



**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**

2.- Principles and Models of Circular Economy

Discussion

***Which CE principle is hardest to apply in land
management, and why?***



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Discussion prompt: “Which Circular Economy principle is hardest to apply in land management, and why?”

Topic

Which Circular Economy principle is hardest to apply in land management, and why?

Context

The circular economy is based on three core principles: reduce, reuse, recycle, aiming to keep materials in use and minimize waste. In Central Asia—especially in Uzbekistan and Kazakhstan—land management systems face challenges such as low recycling rates, weak infrastructure, soil degradation, water scarcity, and limited institutional capacity.

Core Question

Which principle—Reduce, Reuse, or Recycle—is most difficult to implement in land management systems in Central Asia, and what are the main barriers?

Guiding Questions

1. Reduce: Why is it difficult to reduce land degradation and resource use?
2. Reuse: What challenges exist in reusing water, nutrients, or organic waste?
3. Recycle: Why are recycling systems underdeveloped in the region?

Analytical Angle

Consider environmental constraints (e.g., salinization), institutional barriers (weak policy frameworks), economic limitations (high investment needs), and system complexity (multiple value chains).

Expected Insight

Recycling is often the hardest to implement due to infrastructure and policy gaps, though arguments can also be made for reduction or reuse depending on context.



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Extension Activity

Compare Uzbekistan and Kazakhstan and propose one realistic policy solution for improving circular economy implementation in land management.