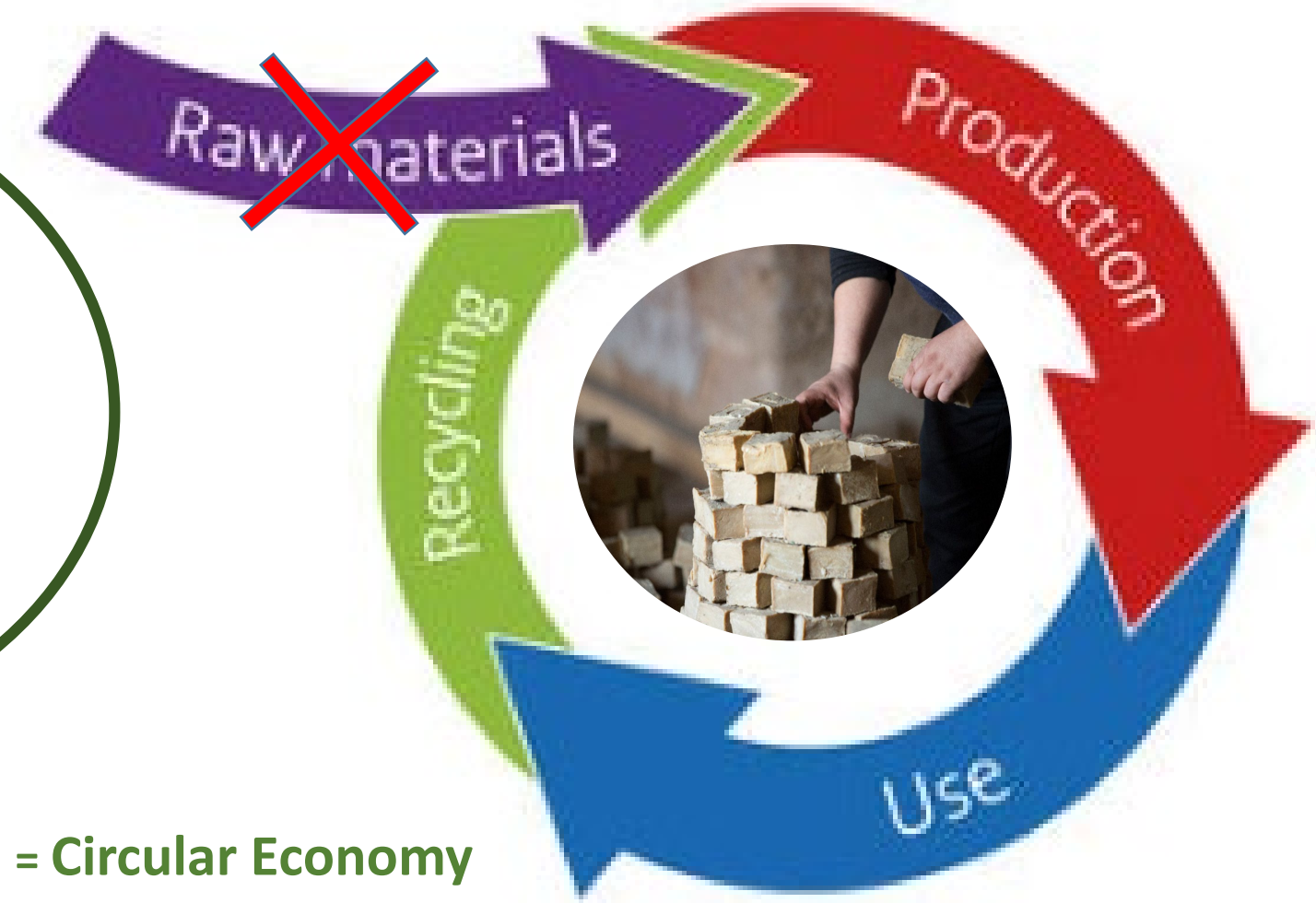


# Lebanon's Natural Soap Production

**Natural soap  
(cold process)**

- 100% natural ingredients
- Completely biodegradable
- Family business
- Creating jobs
- >> 40 SMEs
- 5 large size producers



# Pollution from olive oil extraction

Traditional mills

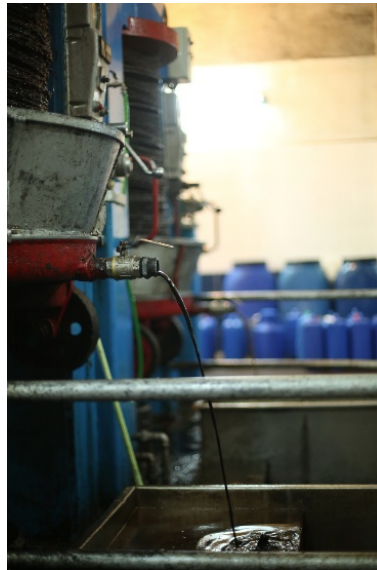
High water consuming industry

2 pollutants

Olive Mill Wastewater (OMW), "Zibar"



Solid residue, "jift"



**OMW**

- Colored substance
- High polytoxic phenols
- High organic matter
- Least biodegradable
- Major pollutant to surface and groundwater
- toxic to plants and microorganisms



e.g. : Hasbani River

Olive = 50% OMW + 20% olive oil+ 30% solid residue

# NGER on olive oil soap

## OMW

if treated (fermented under oxygen)

→ Liquid fertiliser

## Solid wastes

If treated

→ Biomass fuel

→ Compost



eg: Recycling solid waste into firewood

## NGER on Natural Soap in Lebanon



- Valorise the natural soap sector in Lebanon
- Allow to gather SME s to tell their challenges
- Shed the light on SWOT