



**BERAS** *International*  
Building Ecological Recycling  
Agriculture and Societies

**Presentation for X International  
Interdisciplinary Scientific Research Congress  
13 June 2014, Santo Domingo, Dominican  
Republic**

**”Background and main principles of BERAS with  
particular focus on Local Learning Centers and  
the consumer engagement concept Diet for a  
Green Planet”**

**Jostein Hertwig CEO BERAS International**



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**BERAS**  
For people  
who eat food



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# Research work and full scale farm examples in Sweden from 1990 on the environmental effects of Ecological Recycling Agriculture



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# 3 projects co-financed by the European Union with the following focus areas:

- Agriculture
- Food
- Rural development



## **-BERAS I 2003 -2006**

Research and Scientific Assessment of farms  
foodsystems and rural development

## **-BERAS II 2010 – 2013**

Research, concept development and full scale  
examples

## **-URBACT 2013– 2015**

"Diet for a Green Planet" - Knowledge transfer



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# BERAS concepts

**Ecological  
Recycling  
Agriculture**

**Diet for a  
Green  
Planet**

**Sustainable  
Food  
Societies**

# Scientific reports and publications

Available at  
[www.beras.eu](http://www.beras.eu)





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# **Network Agreement with Partners from 11 countries in the Baltic Sea Region**

**Germany, Poland, Denmark, Norway,  
Sweden, Finland, Estonia, Russia, Belarus,  
Latvia and Lithuania**

## Authorities



Fylkesmannen i Oslo og Akershus



## Farmers advisory services



Hushållnings  
sällskapet



KUJAWSKO-POMORSKI  
OŚRODEK DORADZTWA ROLNICZEGO

## Farmers organisations and NGO's



## Universities and research institutes



UNIVERSITETET I  
NORDLAND

## Finance institutions



ekologiskt - socialt - kulturellt

## Food chain actors



Av det naturen ger. Och inget annat.



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# Baltic Sea Region, Northern Europe

# BERAS Global partnership

BERAS Initiatives have started in the Caribbean, Dominican Republic and Haiti, and in India. So far more than ten organisations have joined the network in each location.



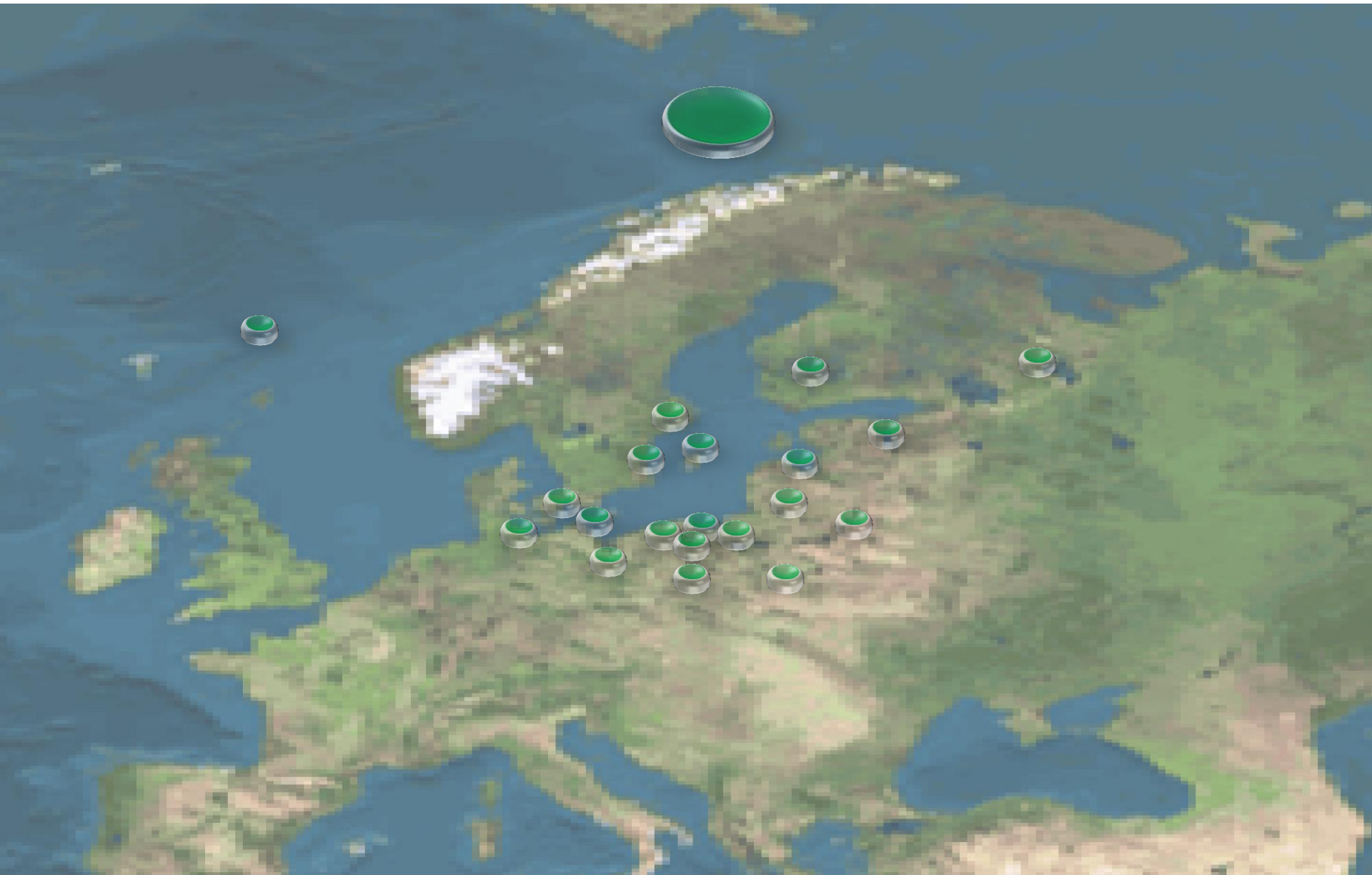
Dr. César E. López,  
gran.beras@gmail.com



Dr. K. Perumal  
perumalk.berasindia@gmail.com



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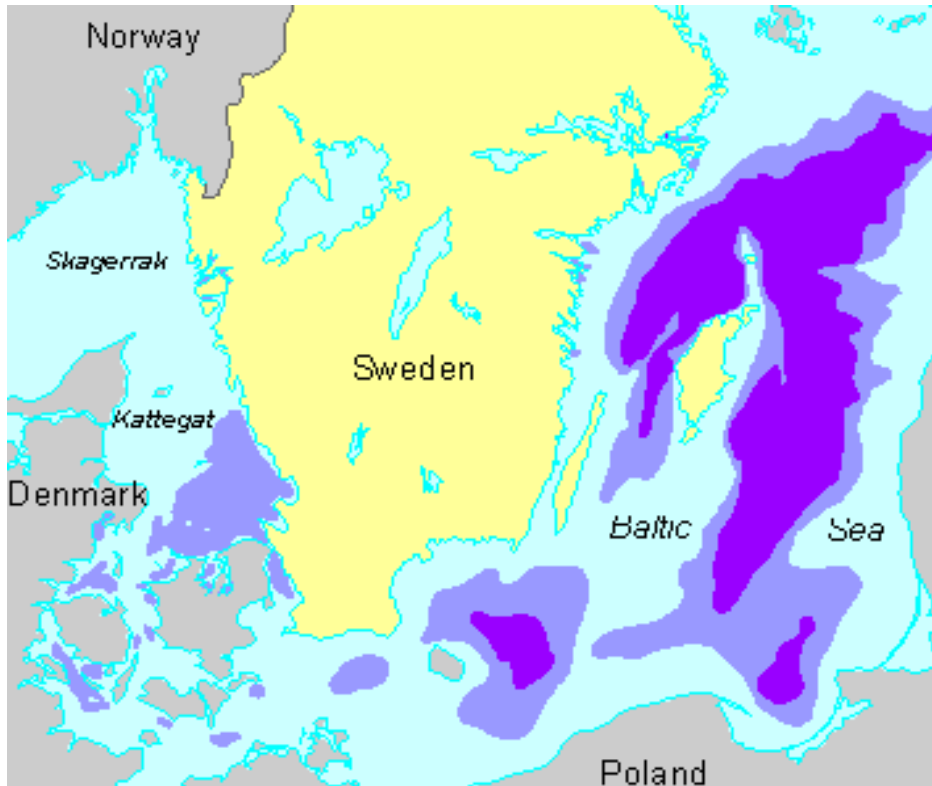


# Environmental challenges for the Baltic Sea

- **algeabloom**



- **A decreasing level of oxygen results in dead sea bottoms**



■ The concentration of oxygen periodically beneath 2 ml/l

■ The concentration of oxygen mostly beneath 2 ml/l = dead or dying



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# Environmental challenges on a global scale

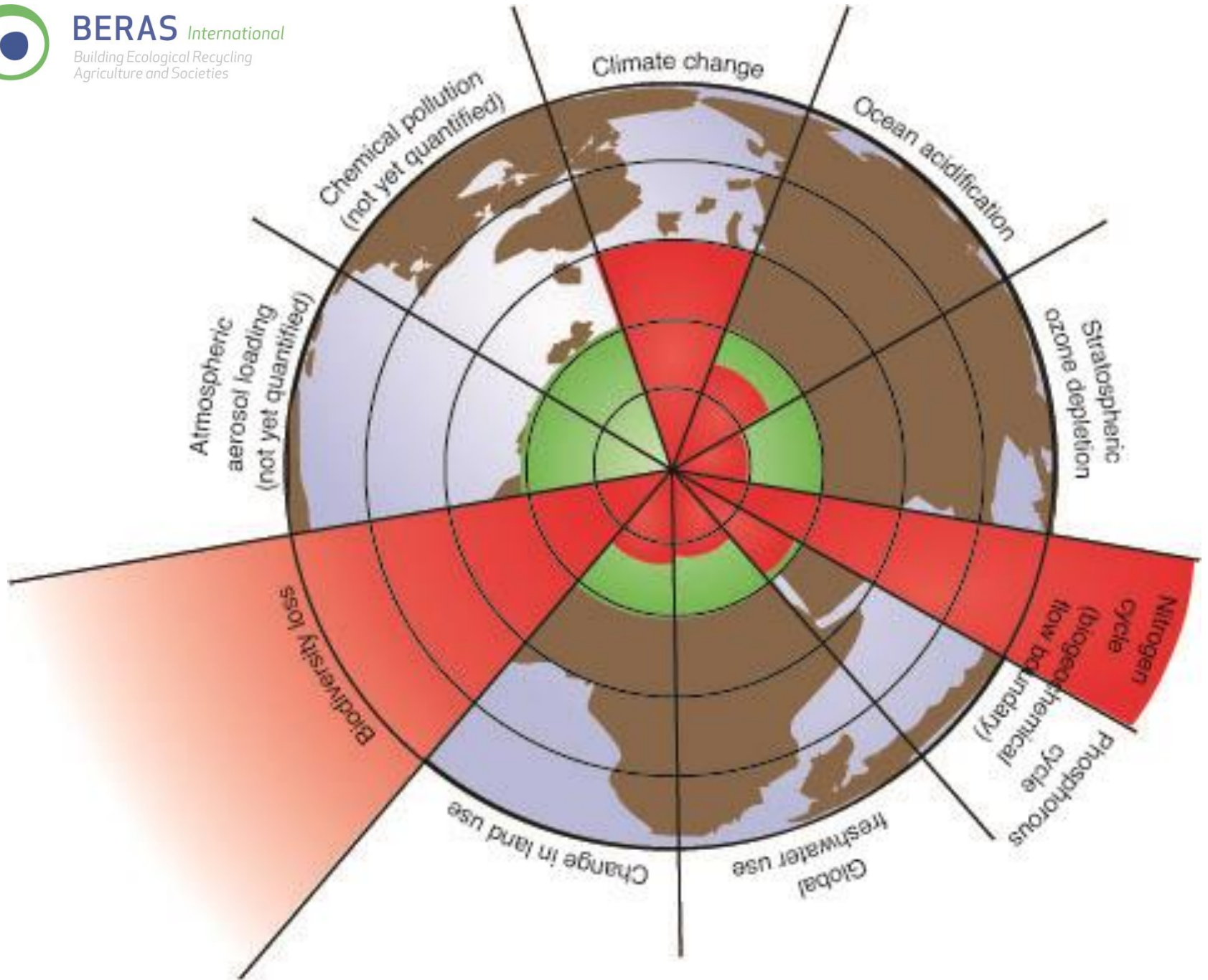
## The nine planetary boundaries

[www.stockholmresilience.org/planetary-boundaries](http://www.stockholmresilience.org/planetary-boundaries)

# Research on Planetary Boundaries:

1. Stratospheric ozone layer
- 2. Biodiversity loss\***
- 3. Climate Change\***
- 4. Ocean acidification\***
- 5. Freshwater consumption\***
- 6. Land system change\***
- 7. Nitrogen and phosphorus cycle\***
8. Atmospheric aerosol loading
9. Chemicals dispersion

(\* indicate impact of agriculture)

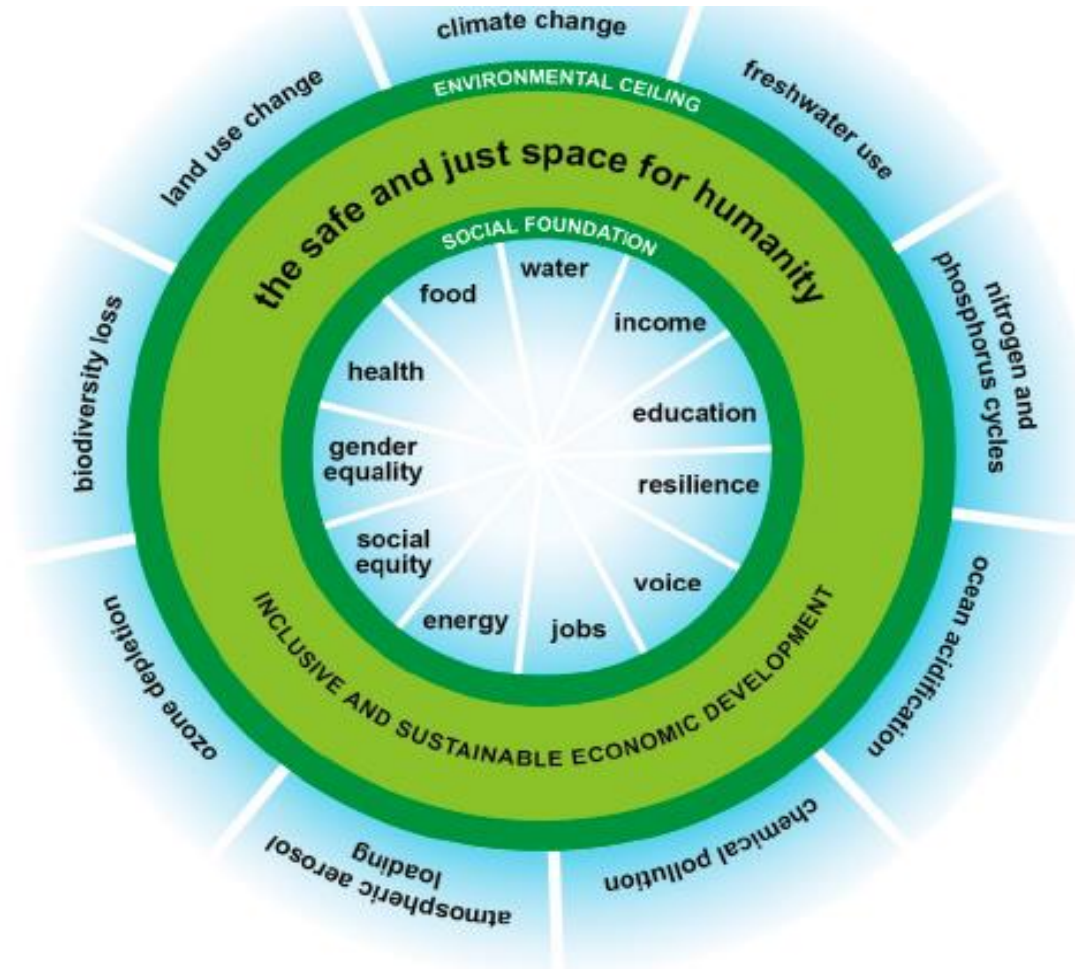


# Adding to this we are faced with social/economical challenges

- Food security and undernourishment- 13 % of the worlds population is undernourished
- Poverty – 20 % lives in poverty
- Lack of essential medicines – 30% lack essential medicines

Combining the environmental  
and social/economic aspects  
means:

”Living within the ”Doughnut”



Source: Oxfam. The 11 dimensions of the social foundation are illustrative and are based on governments' priorities for Rio+20. The nine dimensions of the environmental ceiling are based on the planetary boundaries set out by Rockström et al (2009b)

## **United Nations, UNEP-UNCTAD research on Capacity-building Task Force on Trade, Environment and Development, 2008**

Agriculture is a unique sector in society as it directly affects five types of “capital” assets of a country:

- Natural
- Social
- Human
- Physical and
- Financial capital

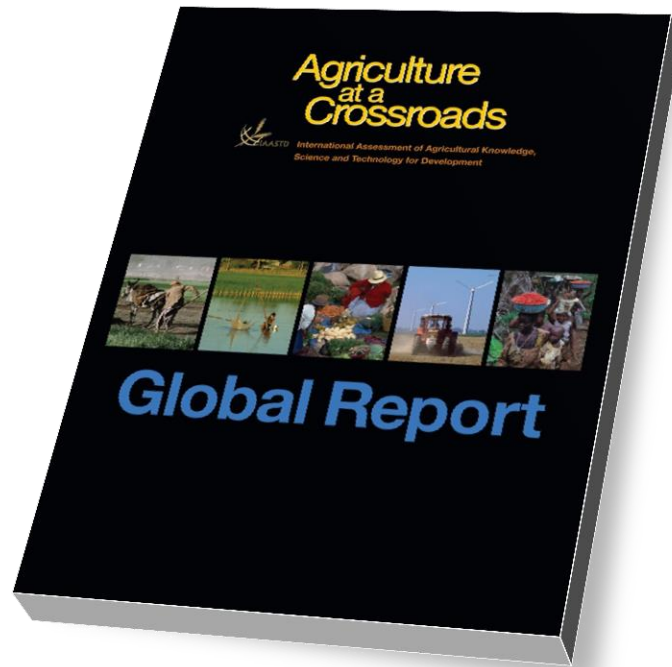
## **Main findings from the research by United Nations:**

- Organic agriculture can increase agricultural productivity
- Organic agriculture can raise incomes with low-cost, locally available and appropriate technologies, without causing environmental damage.
- Partnerships between farmers, farmer groups, NGOs and civil society organizations (CSOs), organic movement organizations, governments and certifying bodies at all levels foster successful organic agriculture.



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# United Nations, UNEP 2008

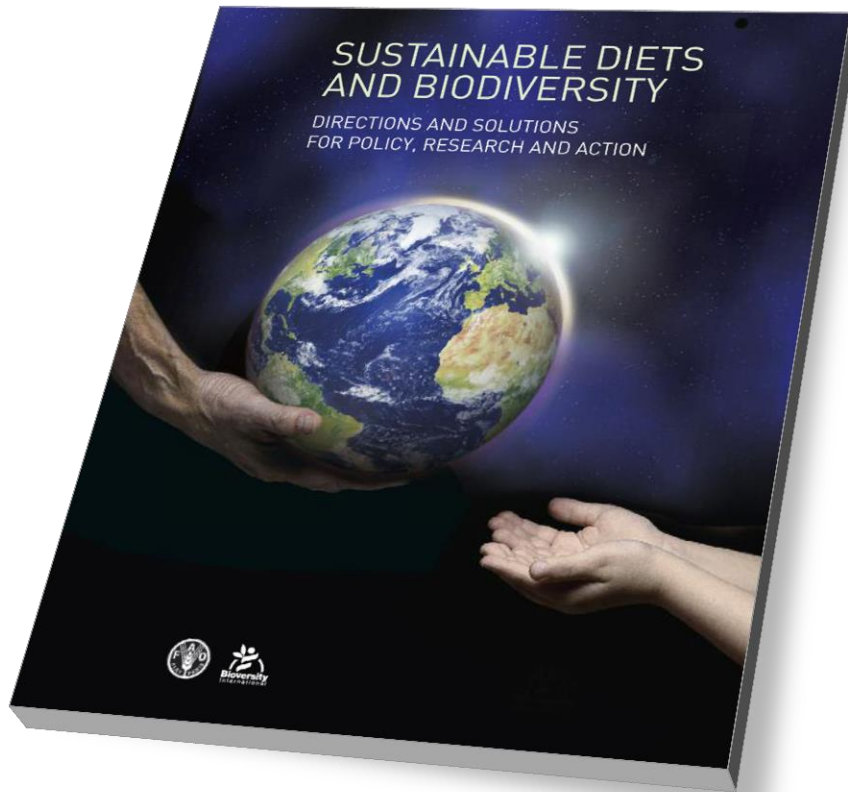


IAASTD: International  
Assessment of Agricultural  
Knowledge, Science and  
Technology for  
Development



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# United Nations, FAO 2010

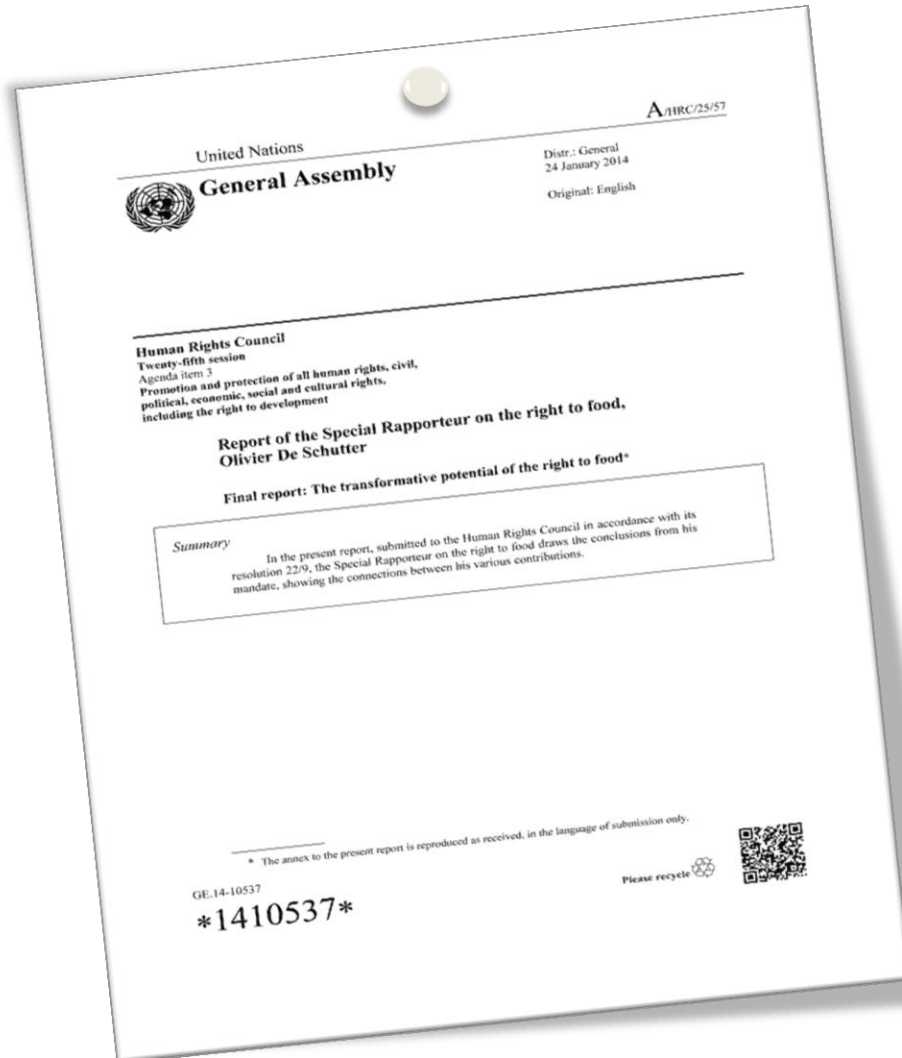


Sustainable Diets and  
Biodiversity



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# United Nations General Assembly 2014



Report of the Special  
Rapporteur on the right to  
food, Olivier De Schutter



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# Time for a CHANGE

“The world needs a paradigm shift in agricultural development: from a ‘green revolution’ to an ‘ecological intensification’ approach”.

“...towards mosaics of sustainable regenerative production systems...”  
- *unctad.com*



# Restoring the Balance



If we handle our resources carefully, we can restore the balance between what we take and what we give back to the Earth



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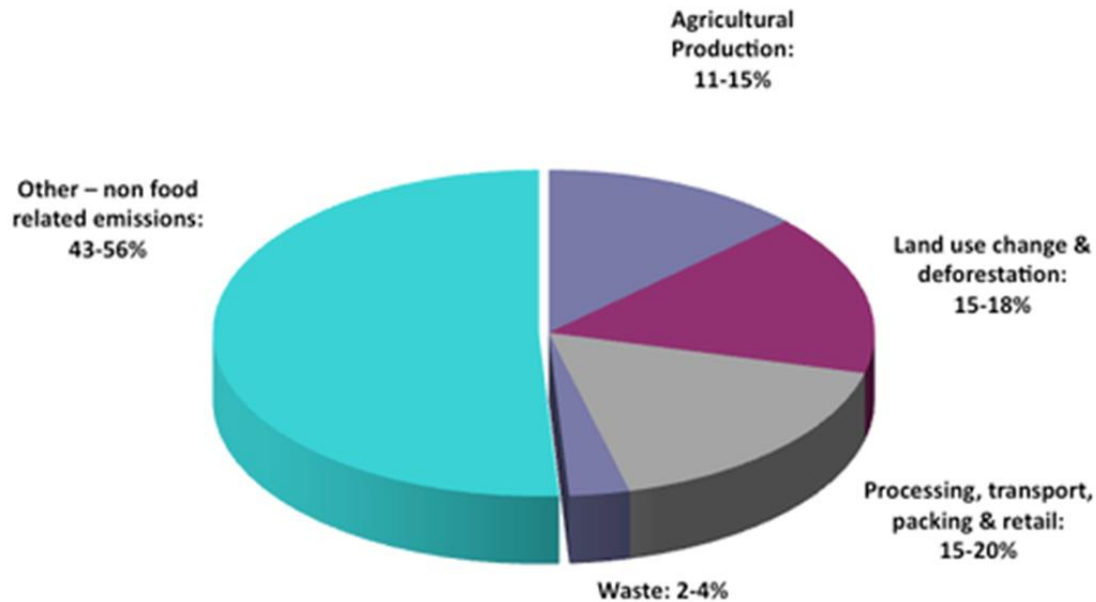
# What you eat **MATTERS**

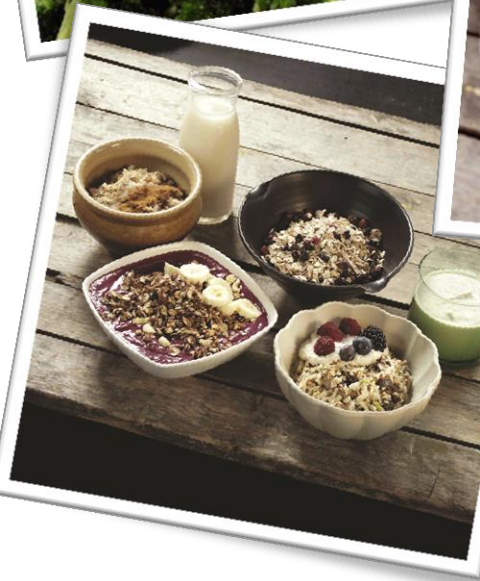
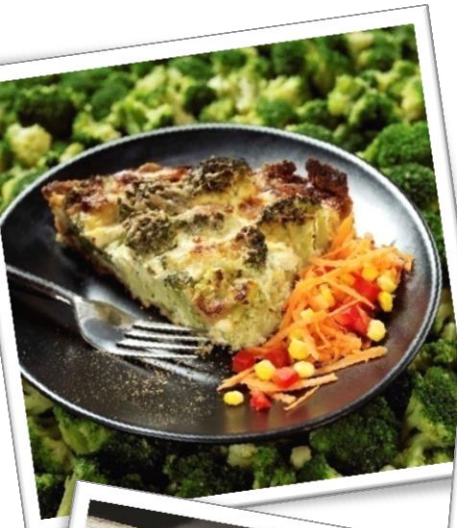
Being a conscious consumer means taking an extra step to find out where your food comes from



# Food and climate change

Around half of the CO<sub>2</sub>-emissions from human activities comes from the food sector





# Diet for a GREEN PLANET

- Tasty and healthy
- Organic
- Regional products
- According to season
- Balance between vegetables -meat (80-20)
- Reduction of food waste



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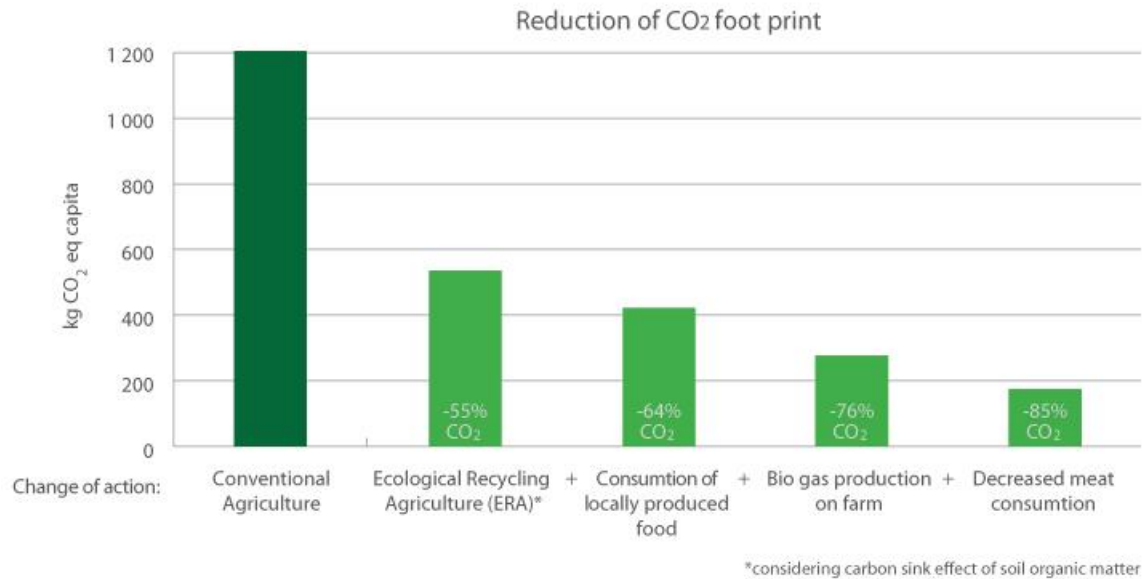


# Pilot study in Södertälje, Sweden

- 24 000 meals every day
- 50% Organic
- No extra cost
- 80–20 vegetables/meat



# 70% reduction in CO<sub>2</sub>- emissions





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# Local Learning Centers for Sustainable Food Societies



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Research,  
Education  
and NGOs

Public  
sector

Business  
sector

# Sustainable Food Societies

Local learning centers  
with the farm in the  
center



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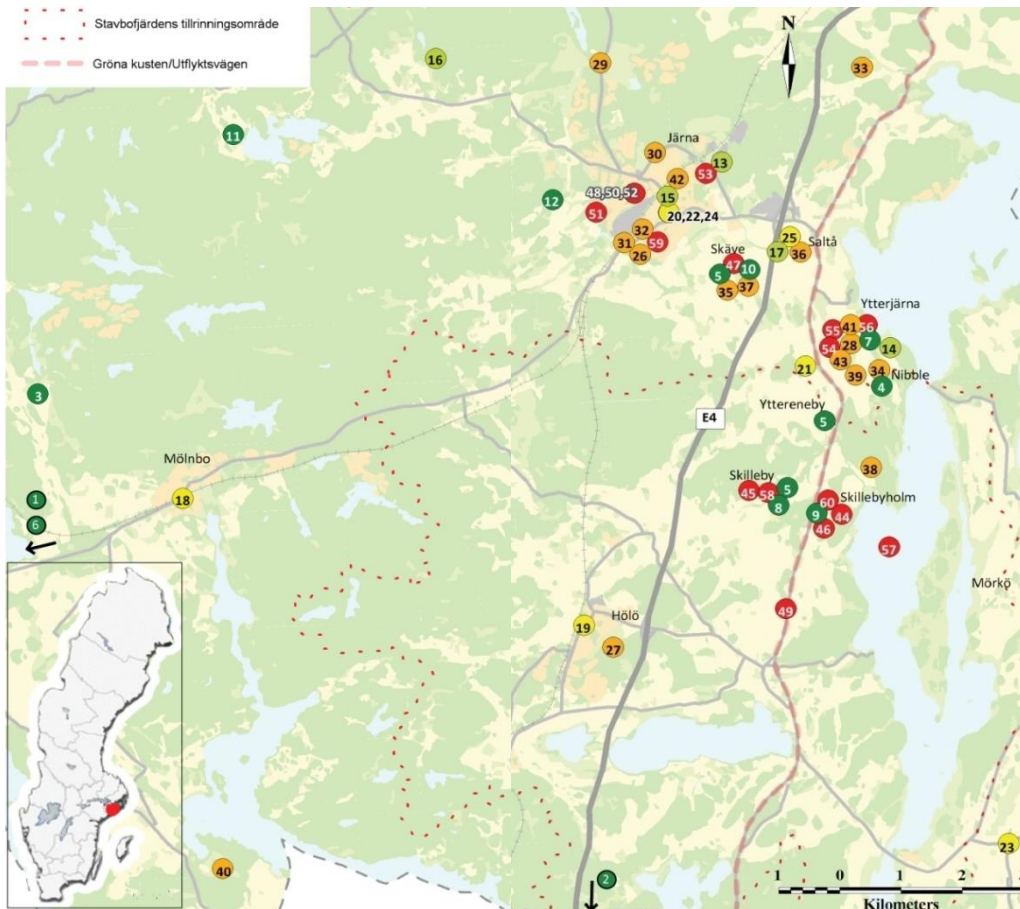


# 20 Local Learning Centers

42 ERA-Farms



# Södertälje Municipality in Sweden



76 initiatives from  
the food sector

**Diet for a Green Planet:**  
24.000 public meals  
served every day



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# A mobile unit as Learning Center





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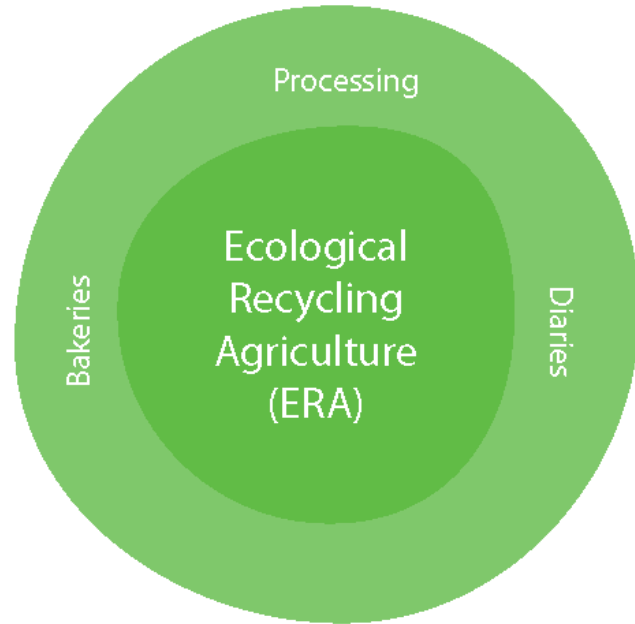
# Local Learning Centers for Sustainable Food Societies

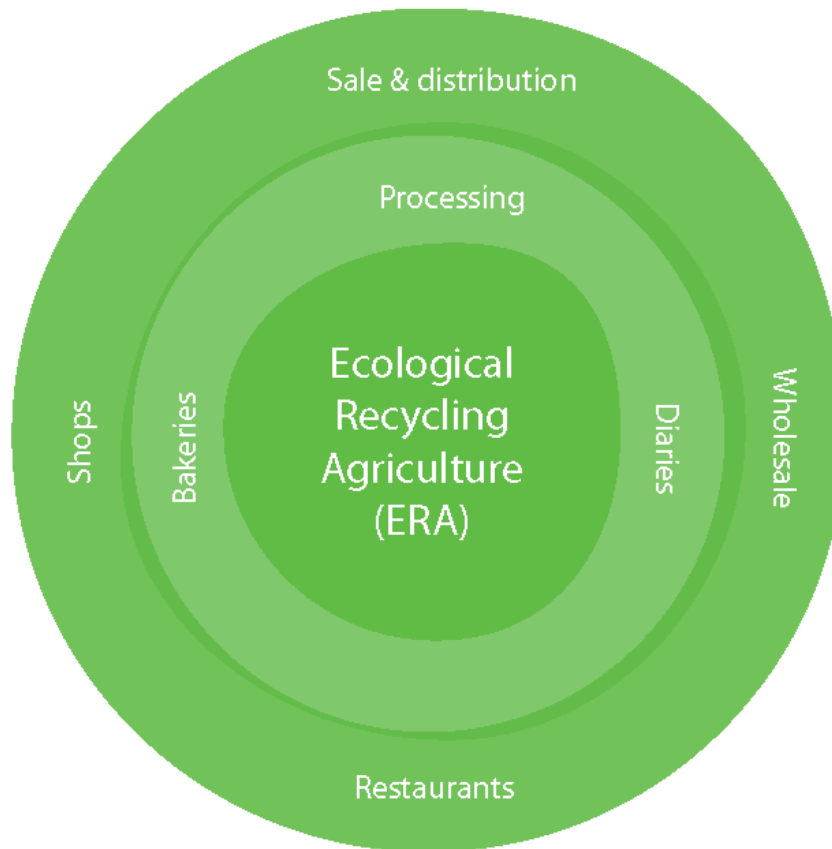
## Concept outline

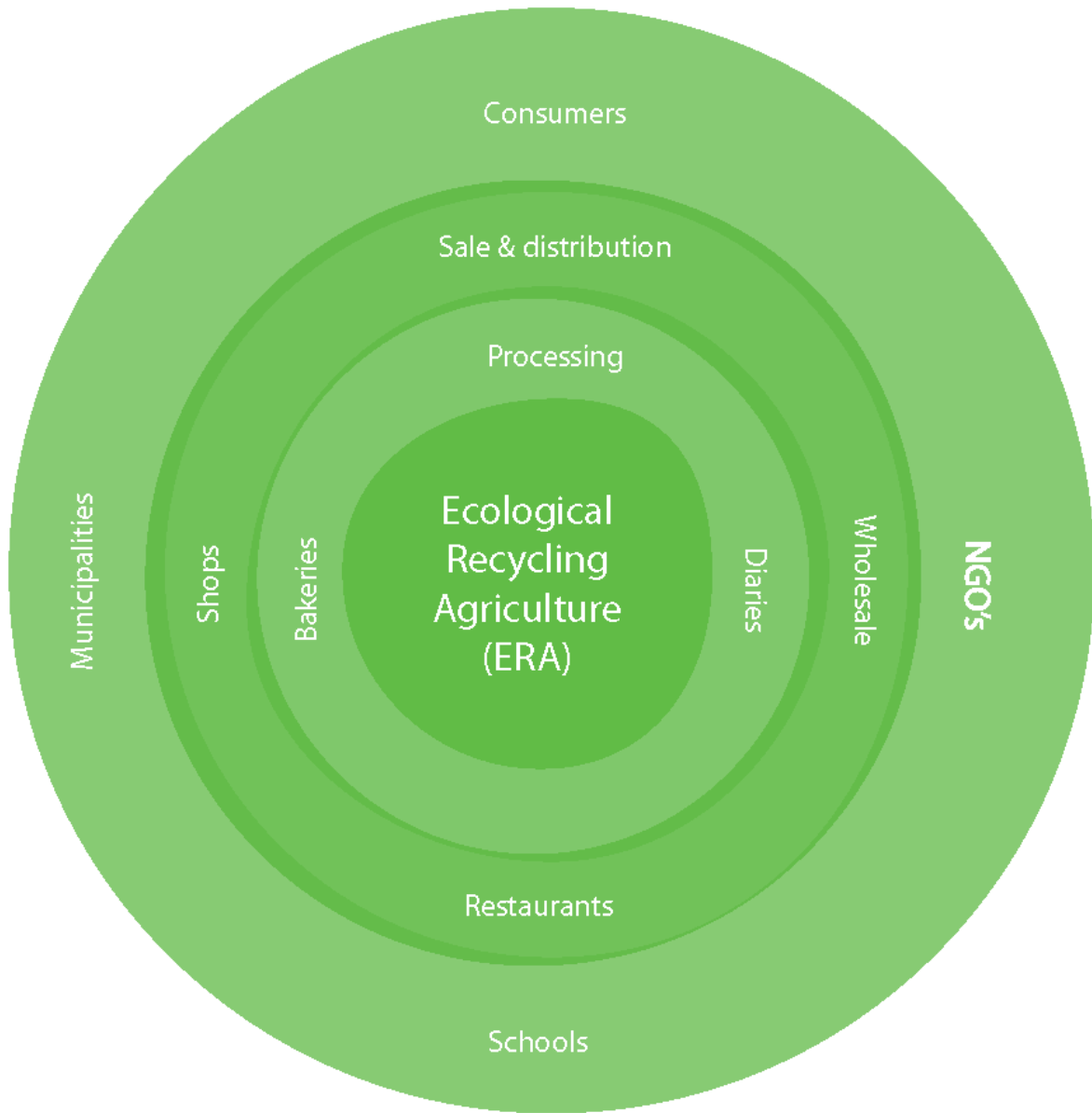
- **Multi - disciplinary research activities**
- **Transparency**
- **Inclusive stakeholder development**
- **Socially just**
- **Provides education and training programs**
- **Secures international research and knowledge exchange**

Ecological  
Recycling  
Agriculture  
(ERA)

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Ecological  
Recycling  
Agriculture  
(ERA)

Consumers

Sale & distribution

Processing

Municipalities

Shops

Bakeries

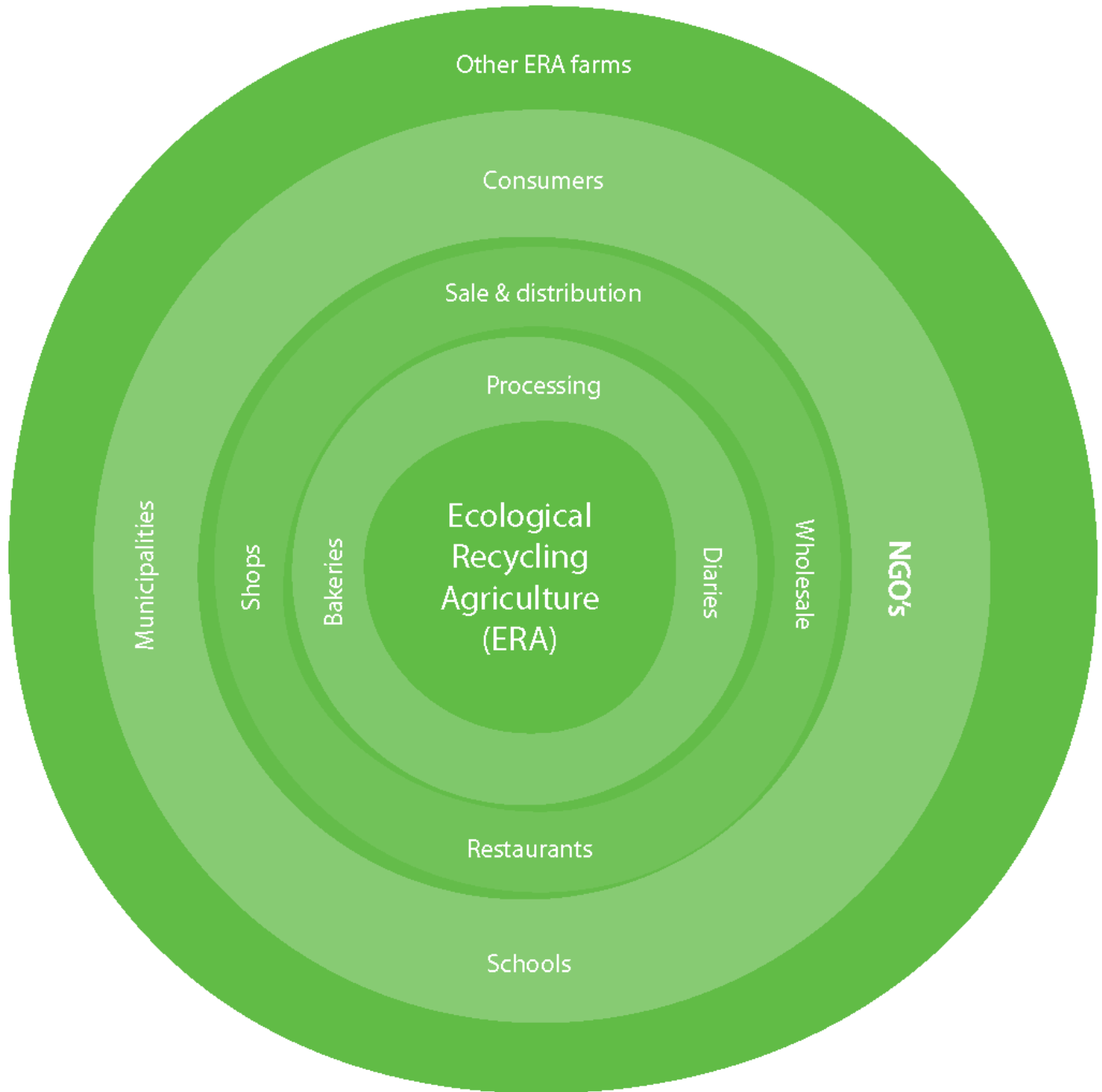
Dairies

Wholesale

NGOs

Restaurants

Schools



Ecological  
Recycling  
Agriculture  
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Bakeries

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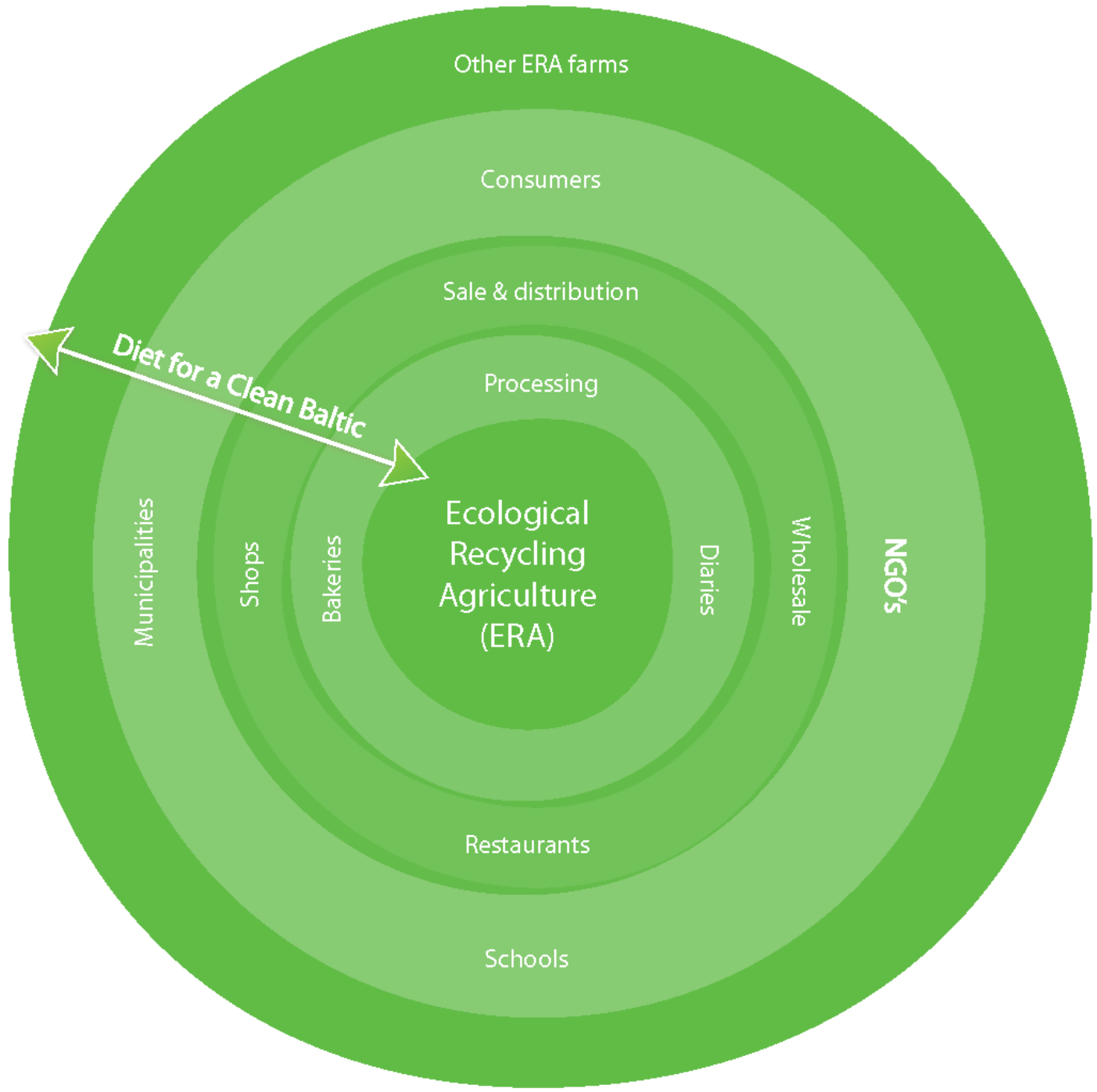
Restaurants

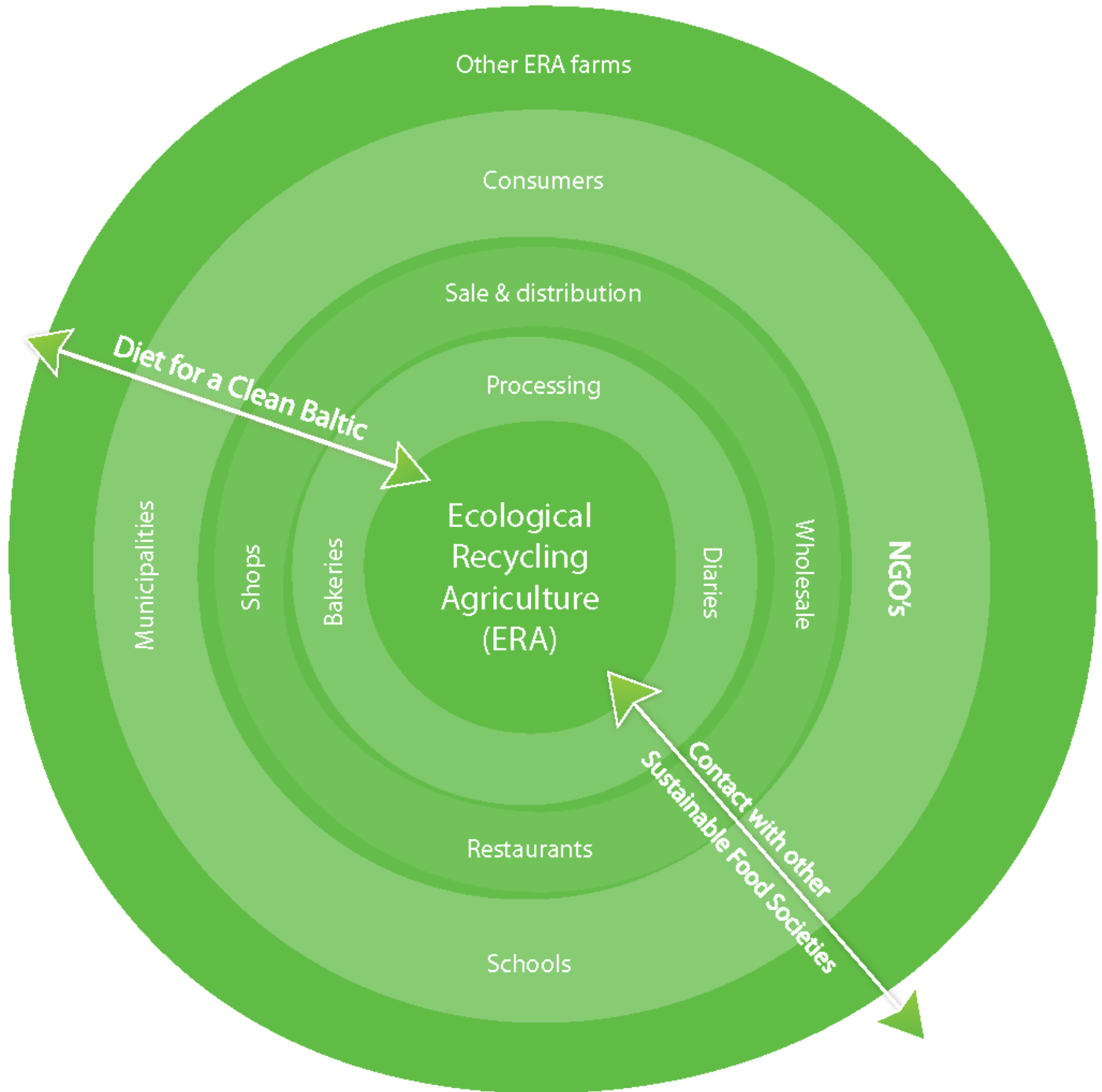
Schools

Other ERA farms

Consumers

NGOs





Other ERA farms

Consumers

Sale & distribution

Processing

Ecological  
Recycling  
Agriculture  
(ERA)

Municipalities

Shops

Bakeries

Dairies

Wholesale

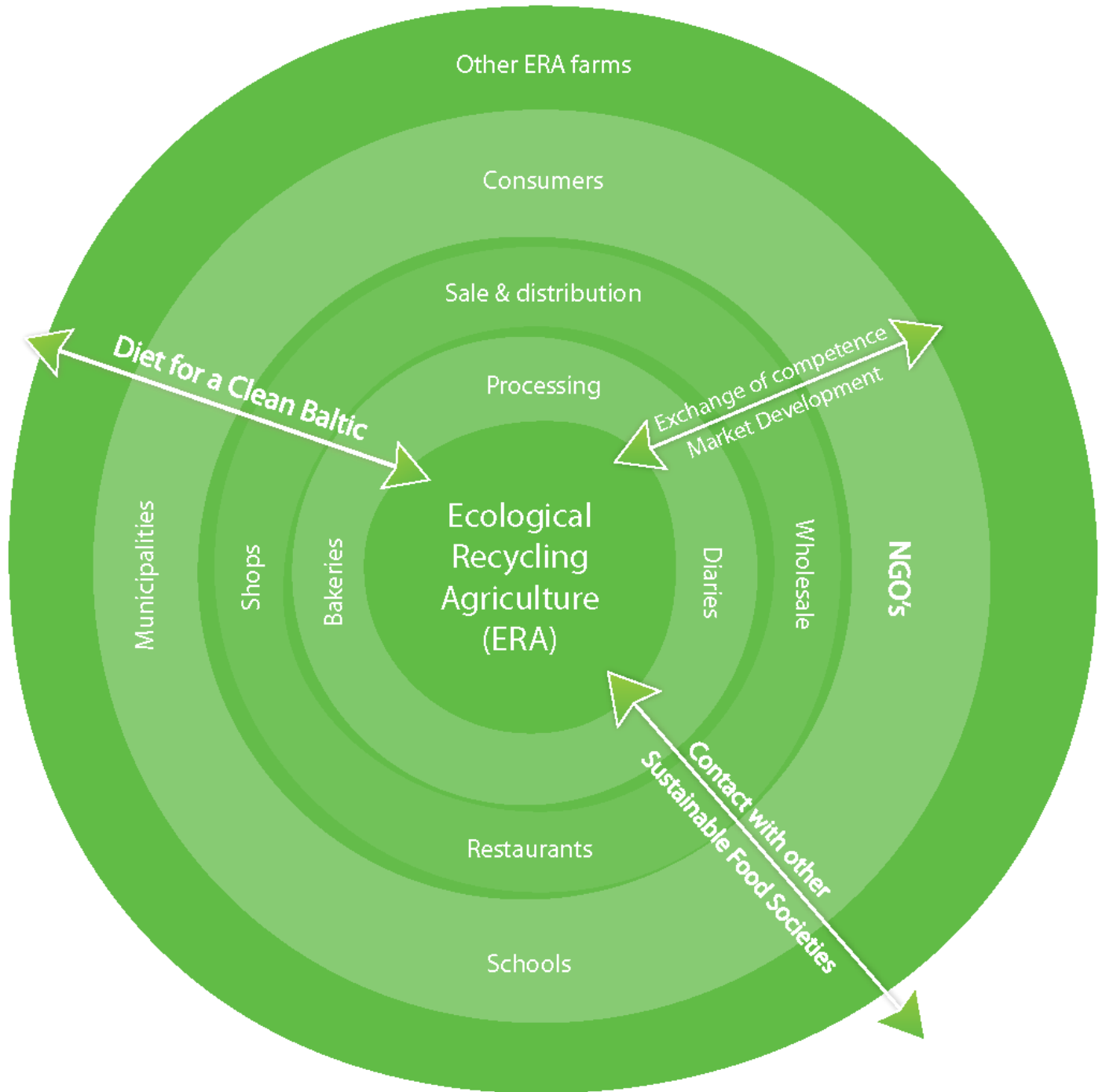
NGOs

Restaurants

Schools

*Diet for a Clean Baltic*

*Contact with other  
Sustainable Food Societies*



Other ERA farms

Consumers

Sale & distribution

Processing

Ecological  
Recycling  
Agriculture  
(ERA)

Municipalities

Shops

Bakeries

Dairies

Wholesale

NGOs

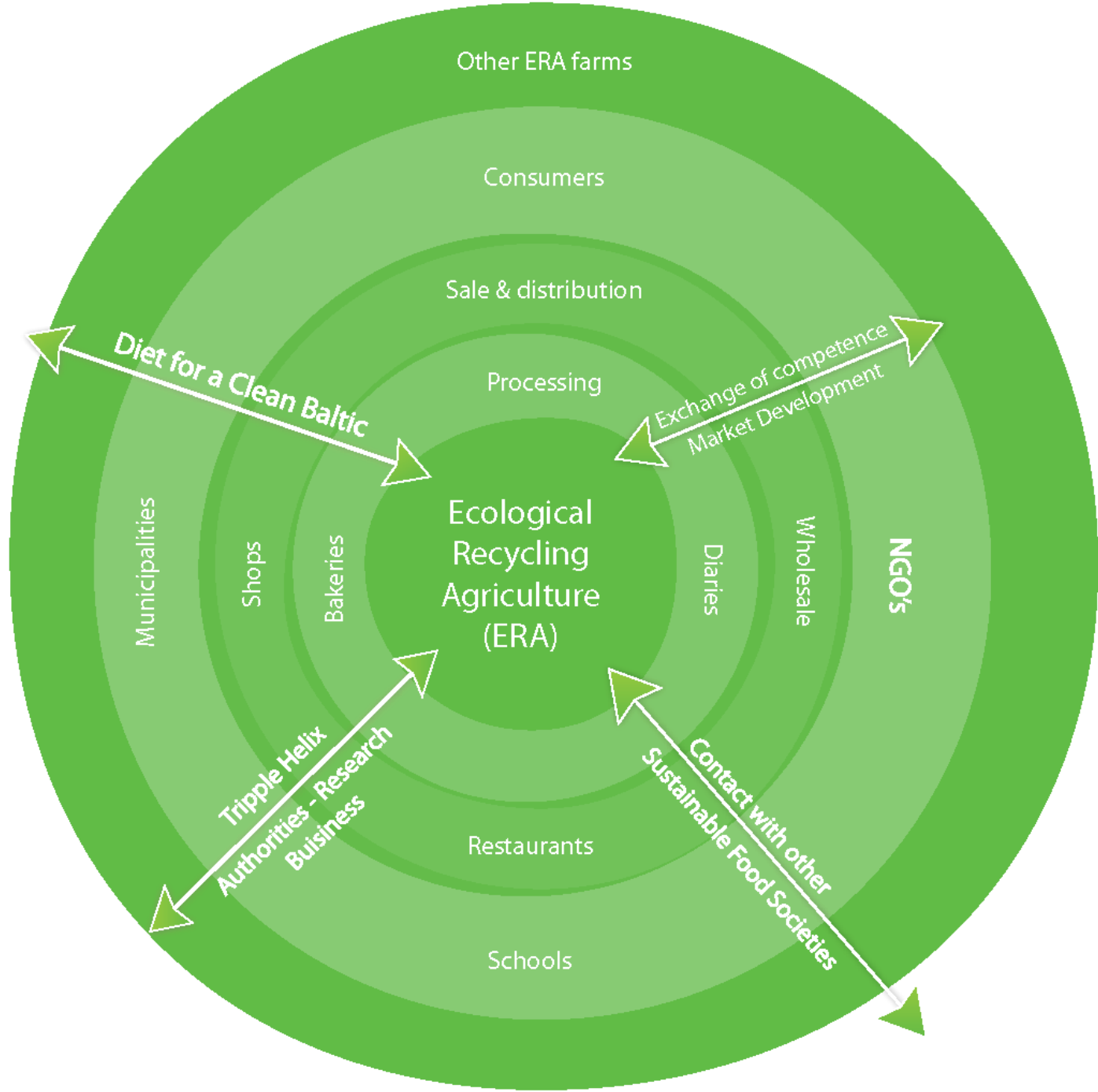
Restaurants

Schools

Diet for a Clean Baltic

Exchange of competence  
Market Development

Contact with other  
Sustainable Food Societies





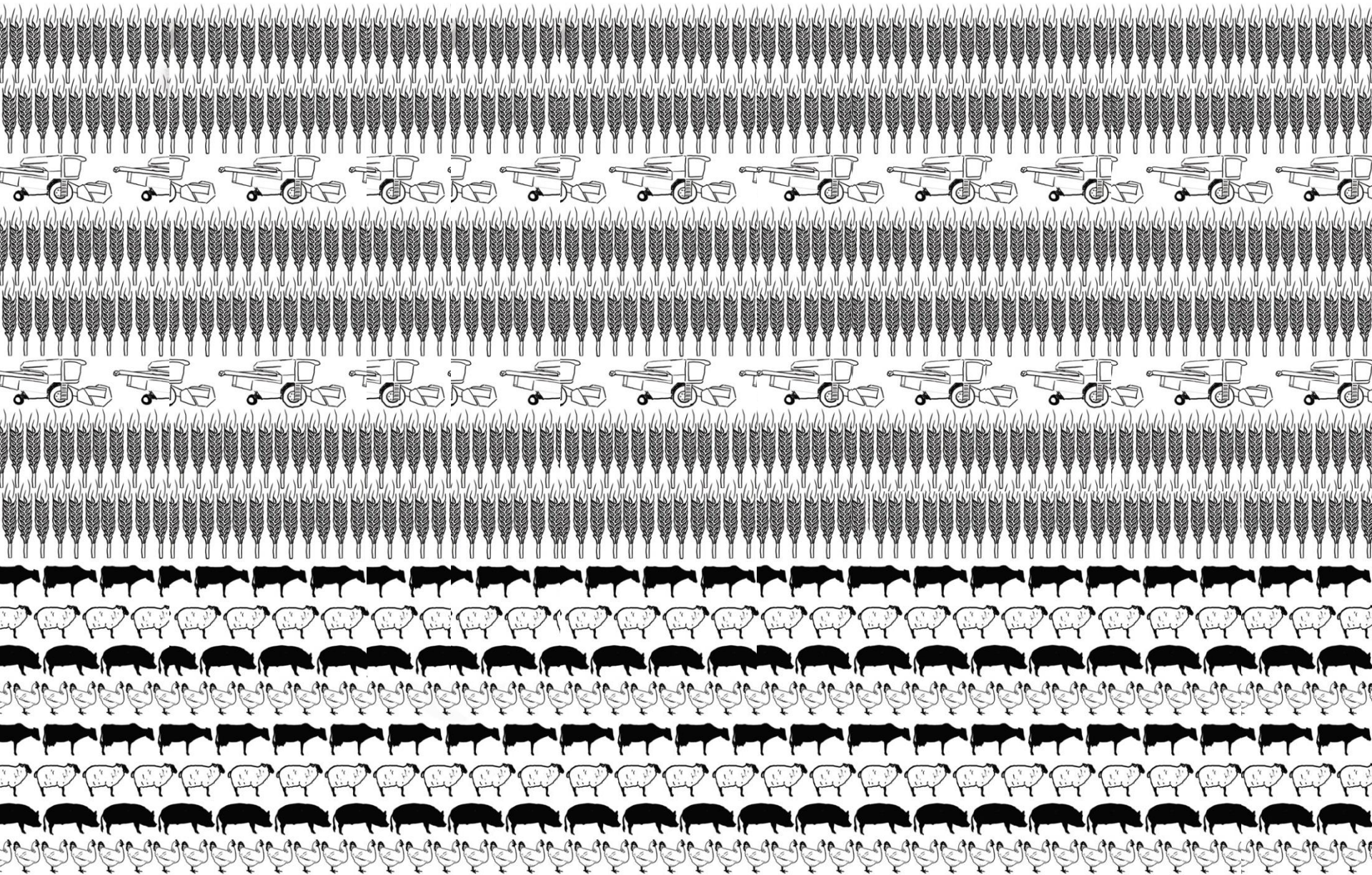
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# BERAS International Network

BERAS offers its **network** and **concepts** as part of the global “...mosaics of sustainable regenerative production systems...”



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# Thank you for your attention

**Jostein Hertwig**  
CEO BERAS INTERNATIONAL

**Kulturcentrum**  
Sweden  
[jostein.hertwig@beras.eu](mailto:jostein.hertwig@beras.eu)