
Assessing food system circularity at different scales

Circular Food System Network webinar
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Framework scope

Circular resource use

Nutrients/biomass, water, energy, land use

Environmental impact

GHG, water, air, soil,
biodiversity

Economic impact

Capital, profit, added value,
markets

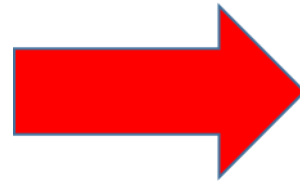
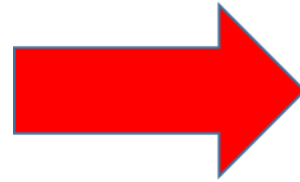
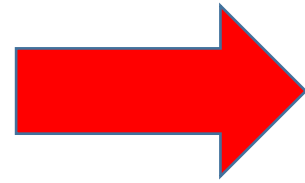
Social impact

Food security, employment,
well-being, animal welfare

Cultural impact

Respect the values of
different ethnicities/cultures

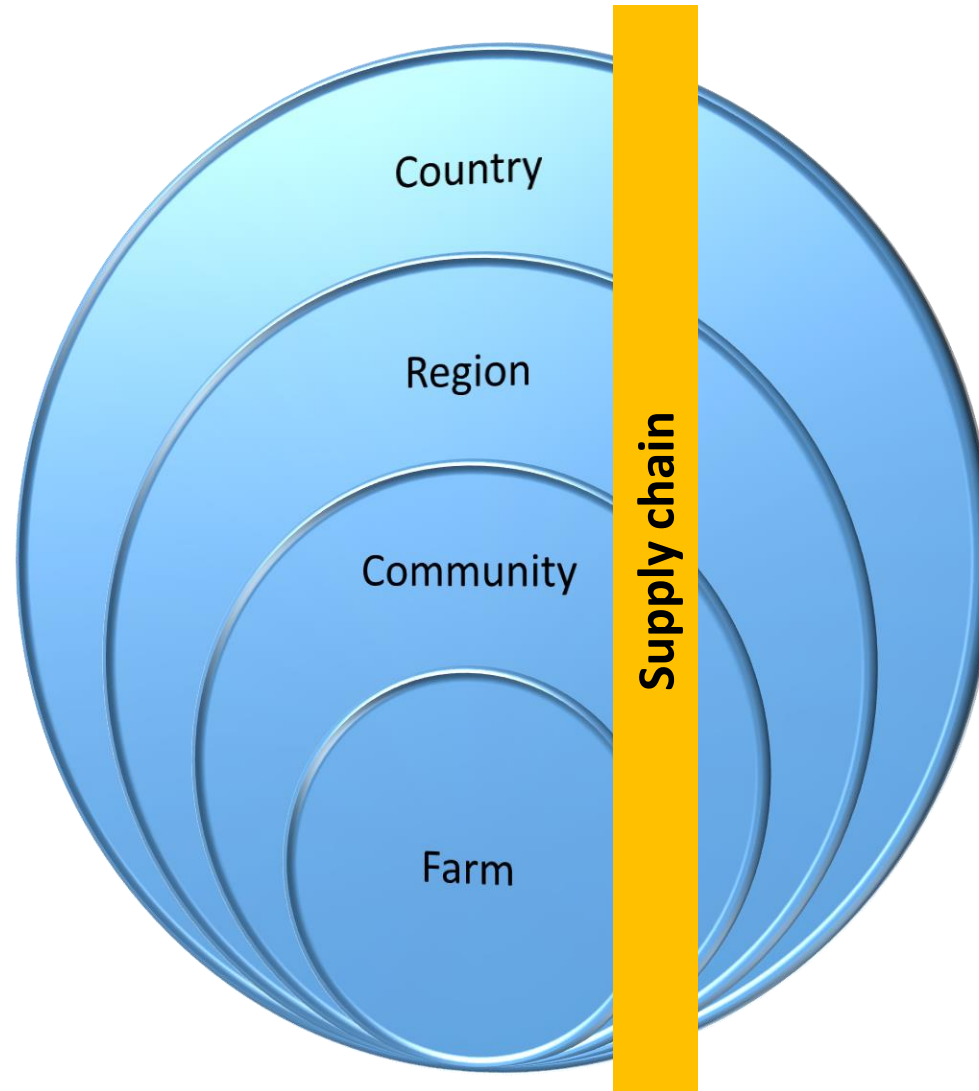
Case studies

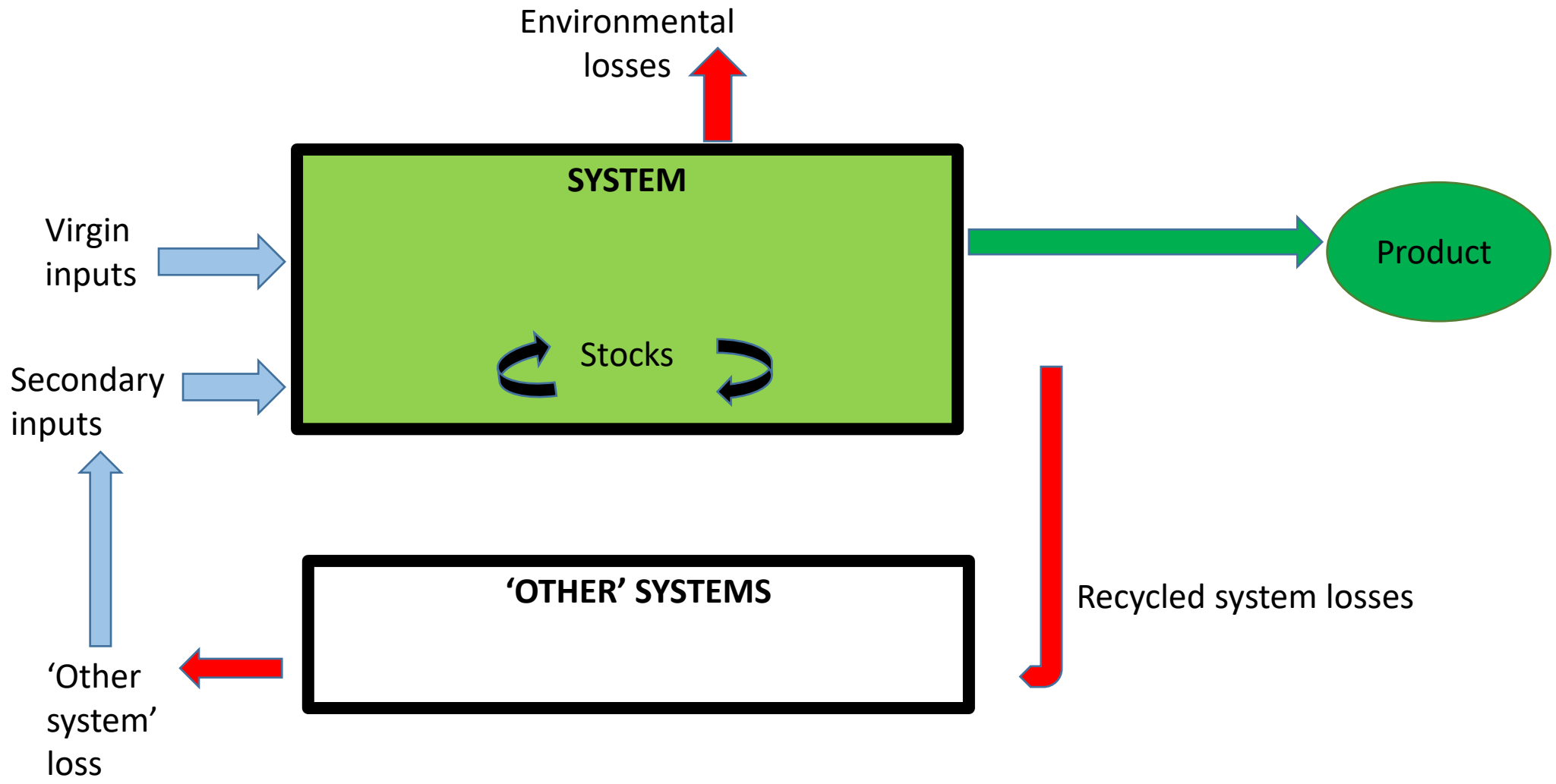


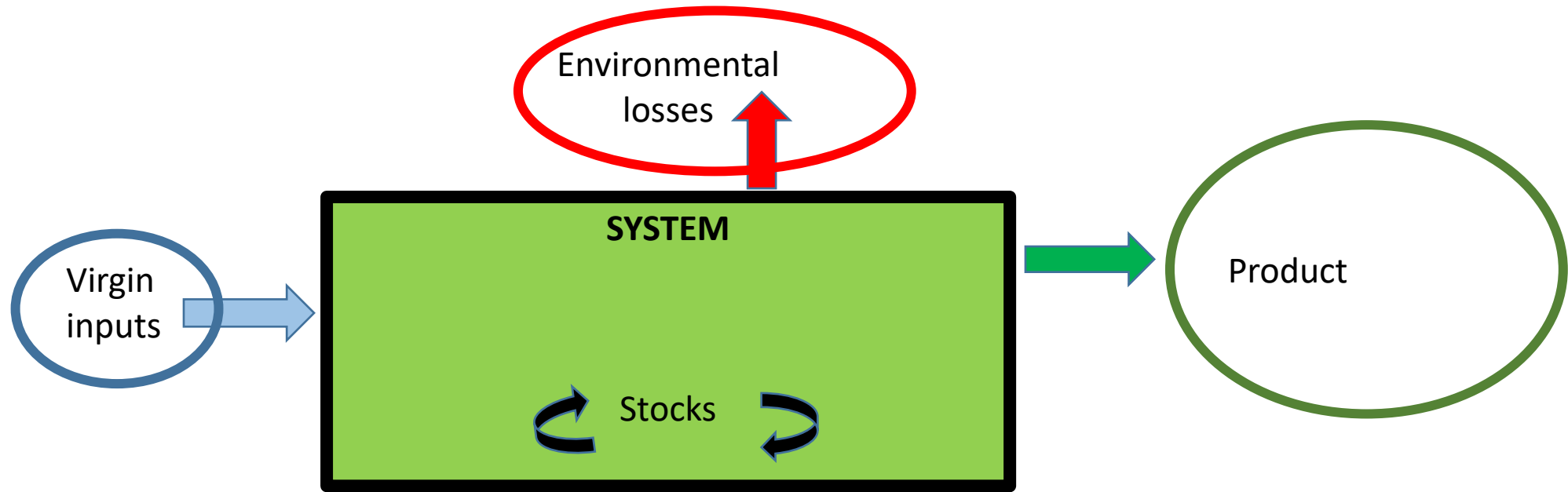
Principles of Circular Economies

- **Reducing inputs and use of limited natural resources**
- **Increasing share of renewable and recycled inputs**
- **Increasing value or durability of products**
- **Reducing emissions**
- **Reducing loss of valuable materials**

Scale







$$\text{MCI} = 1 - \frac{\text{virgin inputs} + \text{waste}}{2 \times \text{total product}}$$

Land use circularity

Farm, community, region, country:

- Productivity of land
- % land in productive, vs biodiversity or other land uses

Supply chain scale:

- Land Occupation (LO) – land occupied in the lifecycle of the product
- Land Use Ratio – accounts for capability of land used for livestock

Next steps

Resource flows compared to business as usual in scenarios:

- What is the relevant scale of assessment?
- What resources and indicators are relevant?
- What are the wider cultural, environmental and socio-economic impacts?