

CSE'S NATIONAL CONCLAVE

ON SUSTAINABLE FOOD SYSTEMS 2022

APRIL 19-21, 2022

Anil Agarwal Environment Training Institute (AAETI) Nimli, Rajasthan



Challenged times



- On one hand,
- Climate change extreme weather events are increasing; putting huge stress on the ability of farmers to cope; increasing risk and cost
- On the other hand
- Farmers need to invest more and more to grow food cost of all inputs is increasing (more now with cost of fuel going up)
- And
- Governments and people need cheap food food for public distribution and for consumers

Join the dots so we can connect and correct

Nature Nutrition Livelihoods



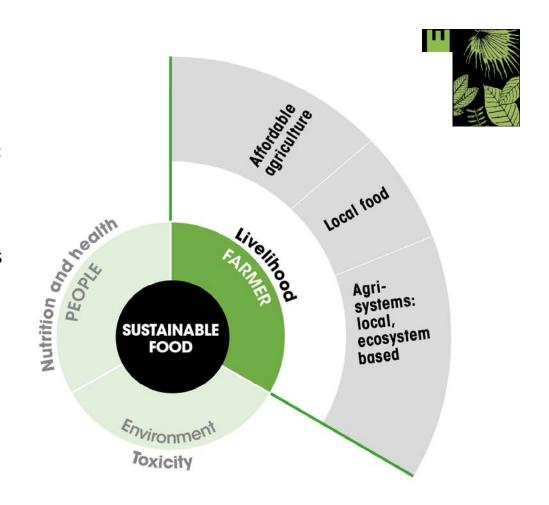
Livelihood connection

Putting more money in the hands of farmers means building food systems that will rebuild nature so that there is sustainability; less cost

Today farmers discount nature; destroy fertility; deplete groundwater; then add costs for chemicals and inputs; this makes them even more vulnerable when the next storm comes

Need systems that invest in nature; **low cost but high value**

Need nutrition for local food security Need producers to connect to markets

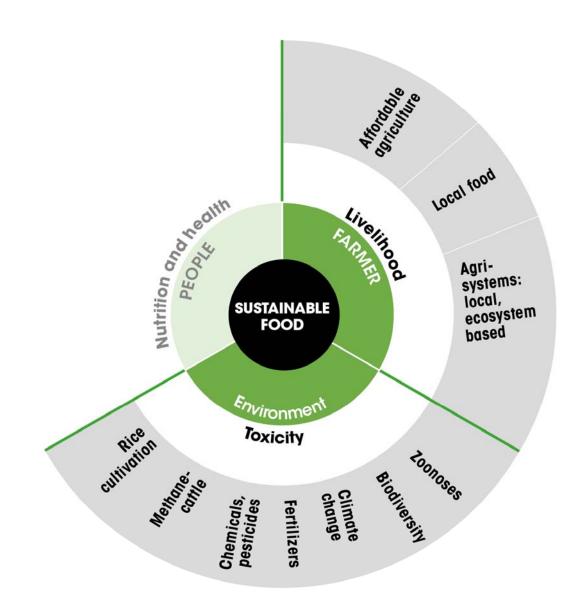


Nature connection

Climate change: agriculture impacted but also a major cause of climate change

Biodiversity: is about resilience – what we grow and what we eat will make nature lose or win

Toxification: the use of pesticides, antibiotics are about crop, animal and most of all human health



Climate change and agriculture



- Agriculture <u>adds to greenhouse gas emissions</u> (one-fourth of global emissions/India)
- Meat use of land, forests, water and crops to grow the meat not meat but the way we grow it and the amount we eat
- Rice and groundwater

Agriculture; land and soils is also a way to <u>mitigate emissions</u> – add carbon to the soil, increase fertility

India impact Monsoon is our finance minister



 More than enough evidence to show that extreme and variable rain events are linked to climate change – increase of floods and then droughts

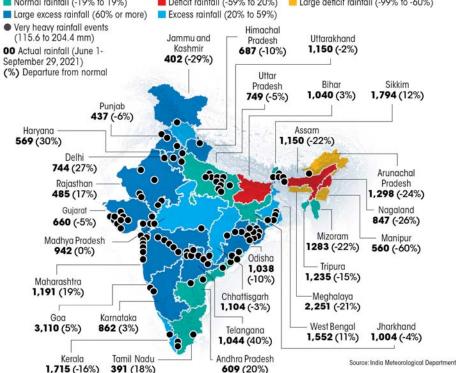
UNTIMELY RAINS

While the monsoon in 2021 remained normal, it was of little help due to monthly variations

Normal rainfall (-19% to 19%)

Deficit rainfall (-59% to 20%)

Large deficit rainfall (-99% to -60%)



Food-biodiversity and COVID-19



- COVID-19 is the result of our dystopian relationship with nature
- Zoonotic diseases increasing because of species-virus 'jump' from animals to humans
- **Destruction of habitats** humans ingress into wild habitats
- Manufacture of food industrial agriculture is destroying biodiversity and so making species more vulnerable to disease and mutations

Grow
Eat,
Celebrate
Diversity
Culture
Cuisines

About resilience
About working with nature
and not against it



Long, white not rice



Huge diversity of rice lost today on our plates

Rice for nourishment

Rice for medicine Rice that can adapt to rising flood waters

- •Kerala's Navara
- •Maharashtra's Ambemohar
- Karnataka's Kayame (drought and salinity resistant)
- •Chattisgarh's Alcha

Food

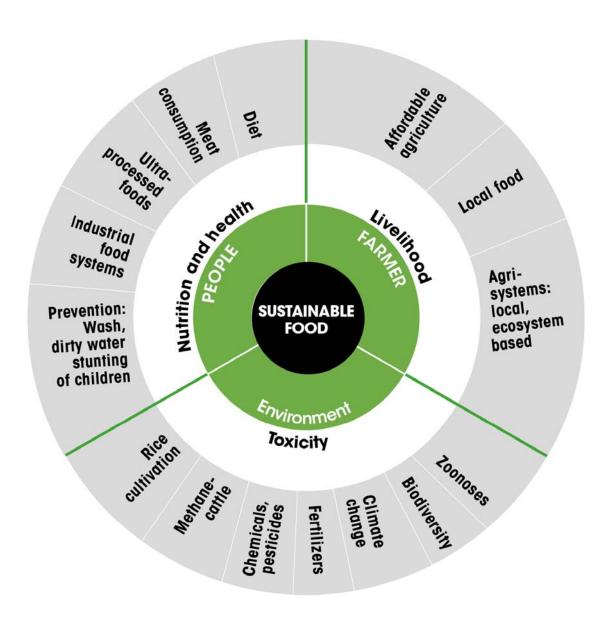


- Is nature
- Food diversity about biological diversity
- We lose one, we lose the other
- We lose culture, we lose nature

Connect human health

Nutrition – what we eat and what we should not eat

Toxins in our body add to health burden – pesticides and antibiotics (silent pandemic)



The food conclave: challenges



- The imperative; the economics and the sustainability of natural/chemical free and organic agriculture: the why
- The barriers and way ahead to upscale growing food that is good for nature; nutrition and livelihoods: how and what we must do
- The innovations in markets that link producers to sustainable food: learnings on what we working so we can do more
- Junking junk food: policy and regulation to inform consumers on food-nutrition link: the battle we must not lose
- The silent pandemic of AMR is about the way we manufacture our food: the prevention and development agenda



CSE Investigation Business of Adulteration of Honey

December, 2020

THE FICH EYERAP

Not about adulteration and our health – sugar syrup not honey but because Bees are critical for health of food system; biodiversity for security



- Because of adulteration beekeepers were going out of business
- If they stopped beekeeping there would be decline in bees
- Bees provide crucial service as pollinators
- Without bees we lose productivity of food; we lose life
- Biodiversity of bees critical for resilience and productivity

The connections and the results



- Best news we got was from Sundarbans: beekeeper producer company wrote to us saying that since our study; prices are up; people also want to buy better quality honey; forest honey; based on biodiversity of bees and they are now a profitable venture putting money in the banks of collectors
- This is why we believe that we must connect food (agriculture) to people it is about their health and their nutrition

Sustainable food systems



- Sustainability is about who grows local food for livelihood security
- Sustainability is about how we grow less intensive and less toxic
- Sustainability is about what we grow biodiversity rich and nature-friendly
- Sustainability is about what we eat less processed and more bio-diverse and local