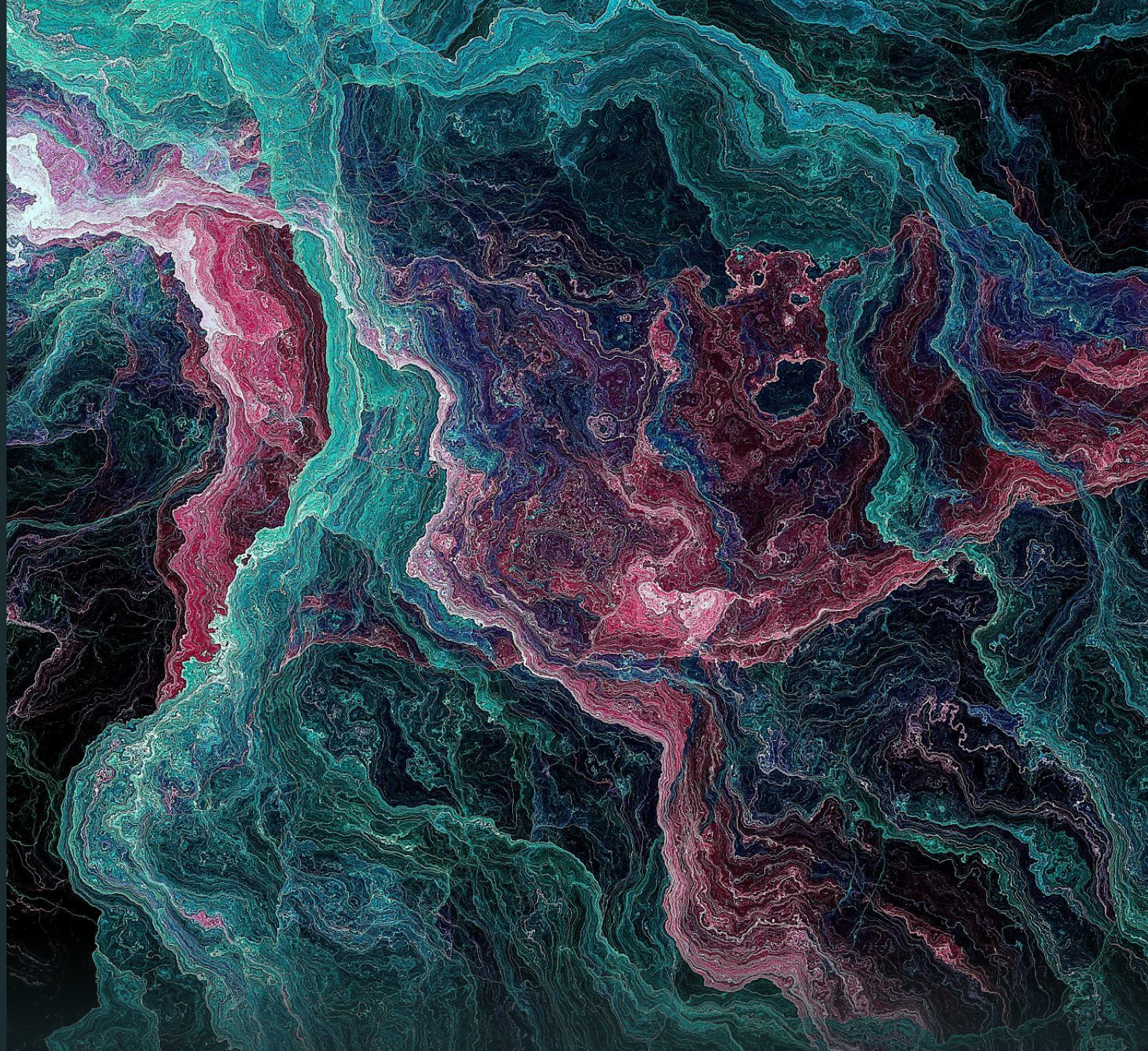




Planetary Health Intervention

Anika Abedin



Extracts from proposal

- “Humans beings may have an innate desire to affiliate with nature” (Wilson, 1984); a quote that truly resonates across global societies. **The natural environment has been proven to improve one’s mental state in various forms of research.** ‘A spatial analysis of proximate greenspace and mental wellbeing in London’ (Houlden et al., 2019) describes how “local-area greenspace is associated with reduced symptoms of mental distress and greater life satisfaction”.
- “some studies have demonstrated that **people involved in urban horticulture projects show an increased interest in trying new products that are produced in urban gardens** followed by an increase in fruit and vegetable intake, thus providing them with fresh, high quality foods, increasing the variation of products consumed, in-turn improving nutrient and mineral intake” (p.250).

Theory of Change

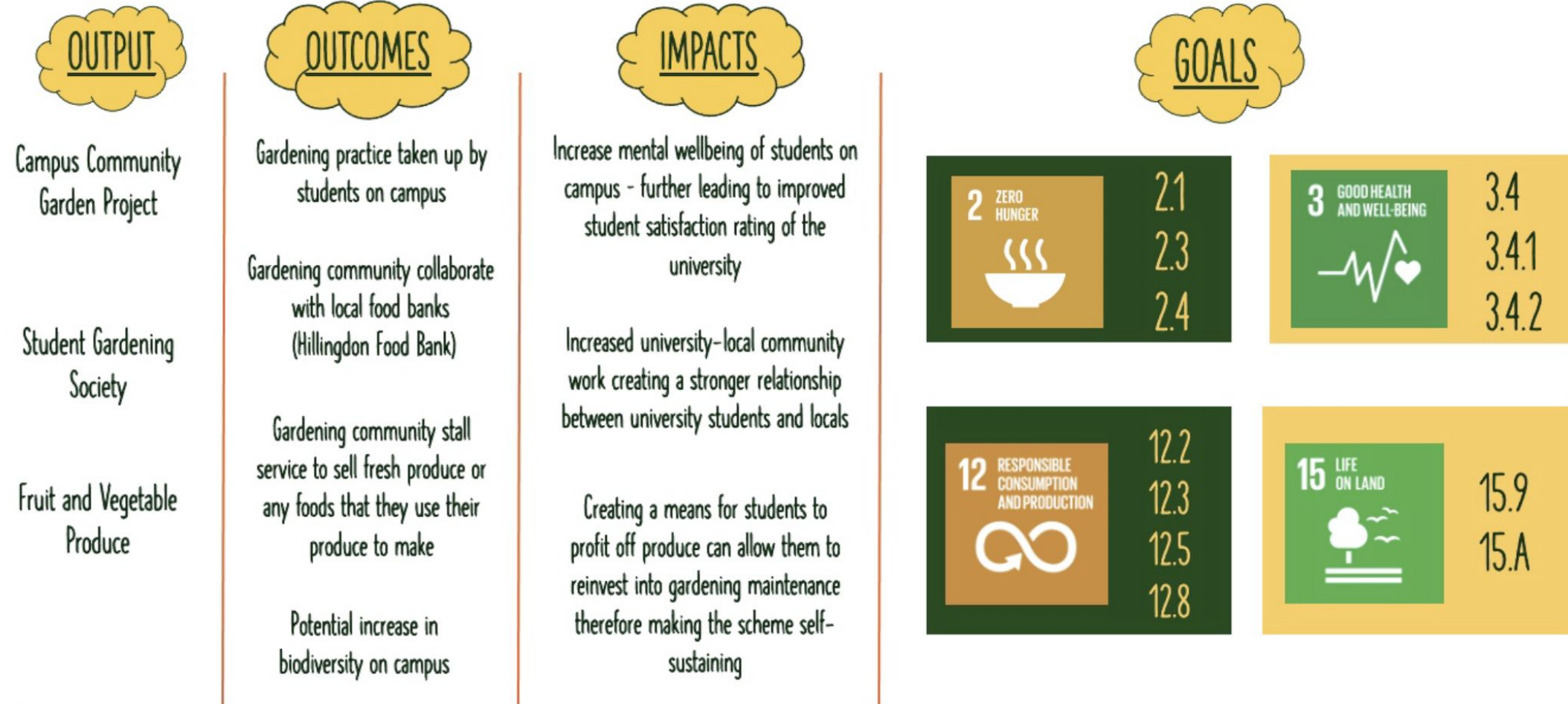


Figure 1 - Theory of Change

Sustainable Development Goals and the specific targets addressed

2) Zero Hunger:

- 2.1: By 2030, end hunger & ensure access by all people, in particular the poor & people in vulnerable situations, including infants, to safe, nutritious & sufficient food all year round.
- 2.3: Double the agricultural productivity & incomes of small-scale food producers.
- 2.4: Ensure sustainable food production systems & implement resilient agricultural practices that increase productivity & production.

3) Good Health & Well-Being:

- 3.4: By 2030, reduce by a third premature mortality from non-communicable diseases through prevention & treatment & promote mental health & well-being.
- 3.4.1: Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease.
- 3.4.2: Suicide mortality rate.

12) Responsible Consumption & Production:

- 12.2: By 2030, achieve the sustainable management & efficient use of natural resources.
- 12.3: Halve per capita global food waste at the retail & consumer levels.
- 12.5: Sustainably reduce waste generation through prevention, reduction, recycling and re-use.
- 12.8: Ensure that people everywhere have the relevant information & awareness for sustainable development & lifestyles in harmony with nature.

15) Life on Land:

- 15.9: Integrate ecosystem & biodiversity values into the national & local planning, development processes, poverty reduction strategies & accounts.
- 15. A: Mobilize & significantly increase financial resources from all sources to conserve & sustainably use biodiversity & ecosystem.

2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



15 LIFE ON LAND



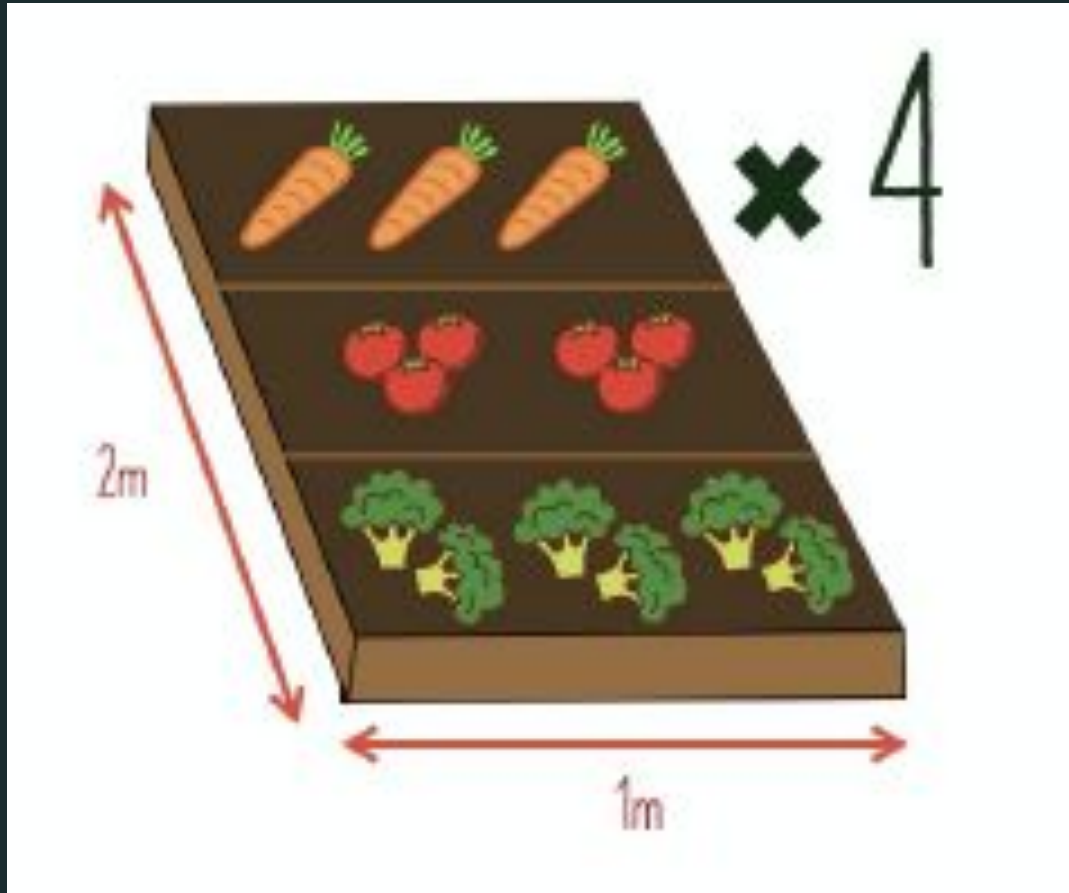


Figure 2 - Garden Allotment and Grow Bed

- The proposed activities for the pilot project will directly target students that are receiving support from the university's welfare team; students that are estranged, care leavers and/or receiving counselling. This is due to the fact that naturally students who have or are presently experiencing personal hardship are more exposed and prone to experiencing mental distress and strain.

- For the pilot project, a **gardening society** would also be created for the participating students as this allows for partial funding for any gardening emergency necessities from the university through the student union as all student societies in Brunel have access to a budget. Furthermore, being a part of a society can give students a **sense of on campus community** and give them a **chance to socialise** more as opposed to there not being a society group and the students not knowing one other.



Figure 3 – Gardening Pilot Project Gantt Chart

Stakeholder Engagement Plan

<u>Stakeholder</u>	<u>Impact:</u> <i>How much does the project impact them? (Low, Medium, High)</i>	<u>Influence:</u> <i>How much influence do they have over the project? (Low, Medium, High)</i>	<u>What is important to the stakeholder?</u>	<u>How could the stakeholder contribute to the project?</u>	<u>How could the stakeholder block the project?</u>	<u>Strategy for engaging the stakeholder</u>
Brunel University Students	High	High	Greater well-being from Gardening.	Growing the fruit and vegetable produce to ensure project success.	Not maintaining their designated grow bed in the gardening allotment.	Monthly garden group meetings.
Brunel University Student Welfare Team	High	Medium	Ensuring students who require welfare support receive as such for better well-being and mental health.	Promote the gardening project, enlist participants and assist in recording the student's well-being progress.	Not enlisting students for participation and not keeping track of student progress.	Provide a full detailed plan of the project to ensure the team knows exactly what is expected and keep regular track of project progress through student engagement.
Brunel University	High	Medium	Having high student satisfaction rankings in comparison to other UK universities.	Provide appropriate funding for the gardening project and access to appropriate resources on campus i.e., the greenhouse facility.	Not giving permission to use campus greenhouse facility and in future, the campus grounds. Also, not providing any financial support for the project.	Provide termly progress updates; final results presented at the end of the academic year to show project success and progress.
Brunel University Campus Grounds Team	Low	Medium	Appropriate use of campus ground for outdoor gardening site.	Provide the appropriate space for gardening allotments.	Not providing outdoor gardening space after the pilot project period.	Provide termly progress updates; final results presented at the end of the academic year to show project success and progress.
Brunel Student Union	Low	Medium	Having successful set ups of new societies – if societies are not successful then they are terminated.	Provide support for resources with the budget available for all societies.	Not allowing the start-up of a new gardening society.	Creation of an engaging and successful gardening society.

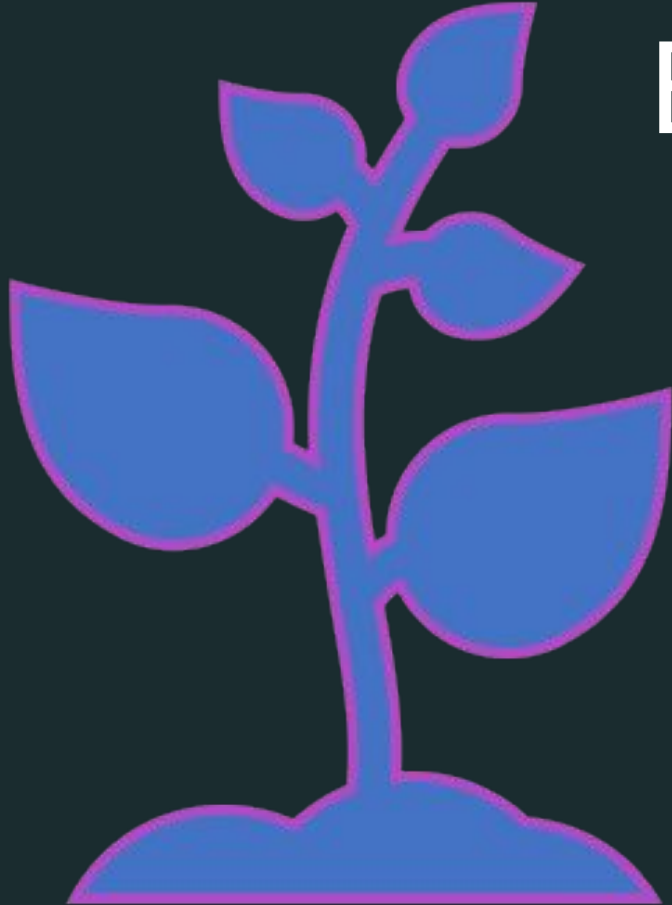
Stakeholder Engagement Plan

Stakeholder Engagement Plan

<u>Stakeholder</u>	<u>Impact:</u> <i>How much does the project impact them? (Low, Medium, High)</i>	<u>Influence:</u> <i>How much influence do they have over the project? (Low, Medium, High)</i>	<u>What is important to the stakeholder?</u>	<u>How could the stakeholder contribute to the project?</u>	<u>How could the stakeholder block the project?</u>	<u>Strategy for engaging the stakeholder</u>
<i>Greenhouse Management</i>	<i>Medium</i>	<i>High</i>	<i>Successful use of the campus greenhouse facility.</i>	<i>Providing the necessary space and equipment for the pilot gardening project.</i>	<i>Denying use of the campus greenhouse facility.</i>	<i>Provide a clear detailed plan for the use of the campus greenhouse facility and what existing resources/equipment is needed.</i> <i>Provide final results to show how much the facility contributed to the success of the pilot project.</i>
<i>Brunel University Counselling Staff</i>	<i>Medium</i>	<i>Medium</i>	<i>Ensuring students who need help with their mental health and well-being are appropriately supported.</i>	<i>Social prescriptions of gardening for students receiving counselling support.</i>	<i>Not supporting the gardening project in bettering the mental health and well-being of students.</i>	<i>Provide a training programme for counsellors to ensure they are aware of the project and social prescribing in general.</i> <i>Provide record of results at the end of the pilot period to show the project's success.</i>
<i>Local Homeless Shelter & Foodbanks</i>	<i>Medium</i>	<i>Low</i>	<i>Being able to feed those of the community who need free meals and provide food supplies.</i>	<i>Create a community to campus relationship.</i>	<i>By not wanting to collaborate with Brunel's gardening society.</i>	<i>This collaboration is a long-term aim; to engage the stakeholder the gardening society must first be able to grow a lot of fresh produce in order to donate produce.</i>

Stakeholder Engagement Plan

Monitoring and Evaluation



In terms of monitoring the success of the garden itself, at the end of the pilot project period there will be a count of all the produce successfully grown in the garden allotments to show just how much can be grown in the given space to then estimate and forecast how much can be grown in the following project year given an outdoor garden expansion and greater student participation. For the following year, there will naturally be more monitoring and evaluation, particularly if an outdoor gardening space is granted and installed on campus. There will still be monthly gardening group meetings, however more recordings of how much produce is grown; this ideally should be a termly record.

Impact/Sustainability

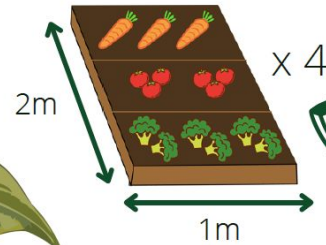
The pilot project will have an immediate impact on student participant well-being and mental health given consistent activity.

In the longer term when the project is scaled up and expanded with greater student participation (including students who do not receive student welfare support however just wish to participate out of interest) there will be greater impact on students on campus.

In addition, an outdoor gardening space will impact the natural environment on campus with an increase in on-campus biodiversity and in general an improved landscape aesthetic.

CAMPUS GARDENING PROJECT

GARDEN PLANTING BEDS
ONE BED ALLOCATED PER STUDENT.



CAMPUS GREENHOUSE

ACTIVITY TO START IN
SEPTEMBER WITH
MONTHLY MEETINGS IN AN
ACADEMIC YEAR.



GARDENING SOCIETY SET UP FOR
STUDENT PARTICIPANTS.



FINAL STUDENT WELLBEING RECORDS AND
GARDEN PRODUCE RESULTS WILL BE
COLLECTED AT END OF THE ACADEMIC YEAR
TO REVIEW SUCCESS.



DURING HOLIDAY MONTHS (IN PARTICULAR
SUMMER) STUDENT JOBS TO MAINTAIN GARDEN TO
BE CREATED.



IF PILOT PROJECT IS SUCCESSFUL, GARDEN CAN BE
EXPANDED ON CAMPUS GROUNDS WITH GREATER
STUDENT PARTICIPANT INTAKE.

BEYOND CAMPUS

- COLLABORATE WITH LOCAL FOOD BANK AND HOMELESS SHELTER KITCHENS.
- 'BUY ONE TO DONATE ONE' SCHEME INSPIRED BY ST ANNE'S FOOD HUB
- WORK WITH LOCAL SCHOOLS TO HELP IMPROVE NUTRITION AND POSSIBLY CHILD FOOD POVERTY.

ULTIMATE GOAL :

ADDRESS AND TACKLE THE ISSUE OF POOR STUDENT MENTAL HEALTH AND WELLBEING ON CAMPUS THROUGH CREATION OF A GARDENING COMMUNITY AND GARDENING ACTIVITY.

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