

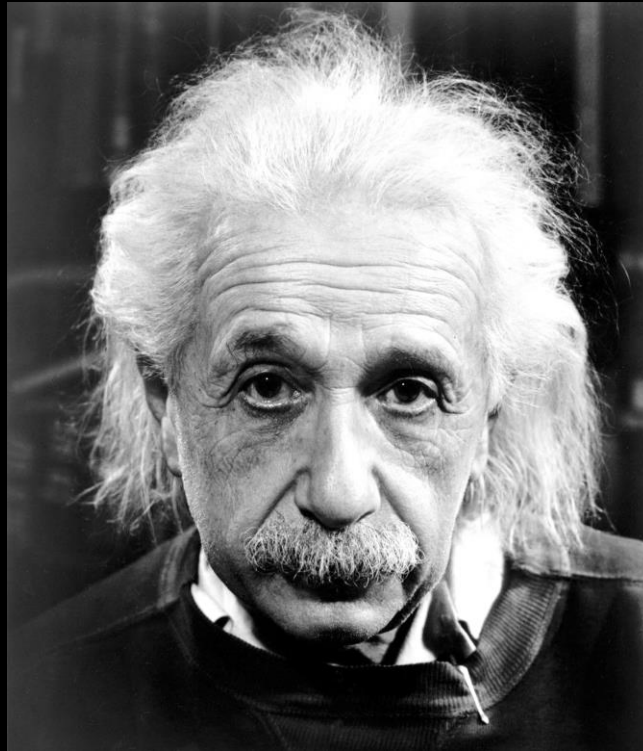


NTN-Innovation Booster *Swiss Food Ecosystems*

next generation

*A joint initiative from
Cluster Food & Nutrition
and Swiss Food Research*

*We cannot solve problems
by using the same kind of
thinking we used when we
created them*



*No problem can be
solved from the same
level of consciousness
that created it*

About ourselves...

Nadine Lacroix Oggier, Ph.D Food Microbiology
Director Cluster Food & Nutrition since 2015



„ Diversity & multidisciplinary is key to solve complex problems “

Peter Braun, Dr. sc. techn.
CEO Swiss Food Research since 2013



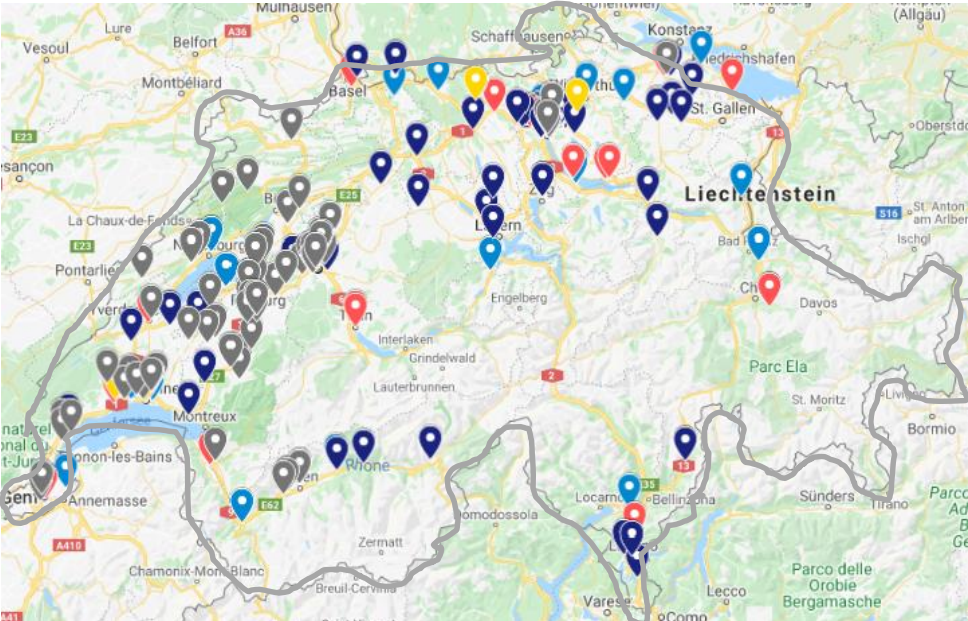
„Innovation paired with systemic approaches is key to transform the Agro-Food system into a planetary healthy system “

Suisse Agro Food Leadinghouse – our strengths, assets & experience

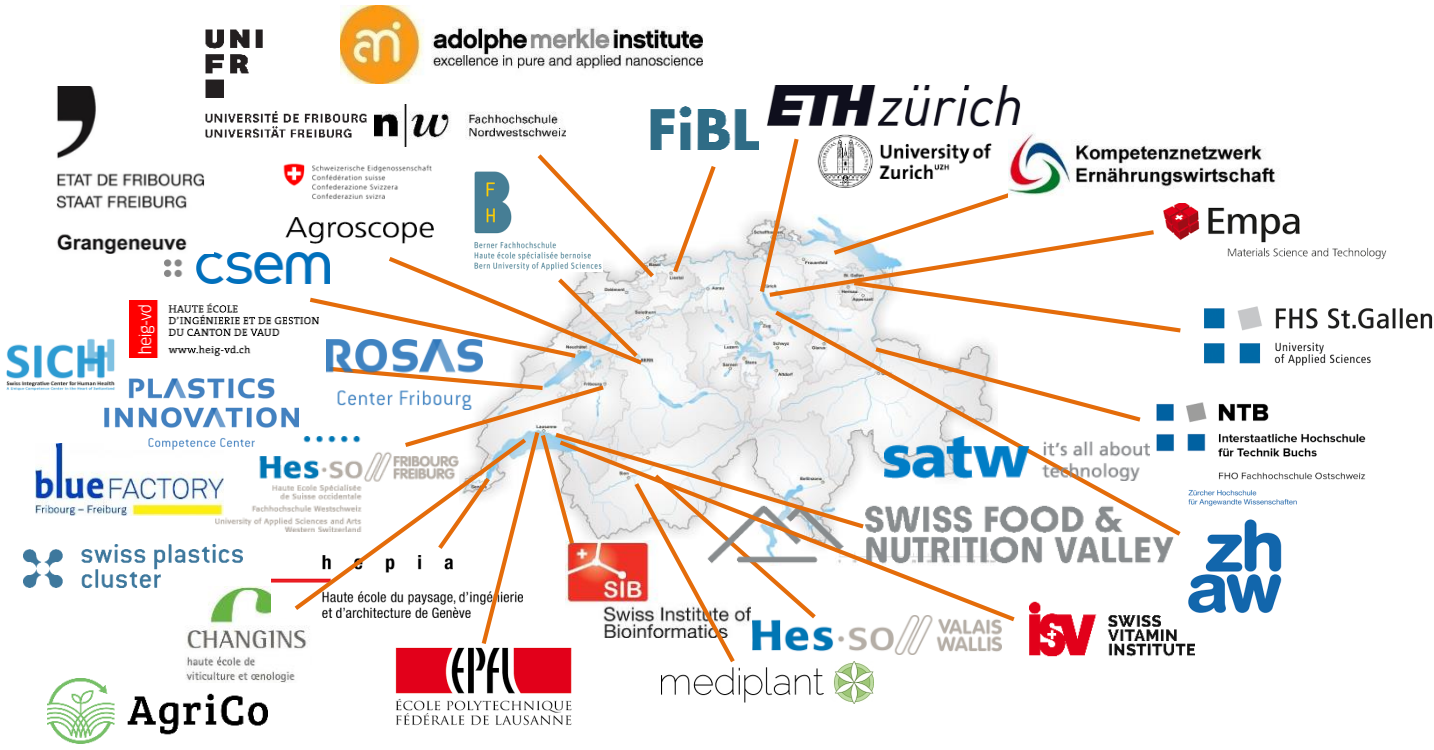


- A growing network of 100+ members & partners from 10 cantons, a combination of companies & academic institutions
- Several years experience in managing an informal structure, more than 30 events, conferences & visits organized
- Several years of experience in supporting collaborative innovation processes (projects, workshops, international call for projects i.e Agri&Co Challenge with 154 applications from 53 countries)
- A transdisciplinary approach – working at the interfaces with other sectors such as plasturgy, health, automation etc..
- Largest national innovation network with more than 140 members across the entire Agro Food value chain
- Experienced in know how transfer - 9 Innovation groups operational of which more than 60 Innosuisse projects evolved
- Own funding scheme – Research Call. >130 projects reviewed, >70 funded and 70% continued
- Large community – more than 15 large events hosted more than 2000 people connected
- 900 followers @ LinkedIn, 3000 subscribers of Newsletter

A nationwide coverage, a privileged link with our network of companies, academic institutions and interdisciplinary partners



More than 240 members, companies, SME, startups, corporates..



« With its double center of gravity, the Suisse Agro Food Leading house Association is able to foster collaborations all across Switzerland while understanding, respecting and embracing cultural differences »

The main challenges related to the agrifood system

The Foodsystem is broken...

Resources under pressure

25%

global GHG
emissions
come from
agriculture

70%

total fresh water
usage for
agriculture

1/3

global energy goes
into food
production from
field to fork

30%

of agricultural
production is lost
or wasted (globally)

9 billion

tons of plastic
produced since
1950 = 7 billion tons
of waste

The main challenges related to the agrifood system

The Foodsystem is broken...

10 billion people to feed by 2050
Healthy & sustainable nutrition... for all ?

1/8

people is
overweight or
obese

20%

people die from
poor diet / junk
food (The
Lancet)

1/9

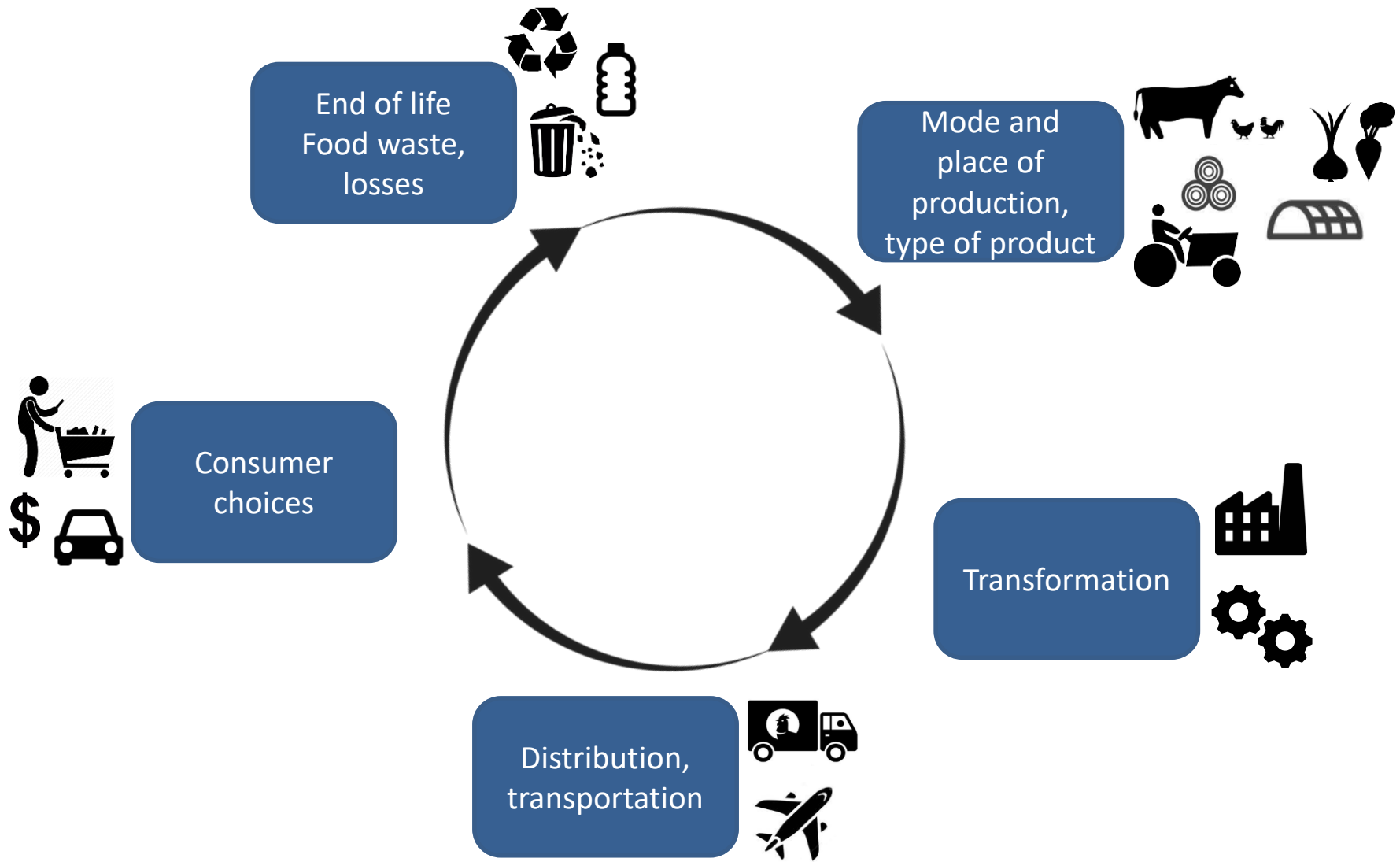
people is hungry
and
malnourished
(WHO)

50%

of humanity
could be fed by
the world's lost
or wasted food
in caloric equiv.

- Health effects of dietary risks in 195 countries, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017, The Lancet, VOLUME 393, ISSUE 10184, P1958-1972, MAY 11, 2019
- Alimentation et environnement 2017 KVV - CCE - 2017 CCE www.meschoixenvironnement.ch
- <https://www.who.int/fr/news-room/fact-sheets/detail/obesity-and-overweight>

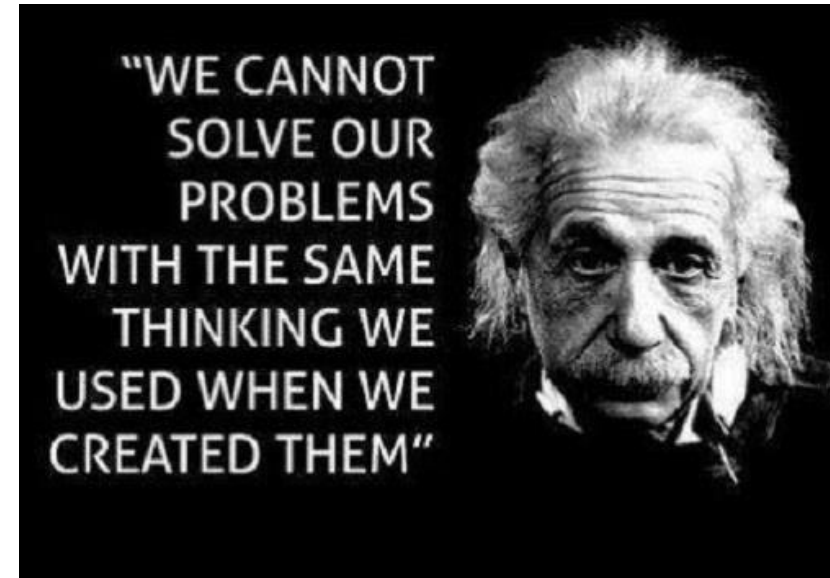
The whole value chain is concerned...a holistic and collaborative approach is required!



Innovation Booster ?

General definition

***Solutions for complex (“wicked”) problems
require multidisciplinary & new approaches***

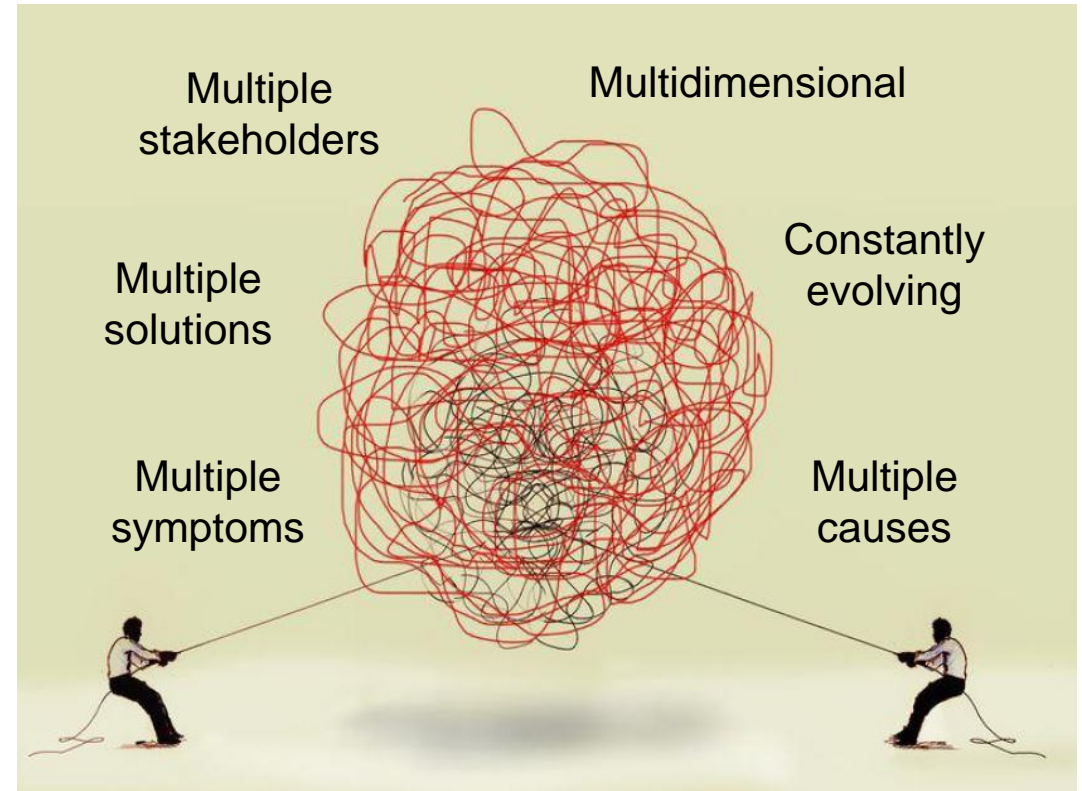


“NTN Innovation Boosters are a community with an open innovation culture in which key players work together to develop innovation ideas in promising technologies and explore new business areas and approaches. In doing so, they give Swiss companies a decisive competitive advantage and create important added value for the Swiss economy and society”

Innovation Booster ?

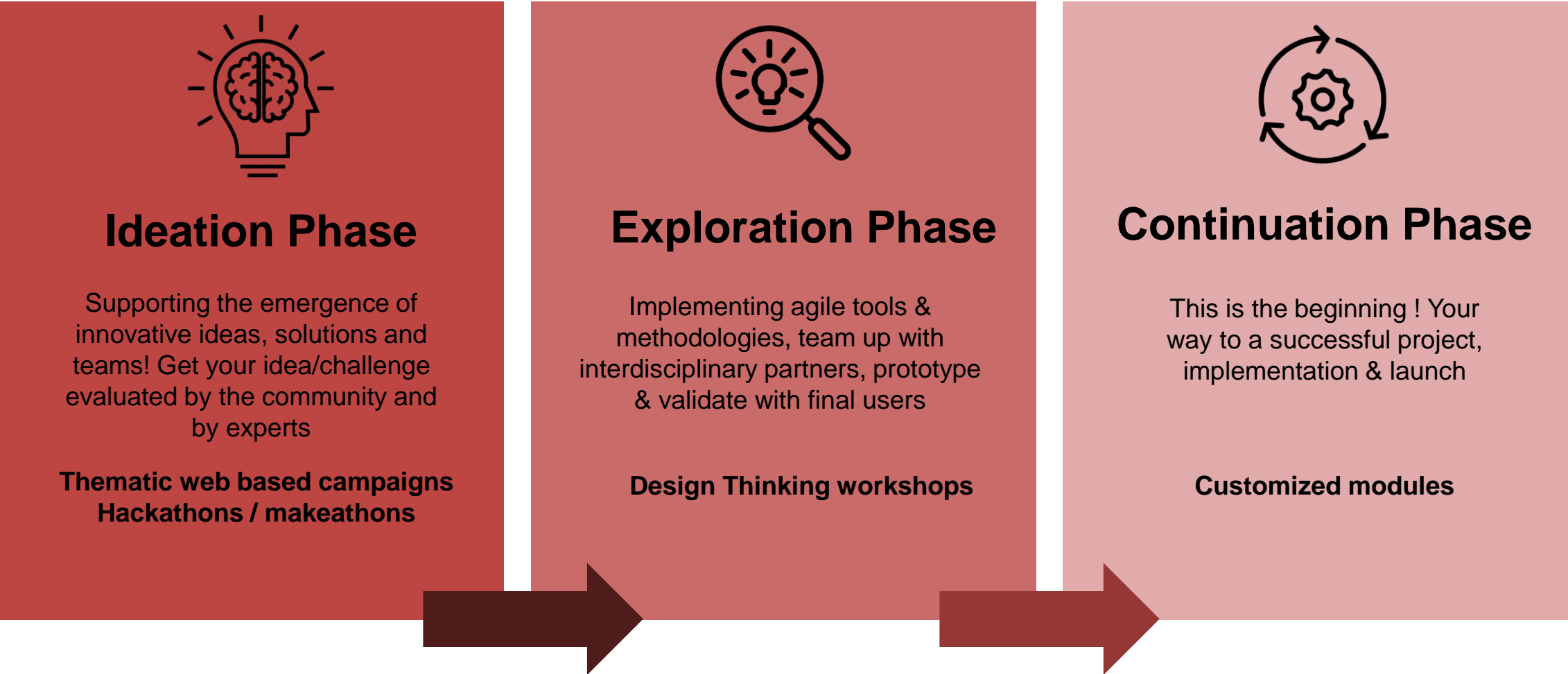
- Encourage and support the emergence of **radical innovation & breakthrough solutions** to solve “**wicked problems**” for which there are no easy solutions
 - New approaches for the food ecosystems
 - Change of mindset required !

- We will do this by means of **Open innovation**, Agile and Human Centered Tools such as **Design Thinking**, collaborative & multidisciplinary teams



“ Spreading the enthusiasm for a new culture of Open Innovation and Design Thinking methodology to the builders of the Next Generation of Swiss Food Ecosystems to become triggering agents for change and innovation”

Our 3-step process - a unique way of supporting the creation of innovation teams and radical innovation ideas



Our process is flexible; we want to adapt & continuously improve ourselves based on our experience

Ideation phase

Open to our community

Web based campaigns on a specific thematic



- 1. I have a great solution
- 2. I have a challenge/problem

First assessment by the community (desirable?)



2nd assessment by a jury of experts (viable, feasible?)

15 x 1'000 CHF
15 x 8 hours dedicated support (vouchers)



This is the start !

3x/ year

Matchmaking opportunities

Hackathons / makeathons



One thematic challenge; how might we...

Several teams work in a collaborative manner over 1 or 2 days

Pitches + Live assessment by jury

5 x 1'000 CHF
5 x 8 hours dedicated support (vouchers)



This is the start !

1x / year

Exploration phase

Open to our community, participation fees required

Design Thinking team workshops



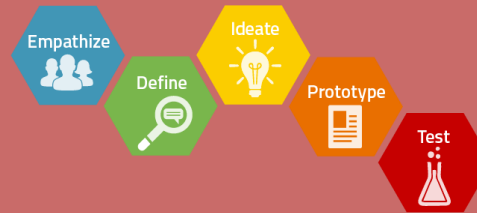
4x/ year

How might we...?

Idea /challenge
(new ones or from
previous
campaigns



Team formation &
matchmaking



4 teams / workshop will live
the whole experience !

Pitches + Live
assessment by
jury

8 x 22'500 CHF
4 x 12'500 CHF
12 x 8 hours dedicated
support (vouchers)



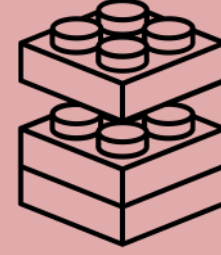
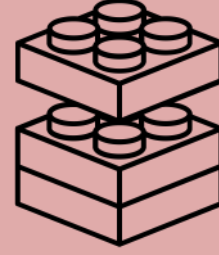
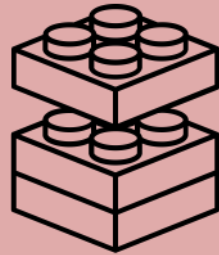
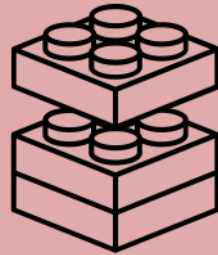
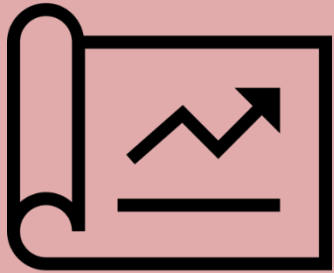
The opportunity to...

- Learn an agile methodology to apply on other projects, within your organization
- Collaborate and innovate with a multidisciplinary team, in an Open Innovation mode
- Develop & validate your prototypes with final users
- Get access to cash money (success rate of 75% to get funded ! 12/16 - 3/4)
- Get access to a dedicated matchmaking and support
- Be part of an engaged community

Continuation phase

Open to our community

The way to projects - customized modules according to your needs!



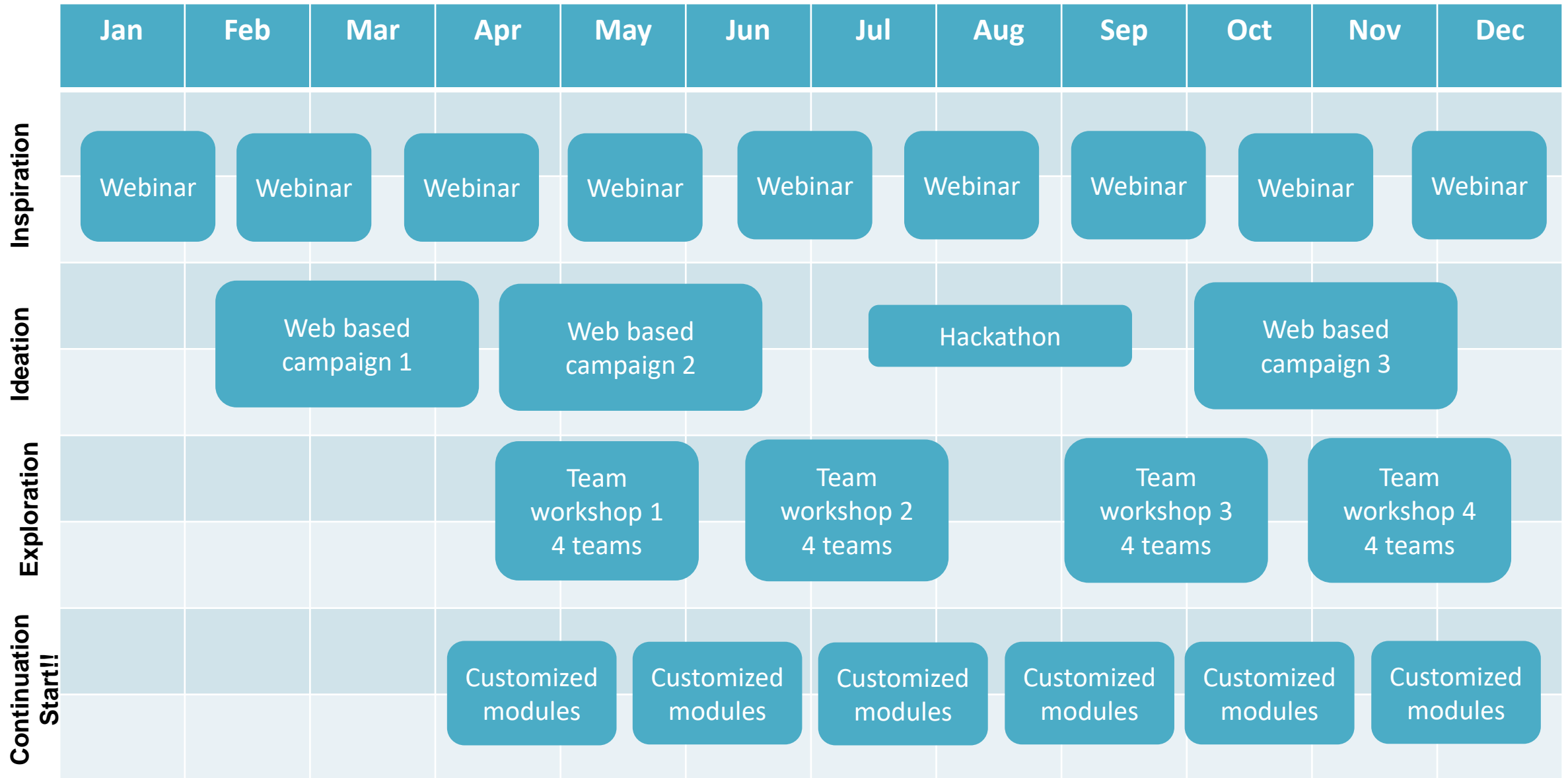
Access to
additional funding



Customized modules can be...

- A new project with additional funding (Innosuisse, NRP, other)
- Access to makerspaces, labs, pilot plant...
- Access to various expertises & competences
- Dedicated Design Thinking workshops
-
-

Overall planning



An intuitive community, matchmaking & assessment platform



Hi Nadine,
Have a look at this campaign



Click on the stars to cast your vote.

MY VOTING	COMMUNITY GRADUATION
★★★★★ Novelty	29 of 20 Visitors
★★★★★ Customer Benefit	4 of 5 Commenters
★★★★★ Feasibility	14 of 10 Voters
★★★★★ 4,4 <small>14</small>	HOTI Status 93%

An open, smooth, transparent and fair process

Lets build together the next generation of Swiss Food Ecosystems !



NTN-Innovation Booster
Swiss Food Ecosystems

next generation



Our three verticals

Smart nutrition

Personalized nutrition, microbiota vs health, fermentations, digitalization, 3D printed food, proteins (alternatives & traditionals), silver economy, food disorders, salt&sugar reduction.....

Bioeconomy

Ressources efficiency
Biomass valorization
Circular economy

New business & distribution models/agricultural practices, new recycling streams, new value chains, biobased industries, new biomaterials, high value molecules, climate resilient crops/protein and oilseed crops, AgTech, robotic i.e to reduce phytosanitary agents, CO2 neutral systems.....

Packaging

Functionality, food preservation & shelf life, food safety, antimicrobials, new materials, polymers, bioprinting, 3D printing, biobased, biodegradability, recyclability, new recycling streams....