

Review

Higher Education Institutions in Italy and Europe Offering Education and Training Programs in Social Agriculture

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Abstract: Over the past few decades, social agriculture, a component of multifunctional agriculture, has grown in popularity due to its numerous benefits for a variety of people, including those with learning and intellectual disabilities. A survey was conducted to assess social agricultural courses or modules offered by tertiary institutions. The study found that Italy and The Netherlands have the highest number of education and training programs that offer a full curriculum and/or individual social agriculture courses. In Norway, continuing and further education courses are frequently used to teach social agriculture. The Czech Republic, Austria, Germany, and the United Kingdom also have prominent social agriculture degree programs. The findings of this survey reveal a disconnect between the agricultural and therapeutic aspects of social agriculture educational programs. Most programs have well-tailored agriculture modules, while others have excellent therapeutic modules to the detriment of the other. Thus, social agriculture programs that focus on all aspects must be developed. Additionally, accreditation bodies are also needed.

Keywords: education; Europe; intellectual disabilities; multifunctional agriculture; tertiary institutions; training



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1. Introduction

Agriculture is a multifunctional activity that has the potential to contribute significantly to the social and economic condition of communities and countries. Social agriculture, also referred to as social farming, care farming, or green care, is a section of agriculture that has gained prominence. This sector comprises a range of intervention initiatives designed to harness the multifunctionality inherent in agriculture [1]. Unlike typical agriculture, social farming does not limit its focus to primary crop production or animal husbandry for food production and profit or income alone. Instead, it concentrates on short or long-term intervention activities that leverage agricultural resources, including animals and plants, to foster and provide essential social services in rural areas, all while diversifying income streams for farm owners [2,3]. These services encompass a spectrum of offerings, such as nature-based rehabilitation, therapeutic horticulture, animal-assisted therapy, sheltered employment, lifelong learning, and other endeavors that bolster the social inclusion of vulnerable people or marginalized groups. These groups include a wide range of individuals, including formerly incarcerated individuals, troubled youth, and those with physical, learning, or intellectual disabilities [4,5]. Intellectual disabilities are defined by notable restrictions in both intellectual capabilities and adaptive behavior, which involve a range of everyday social and practical skills [6]. A distinctive strength of social agriculture lies in its capacity to encourage participants to focus on their abilities rather than their limitations, nurturing their self-esteem while empowering them with transferable

skills. Social farming initiatives promote, in addition to the growth of the skills of people living in fragile situations, the creation of cohesive communities through the involvement and active participation of different subjects. Engaging in social farming plays a vital role in achieving an active vision of well-being, serving as a catalyst for local development. This is grounded in cooperative efforts among the government, private sector, civil society, and the increasing influence of the community in service management. It entails the participation of local entities and resources, fostering the creation of communal well-being initiatives [7]. In this perspective, training and education activities aimed at responding to the need to prepare qualified personnel, referred to as operators, who know how to combine the needs of the agricultural sector, as well as interface with social workers and users of the various activities, are needed [8]. Comprehensive training and education, of professionals, that focus on all aspects of social agriculture to enable the delivery of targeted support and care that encompasses all participants' needs, including proper accreditation, could lead to increased participation. This in turn will lead to improved economic, environmental, and societal welfare. Even though social agriculture has gained renewed recognition in recent decades, it is expected that training and education opportunities would not have developed in parallel. To the best of our knowledge, the number and level of available educational opportunities have not been deeply studied before. Hence, the primary objectives of this study were (1) to assess the landscape of social agriculture training and education in Italy and Europe to provide an overview of its current state in tertiary institutions, (2) to examine the existing curriculum of social agriculture programs, and (3) to identify and analyze the existing discrepancies between agriculture-focused modules and therapeutic-focused modules. This study provides a better understanding of the training and education landscape of social agriculture as it stands today.

2. The Need for Training and Education in Social Agriculture

As social agriculture continues its evolutionary journey, it becomes imperative to implement measures that ensure the proper acquisition, utilization, and dissemination of the knowledge and insights derived from these practices. One such essential measure involves the introduction of European Union-regulated social agriculture curricula at the national level. Operators working in social agriculture need to have advanced training beyond what is typically taught in agriculture due to the need to coordinate and support the reintegration of vulnerable people into society [9]. Training courses must cover the difficulties that vulnerable people encounter, offering guidance on inclusive behaviors, therapeutic approaches, and efficient communication techniques. Hence, targeted training and education programs that equip them with the skills needed for meaningful engagement in agricultural activities are important [10]. This includes, for example, understanding the cognitive and emotional needs of individuals with intellectual disabilities, tailoring interventions for those with learning disabilities, and employing effective strategies for youth facing behavioral challenges. Training should encompass not only technical expertise in agricultural practices but also a deep appreciation for the individuality of each participant, fostering a person-centered approach to the provision of care and support [1]. Ensuring accessibility and wider dissemination of social agricultural activities is contingent upon operators receiving specialized training [10]. Furthermore, investing in operator training and education programs may help develop scalable and long-lasting social agriculture initiatives. Their expertise could enable the establishment of best practices, the development of impactful interventions, and the cultivation of a cadre of professionals capable of disseminating knowledge and fostering positive change in diverse settings. Therefore, it would be advantageous to investigate training and education opportunities available to operators [10]. According to Nobelmann et al. [11], there is an ongoing endeavor in numerous European countries to establish formal qualifications in social agriculture within higher education institutions. Some tertiary educational institutions in Europe have taken the initiative to incorporate diverse courses and modules into their curricula, specifically designed to equip future professionals in this field. Nevertheless, there is a noticeable

gap within the current body of literature pertaining to standardized educational programs in social agriculture, particularly those aimed at preparing individuals to assume roles as caregivers for groups of people who could significantly benefit from engagement in social agricultural activities. As pointed out by van Elsen et al. [1], Europe currently lacks a standardized curriculum “to certify entrepreneurs and employees of organic green care farms working with disabled individuals”. To create suitable learning curricula and certification bodies, research becomes indispensable in determining the competencies and skills essential for individuals seeking to participate in the care farming sector. The various countries in Europe that engage in social agriculture follow their own regulations, which tend to differ depending on the purpose and outcomes of the social agriculture activities. Di Iacovo et al. [4] stated that there is a lack of clearly defined judicial and institutional frameworks for social farming in most countries and at the European level. In Italy, a national law called “Provisions on Social Farming” was enacted in August 2015 to give legitimacy to the existence of social agriculture [12].

Horticultural therapy, a component of social agriculture, refers to engaging in horticultural activities under the guidance of a certified horticultural therapist. The purpose is to attain predefined objectives within a structured treatment, rehabilitation, or vocational program, which has long benefited from the advantages of having professional education, training, and certification bodies in other countries [13,14]. Horticultural therapists are certified by the American Horticultural Therapy Association (AHTA) in the USA, the Awaji Landscape Planning and Horticulture Academy (ALPHA) and the Japanese Horticultural Therapy Association (JHTA) in Japan, the Korean Horticultural Therapy and Well-Being Association (KHTWA) in South Korea, the Hong Kong Association of Therapeutic Horticulture (HKATH) in Hong Kong, and the Hwa-Kang Xing-Ye Foundation (HKXYF), Formosa Green Care Association (FGCA), and Taiwan Horticultural Therapy Association (THTA) in Taiwan [15]. Horticultural therapy has made great advancements in terms of formalizing education and certification whereas social agriculture still falls short in this regard. According to De Boer et al. [16], the most crucial competencies to possess by those engaging professionally in social agriculture include the ability to integrate activities for residents into everyday practice, to handle many duties, to deliver medical care activities, and to have good communication skills.

3. Methods

The purpose of this survey was to identify tertiary institutions in Italy and Europe that provided standardized, comprehensive courses or modules in social agriculture as part of their undergraduate or postgraduate curricula. The data presented in this paper were collected through internet-based research methods. A survey was conducted utilizing specific keywords, including ‘social agriculture’, ‘social farming’, ‘care farming’, ‘green care’, ‘multifunctional agriculture’ ‘education’, ‘Italy’, ‘Europe’, ‘intellectual disabilities’, ‘learning disabilities’, and ‘neurodevelopment deficits’. To gather data, appropriate databases were utilized, including but not limited to Google and Scopus databases. These databases were chosen for their extensive coverage of academic resources across various disciplines. The search encompassed a wide range of sources, including scholarly articles, conference papers, theses, and institutional websites. The survey methodology involved iterative searches using combinations of the keywords to refine the scope of the study and ensure comprehensive coverage of relevant institutions and programs. Data collection proceeded through a systematic review of search results, with a focus on extracting information, such as module composition, program level, duration, etc., pertinent to the research objectives. Upon completion of data collection, a thorough analysis was conducted to identify trends, patterns, and discrepancies in the provision of social agriculture training and education across the extracted information. The analysis involved examining the prevalence of courses/modules, the integration of agricultural and therapeutic components, and the geographic distribution of institutions offering such programs. Overall, the methodology employed in this study aimed to provide a rigorous approach to identifying and analyzing

tertiary institutions offering social agriculture training and education in Italy and Europe, with the goal of informing future research and policy initiatives in this field. Limitations to data acquisition following this survey methodology are acknowledged.

4. SoFarEdu Project—Curriculum Teaching Social Farming in Higher Education

A multi-country project was formed in Europe in 2006–2009 due to the lack of tertiary-level teaching and training courses in social farming. This international project was aimed at creating curriculum and educational resources for social farming within the domain of multinational higher education among five partner countries, mainly Austria, Germany, Norway, the Czech Republic, and Hungary. The curriculum will train students in social work, agriculture, and farm entrepreneurship. The results of this work were a curriculum consisting of eight units in which multiple crucial areas of training are presented, this includes an introduction to social farming, fundamentals of social work, target groups of social farming, and more (Table 1) [17]. This curriculum could be used as a reference for introducing social farming courses in tertiary institutions across Europe (Table 2) and the world.

Table 1. SoFarEdu proposed a curriculum teaching social farming in higher education [17].

Content	ECTS *	Content	ECTS
Unit 1: Introduction to Social Farming		Unit 2: Basics in Social Work	
Reflection upon the decision of starting a social farm	2	Introduction to social work: theory and methods	5
Concepts and varieties of social farming	5	Ethics for helping professions	4
Scientific research social farming	5	Specific issues of psychology, sociology, and social pathologies	6
Legal issues regarding social farming	4	Traineeship and supervision	5
Financial issues/funding social farming	4	Social policy and legal regulations	4
Unit 3: Basics in Agriculture		Health and illness	6
Agriculture in country X—key figures, characteristics, developments	2	Communication	5
Basics in soil science	4	Unit 4: Target groups on a Social Farm	
Crop production	6	Communication and conflict management	5
Animal production	6	Knowledge of target groups and needs of specific groups	6
Socioeconomics and multifunctional agriculture	4	Cultural, social, and religious background of target groups	5
Legal policy of farming and selling products	2	Choosing types of social farming according to aims of target groups concerning employment, therapy, social services, education care and assisted living	6
Food processing	4	Personal resource management	2
Organic farming	3	Unit 6: Entrepreneurship	
Sustainable farming and small-scale farming	4	Develop a vision, a mission, and a strategy for social farming	1
Unit 5: Adaption of Farming Activities and the Farm to Social Farming		Human resources management	2
Plan work for participants on the farm	5	Stakeholders and networking	1
Plan and organize care and agricultural production	5	Financial plan	5
Plan and organize cooperation with stakeholders	2	Marketing plan	5
Adjust and adapt machines, equipment, and tools according to social farming	3	Communication plan	3
Adapt the space and buildings to social farming	3	Entrepreneurship plan for sustainable income	3
Implement work hygiene and safety measures	2	Business plan	5
Unit 7: Practical Placement and Field Trip		Unit 8: Bachelor Thesis	
This module includes a study tour to visit and analyze a wide variety of social farms, as well as an individual internship at a social farm	8	Bachelor Thesis	5
Supervision	2	Bachelor Seminar	5

* ECTS: European Credit Transfer and Accumulation System.

Table 2. Examples of degree courses in social agriculture offered by tertiary institutions in Europe.

Course Name	Education Level	Credits (ECTS)	Duration	University	Country
Social Agriculture	Level 1 MSc		600 h	“Tor Vergata” University of Rome	Italy
Green Care—Educational, advisory, and therapeutic interventions with animals and plants	MSc	120	3 years	University of Agricultural and Environmental Education	Austria
Multifunctional Agriculture	MSc	120	2 years	University of South Bohemia	Czech Republic
Social Agriculture	- *	-	-	University for Sustainable Development Eberswalde (HNEE)	Germany
Agricultural Water Management Engineering	MSc	-	-	Szent István University	Hungary
Green social entrepreneur	Professional training	-	-	Groenhorst College	The Netherlands
Entrepreneur in a social farm	Professional training	-	-	AOC De Groene Welle College	The Netherlands
Social entrepreneurship	Professional training	10	-	Norwegian University College for Agriculture and Rural Development (HLB)	Norway
Agricultural Science and Territory: curriculum Social Agriculture	MSc	120	2 years	Polytechnic University of Marche	Italy
Agro-Zootechnical Multifunctionality and Human-Animal Interaction	MSc	120	2 years	University of Pisa	Italy
Advanced training course in Social Agriculture	Advanced diploma	-	3 months	University of Bologna	Italy
Sustainable Agriculture	MSc	120	2 years	University of Perugia	Italy
Adult Continuing Education (Ace) in Practice Support in Social Farming	Certificate NQF 6	30	1 year	University College Cork	Ireland
Health and Society	MSc	120	2 years	Wageningen University and Research	The Netherlands
International Development Studies	MSc	120	2 years	Wageningen University and Research	The Netherlands
Organic Agriculture	MSc	-	2 years	Wageningen University and Research	The Netherlands
Introductory course in animal-assisted interventions—animal-assisted therapy, pedagogy, activity and green care	Continuing and further education course	5	-	Norwegian University of Life Sciences	Norway
Animal-assisted interventions on the farm	Continuing and further education course	10	-	Norwegian University of Life Sciences	Norway
Animal-assisted interventions with dogs	Continuing and further education course	10	-	Norwegian University of Life Sciences	Norway
Special Education	MSc	120	3 years	Inland Norway University of Applied Science	Norway

* Data not available.

5. Tertiary Courses and Modules in Social Agriculture in Italy and Europe

5.1. Italy

5.1.1. Agricultural Science and Territory: Social Agriculture Curriculum

This is a two-year master's degree in Agricultural Sciences (degree class LM-69) course under the Italian Ministerial Decree 270/04 at Marche Polytechnic University located in the city of Ancona. Within the Agricultural Science and Territory program, there are two curricular paths that students can choose, namely Crop Production and Protection and Social Agriculture; the latter curriculum was first established in 2015. The course is taught entirely in Italian. To be enrolled in this program students need to have an Italian first cycle degree or an equivalent foreign degree in a similar or related field and meet all other selection criteria, including passing a selection interview. Students enrolled in the program undertake common lectures in the first year followed by a year of specialization in the second year. Students who choose the Social Agriculture curriculum will take a deeper look at topics related to sociology and service planning, psychiatry and psychology with teachings that aim to take advantage of the multifunctionality aspect of agriculture for the societal inclusion of different groups of disadvantaged people (Table S1) [18].

5.1.2. Animal Production Sciences and Technologies: Agro-Zootechnical Multifunctionality and Human–Animal Interaction Curriculum

This two-year master's degree course in Animal Production Sciences and Technologies is offered at the University of Pisa. The course is divided into two curricula, namely (1) Agro-Zootechnical Multifunctionality and Human–Animal Interaction and (2) Quality and Valorization of Products of Animal Origin (Table S2). Each curriculum has courses that count for a total of 120 ECTS and is taught entirely in the Italian language. Students need to hold an Italian First cycle degree or an equivalent foreign degree in a similar or related field. Assessment of prior knowledge and competencies is not necessary for admission into the course. In the curriculum of Agro-Zootechnical Multifunctionality and Human–Animal Interaction, a module in Social Agriculture and Apidology is offered as compulsory to students. The module counts for 8 ECTS comprising 36 h of teaching and focuses on multiple aspects of implementing social agriculture. Students can deepen their knowledge and apply learned theory into practice by either carrying out internships or traineeships with private and public practitioners, where they will be exposed to the multifunctionality of agriculture on a first-hand basis [19].

5.1.3. Social Agriculture

This level 1 master course is a product of a partnership among the University of Tor Vergata (Rome) and other private actors. The course is offered over distance learning, which comprises 96% remote lesson hours and 4% frontal lessons, that is, 384 h of distance learning in e-learning and 16 h in the laboratory classroom, respectively. The course also includes a project or final thesis and a 200 h internship to be carried out by students (Table S3) [20].

5.1.4. Advanced Training Course in Social Agriculture

The University of Bologna offers a lifelong course in Social Agriculture (Table S4) that is taught over three months. To be admitted to the course, prospective students must have a bachelor, master, or single-cycle degree class obtained under Ministerial Decree 270/04 or first-cycle, second-cycle, or single-cycle degrees possibly obtained under the previous regulations (Ministerial Decree 509/99 and previous systems). Additionally, secondary school diploma of II-degree holders, candidates not in possession of either of the above-mentioned degrees, may also be admitted to the selection process if they have an academic curriculum vitae that documents a qualified competence of three years in the subject(s) of the course. The admission of prospective students is decided by a Selection committee [21].

5.1.5. Sustainable Agriculture

University of Perugia, Italy, offers a 2-year master's degree course in Sustainable Agriculture, which consists of three curricula, namely Bioeconomy, Organic and Environmentally Friendly Agriculture, and Territory and Landscape in which it is possible to take a module on Social Agriculture (Table S5) worth 3 ECTS as an elective. Instruction in this program is conducted exclusively in Italian, necessitating foreign students to undergo an assessment to confirm their proficiency in the Italian language. Students will have the opportunity to participate in internships designed to familiarize them with the day-to-day work duties; this experience will involve identifying and planning the activities associated with content studied in the degree. The internship can be carried out at an Italian or foreign institution/organization. Those who complete the program will be qualified to occupy professional roles in agricultural, environmental, and sustainable development sectors of rural areas. Their proficiency lies in conducting economic-environmental analyses, evaluating environmental and territorial aspects, formulating environmental policies, and devising sustainable development strategies [22].

5.2. Czech Republic

Multifunctional Agriculture

The University of South Bohemia in České Budejovice (USB) in the Czech Republic offers a postgraduate master's course in Multifunctional Agriculture of 120 ECTS, which spans over two years. Prospective students seeking admission must possess a bachelor's degree in a pertinent field and possess an English international certificate at the B2 level from an authorized body. The course is taught entirely in English as it is meant to attract foreign students, and students are expected to obtain at least 20 credits at the end of each semester with a total of 120 credits to qualify for graduation (Table S6). Students will have the opportunity to participate in a semester of education abroad under the ERASMUS+ exchange program, which will be in line with the requirements of the course [23].

5.3. Austria

Green Care—Educational, Advisory, and Therapeutic Interventions with Animals and Plants

The MSc course in Green Care is a three-year part-time master's course offered by the University of Agricultural and Environmental Education in Vienna, Austria. The course is credited with 120 ECTS (Table S7). To gain admission into the course applicants must have completed a bachelor's degree or an equivalent degree with 180 ECTS at a recognized domestic or foreign post-secondary or tertiary educational institution. Alternatively, applicants could present proof of a proficiency test for teaching and promoting agriculture and forestry at the University of Agricultural and Environmental Education or its predecessor organizations in connection with several years of relevant professional experience and proof of further training days. The course is presented in Deutsch with English as the optional language of instruction [24].

5.4. United Kingdom

Adult Continuing Education (Ace) in Practice Support in Social Farming

University College Cork, Ireland, offers a course in Adult Continuing Education (Ace) in Practice Support in Social Farming (Table S8). The course is delivered part-time over one academic year and the certificate carries 30 credits, NFQ Level 6 award. Entry requirements include possession of a Leaving Certificate/FETAC Level 5, an English proficiency test IELTS Level 6 or equivalent TOEFL score, and a minimum age of 21 years, and, where applicable, prior experience is considered [25].

5.5. Germany

Social Agriculture

University for Sustainable Development Eberswalde (HNEE) in Germany offers a certificate course in Social Agriculture, which consists of four modules that can be taken independently, except for the 'My future in social agriculture' module, which has a prerequisite of the 'Basic knowledge in social agriculture' module (Table S9). To be admitted into the course or module, applicants must have a university degree or have completed vocational training with two years of professional experience requirements [26].

5.6. Norway

5.6.1. Courses in Animal-Assisted Interventions

The Norwegian University of Life Sciences (NMBU) in collaboration with Dyrebar Omsorg has developed several courses that aim to further educate and enhance the competencies of people who want to use animals actively in intervention with humans in public and private sectors. These continuing and further education courses are offered in Norwegian with the possibility of having some modules in English.

Introductory Course in Animal-Assisted Interventions—Animal-Assisted Therapy, Pedagogy, Activity, and Green Care

The course is primarily aimed at participants with a background in pedagogy, health sciences, social sciences, medicine, veterinary medicine, biology, or psychology. Other interested parties can participate based on general study competence or prior learning. The course is composed of 3-day frontal lessons followed by independent work on a semester assignment using the prescribed syllabus. Upon successful completion of the assignment, as well as having 80% attendance in frontal lessons, participants will earn 5 credits and a certificate [27]. The learning objectives of the course are listed as follows:

- Describe and explain the most important concepts in animal-assisted interaction with emphasis on preventive, stimulating and rehabilitative measures for different groups of people.
- Assess user groups and subject areas where animal-assisted intervention can be used.
- Understand the importance of putting users' interests in focus.
- Develop the ability to evaluate available literature in the field.
- Understand the importance of safeguarding animal welfare in interaction with humans.

Animal-Assisted Interventions on the Farm

This course is intended as a business-oriented continuing education, where the participants gain knowledge about different ways of collaborating with the animals on the farm in their business or professional practice. A prerequisite for attending this course is successful completion of the course 'Introductory course in animal-assisted interventions—animal-assisted therapy, pedagogy, activity, and green care' mentioned above. A total of 10 credits is awarded to participants who complete the study material in its entirety [28]. The learning objectives of the course are listed as follows:

- Have theoretical and practical knowledge about behavior and learning in domestic animals.
- Choose the right individual and prepare the individual for tasks in animal-assisted interventions.
- Be able to guide users in animal-assisted interventions in the field of personal practice.
- Understand the importance of safeguarding animal welfare in a learning situation and while working with animal-assisted interventions.

Animal-Assisted Interventions with Dogs

Successful completion of the course 'Introduction course in animal-assisted interventions' is a prerequisite for gaining admission to the 'Animal-assisted interventions with

dogs' course. The course carries 10 credits [29]. The learning objectives of the course are listed as follows:

- Have theoretical and practical knowledge of behavior, learning and requirements for the individual animal's mentality.
- Be able to use this ethological knowledge to choose the right individual and how to prepare the individual for tasks in animal-assisted intervention.
- Understand the importance of safeguarding animal welfare in a training situation and during work with animal-assisted intervention.
- Understand the importance of safeguarding the user's interests.
- Be able to consider ethical considerations when incorporating animal-assisted interventions.
- Participate in the design of projects with animal-assisted interventions, and thus be able to guide users in animal-assisted interventions in personal practice.

5.6.2. Special Education

The master's degree in Special Education is a collaborative effort between the Inland Norway University of Applied Science and The Field Centre, Ruskin Mill Land Trust (UK). Structured as a part-time program spanning three years and accumulating 120 ECTS credits, this study requires potential candidates to possess a bachelor's degree in the applicable field. Additionally, applicants must furnish a work certificate validating at least two years of full-time, relevant work experience with children and/or adults in an educational setting. Non-native English speakers are mandated to present official documentation demonstrating proficiency in the English language at a specified level [30]. The primary goals of the master's degree include:

- Develop and create innovative practical approaches to teaching and learning in special needs education.
- Recognize and meet children and youth with disabilities and/or special learning difficulties with knowledge, respect, and dignity—in a collaborative process.
- Develop conscious awareness of educational potential, through the re-connection of the hand (practical), the heart (emotional) and the head (intellectual).
- Develop a conscious awareness of pedagogic possibilities and potential in new situations, contexts, and locations.
- Facilitate transformative learning through the relocation of the point of learning from the head to the hands and heart.
- Effectively evaluate, reflect, and research own practice to enhance the effectiveness of teaching and learning within a special needs context, reflecting the specific needs and resistances presented by the individual learner.

5.7. Hungary

Agricultural Water Management Engineering

The MSc course in Agricultural Water Management Engineering offered at Szent István University is a 120 ECTS course that mainly focuses on training professionals in agricultural water management, with a special focus on sustainable integrated water resources management. The course is taught in English. To gain admission, prospective students are required to have a BSc or equivalent degree in a relevant field of science or related area and have a good command of the English language. Within the course, it is possible to take the module on sustainable agriculture, which is divided into 3 h of frontal lessons and 16 h of visits to a local farm [31].

6. Discussion

The contradictory results of training and education programs offered by higher education institutions identified in this study highlight a significant divide in the current state of social agriculture education. While these institutions are indeed offering programs related to social agriculture, they often exhibit a skewed emphasis on one aspect over the other, which will result in an incomplete understanding and preparation of operators

in this field. As social agriculture is an inherently interdisciplinary field, training and education should encompass a wide range of skills and knowledge areas. On the one hand, operators need a strong foundation in agricultural practices, including crop cultivation, animal husbandry, and sustainable farming methods. On the other hand, operators must possess a deep understanding of therapeutic approaches to help participants reach goals such as improving mental health or enhancing cognitive skills, self-esteem, and autonomy. Furthermore, operators also act as bridges between the program and the wider community, thus requiring effective communication and outreach skills to build support and participation [13]. The programs presented in this current study do provide sufficient fundamental components and concepts aimed at giving students a thorough understanding of this diverse and multifaceted topic. Students learn the definition, historical development, and a wealth of related concepts such as social farming, care farming, green care, and multifunctional agriculture during this phase, which introduces students to the core of social agriculture. Beyond theory, some of the curricula we have identified explore social agriculture service applications in real-world settings, though these programs tend to prioritize modules focusing on agricultural practices. These activities focus predominately on providing students with skills in crop production, animal husbandry, and environmentally friendly farming practices, which represent only one facet of social agriculture. Examples of this include the Agricultural Science and Territory: Social Agriculture [18], Sustainable Agriculture [22], and Agricultural Water Management Engineering [31] programs that mainly focus on farming to the exclusion of the health aspect of social agriculture.

The inverse is also true when it comes to the therapeutic components of social agriculture addressed by some of the curricula identified in this study. The Green Care—Educational, Advisory, and Therapeutic Interventions with Animals and Plants [24], Adult Continuing Education (Ace) in Practice Support in Social Farming [25], and courses in Animal-Assisted Interventions [27–29] focus solely on education and training in therapeutic components. This section includes working with several therapeutic modalities that use agricultural resources to improve participants' well-being, such as horticulture therapy and nature-based rehabilitation. Working with a variety of participant groups, including those with intellectual disabilities, people dealing with mental health issues, troublesome youth, the elderly, and other marginalized communities, is also covered with guidance.

The Social Agriculture curricula offered by the University for Sustainable Development Eberswalde in Germany [26] is an example of a program that provides a good combination of agriculture and caregiving modules in equal measure. Students are provided with thorough knowledge of crop and animal production as well as fundamental concepts in social agriculture, including guiding principles and definitions in social agriculture, diversity of social agriculture in Europe, fields of action, added value, requirements of the client groups on the farm, and requirements of the farm on the different client groups. Three modules in this course are weighted at 6 ECTS, which is equivalent to 180 h of study while one module is 9 ECTS, equivalent to 270 h of study. According to Study Portals Masters [32], 1 ECTS is equivalent to 30 h of study in Germany. From the total amount of hours required to master and pass the examination for each module and subsequently graduate from the course, we can assume that students will have gained in-depth knowledge of social agriculture. Additionally, the Advanced Training Course in Social Agriculture curriculum from the University of Bologna in Italy [21] has a good combination of agriculture and health aspects while placing more emphasis on policies and legislation and management and marketing in social agriculture. Students will be well-versed in the legal ramifications of social agriculture by virtue of the curriculum's examination of the legislative and regulatory frameworks pertinent to the sector. Additionally, students also acquire knowledge about designing and executing programs, including how to create plans that are specifically tailored for each participant. The educational programs we presented in this study also give emphasis on teaching operators how to plan and execute activities for client groups with different needs within the farm environment.

Internships play a pivotal role in providing practical hands-on experience that complements theoretical learning thus allowing individuals to apply classroom knowledge in real-world settings. A few of the programs require students to complete an internship to explore the many versatile career paths in social agriculture with the ultimate goal of gaining work experience. This includes programs from the University of Pisa [19], the University of Tor Vergata (Rome) [20], the University of Perugia [22], and the University of Agricultural and Environmental Education [24]. This is important because it allows individuals to apply theoretical knowledge gained in the classroom to actual tasks and projects, enhancing their understanding and skills.

When comparing the programs, it is evident that in some cases, there is no perfect connection between the agriculture and therapeutic aspects of social agricultural educational programs. Most programs have well-tailored agriculture modules while others have excellent therapy modules, respectively. This imbalance has significant repercussions; when training and education programs concentrate too much on one facet of social agriculture, they run the risk of producing graduates who lack the comprehensive knowledge and skill set needed to address the complex challenges facing modern agriculture. A social agriculture program that focuses on all aspects must be developed. The curriculum proposed by the SoFarEdu project [17] offers a bridge between providing agricultural and caregiver training with multiple modules considered. The programs identified in our study share certain similarities with those in the SoFarEdu project, albeit not to the same extent. Furthermore, interdisciplinary collaboration between departments and faculties within universities can facilitate the integration of diverse perspectives and expertise into these educational programs. By embracing an interdisciplinary and holistic approach to training, higher education institutions can better prepare future operators to navigate the many opportunities and challenges in the field of social agriculture.

This study can serve as a benchmark for European countries to assess the state of their social agriculture training and education. The disparities highlighted in the provision of education within and between countries can serve as a starting point for understanding how certain countries were able to curate well-rounded programs; this can inform policymakers about areas that may need development or additional support in their regions. For instance, the identified disconnect between agricultural and therapeutic aspects in the programs can trigger a broader discussion across Europe to address this gap, ensuring a more balanced and integrated approach to education in the field in the future. The Social Agriculture curricula offered by the University for Sustainable Development Eberswalde in Germany [24] could be a lead from which to start. Subsequently, harmonized practices and standards could be developed across Europe. Thus, policymakers could initiate the development and dissemination of curricula with successful approaches and methodologies that can serve as a resource for higher education institutions, fostering cross-border collaborations, continuous improvement, and innovation in social agriculture education. Lastly, accreditation bodies are also needed to define and implement quality standards for the programs as well as for certifying qualified professionals.

Although the primary objective of this review has been to focus on higher education, such as that offered by universities and similar bodies, it may be useful to consider that there is also a wide range of training options in social agriculture outside of academic institutions. Many regional administrations, which are often (at least in Italy) responsible for the field of social agriculture, promote training courses that are shorter in duration than academic degrees and which are often the requirement to be able to apply to the regional registers required by (e.g., Italian) legislation.

7. Conclusions

Social agriculture has emerged as a versatile tool to provide a wide array of services and support, making a significant impact on the lives of marginalized populations. Recognizing the myriad advantages that social agriculture brings, there is a compelling case for its broader adoption and diffusion. Formalizing and standardizing educational and

training opportunities for those interested in entering the industry or transitioning from other fields emerges as a crucial step. Our study sheds light on the current landscape of education and training opportunities within higher institutions in Europe. Most of the programs identified focus on one aspect to the detriment of the other. Therefore, we recommend conducting research to develop educational programs that give equal attention to all aspects of social agriculture. Furthermore, other training and education opportunities could be explored and compared to the ones already reported to assess their accessibility and application.

Limitations of this survey study are acknowledged. Firstly, the keywords used in this study might not be exhaustive and could have resulted in the omission of relevant programs, especially in the cases where information is written in a different language. Our study mostly used the English language during searches. Secondly, the data were mostly acquired from institutional websites and may have been presented in a way that belies the comprehensiveness of the program. Thirdly, the study lacks perspectives from students, educators, or practitioners involved in social agriculture programs. Their experiences and insights could provide valuable context and nuances to the findings. Finally, the findings presented in this study reflect the state of social agriculture training and education at a particular point in time; thus, changes or developments implemented to programs after the survey period might not be captured. Ultimately, there could be more educational programs available than those we reported in this study.

Supplementary Materials: The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/su16072893/s1>, Table S1: Social Agriculture curriculum program structure offered by Marche Polytechnic University, Italy [18]; Table S2: Agro-Zootechnical Multifunctionality and Human-Animal Interaction program structure offered by University of Pisa, Italy [19]; Table S3: Social Agriculture course program structure offered by University of Rome, Italy [20]; Table S4: Advanced training course in Social Agriculture program structure offered University of Bologna, Italy [21]; Table S5: Sustainable Rural Development course offered by University of Perugia, Italy [22]; Table S6: Multifunctional Agriculture course offered by University of South Bohemia, Czech Republic [23]; Table S7: Green Care course program structure offered by University of Agricultural and Environmental Education, Austria [24]; Table S8: Adult Continuing Education (Ace) in Practice Support in Social Farming offered at University College Cork, Ireland [25]; Table S9: Social Agriculture course program structure offered by University for Sustainable Development Eberswalde, Germany [26].

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