

**Family education "MeTURA-Back to the Roots", therapeutic family gardening and therapeutic family cooking for independent life of adult family members with intellectual disabilities**



## **SUMMARY OF THE SYNTHESIS REPORT**

**Activity O5, A study of obstacles and potentials of the family lifelong learning unit which uses therapeutic family gardening as an andragogical method for an effective learning opportunity for families with adult family members with intellectual disabilities**

## CONTENT

<b>Introduction</b> .....	<b>4</b>
<b>Key findings</b> .....	<b>5</b>
Key points .....	6
<b>Discussion</b> .....	<b>8</b>
Gardening trends, attitudes and approaches .....	8
Comparative questionnaire results.....	10
<b>Next steps</b> .....	<b>15</b>
<b>National reports</b> .....	<b>15</b>
<b>Summary of the national report for Croatia</b> .....	<b>15</b>
Attitudes and approaches to gardening in Croatia .....	15
Benefits of Gardening.....	15
Gardening opportunities for people with intellectual disabilities – examples of good practice .....	16
Questionnaire Summary .....	17
<b>Summary of the national report for Italy</b> .....	<b>18</b>
Attitudes and approaches to gardening in Italy .....	18
Benefits of Gardening.....	19
Gardening opportunities for people with intellectual disabilities- examples of good practice .....	20
Questionnaire results .....	21
<b>Summary of the national report for Slovenia</b> .....	<b>21</b>
Attitudes and approaches to gardening in Slovenia.....	21
Benefits of Gardening .....	22
Gardening opportunities for people with intellectual disabilities – examples of good practice .....	23
Questionnaire results .....	24
<b>Summary of the national report for the United Kingdom</b> .....	<b>24</b>
Attitudes and approaches to gardening in UK.....	24

Benefits of Gardening.....	25
Gardening opportunities for people with intellectual disabilities.....	26
Survey results.....	27

## Introduction

Funded under the Erasmus+ program, Key Action 2 (KA2), the “MeTURA - Back to the Roots” project aims to improve lives of adults with intellectual disabilities (often referred to as ‘learning disabilities’ in the UK) by encouraging family gardening and cooking as a therapeutic way of supporting ongoing lifelong learning (LL) and promoting the independence of adult family members with intellectual disabilities (AFMID). Lifelong learning refers to all the purposeful learning activities undertaken on an ongoing basis throughout a person's life, with the aim of improving knowledge, skills and competencies.

The MeTura project will last for 35 months and is being run in cooperation between non-profit organizations from Slovenia, UK, Croatia and Italy. The participating organizations are: Education Centre Geoss (Slovenia), Zveza Sožitje (Slovenia), Danilo Dolci (Italy), UOSIKAZU (Croatia) and Thrive (United Kingdom).

MeTURA will enable partner organizations to expand their offer of lifelong learning opportunities for vulnerable adult learners. The project aims to develop toolkits and resources to enable educators and families to make the most of the lifelong learning opportunities that therapeutic gardening and cooking can provide. It will provide insights into how adults with learning disabilities and their families can best be supported to acquire the skills, knowledge and confidence to cook and garden together at home, as well as insights into the other therapeutic benefits of these activities.

Through preliminary preparatory studies, project the MeTura partners discovered that the majority of adult persons with intellectual disabilities live at home with their families and that each family would benefit from a personalized process of lifelong learning, adapted to their own individual needs. The initial phase of the project looked to gather information about the requirements and preferences of educators and adults with intellectual disabilities and their families, the availability of educational opportunities and their attitudes and interest in cooking and gardening

As part of the initial phase of the MeTURA project, study 04 aimed to investigate the potential benefits of therapeutic gardening for adults with Learning disabilities (LD) and their families. This included investigating whether families with adult members with LD were aware of, or involved in gardening as a therapeutic activity and particularly in combination with cooking; what they perceive that

the financial, economic, educational and social benefits of these kind of activities might be; what additional resources, skills and support might be needed for families and adults with LD to engage in these activities; what the possible barriers might be to engaging with therapeutic gardening.

The purpose of study O5 was to gather information to guide the development of new knowledge, skills and andragogical tools for educators to enable them to encourage and support adults with intellectual disabilities and their families to engage in therapeutic family gardening and cooking as a means to a more independent life for adult family members with intellectual disabilities.

For the O5 Study, a questionnaire was conducted in all participating countries. We wanted to discover how many families have a garden or a space to grow plants. We also wanted to know what size it is, and how they use the space (what do they grow, who gardens, etc.)

We also wanted to discover what respondents think are the benefits of gardening for adults with learning disabilities might be. We also wanted to know what kind of support would help adults with learning disabilities and their families get involve in gardening and maximise the lifelong learning and wellbeing potential of therapeutic gardening as an intervention.

The following report summarizes the findings from the national reports and highlights the key findings from this study.

## Key findings

The national reports and results from the questionnaires show a generally similar situation in all of the participating countries. There may be some national differences in the availability of space for gardens and primary motivations, barriers and support approaches which should be borne in mind in the design of future methodologies and resources.

The majority of respondents believe that gardening would be a useful occupation for adults with ID particularly in terms of improving physical and mental wellbeing as a result of spending more time outside in the fresh air and engaged with nature, and that growing food to eat would be a good motivation to encourage this. The main barriers to this are the need of the AFMID for emotional, motivational and practical support and the limited time, energy and knowledge/experience of parents and carers to provide this.

## Key points

- Many of the families with AFMID have medium to small gardens or no garden.
  - Methodologies & resources should take this into account and include information on gardening in small spaces or on window sills, balconies or indoor/table top gardening options.
  - An alternative maybe to consider options for shared gardens or community gardening groups either specifically for AFMID (and potentially their families) or to include resources for educators to develop shared gardens or ways of including AFMID in existing community gardens/shared gardens
- The majority of respondents were already growing vegetables and fruit themselves, as well as aromatic plants & herbs.
  - Those growing in small spaces (balconies & window sills) focused on growing herbs or specialized fruit and veg which may be expensive or difficult to buy.
- The main benefits that families think are gained from gardening relate to general benefits such as increased physical activity, fresh air and a reason to be outside. Families also thought there would be benefits to mental health/wellbeing.
- The survey results suggest that adults with ID will generally need emotional and practical support to engage in gardening.
  - Families often have limited leisure time and are looking for a hobby/activity that requires minimal time investment and is enjoyable rather than a chore or demand, so gardening.
  - Some may also be willing to invest in technology to support their gardening/make it easier, but financial restrictions may make this impossible for other families.
  - The majority of families reported that there was a single individual with ID in the family, suggesting that parents and carers, in general do not have ID themselves.
- Gardeners in the age group of the AFMID surveyed (20s-30s) are generally concerned with environmental issues and sustainable, healthy living and eating.
  - This may not be such a driver for adults with ID whose approach to gardening may be influenced by parents/carers who are in the 50-60s.



- There are some national differences reported in the survey results but in general results are similar across all four countries. Key factors to take into account may be:
  - Fewer families surveyed in Italy reported that they had gardens
  - Gardening in UK and Italy may be seen as more of a hobby/recreational activity in Italy and the UK and more of a practical life skill in Croatia and Slovenia?
  - There may be regional specialties/focuses e.g. gardening for honey production in Slovenia or regional specialties in particular fruits or vegetables.
  - May also need to take into account climate differences
- Main benefits reported relative to general improved physical and mental wellbeing as a result of spending more time outside in the fresh air and engaged with nature
- Main barriers reported are the need for emotional, motivational and practical support for the AFMID to engage in gardening.
  - Lack of knowledge and experience about how to garden and what to grow was also seen as a barrier, especially where the parent/carer has limited time to spend helping. This may be one reason why the support of an experienced gardener or community gardening group was seen as an important support need.
  - The size of gardens may be an issue (too little space or too little garden)
- There was less consensus across countries on the preferred for of support that would help the family and AFMID to engage in gardening.
- Access to the appropriate space was seen as a key support need along with the support of experienced gardeners or community gardening groups and gardening courses for the AFMID.
  - Advice on what to grow and how to grow plants to eat, along with resources such as books or tutorials were seen as the next most important support needs
  - Family gardening groups and combined cookery and gardening courses were seen as less essential.
  - Rewards, recognition of achievement and other motivational approaches were seen as least useful form of support overall, although seen as important in Croatia.

## Discussion

### Gardening trends, attitudes and approaches

The reported trends, attitudes and approaches to gardening were similar across all four partner countries. The key trends and patterns identified were:

#### Increasing popularity & demographics

- Gardening is becoming increasingly popular in recent years after a period of decline when it has changed from it being common for people to have a garden and grow their own food.
- Roughly equal proportions of males and females are involved in gardening. In general, involvement in gardening increases with age (driven by factors such as increased earnings, established careers, increase in free time when children leave home) until older age (~70s) where large scale gardening declines.
- In recent year, more millennials (20-30s) are becoming involved in gardening, driven mainly by perception of the health and wellbeing benefits.

#### Health and environmental concerns

- There is a concern among younger generations with environmental issues and move away from meat eating and looking for a more sustainable way of life.
- Another factor is the increasing understanding of the health benefits of food growing & a desire to know the provenance of food. The change in rural landscape to large scale industrial production with intensive farming has resulted in a mistrust of mass produced food grown with the use of fertilizers and insecticides

#### Size of gardens

- Gardening in small spaces e.g. only minority have big gardens.
- In general the younger the owner, the smaller the garden (related to income and also tendency to live in urban areas for work reasons).

#### Impact of Urbanization

- The change in the rural landscape and intensive farming has led to a migration of populations to a more urban environment with multi occupancy buildings and small or no gardens.



- This has been driven partially by employment opportunities in cities and the change in rural landscape to large scale industrial production with intensive farming leading to a decline of employment in rural areas due to industrialization)
- Urban gardening usually involves gardening in small spaces. Often urban dwellers will not have a garden but may garden on a balcony, window sill or terrace. This has led to a variety of imaginative solutions to enable people to garden. It also means that people have to be selective about what they grow and may tend to focus on consumables such as less available or expensive to buy fruit and vegetables or aromatic plants such as herbs.
- Urban gardeners are generally quite young (35 years old on average), I and generally concerned about health and the environment (loves nature and prefers organic vegetables and fruits).

#### Time and effort

- Gardeners appreciate the sense of relaxation and peace that they get from gardening and this is partly due to the opportunity to care for other living things. At the same time they often have limited leisure time and are looking for a hobby/activity that requires minimal time investment and is enjoyable rather than a chore or demand. They want to be able to enjoy time in the garden rather than being driven by the needs of the garden
- Gardeners are increasingly investing in Technology – hydroponic solutions, green walls, irrigation systems, information sharing via traditional and social media, information about fertilizers, organic gardening (natural system ) – means no longer go to garden every day

#### Shared gardening (community)

- Some governmental institutions are recognizing the benefit of urban green space and shared gardens. Shared gardens are seen to help build communities and are a good expenditure of public money on for the public good and are being included in many new buildings in the suburbs.
- Shared gardening also makes gardening less expensive (sharing resources), requires less space for storage and less time.
- Gardening is also seen as a way of integrating different generations e.g. in terms of family gardening (with children/grandchildren) or family farms and small holdings where all the family are engaged in the farming/gardening

### National & regional differences

- Some countries reported that different regions of the country may have different specializations or there may be particular kinds of gardening that have a greater emphasis in different countries e.g. popularity of beekeeping in Slovenia

## Comparative questionnaire results

### 1. Age and gender of key family members

	Adult with LD	Parent/carer
Croatia	33	59
Italy	32	56
Slovenia	38	62
UK	29	58

The demographics of the families with AFMID who were surveyed were very similar across the four countries. In general the AFMID is in their early thirties and the parent/carer in their late 50, early 60s.

### 2. How many other family members (adults and children under 18)?

### 3. How many have LD?

In all countries the majority of families only had one family member with learning disabilities. Only Slovenia reported more than one family member (2 families) with one family having 4 members with learning disabilities

	Family members with ID
Croatia	1
Italy	1
Slovenia	18(1) 2(2) 1 (4)
UK	1

This suggests that in most cases the AFMID will be the only individual with ID in the family and those parents and carers will not have ID themselves.

### 4. Do you currently have a garden or other space for growing plants?

	Garden	No garden/ space		

Croatia	67%	33%	Small/medium gardens 1 large	Lots of Vegetables, fruit trees, some flowers
Italy	14%	86%	Terraces/balconies	Vegetables, aromatic plants (herbs)
Slovenia	65%	35%	Small/ medium 1 farm,2 large	Primarily vegetables, herbs some flowers
UK	86%	14%	Majority have big Rest small to medium, one has allotment	Many grow fruit Most vegetables (although some used to but not now, health issues/time – grass and flowers)

**5. What do you think are the benefits of gardening for adults with learning disabilities?  
 (please select all that apply)**

	Cr	IT	SL	UK
Increased physical activity	76%	82%	86%	95%
Developing a new hobby/recreational activity	57%	95%	45%	90%
Fresh air	90%	91%	95%	86%
A reason to spend time outside	57%	73%	77%	86%
Improved mental health/wellbeing	33%	95%	68%	76%
Engagement and understanding of nature	85%	36%	59%	71%
Developing a sense of purpose	29%	27%	59%	67%
Understanding of where food comes from and healthy dietary choices	52%	73%	82%	67%
Achievement and increased sense of confidence	24%	91%	55%	67%
Increased engagement with local community (family or wider society)	3%	50%	50%	67%
Freedom to make choices and take on responsibility in a safe, low risk environment	19%	9%	50%	62%
Being involved in an activity that can be shared/discussed with others	38%	23%	45%	62%
Learning to manage emotions and improved behaviour	24%	36%	41%	57%
Opportunity to continue learning or gain qualifications	14%	82%	41%	52%
Improved work-related skills such as time management, task planning etc.	29%	32%	50%	48%
Other (please specify)	1.5%	5%	9%	5%
	90%		9%	

Key benefits across all countries were seen to be increase physical activity, fresh air and a reason to be outside. Gardening was also thought to improve mental health and wellbeing. In Italy, learning/qualification and achievement and increased confidence were seen to be important benefits, but not in the other three countries. In Croatia and the UK, engagement and understanding nature were seen as important benefits but less so in the other two countries. In Italy and the UK, developing a new hobby/recreational activity was seen as an important benefit, but less so in Croatia or Slovenia.

This maybe because gardening is seen as a more practical activity in the latter two countries but as more of a recreational activity in the former two?

**6. What are the practical barriers to gardening at home? Please indicate how much of an impact the following factors have on the opportunities for your adult family member with learning disabilities to engage in gardening with your family**

	Croatia	Italy	Slovenia	UK
Lack of interest in gardening	x		x	
Requires emotional or motivational support	x	x	x	x
Lack of motivation		x	2	x
Lack of confidence		x	2	2
Lack of time		x		2
Require practical support from parents/carers	x	x	x	x
Risks relating to use of tools	x		2	
Lack of knowledge/experience about how to garden (how to grow plants, what to grow and when)	x	2	x	x
No appropriate space for a garden		2	x	
No money to buy plants or other resources (tools, seeds, plants etc.)		2	2	
No access to facilities for buying plants or other resources				

The main barriers to gardening in all country are the need for emotional, motivational and practical support for the AFMID to garden. This may be even more of a barrier if the parent/carer has limited time e.g. If they are working or where parents/carers are elderly. Lack of knowledge and experience about how to garden was also a barrier (knowing what to do when and how). Although there are plenty of gardening books and online material which advise on seasonal tasks, we have not yet discovered any in

easy read format designed for adults with LD (although there are cookery books written in easy read format). This may also be a way to motivate and engage the AFMID in gardening.

Size & availability of gardens may also be a barrier in some cases. Slovenia and Italy reported a lack of space while several UK respondents mentioned that their gardens are too big for them to maintain or require too much work is an issue

## 7. What kinds of support would help your family and the adult family member with LD to engage in gardening? (please select all that apply)

	Croatia	Italy	Slovenia	UK	overall	Rating*
Support of an experienced gardener or local community gardening group	9%	91%	26%	71%	49%	4
Access to a local allotment or space to grow plants	29%	86%	37%	62%	54%	4.5
Resources such as books or online tutorials on how to garden	29%	86%	21%	29%	41%	3
Seasonal plans for what to grow and when	14%	86%	21%	63%	46%	3
Gardening course/workshops for AFMID	24%	91%	21%	71%	52%	4
Gardening courses/workshops for whole family	5%	82%	16%	71%	44%	2.5
Advice on growing plants to eat	52%	64%	47%	43%	52%	3
Food growing courses combining gardening and cookery (healthy eating)	29%	23%	32%	76%	40%	2.5
Rewards and recognition for achievement of other motivational approaches	52%	5%	11%	43%	28%	1.5
Other			16%			

- Rating highest choices as 1.5 (green) and second choices as 1 (orange)
- 

There was less consensus across countries on the preferred for of support that would help the family and AFMID to engage in gardening. Rewards, recognition of achievement and other motivational approaches were seen as least useful overall, although this was the joint first preference for Croatia, along with advice on growing plants to eat, which was also the highest preference for Slovenia. Access to space was seen as a key support need, along with support of an experienced gardener or group and gardening courses for the AFMID. Family gardening groups and combined cookery and gardening courses were seen as less essential. Seasonal plans for what to



grow and advice for growing plants to eat were seen as moderately useful along with the need for other resources such as books or tutorials.

## Next steps

The next stages of the project will involve developing a methodology and supporting resources to support gardening and cookery at home or close to home for adults with intellectual disabilities, their families and local educators.

## National reports

### Summary of the national report for Croatia

#### ***Attitudes and approaches to gardening in Croatia***

Increasing urbanisation is gradually deleting the boundaries between countryside and cities. As a result, the rural environment and food production is becoming increasingly industrialised with a focus on maximising yield and profit. This is resulting in consequences such as health issues due to the excess use of fertilizers pesticides, GMOs etc. and a disconnect between people and their food due to long delivery times which leads to an alienation from the process cultivating the food that we eat and a lack of knowledge about the sources and quality of the food that we eat.

Gardening in Croatia is more prevalent in rural areas where people own land. People are increasingly looking to home-grown vegetable.

Rural gardeners are commonly between 30 -70 years of age, although family farms run by all the adults in the household are becoming increasingly common. Different regions of Croatia are known for producing different crops: e.g. the Neretva valley is rich in tangerine plantations.

Urban gardening is becoming increasingly popular. As well as gardens, gardening on windowsills, balconies, terraces and roofs are becoming more popular as, due to space congestion, people are finding imaginative solutions. In fact, it is a trend that takes its typical forms: as a return to the original or new discovery of a rural garden, to a more serious movement of collective city gardens or a comprehensive deliberate exploitation of unused public spaces.

#### **Benefits of Gardening**

Home grown vegetables provide considerable relief to the family budget, and an opportunity for relaxation and activity in the fresh air. Fresh picked, home-

grown vegetables are recognised to be more nutritious and to have more vitamins and minerals than those that have a long supply chain and have been stored for a long time.

Growing plants is an effective way of relaxing and the benefits of caring for another living being, even if it is just a plant. It also has the advantage that plants only require a little of our leisure time to be rewarding.

Gardening is a common topic of conversation at family or community meetings and educational and gardening tips are frequently heard in the media (tv, radio, newspapers) as well as in specialised shows and websites.

People are engaging in gardening because they believe it has a positive impact on physical and mental health. As well as the advantages listed above, gardening is seen to reduce stress and relieve tension, reduce risk of heart disease and diabetes, provide a sense of happiness, keep the brain health, promote better and easier sleep.

### ***Gardening opportunities for people with intellectual disabilities – examples of good practice***

Since the 1960s, there has been a policy of deinstitutionalisation of individuals with ID and a move to enable them to live in the community. In order to support this most Community Service centre and associations which work with adult s with ID work to help them to master the activities of daily living e.g. cooking simple meals, hygiene, shopping, transport, communication and socialising.

Among the activities of daily living there are an increasing number of activities in gardens, for which there is ample evidence that it has a beneficial effect on the physical, psychological, social and spiritual health of people with intellectual disabilities. Caring for the garden is the essence of gardening and the essence of its therapeutic effect. But the garden is not only a place for gardening, but also a place for "rest, peace, innocence and sweet solitude." Gardening enables every human being, regardless of limitations, to work, acquire new knowledge and relax.

There are various examples of good practice in Croatia of working with gardens. The Ozalj Community Services Centre is a public institution in Rlovac County working with children, young people and adults with ID. It is based in a park and includes work in agriculture arable farming, pig farming, vegetable growing, fruit growing, floriculture, and cultivation of aromatic and medicinal herbs) including processing of agricultural products (production of fruit juice, drying of

vegetables, fruits and medicinal / aromatic herbs, and packaging operations) and production of natural cosmetics using high quality natural ingredients and are made of: soaps, oils for skin care and cleansing, oily grease, calendula grease, lip balms, massage tiles, peels, aromatic salts and fragrant waters for rooms and body. The Martin's cloak cooperative includes a project using a folding mini urban garden for disabled people that is easily installed on balconies or terraces and is suitable for wheelchairs, as well as anyone who has problems with bending, squatting, such as the elderly. It also provides other courses such as Initial training on organic (eco) farming and nutritional counselling relating to healthy eating. The Association of Persons with Disabilities of Karlovac County (UOSIKAZU) in partnership with the Ozalj Community Service Center, is involved in a project "Development and Improvement of Social Services - Practical House of Knowledge II", which includes the cultivation of aromatic and medicinal plants. It involves knowledge transfer relating to horticulture, the process of planting and growing calendula on raised (adapted) flower beds, education on organic cultivation and care of seedlings to the finished product of natural cosmetics (calendula grease, natural soaps and hydrolytes) will enable the Association to independently start the listed activities that may be marketed in the future.

### **Questionnaire Summary**

According to the results, all families who participated in the questionnaire had only one member with intellectual disabilities. Most families (67%) own a garden and are engaged in gardening, growing various vegetables, fruits and flowers. However, in most families (57%), AFMID is not involved in garden work.

The three most important benefits of gardening for families are fresh air, staying in nature and a sense of nature, and increased physical activity.

The barriers that have the greatest impact on the AFMID's opportunity to engage in gardening with their family are the requiring practical support from parents / guardians, lack of knowledge / experience in gardening, and the risk of using tools.

The most important types of support that would help families and AFMID engage in gardening include advice on growing plants to eat and rewards and recognition for achievement or other motivational approaches.

## Summary of the national report for Italy

### **Attitudes and approaches to gardening in Italy**

According to a survey into consumer habits, 1 in 3 Italians is dedicated to gardening and more and more are taking up gardening as a hobby, often with their children or grandchildren. One of the main advantages is that gardening can be done by those who have a garden but also by those who only have a small balcony or terrace. The Italians, in line with the world results, showed that:

- 7% of respondents dedicate themselves to gardening every day
- 25% at least once a week
- 19% once a month
- 21% sometimes
- 28% says they have never practiced gardening

Men and women engage in gardening equally. The majority of gardeners are over 60, but 37% of 40 yr. olds engage in gardening on a weekly or daily basis. Teenagers (15-19 yr. olds) are least engaged in gardening (about 59% never garden).

More and more Italians are starting to garden either for themselves or with their extended families.

In Italy there is a new gardening trend of urban, shared and ethical. Italy is fifth in the world for shared gardening in city. Urban gardeners are generally quite young (35 years old on average), loves nature and prefers organic vegetables and fruits.

Millennials (those born after 1980) often don't have room for gardens and reject the use of chemicals. In general, those who own large gardens to house plants, lawns, orchards and fruit trees are the minority. The move from the countryside and the extension of the cement even in the suburbs has brought (and will bring even more in the future) an impressive increase in the number of inhabitants in the apartments compared to those lucky enough to own a garden-equipped house

Urban gardeners are also involved in "social sharing", that is the sharing of patches of land (granted by more and more numerous municipalities of the peninsula, starting from Rome) or courtyards and condominium terraces to make vegetable gardens and flower gardens. Shared gardens also help build communities and are a good expenditure of public money on for the public good and are being included in many new buildings in the suburbs. It also makes

gardening less expensive (sharing resources), requires less space for storage and less time.

New enthusiasts are also investing in technological solutions such as hydroponic systems (in pots without soil, the roots are in water, now they are sold also in large plants, warehouses because the demand has increased), or by hanging baskets or bags with plants on the walls to make green walls with a tropical effect. In the name of technology, the new gardeners fully exploit the automatic and electronic irrigation systems, calibrated drop by drop exactly on the type of vegetable that is grown, and no longer go to the garden every day to give water to the vegetables as their predecessors did.

They get information, read manuals also online and participate in forums and chats between “colleagues” to learn more and read fertilizer and fertilizer labels, preferring natural systems to chemical ones to grow their plants and vegetables because they care about the environment. More and more often, finally, before planting carrots and potatoes, they analyse land and water from laboratories to test their quality.

### **Benefits of Gardening**

Reasons for gardening include making the home environment beautiful and useful (by producing their own fruits and vegetables). Those living in apartments can grow things such as spices or fruit trees on balconies. Gardening has positive psychological benefits in taking care of the environment around you and relaxation. It also allows individual to create a strong bond with children and to engage them in education and positive personal growth.

Globally, about 84 billion dollars were spent on plant and vegetable care, 11 percent more in the last 5 years. The figure is set to rise again to reach 88 billion in 2020, analysts predict. Italy, after 3 years of decline in green purchases linked to the most difficult macroeconomic situation, is now the fifth market in the world after the United States, Germany, France and England.

According to experts, gardening activities improve the physical and mental health of the patients themselves. But also motor skills: sowing, pruning, gathering fruits and other activities in contact with nature encourage movement also favouring eye-hands-arms coordination. Assimilating the name of some plants, learning space-time notions, cyclical seasons, are all activities that enhance learning skills and the cognitive sphere. Furthermore, the insertion in a work group where a common intent is pursued and an activity takes place together with the others, sharing spaces, tools, promotes socialization



### **Gardening opportunities for people with intellectual disabilities- examples of good practice**

Various projects have used gardening for people with disabilities for example: Gardening has been used as a therapeutic method for the work and social reintegration of patients suffering from mental illness. A project launched by the “Maccacaro Mental Health Department” in Turin for day centre patients entrusted with the direct management and refurbishment of a public garden in Turin. For this commitment, patients will receive financial compensation thanks to some “work grants” funded by the Department for Social Health. This project aims to create a bridge between health facilities and neighbourhood resources, creating a network that allows the progressive reintegration of the psychiatric patient. At the same time, the commitment related to the direct management of a green area allows the patient to recover manual skills and the ability to self-responsibility, regaining self-esteem through gratification linked to the results obtained, financial compensation and awareness of carrying out a socially useful work appreciated by the citizens”.

Beatrice Marucci , who is a Perugian agronomist, designs and creates gardens to make it less difficult to stay in facilities that house people with physical disabilities, mental illness, and terminal illnesses. She is now working on a therapeutic garden project that will engage LUISS university students in Rome with autistic children. Horticultural therapy is still little known in Italy in its various applications of therapeutic gardening and healing landscape. The patients of the Sant’Anna Housing Community, within the social farm in the Sant’Elia district in Sardinia, are in charge of sowing, harvesting fruits, gardening and arranging the garden. Tasks that can stimulate the sense of smell, sight, touch, hearing and develop skills and competences. It is the objective of the project “Cultivating Yourself”, promoted by the Housing Community managed by the Humanitas cooperative in collaboration with the “Il Sorriso” association.

The Cardinal Ferrari Centre of Fontanellato in Emilia Romagna is creating a garden vegetable garden dedicated to occupational therapy. The therapeutic idea of garden is born within the Occupational Therapy pathways studied by the CCF experts to involve more patients with results of severe acquired brain injury, mainly of a cognitive-behavioural nature.

“It is a project - explains the neurologist Donatella Saviola, head of the CCF Day Hospital - which aims to increase autonomy and improve the quality of life and is based on the constant observation of patients carried out over the years” “With our pilot experience - continues Saviola - we observed that group therapy,



through the involvement in the care of a vegetable garden, favours participation and aggregation, which would be difficult to obtain, instead, with traditional methods, i.e. in structured cognitive-behavioural therapy sessions”.

### **Questionnaire results**

According to the results, all families who participated in the questionnaire had only one member with intellectual disabilities. Most families (86%) don't own a garden and are not engaged in gardening.

The most important benefits of gardening are the “developing a new hobby / recreational activity”, “improving mental health / well-being”, “fresh air” and “achievement and increased sense of confidence”. Also “increased physical activity” and “opportunity to continue learning or gain qualifications” are considered very important for the respondents.

The barriers that have the greatest impact on the AFMID's opportunity to engage in gardening with their family are “lack of confidence” (19 answers), followed by “require practical support from parents / guardians”, “lack of time”, “lack of motivation”, “requires emotional or motivational support” (18).

## **Summary of the national report for Slovenia**

### **Attitudes and approaches to gardening in Slovenia**

In Slovenia vegetable production is well developed almost every house has at least a small garden. In Slovenia there is still a strong culture of owning a garden and cultivating vegetables at home. One of the more popular Slovenian hobbies is urban gardening and many Slovenes dream about having a quiet house with a garden.

Gardeners in Slovenia are also residents of apartment buildings that own/rent garden lots (usually near their home) for growing vegetables. There are usually several such garden lots in one place, so the “neighbours” socialize, help each other and spend quality time outside.

Most bigger towns in Slovenia have this garden lots available for rent, and in most cases, they are totally full, so there are long waiting lines if a new person wants to rent one. In smaller towns there are usually no garden lots, since most people have a place beside their house for a garden.

Population of Slovenian gardeners is very diverse, from students to persons in retirement. There are also very different sizes of gardens/garden-like-spaces. A lot of people that live in apartment buildings, have their plants on the balcony in

smaller or bigger pots (depending on what they grow). In private houses the gardens are bigger and more diverse in plant selection.

Decision on what to grow is based on the needs and wishes of the gardener, available space, finance, and of course time, that needs to be invested in order for plants to grow successfully.

Among most popular plants are definitely herbs and spices, because they are relatively easy to grow and you can keep them on a window sill if you do not have a garden or a balcony. Recently there has been an increase in tomato and strawberry growing on balconies, probably due to new varieties that are easier to grow in pots. People with bigger gardens tend to grow more vegetables in combination with fruits and herbs as well. Most of the balconies (apartments and houses) tend to have ornamental flowers.

There are numerous magazines, web sites, courses and other sources of information on gardening in Slovenia.

Frequently there are farmers markets, fresh vegetable exchange events; indigenous seed exchange and other events that promote gardening and the use of our indigenous seed selection, so the plants thrive and are suitable for our environment.

### **Benefits of Gardening**

Home-grown vegetables have many advantages over the vegetables we buy at the store. It usually tastes better because it is raised in a more natural way without modern industrial approaches. Most often, we sow and plant varieties that are not best suited for industrial production and cannot be bought in a store or market. Homemade vegetables can be more human-friendly, as we usually use organic fertilizers and fertilizers that are produced organically.

Growing vegetables in a home garden is not economically viable, strictly through money. Considering the time invested in cultivation, home-grown salad is many times more expensive than purchased at a market or grocery store. But on the other hand, it is also a hobby where we are in contact with nature. The cultivation of a vegetable garden also requires some physical effort and is a form of recreation. The pleasure we have in harvesting and enjoying home-made tomatoes, lettuce, carrots and other vegetables is priceless.

Reasons for gardening are as versatile as people are. Some enjoy the fresh air; some like the touch of the soil; some use it instead of exercise; some love the

feeling of growing something new from seed to fruit; some are just used to it from their parents/grandparents and some just want their own home-grown food. No matter the reason, gardening always seems to be a good idea.

### ***Gardening opportunities for people with intellectual disabilities – examples of good practice***

The Korenika eco-social farm is located in Šalovci, at the very heart of the Goričko Landscape Park (north-east part of Slovenia). The professional public recognizes it as an example of good practice in social entrepreneurship, employing people with disabilities and other vulnerable social groups, as well as sheltered employment.

At the Korenika farm, they established a system of organic food production and processing. They produce crops, herbs, fruit and vegetables on over 20 hectares of land. They also pick wild fruit and turn them into organic products. They produce and sell their own brand of herbal teas, cold-pressed oils, dried and pickled fruit and vegetables, food for the winter, juices, syrups and much more.

They arranged a spacious herb garden and animal park, which is home to many animals popular with youngest visitors. As the number of visitors continues to rise, they offer more and more activities and educational events in this pleasant, soothing and impressive rural environment. The increasing number of visitors has positively influenced the development of their tourist and catering offer. They offer workshops based on experiential learning for many schools and kindergartens, where children and young people can learn, relax and play at the same time.

### **Occupational Activity centers (OAC) for people with intellectual disabilities**

Most of the OAC are oriented in working together with their users, so they learn every-day-life skills. Most of the OAC in Slovenia have their own garden and some even have their own bee hives, so they produce their own honey.

In OAC Tončke Hočevar in Ljubljana they have a therapeutic garden. Horticultural activities have a long tradition in their institution. It is very popular among users, especially due to a variety of activities that are held throughout the year. They plant balcony flowers, ornamental flowers, grow room flowers, herbs, vegetables and berries. They take care of the lawn and ornamental shrubs, organize flower arranging workshops, have organised visits to garden shops and parks; they get to learn about plants. The main goals of horticultural activities are as follows: learning new skills and acquisition of new knowledge, experience and roles; gaining responsibility; refocusing attention; relaxation and

promoting a healthy lifestyle; creativity in gaining experience of satisfaction at success. Herbs, fragrances and vegetables are used in their every-day life, so in this way they get to know the value of plants. The activities take advantage of the therapeutic effects of the plants: they create a better mood and improve the quality of their life. In their therapeutic garden that is equipped with benches, a swing and garden furniture is a place to relax, socialize and performing other therapeutic activities. The garden is adapted for people who are wheelchair users, surfaces are wide enough into paved, garden-raised beds that make it easy to work with plants.

In OAC Zagorje ob Savi one of their activities is beekeeping. Participants of the activity have weekly meetings. Beekeepers have a lot of work to do when taking care of their bee families and producing the honey.

### **Questionnaire results**

According to the results, majority of the respondents have a garden or a place to grow plants. Most of them grow vegetables and herbs for their own consumption.

Majority of respondents believe that fresh air is beneficial when gardening. Other benefits of gardening are: increased physical activity, spending time outside; understanding where food comes from and improved mental health/wellbeing.

Main practical barriers that prevent AFMID and their family to be engaged in gardening are: no appropriate space for gardening; lack of interest in gardening; requirement for support (emotional and physical); and lack of knowledge about how to garden.

Majority of respondents say they could use some support in engaging their AFMID in gardening by receiving advice on growing edible plants. Other forms of support include access to a local allotment (garden); food growing courses combining gardening and cookery; and support of a local gardener or a gardening group.

## **Summary of the national report for the United Kingdom**

### **Attitudes and approaches to gardening in UK**

Roughly half of adults in the UK report that they garden as a free-time activity. Gardens are appreciated for their aesthetic qualities as well as being a place in which to grow vegetables. There are marginally more female gardeners than male. People begin taking up gardening in their mid-20's but it does not become popular until the 40s once they are more comfortable in their financial and

familial settings. Younger generations are more involved with going out to work and looking after children so have less expendable time.

The average garden size is 14m<sup>2</sup>, the general trend shows that the younger the owner, the smaller the garden (related to lack of income and tendency to move to urban areas for work). However, some buildings have had innovative transformations to incorporate green space into the built environment with rooftop gardens, balcony plants and many potted plants.

The typical British garden is well kept, with mowed lawns and trimmed bushes. Many people view their gardens as a 'fifth room' and are used for entertainment purposes such as barbeques and garden parties. People want them to look nice without having to do too much work which has led to low maintenance plants and decorative feature sales increasing.

Parents value gardens as play and discovery spaces for their children but increasing numbers of younger adults also want to grow food. For those who wish to have access to green space but do not have room where they live there is also the option of getting an allotment. These are traditionally vegetable growing plots in communal areas that also act as spaces for communities to congregate adding a more social side to gardening and growing plants.

In these uncertain political times many people have decided that getting out into nature and growing their own vegetables is exactly what they need to unburden themselves of stress and worry. While our landscape may be becoming more urban there is a certain 'fight back' from across the generations. They have an invested interest in where their produce is coming from and it is within reason for them to want to play a part in its growing and making sure it is developed in a way that is ecologically friendly to the planet. 82% Brits would like to attract more wildlife into their gardens- 37% deem wildlife to be most appealing garden feature

Garden retail in the UK is worth over £5 billion and the TV gardening programme » Gardeners' world reaches almost 3 million viewers (but was replaced by sport which has lower viewing figures but greater financial weight)

### **Benefits of Gardening**

As we get older gardens become more important as a source of physical activity, but also in terms of our identity and independence, and in ameliorating loneliness.



While gardening activity may decline in those aged 75 it is still an important and viable activity. It could also be said that generationally this age bracket may have grown up being taught gardening by their parents and the sights, smells and familiarity of some of the tasks can act as an important link to their pasts in later life. We can also add that those aged 75 and over do not have to be doing physical tasks to benefit from being outside and that even the vitamin D from the sun and access to natural air and a clean environment would be good for them in the long-term.

Gardening has also more recently found its way into the school system and proving itself to be of benefit to those in the classroom. Well-designed studies of school gardening suggest that children's fruit and vegetable intake can be significantly increased combined with efforts to improve parental support; a further range of studies points to increased knowledge, and preferences for fruit and vegetables. Teachers report positive wellbeing effects, personal achievement and pride in 'growing' and, where volunteers are involved, gardening can be a way to break down social boundaries inherent in academic settings. For children with learning difficulties or behavioural problems, gardening as a non-academic task and the garden as a place of peace and meditation are particularly valuable

The RHS has also noted a year on year increase in numbers of those wishing to gain qualifications in horticultural studies. This could leave us to believe that individuals may want to garden not just a hobby but find vocational use for their skills within the field. So instead of doing jobs that would mean being confined to a desk or working in a large building in the city many may want to be outdoors and benefiting from green spaces around them.

This is also true of those with learning disabilities or mental health issues for whom gardening, in the right environment, may have less stress attached or be more achievable with less reliance on dealing with the public or having to have a demand for high cerebral capability.

### ***Gardening opportunities for people with intellectual disabilities***

It was estimated in 2005 that there was a total of 836 Social and therapeutic horticulture (STH) projects running in the UK. These numbers are significant when considering that people with learning disabilities make up 48.7% of the overall client groups using STH. 24.4% of organisations connected with STH within the UK are colleges, community centres, schools, garden centres and specialist schools, in other words, places that may have the most connection to those with learning disabilities or would have a stake in promoting learning.



A good example of an STH project working with people with learning disabilities and how it succeeds in providing a pathway to paid work was a project set up to deal with a shortage of workers on a local tomato harvest by developing an ad-hoc work program for 19 individuals with ID involving a short period of 20, 4 hour days of paid employment. The productivity of the patients was lower than that of the workers but they were better at selecting usable fruit and all the fruit picked by the patients passed selection. The activity led to an improvement in the patients' colour discrimination and co-ordination. The act of earning money created a feeling of accomplishment and increased self-esteem. They were able to demonstrate promptness by meeting their bus and "good work habits when they cleaned their bus each evening. The project was a path way to work but also allows for lifelong learning to take place in that they were able practice timekeeping and care for their equipment as well as the benefits such as improved co-ordination and sense of accomplishment. It's worth noting the holistic nature of STH also in that all these goals are being achieved in the boundaries of one activity rather than a range of tasks being set

### **Survey results**

The majority of respondents have space for growing plants. Several mentioned that they had large gardens and that they found the garden challenging. Many grow fruit (on fruit trees or bushes), possibly because this is a low maintenance way of growing edible crops with minimal time and effort. Many are already growing vegetables and others have grown them in the past or would like to,

The main benefits of gardening relate to having a reason and motivation to be outside and physically active. Families also recognised the general benefits to health and wellbeing of being engaged with nature but understanding dietary choices and increasing confidence and engagement with the wider society were also seen as important. Gaining qualifications or work skills were seen as less important possibly because the level of impairment of the adults in the study means that these are not relevant goals.

The major barriers that respondent identified were the need for practical support from parents/carers and the lack of knowledge and experience about how to garden (how to grow plants, what to grow and when). Most had space for gardening and access to materials and finances to buy resources.

The most popular forms of support were courses, either on food growing or on general gardening and respondents were equally interested in course just for

AFMID or for courses also including families. Support of an experienced gardener or community gardening group were also seen as important.

The least useful forms of support were seen to be resources such as books or online tutorials and general advice or recognition for achievement.