

SIRCLES







SIRCLES PROJECT PROMOTING CIRCULAR ECONOMY

Many people in different countries are unaware of the advantages of bio-waste and the way a circular economy could, in many ways, have a positive impact on the general population. Tommy Waked, a solid waste management consultant, believes that one of the main obstacles to achieving a circular economy is the lack of public awareness.

While many agree on the definition of 3Rs (Reduce, Reuse, and Recycle), there are numerous different ways to understand the idea of upcycling as part of a circular economy. However, they generally emphasize preventing waste by increasing the efficiency of the production of goods and materials and reusing them. When there is a need for new raw materials, they shall be obtained sustainably to avoid harming the environment. This contrasts with a linear economy, where raw materials are used to make products and the waste they leave is thrown away.



There are many benefits to a circular economy, with the term "less" repeated many times. There is less use of non-renewable resources and resources are used sustainably. Less carbon is emitted due to lessened mining needs, and less waste is produced in general. There are many ways to promote upcycling and the limiting of including pay-as-you-throw waste, (PAYT) schemes, Extended Producer Responsibility (EPR) systems that encourage manufacturers to use reusable and recyclable products, and increasing the efficiency of waste management systems through waste reduction, sorting at source, and ensuring the sustainability of the Operation, Maintenance and Development (OM&D) cost. Some even consider the conversion of "Waste to Energy" as a form of recycling, under the principle that it transforms unusable waste into usable energy. There are many ways to understand and implement elements of a circular economy, some are more suited to Lebanon than others. In the longer run, however, the adoption of a circular economy could help to revive Lebanon's struggling industrial sector which can be heavily involved in any circular economic processes, as well as 3Rs processes, as well as support





Furthermore, it is no secret that Lebanon, Tunisia, Palestine, Spain, Italy and Greece have been in dire need of a better waste management strategy, and compost, with its many benefits, can contribute to solving this problem. Compost improves the physical, chemical, and biological properties of soils and potting mixes, meaning that it acts as a natural fertilizer. In addition, it improves the aeration, drainage and water-holding capacity of agricultural soils and is thus a source of micronutrients. In the longer run, biological treatment mechanisms can also be reconsidered and diversified to account for the nature of the waste being managed and to the limitations of various technologies. However, what is most fascinating about compost is that it is made from abundantly available material, i.e. bio-waste, which constitutes more than half of daily municipal waste.



Potential composting site in Hbaline, Jbeil, Lebanon

The SIRCLES project is a model project for circular economy. With respect to its goal of involving vulnerable sectors of the population and to support environmental sustainability, the project and its partners aim to create new employment opportunities (green jobs) in the bio-waste sector within the framework of a circular economy. Having taken into account the constantly increasing rate of youth unemployment due to the economic and financial crisis the country is suffering from, particularly that of NEETs and women in Lebanon, the project will develop new business development capacities as well as the separation, collection, composting and agriculture processes.

However, Tommy Waked believes that tackling the socioeconomic problems in a more holistic way requires a shift in local and global political actors' vision, as well as the promulgation of laws and regulations that foster a circular economy by creating financial incentives to encourage people to take serious actions on that front.

THE TECHNICAL TRAINING COURSE IN THE OPERATION AND MANAGEMENT OF COMMUNITY COMPOSTING SITES

Circular economy, decentralized models, food waste collection, composting process, the management of composting sites, process evolution and compost are the essential topics which SIRCLES project's seven partners need to master in order to implement the projects in the most effective way. They mastered them deeply in "The technical training course in the operation and management of community composting sites" in Sort, Spain which was given by Dr. Ramón Plana González-Sierra, PhD in Biology and master composter. The training enabled them acknowledge the practical key factors to manage bio-waste in models based on community composting, development of the skills and techniques to identify the agronomic quality of the final product in order to correctly use the bio-waste compost locally.



The partners from the different countries now have the necessary tools to analyze the characteristics and realities of their territories in order to design their own community composting model while defining all the pros and cons and they are also able to create a training program for future "master composters". Dr. Plana insisted on the importance of the training for the correct implementation of compost and must be expanded and reach all the stakeholders. Citizens, local businesses, technicians, experts, politicians, schools and local farmers amongst other stakeholder must be fully aware of all the aspects of the project in order to get a consensus on the design and operation of the local composting system.

Thus, all the stakeholders must have basic knowledge of composting, how it works, who are the master composters and the environment and economic cost of composting. Also, they must be kept in the loop regarding the different stages of the implementation, the production of compost and where and how it is being used. Finally, such a training allows all the stakeholders to face any type of challenge.



Having said that, it is worth mentioning the difficulties that compost facilities had to face during and post the COVID-19 pandemic, noting that the generation of bio-waste did not stop during the pandemic and will not stop after it. The main challenge was to resume individual collection and local composting safely and risk free. During the first months of the pandemic, many municipalities, namely in Spain, conducted a health and risk analysis and took various decision regarding the modifications to be made to keep the service operational. The second challenge, which is going to be a struggle in the foreseeable future, is related to change in the people's way of life after the pandemic, namely the changes in consumption habits. Dr. Plana was dismayed to announce that "the increase in consumption of plastics and processes food can have negative effects on the composting of food waste". Therefore, it's essential to raise environmental awareness, specially about waste management and the community's role in it.

"There is a little lack of awareness. In each village, there are always those who participate a lot and those with whom we should work to educate and raise their awareness" is what Ruiz, technician in community Cristina composters at the Council of Pallars Sobirà County had to say about people's involvement in the project. As aforementioned, since the project is highly centered around the people and the community, as their consent is required to build a compost facility, they are asked to separate waste, and most importantly it is given back to the people to use, raising awareness remains the most important obstacle. The bet is on the youth, in Jordan, Rana Al-Hijazin, project manager in EDAMA, stated that the youth will play a major role in the process as they: "Youth can manage the distribution of containers in different regions of the Kingdom, they can operate the compost facility as well as market and sell the produced compost".







SOCIAL INCLUSION: STILL FAR FROM REALITY

Social inclusion and gender equality are barriers many groups in many countries have to overcome in order to fully participate in political, economic and social life. These groups may be subject to exclusion not only in legal systems but also because of discriminatory and stigmatizing attitudes, approaches, perceptions and beliefs. The disadvantage is often rooted in social identity, which means in gender, age, occupation, race, religion, disability and sexual orientation. This type of social exclusion is depriving people from their dignity, security and most importantly the opportunity for a better life. The COVID-19 pandemic has shed the light on deep rooted systemic inequalities, as it has put the spotlight on the differentiated impact the crisis has on people with disabilities, women, youth, the elderly and many other groups of people. If the root causes of this issue and discrimination are not addressed, a hope for a better and fairer world are at risk.



Raising awareness about social inclusion and the policies revolving around is the right thing to do, since its advantages are many and left unaddressed, the exclusion of disadvantaged groups can be costly. Having said that, regardless of the many laws and conventions such as the Equal Remuneration Convention, Discrimination (Employment and Occupation) Convention, Workers with Family Responsibilities Convention and Maternity Protection Convention, in many places women face many forms of discrimination at work. In addition, despite the many conventions such as the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) which guarantees the right to people with disabilities to mainstream vocational training, employment and social protection and ILO Vocational Rehabilitation and Employment (Disabled Persons) Convention, 1983 as well as by the Discrimination (Employment and Occupation) Convention, 1958 which promote equality at work, the reality is far from ideal. Finally, in spite of International Labour Standards which consist of Conventions and Recommendations providing practical guidance for countries seeking to facilitate young people's full and productive integration into the labour market, the youth in many countries remain unemployed and uncared for.

Through circular economy, SIRCLES project aims to create opportunities for youth, women and specially NEETs in order to promote social inclusion and equality. Many should be the projects and initiatives, similar to SIRCLES that focus on social inclusion and equality if we wish to build a better future for the incoming generations.

