



**LAND MANAGEMENT, ENVIRONMENT & SOLID-WASTE:
INSIDE EDUCATION AND BUSINESS IN CENTRAL ASIA
ERASMUS-EDU-2023-CBHE Project Number: 101129032**

MICRO-CREDENTIAL

**CIRCULAR ECONOMY
FOR LAND AND WASTE MANAGEMENT**

7.- Organic Waste and Biological Cycles

***Activity 1.- Design a basic composting or digestion
scheme***



Co-funded by
the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Activity 1. Design a Basic Composting or Digestion Scheme

Objective: Apply knowledge of organic waste management to design a simple composting or anaerobic digestion system suitable for a local context.

Task: Design a basic system for treating organic waste using either composting or anaerobic digestion. You may choose a context such as a household, university campus, farm, or small community.

In your answer, include the following:

1. Context description
Briefly describe where the system will be implemented (e.g., household, campus, rural area) and what type of organic waste is generated (food waste, garden waste, agricultural residues, etc.).
2. Choice of method
State whether you choose composting or anaerobic digestion and briefly explain why this method is suitable for your context.
3. System design
Describe how the system will work, including:
 - collection and separation of organic waste
 - main process steps (e.g., composting stages or digestion process)
 - basic conditions required (e.g., oxygen, moisture, temperature for composting; absence of oxygen for digestion)
4. Outputs and benefits
Explain what useful outputs are produced (e.g., compost, biogas, digestate) and how they can be used (soil improvement, energy, etc.).
5. Potential challenges
Identify one or two possible challenges (e.g., contamination, odor, management issues) and suggest simple solutions.

Your response should be concise (approximately half a page) and may include a simple diagram if helpful.