

The current geopolitical challenge of the food system is therefore to revolutionise the production model, starting from the correct management of natural capital, which is associated with cultural and economic capital, while respecting planetary limits and at the same time offering a fair space to civil society. The complexity of the food system requires a transdisciplinary perspective that defines the characteristics of an economic paradigm based on value relationships. It must start by preserving the ecological fabric that sustains life on our planet and which man is devouring with incredible voracity. Generating a new conceptual framework that grasps the needs of civil society, the production system, the environmental context, circularity and sustainable development, is a fundamental objective to be pursued with the aim of supporting an ecological transition that on a scientific basis aspires to real application.

This is the purpose behind the 3Cs of the Circular Economy for Food (Fassio, 2021) - Capital, Cyclicity, Co-evolution - a trajectory that aims to be inclusive, simple in its narrative, complex in its articulation, to be followed by each of us using our own means but sharing the goal.

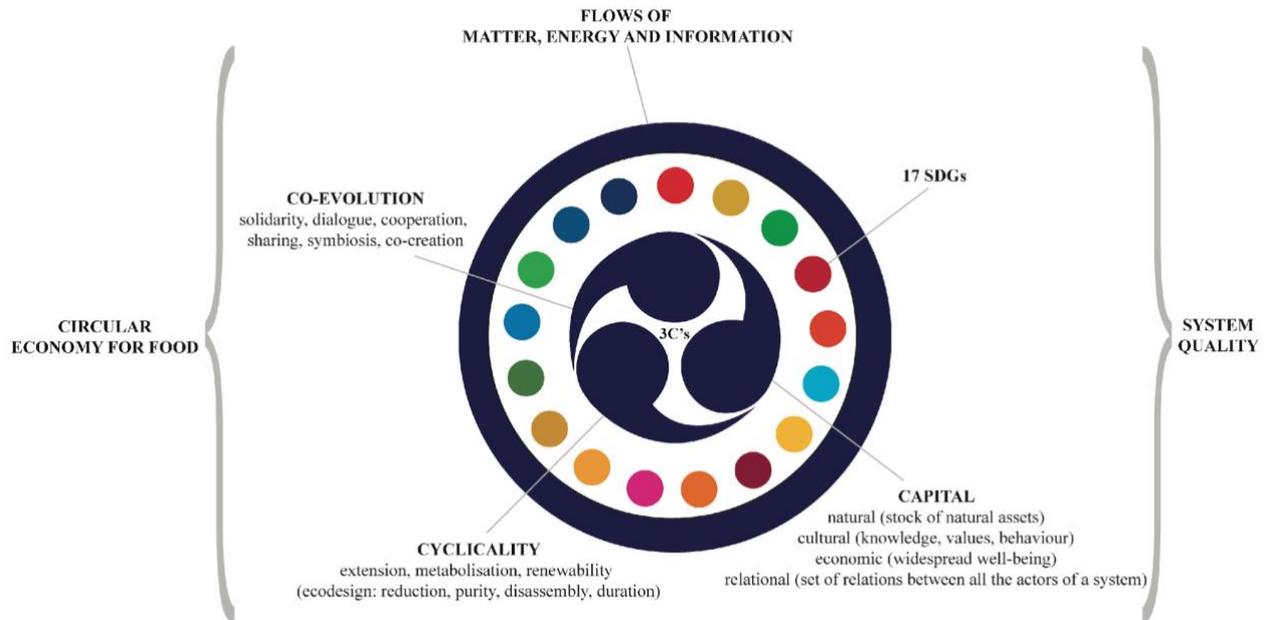
In short, the new circular economic paradigm, when applied to food, should first of all start from preserving and regenerating on a local level, Natural Capital, the entire stock of natural assets (living organisms, air, water, soil and geological resources) that contribute to providing ecosystem goods and services for humanity and are necessary for the survival of the very environment from which they are generated. Related to this is Cultural Capital, i.e. the body of knowledge, values and attitudes towards natural and social ecosystems, which must be preserved and handed down as a precious legacy, so that it can become, from generation to generation, a vision integrated with the future and capable of producing a distributed and fair source of income that supports Economic Capital. Natural, Cultural and Economic Capital are therefore inseparable factors supported and in dialogue thanks to Relational Capital.

The second C is that of Cyclicity, which invites us to think in a regenerative key, encompassing three fundamental concepts such as extension, metabolisation and renewability. Extension of corporate responsibility which, from the origin of the raw materials, must take on the entire life cycle of the product, including its final disposal, and which must put the consumer in a position to waste less and dispose of it by separating it correctly. Metabolization, i.e. the ultimate upcycling (McDonough & Braungart, 2013) of everything that is put on the market, with the aim of not generating waste but always and only resources for the same or another system (biological and technical cycle of

metabolization). The concept of metabolization also contains in turn four executive cycles short (when there is a physical and temporal proximity between points of output and re-entry into the production system), long (when the time of use value of the output increases through several consecutive cycles), cascade (when an upcycling passage of output-input is created between distant segments within the same value chain or belonging to different industrial sectors), pure (concerns the maintenance of the quality of the resource in the different passages of the value chain and the absence of dangerous or non-metabolizable substances). In order to achieve this, it is essential to adopt strategies to facilitate its realization such as those suggested by EcoDesign and among which we find the requirements of disassembly, reduction of material and energy, durability and purity. In this sense, emphasis is placed on renewability because every action must be in tune with the regenerative cycles present in nature.

Finally, the C of Coevolution, which is inspired by the mutualistic symbiosis present in nature, a dynamic in which one or more subjects benefit from the relationship they establish, implementing a win-win solution for all the actors in the system. Co-evolution is developed through a collaborative paradigm which, through the application of a win-win logic, generates a win-win solution for all, including the environment. Solidarity (between people and peoples to reduce social inequality and access to quality food), dialogue (between natural and man-made ecosystems, to eliminate the asynchronicity of the human economic model with natural cycles), cooperation (between communities that share values and objectives), sharing (of matter, energy, information to accelerate the transition and facilitate evolution), symbiosis (between companies and between them and the community, the territory, the five natural kingdoms), trust (which must be mutual "mutual trust"), are the priorities on which we must work to give resilience to the circular economic paradigm. A context in which even communication becomes symbiotic, as the result of a synergistic dialogue, of a concept of system quality (Fassio, 2020) that is expressed through an organized and regenerative flow of matter, energy and information, in continuous vibration (Stapp, 1975) towards sustainable development. Finally, co-creation, also part of the co-evolutionary process, is the means by which a dialogue can be established between producer and consumer. An example of this is the graphics on many food packaging still on the market, bearing images, names and iconography developed by ordinary people. This personalization of products can help speed up the co-evolutionary process when, for example, it becomes representative of a collaboration to protect the planet. Because one of the central issues of the ecological transition is to find a common

language to share values: a knowledge economy that can support a new model of circular economy.



The 3 C's of the Circular Economy for Food. Credits: Franco Fassio, 2021

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