activities such as planting, weeding, and watering together. The event welcomed everyone from experienced gardener to

beginners. During the event the participants quickly came together, meet each other and shared some tasks that needed to be done in the allotment area.²⁴

The event was a very good example of how urban green spaces, allotments and community gardening events bring people together; encourages the collaboration; reduces the lack of communication among people which occurred mostly during the COVID-19. This showed that allotments serve not only to improve individuals' physical and mental well-being but also as a catalyst for building stronger, more cohesive societies.

In addition to the above-mentioned personal initiative-based, solution-focused individual and group initiatives have emerged in response to extensive waiting lists. One of them is the 'Roots' initiative, established by four friends in 2000. This initiative was designed as a response to the prolonged waiting list and aimed to help people grow their own food and plants during lockdown. On the other hand, as they mentioned on their 'story' if everyone can grow their plant; this small effort will have a big impact on planetary health.²⁵²⁶

CONCLUSION

Since the beginning of the 19th century, allotments have been playing a crucial role in promoting sustainable agriculture, biodiversity conservation, and community resilience. Although they started as a response to the need for food production among the labouring poor and turned to the symbol of status among middle classes, they always provided benefits to the society and be part of the social change. Although there were declines due to changes in social life in the post-war period, it became popular again during the COVID-19 period and remains popular.

Besides providing space for individuals and communities to grow their own food, contributing to the food security and reducing dependence on industrialized agriculture, the gardening activities in allotments promote physical activity, mental well-being, and social interaction, fostering stronger community ties and social cohesion. They can also serve as learning environment for individuals and support their skills, encourage knowledge sharing. Through gardening workshops, community events, and educational programs, allotments offer opportunities for individuals to learn about sustainable farming practices, biodiversity conservation, and environmental stewardship. This knowledge exchange not only empowers individuals to make informed choices about their food consumption but also fosters a deeper connection to nature and a sense of responsibility towards the environment.

In addition to their environmental and health benefits, allotments also have the potential to drive social change by promoting inclusivity, diversity, and community empowerment. Allotment gardening activities eliminate social and cultural boundaries, bring people together from diverse backgrounds and foster a sense of belonging and shared purpose. Moreover, allotments can serve as platforms for collective action by enabling communities to address broader issues such as food justice, urban regeneration, and sustainable development.

In conclusion, allotments represent more than just gardens for growing fruits and vegetables—they are dynamic hubs of social innovation, community engagement and interaction. By considering the potential of allotments to support planetary health and social change, we can create healthier, more resilient and equitable communities and more liveable cities for future generations. To achieve this, all stakeholders need to come together to find solutions to provide more space for people, organise community gardening activities and encourage sharing and socialising. This will create a healthier society that improves both physical and mental wellbeing.

NOTES

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- ²² Interview with allotment owner, Canterbury, March 20, 2024.
- ²³ Interview with allotment owner, Bromley. March 23, 2024.
- ²⁴ Community Gardening Session, Bromley. March 23, 2024.
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