What do you think is currently the most important challenge for agriculture in your country?

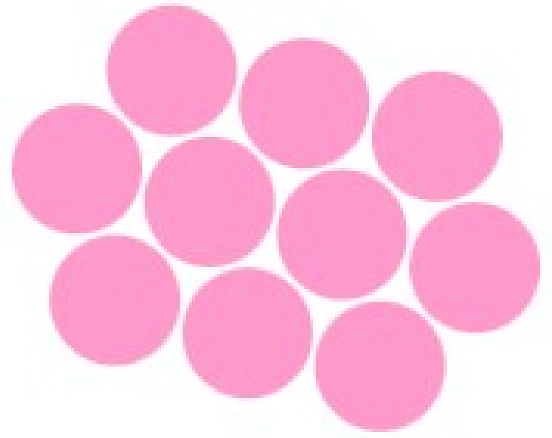
unplanned development
chemical fertilizer
rapid urbanization
urban planning and design
loss of soil fertility
unregulated pesticide use
lack of local production
natural disasters
climatic change
insufficient method
heavily contaminated rive
land conversion
urban expansion
the protection
hybrid seed invasion
water shortage
land use
water scarcity
low infrastructure
environmental issue
landuse
urbanisation
water
importing the food items
weather
land grabbing
decarbonisation
water restoration
farmers lack support
water supply
water quality
overuse of space
focus on cash crops
flooding
decrease in farm lands
sustainability
urban soil degradation
overcultivation
insurgence
climate change
appreciation for food
land use change
increase in gmo
industrialization
soil pollution
people engaged
land use for other reason
low amount of rain
water and over-farming
underpayment of farmers
communities involved

2
29

How many companies are managing more than 70% of the world trade in grain and fertilizers?

16 5- 10 companies

3 10 - 20 companies



10 20 - 100 companies

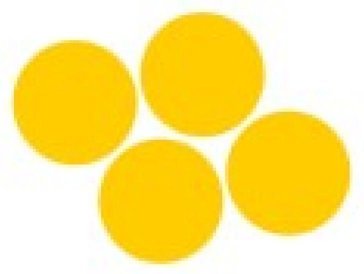
1 100 - 300 companies

5

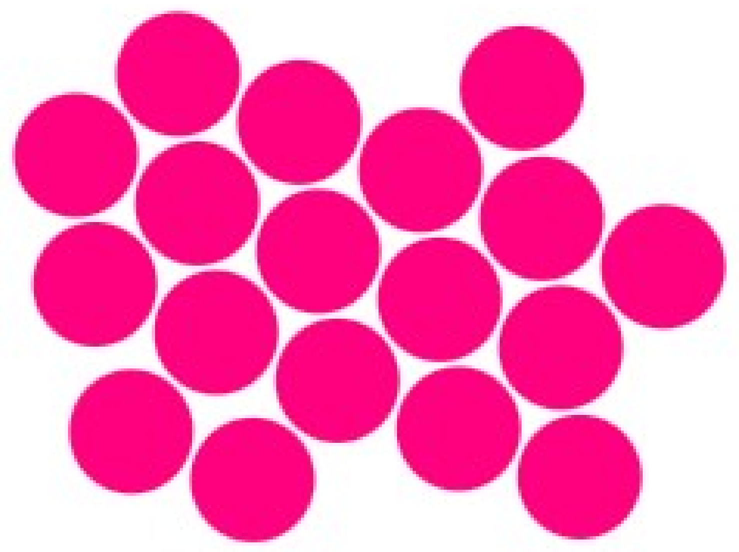
30

The use of artificial fertilizers is important for the soil, because:

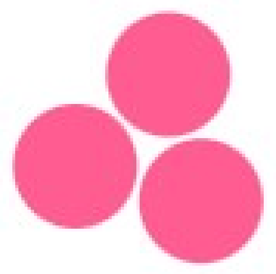
3 It supports carbon sequestration (capture of green house gases) in the soil which mitigates climate change



4 It promotes the structure of healthy soils with micro organisms and more organic matter



18 It helps to raise the amount of available amount of nitrogene, kalium and phosphate in the soil



3 It ensures that the soil will harvest more water which reduces the speedy seeping of water to the subsoil.

4

28

Name at least one argument for each category:

What are the pros and cons of artificial fertilizers?

Quick yield vs soil degradation

fast production

indepedency from natural cycles and seasonal phemomena, taking control of the contigencies, programming the production

Even though it provides short term benefits ,in the long run It damages the living organism those are helpful and also biodiversity in the soil .

rapid results, precise nutrient ratios, and cost-effectiveness,

Artificial fertilizers help plants grow faster and increase yield, but over time they can harm the soil and pollute the environment.

Rapid plant growth

Fast nutrient supply

2

20

Name at least one argument for each category:

What are the pros and cons of artificial fertilizers?

and than soil pollution

Provide nutrients quickly and effectively to plants.Easy to apply and measure.Increase crop yield in a short time.Can cause soil degradation and pollution over time.May harm beneficial soil orga

PROS: mass production CONS: has adverse impacts on the environment

Artificial fertilizers contain precise and concentrated amounts of essential nutrients (N, P, K).

Pros: it supplies the soil with missing nutrients And they give fast results

Pros: Boosts Crop Yield, Immediate Availability of Nutrients Cons: Environmental Pollution, Soil Degradation

They are cheaper to produce and transport compared to organic fertilizers.

Easy to transport and store

2

20

Name at least one argument for each category:

What are the pros and cons of artificial fertilizers?

Pros: fast harvest, and good food quality, Cons: poisoning the water system

Artificial fertilizer can produce more productivity but on the other hand, it's also harmful for the soil and health

Available in uniform forms (granules, liquids), making them simple to handle and distribute.

pros: Making the soil and the product stronger and with higher quality, it also helps accelerating the process. cons: environmental damages

Farmers can choose specific fertilizers to correct particular soil nutrient deficiencies.

Pro: Support agricultural yield, especially in areas of low-quality soils where populations are high.

water pollution

it helps plants grow, but it can also damage it

2

20

Name at least one argument for each category:

What are the pros and cons of artificial fertilizers?

Continuous use can reduce soil organic matter and harm beneficial microorganisms.

Overuse may lead to excess salts or specific nutrients, making the soil less fertile in the long run.

Cheap, well-marketed, and more accessible.

Runoff of nitrates and phosphates can contaminate rivers and lakes, causing eutrophication.

Con: Reduce ability of natural soil regeneration, interrupts cycles to the extent they exist.

Manufacturing artificial fertilizers (especially nitrogen-based ones) consumes large amounts of fossil fuels.

Pros: Government subsidies Cons: Pollution

Water and soil pulotion

2

20

Why is a strategy that focuses on techno-fixes for reducing climate impact, pollution, nitrogen overloads NOT they way to go (following IPES Food)?

They could be energy intensive and limited at scale/time.

pressure on farmers

Another input cost for agriculture industry.

They treat environmental impacts (like nitrogen pollution or greenhouse gas emissions) as isolated problems instead of symptoms of a broken industrial food system.

According to IPES-Food, focusing only on technological solutions to reduce climate impact, pollution, and nitrogen overload is not the right path because it keeps the industrial food system's.

The core issue—overproduction, monocultures, and dependence on chemical inputs—remains untouched.

Many technological solutions are owned and promoted by large agribusiness corporations, reinforcing their dominance over global food systems.

They can be expensive and unsuitable for deployment in developing countries.

3

17

Why is a strategy that focuses on techno-fixes for reducing climate impact, pollution, nitrogen overloads NOT they way to go (following IPES Food)?

his limits farmers' autonomy and undermines local, sustainable practices

According to IPES-Food, techno-fixes are not the way to go because they treat the symptoms, not the root causes, and keep power in the hands of big corporations instead of transforming the food system

Reduction of a degree of agro-business autonomy and/or influence over decisions.

Most often, a quick fix doesn't really lead to a long-term solution, instead it comes up with a new problem to solve .Also , at the very back end of technology, there is energy consumption involved.

Overconsumption, Insufficient monitoring, Lack of regulation implications

For example, synthetic fertilizers and genetically modified crops may temporarily increase yields but also degrade soils, reduce biodiversity, and increase dependency on external inputs.

techno-fixes keep the same unsustainable system running rather than transforming it.

It should not just address sympoms through techno fixes but structural drivers.

3

17

Why is a strategy that focuses on techno-fixes for reducing climate impact, pollution, nitrogen overloads NOT they way to go (following IPES Food)?

Some “green” technologies shift impacts elsewhere instead of reducing them (e.g., biofuels compete with food crops for land)

It increases technological solutions and factory production, bringing environmental pollution with it.

Because they don’t solve the main problem they deal with the symptoms

A focus on technological efficiency diverts attention and investment away from agroecology, dietary change, and local food systems that could deliver real, lasting sustainability.

Possible geopolitical risks for dependency on the originator of said technology.

IPES-Food emphasizes that transformation—not optimization—is needed to address food system crises.

There should be a solution to the root problem

what happen is that, "techno-fixes" places markets and food security in the hands of a few companies or tech giants

3 17

Why is a strategy that focuses on techno-fixes for reducing climate impact, pollution, nitrogen overloads NOT they way to go (following IPES Food)?

IPES-Food calls for agroecological approaches that integrate ecology, fairness, and resilience.

Technology is great but constantly changing. You cannot depend on technology alone but rather use it as a tool that works hand in hand with the soil.

These strategies strengthen soil health, biodiversity, and local economies—offering long-term solutions rather than temporary fixes.

Technological strategies alone to reduce environmental impacts are insufficient and inappropriate due to overlooking fundamental causes and neglecting social and economic dimensions.

Data concerns

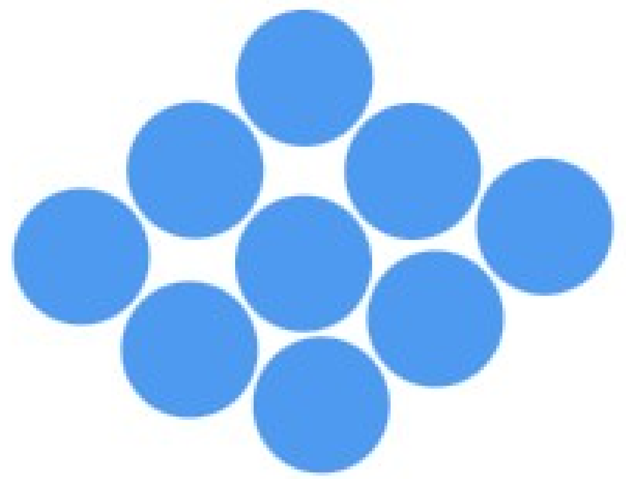
technology comes with unintended effects

A strategy based mainly on techno-fixes is short-term and partial, focusing on specific pollutants or emissions rather than transforming the entire food system to be sustainable, equitable,

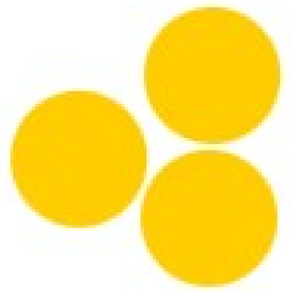
3

17

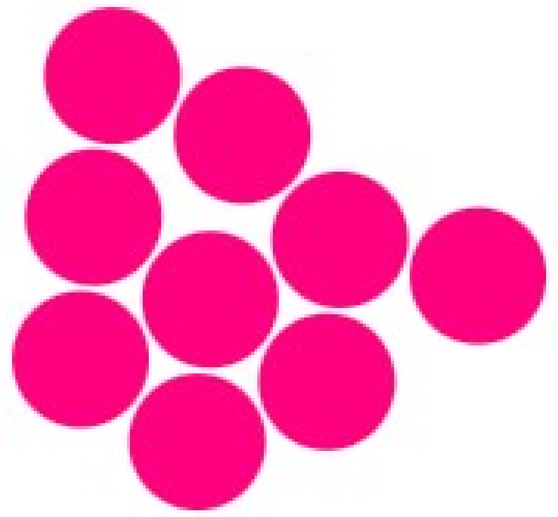
The Nyeléni declaration states that agroecology can provide an important pathway. What is agroecology actually?



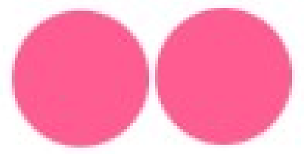
9 A combination of ecological, biological and biodynamic agriculture



3 A method of agriculture where farmers combine the material processes with spiritual approaches relating to cosmic cycles



9 Agriculture that is productive, conserves natural resources, and socially engaged.



2 A type of agriculture where cycles of material, water, organic matter are closed

6

23

How would you consider your own diet? Select the one that is most appropriate.