

1 ottobre 2018  
CLEVER EARTH CONCEPT  
Resource regeneration for food sustainability

Progetto di ricerca sostenuto da Fondazione Cariplo:  
Integrated research on industrial biotechnologies 2015  
“BIOCONVERSION OF FRUIT AND VEGETABLE WASTE TO EARTHWORM MEAL AS NOVEL FOOD SOURCE”

## Innovazione alimentare e imprenditorialità

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Eisenia reintroduces  
vegetable waste  
into the food supply  
chain,

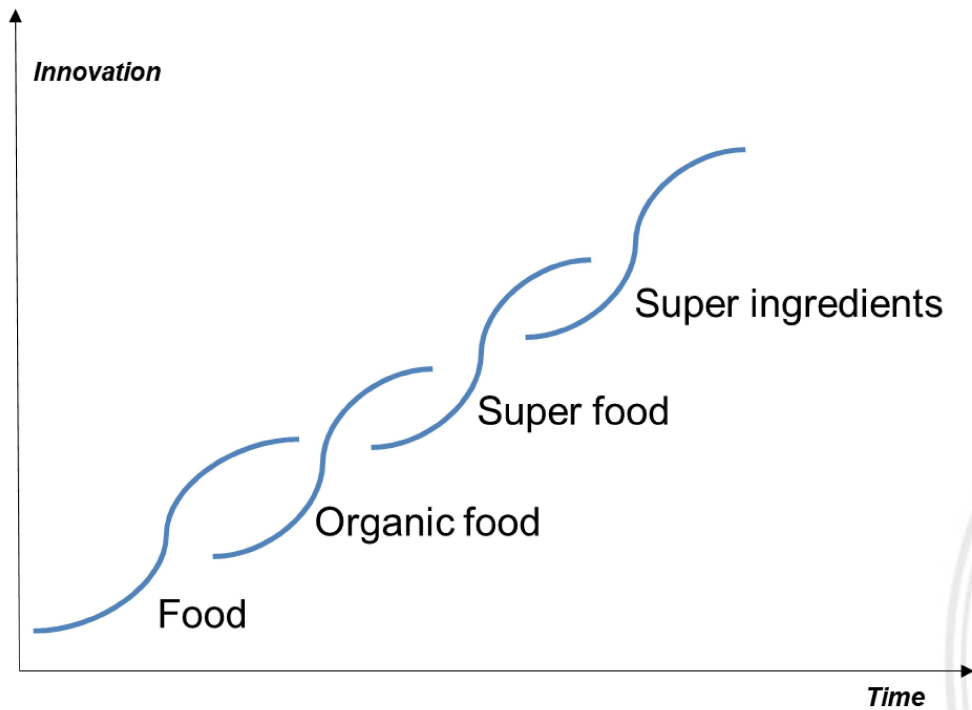
to produce  
earthworms,  
an eco-sustainable  
and ethical solution,

which offers a valid  
resource of animal  
proteins without the  
downsides of meat  
consumption,

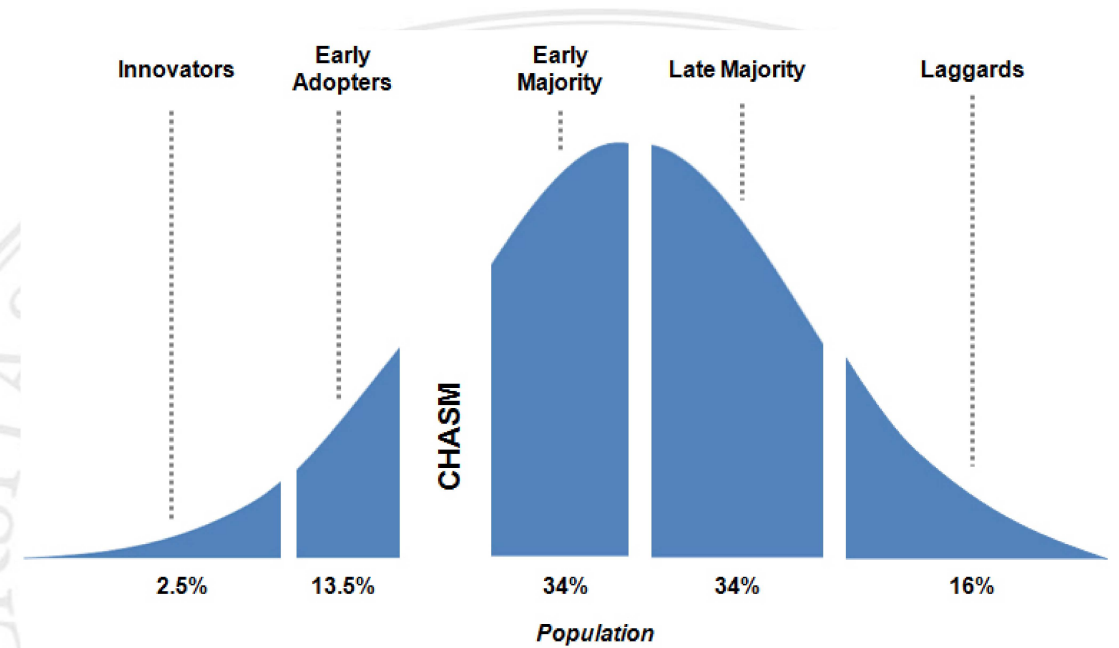
addressing the  
future needs for  
food in a fast  
growing population  
scenario.



# Industry Shifts



Innovation S-curves



Customer Adoption Life Cycle

# Market Drivers

## Esterni:

- Popolazione mondiale prevista 9.8 mld entro il 2050.
- Produzione di cibo aumenterà del 70% entro il 2050 (FAO,2011).
- Allevamento responsabile del 18% delle emission di gas serra (FAO,2006).
- 1/3 del cibo prodotto è scartato (FAO, 2011).
- Eticalizzazione della società (Passport, 2017).

## Interni:

- Supporti governativi (e.g. Horizon 2020).
- Crescita della competizione.
- Aumento degli investimenti(Forbes).
- Nuova regolamentazione su novel food 1/01/2018.

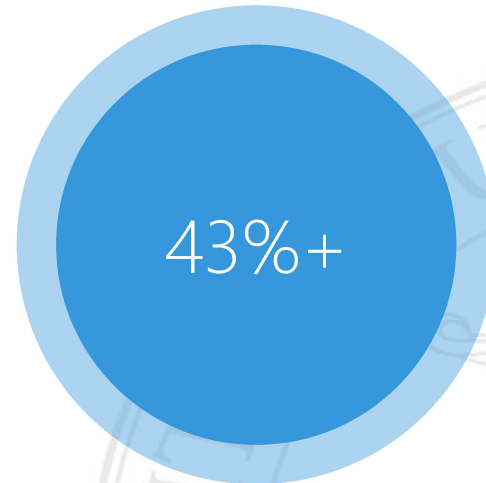


Political	Economic	Social	Technology
<ul style="list-style-type: none"> <li>• Industry regulation: high European standard in terms of quality and safety controls.</li> <li>• Policies favourable to find alternative sources of protein (Horizon 2020)</li> <li>• New regulatory on novel food.</li> </ul>	<ul style="list-style-type: none"> <li>• European economy particularly stable compared to other areas</li> <li>• Consumers spending steadily increasing</li> <li>• Labour cost in Eu: slighting increasing as effect of inflation (1-4%)</li> <li>• Interest rate around 0%</li> </ul>	<ul style="list-style-type: none"> <li>• New trends oriented to eco-friendly sustainability.</li> <li>• Consumer demand in domestic vs international markets.</li> <li>• Increasing awareness on the need for reducing footprint and GHG emissions.</li> </ul>	<ul style="list-style-type: none"> <li>• Technology is an important force impacting animal agriculture (leading productivity).</li> <li>• Increasing automatization but controlled due to animal welfare protection and concerns.</li> </ul>

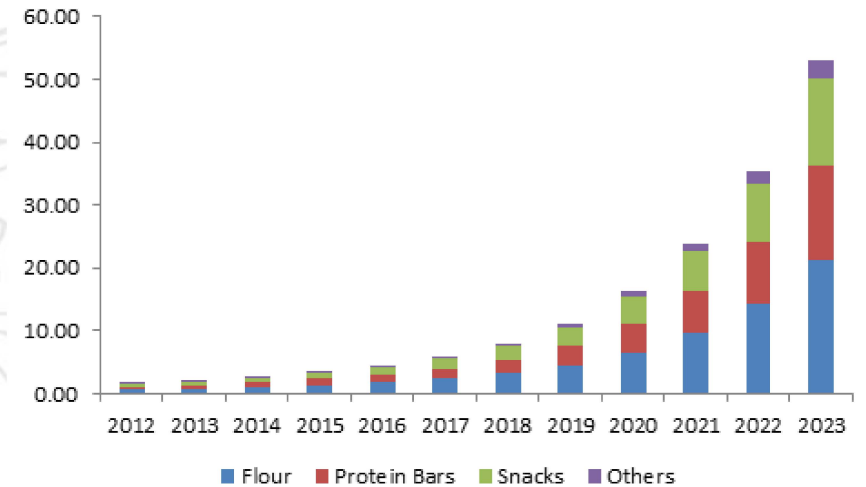
# Market Size Today



Total World Market  
2016



Expected CAGR up  
to 2023 (EU)



Market size, by application

# Competitors

57 companies worldwide

18 online shops

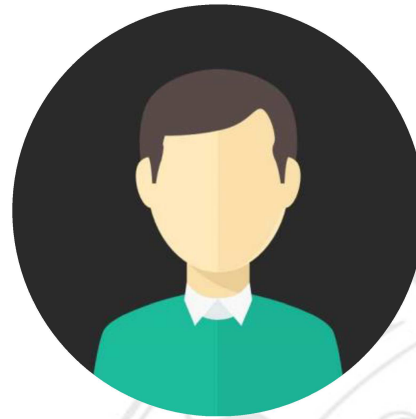


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# Customer Profiles



Food innovators  
Environmentally friendly mindset  
Ethical consumers  
Meat consumers





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