Indian Council for Research on International Economic Relations

Engaging in Urban Food Safety

Presentation by:

Dr. S. Mukherjee

Secretary and COO, Club of Rome – India

B-32, TARA Crescent, Qutub Institutional Area, New Delhi-110016.

Ph: 011-2654-4235 (Direct), 011-2654-4100

Mobile: +91 9339259812

e-mail: [subra@clubofrome.in]

Date: 14th July 2014

Presentation: "Engaging in Urban Food Safety" at The Indian Habitat Centre Date: 14th July, 2015 **Presentation by:** Dr. S. Mukherjee, Secretary and COO – Club of Rome—India.

Slide 1 of 14

Engaging in Urban Food Safety

To involve oneself or become occupied/ participate



Of, pertaining to, or comprising a city or town.



A substance that can be metabolized to give energy and build tissue



The condition of being safe; freedom from danger, risk, or injury



Presentation: "Engaging in Urban Food Safety" at The Indian Habitat CentreDate: 14th July, 2015Presentation by: Dr. S. Mukherjee , Secretary and COO – Club of Rome—India.Date: 14th July, 2015

Slide 2 of 14

Toxic Yamuna veggies on your menu

Health fears over river bank vegetables contaminated with sewage water



http://www.dailymail.co.uk/indiahome/indianews/article-2280168/Toxic-Yamuna-veggies-menu-Health-fears-river-bank-vegetables-contaminated-sewage-water.html

Presentation: "Engaging in Urban Food Safety" at The Indian Habitat CentreDate: 14th July, 2015Presentation by: Dr. S. Mukherjee , Secretary and COO – Club of Rome—India.Date: 14th July, 2015

Slide 3 of 14

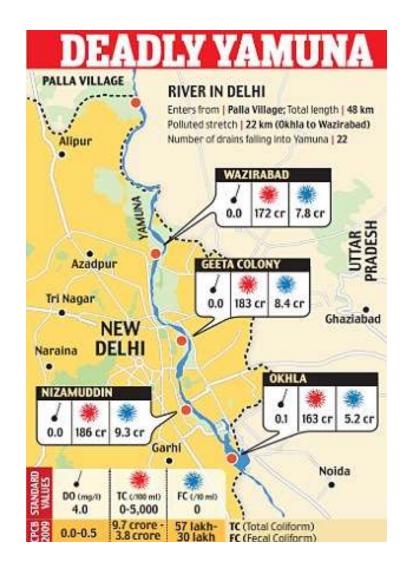
Yamuna water, which is no better than sewage water now, is also used to grow or wash vegetables and fruits at the *mandis*, from where they are sent to different parts of the city.

			-			
	a land			1 170 34		The st
	Conception in the	10-	- the		All .	
	RR	25	TARK		Bueze	
- Alexan	11-20					
RAISIN		JAE	FEIFE			
14:20111	5 MM M = 1 r			- A		-
		$\eta_i \eta_j$		12		
PARAMETER		OBSERVE		12	REPORTED	
A CAMPAGE ON VALUE AND A	WAZIRABAD			OKHLA	REPORTED VALUE (CPCB 2009)	STANDAR
A CAMPAGE AND A CAMPAGE AND		OBSERVE GEETA	D VALUE	OKHLA 8.21		STANDARI VALUE 6.11-9.39
PARAMETER Measure of acidity of a liquid (pH)	WAZIRABAD	OBSERVE GEETA COLONY	D VALUE		(CPCB 2009)	VALUE
PARAMETER	WAZIRABAD 7.63	OBSERVE GEETA COLONY 7.99	D VALUE NIZAMUDDIN 8.01	8.21	(CPCB 2009) 7.5	6.11-9.39

Presentation: "Engaging in Urban Food Safety" at The Indian Habitat Centre Date: 14th July, 2015

Slide 4 of 14

Presentation by: Dr. S. Mukherjee , Secretary and COO – Club of Rome—India.



"Ingestion of such contaminated food can cause vomiting, diarrhoea, gastroenteritis, blood infection, dehydration, urinary infection and kidney dysfunction.

"Leafy vegetables should be repeatedly washed and then cooked. Raw vegetables should be avoided,"

"In fact, the guavas and red radishes sold by the roadside in east Delhi are washed in the Yamuna water. "

Presentation: "Engaging in Urban Food Safety" at The Indian Habitat CentreDate: 14th July, 2015Presentation by: Dr. S. Mukherjee , Secretary and COO – Club of Rome—India.Date: 14th July, 2015

Slide 5 of 14

http://www.thestatesman.com/news/opinion/poisonous-food/73013.html

Poisonous food

Jaydev Jana | 02 July, 2015 (AFP)

All substances are poisons; there is none which is not a poison. The right dose differentiates a poison and a remedy - Paracelsus (1493-1541)



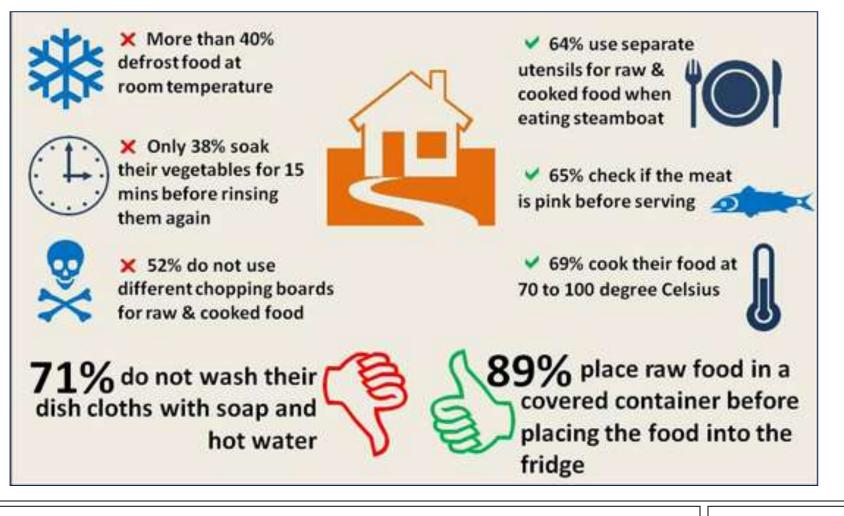
"Freshwater fish contains mercury from industrial effluents; poultry chicken and eggs are contaminated with hormones that can lead to prostate cancer.

Every bite of food is contaminated with pesticides.

Indeed, we eat at our peril."

Presentation: "Engaging in Urban Food Safety" at The Indian Habitat CentreDate: 14th July, 2015Presentation by: Dr. S. Mukherjee , Secretary and COO – Club of Rome—India.Date: 14th July, 2015

Food Safety Habits in Western Households



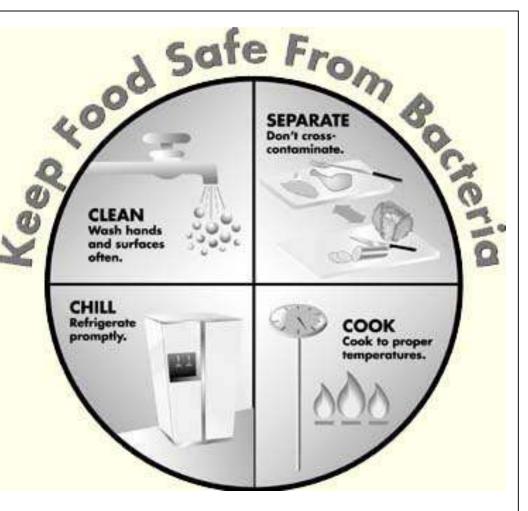
Presentation: "Engaging in Urban Food Safety" at The Indian Habitat Centre Date: 14th July, 2015 **Presentation by:** Dr. S. Mukherjee , Secretary and COO – Club of Rome—India.

Slide 7 of 14

We need to reduce the risk of food-borne illness in home food preparation.

This can best be done by producing as much of our own food in our own 'homestead'.

Please view the TED Talk presentation by **Pam Warhurst**, from Todmorgen in North England: '*How we can eat our landscapes*', at:



[http://www.ted.com/talks/pam_warhurst_how_we_can_eat_our_landscapes]

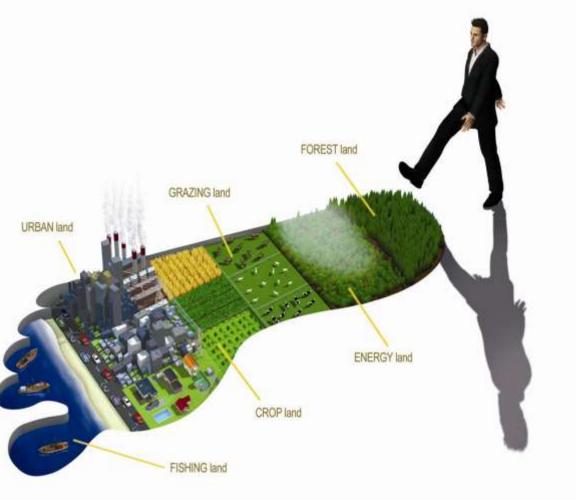
Presentation: "Engaging in Urban Food Safety" at The Indian Habitat Centre Date: 14th July, 2015 **Presentation by:** Dr. S. Mukherjee , Secretary and COO – Club of Rome—India.

Slide 8 of 14

Ecological footprint:

A measure of human demand on the earth's ecosystems.

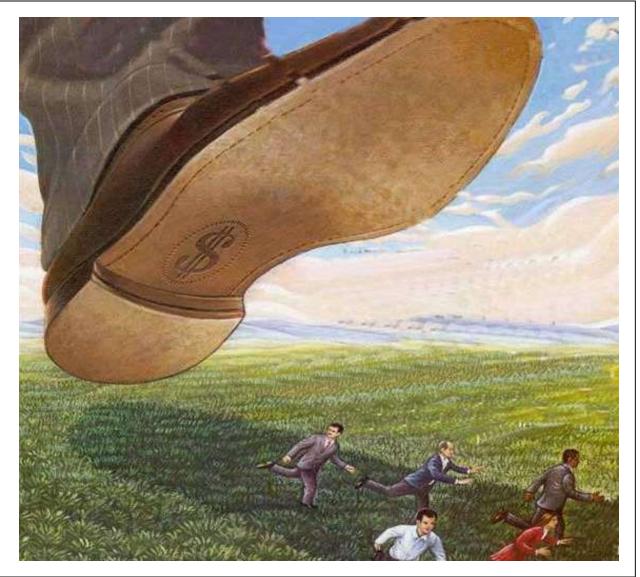
It represents the amount of biologically productive land and sea needed to regenerate the resources human population uses and to absorb and render harmless the corresponding waste.



Presentation: "Engaging in Urban Food Safety" at The Indian Habitat CentreDate: 14th July, 2015Presentation by: Dr. S. Mukherjee , Secretary and COO – Club of Rome—India.Date: 14th July, 2015

Large scale food production has become a moneydriven business instead of a healthdriven business.

Non-renewable resources are used to transport food over large distances causing a third of all man-made emissions, while losing quality, nutrients and freshness – *i.e. food safety* – in the process.



Presentation: "Engaging in Urban Food Safety" at The Indian Habitat CentreDate: 14th July, 2015Presentation by: Dr. S. Mukherjee , Secretary and COO – Club of Rome—India.Date: 14th July, 2015

Slide 10 of 14

Benefits of Edible & Sustainable Landscapes

Where our food comes from is becoming more and more critical to our health and wellbeing. Growing food on our own land is a healthy, economical, therapeutic and satisfying endeavor.

Edible plants in our landscape give a return on investment that is both smart and delicious. When we grow our own food, we create a more sustainable world.



Dr. Nathaniel (Nate) Storey is our Aquaponics Mentor: View his '*The Bright Future of Food*: Empowering Local Economies and Ensuring Food Security'

http://www.youtube.com/watch?v=pwquu0xoRbE&feature=youtu.be

Presentation: "Engaging in Urban Food Safety" at The Indian Habitat Centre Date: 14th July, 2015 **Presentation by:** Dr. S. Mukherjee , Secretary and COO – Club of Rome—India.

Slide 11 of 14

Guerrilla Gardening

Forget about the pretty shrubs and flower beds ... The new thing is *edible parks*.

'Guerrilla gardeners' are <u>aesthetically</u> planting in vacant, neglected public lands and everyone is welcome to help in the growth processes.



Please view TED Talk presentation by **Ron Finley**: *A guerrilla gardener in LA* http://www.ted.com/talks/ron_finley_a_guerilla_gardener_in_south_central_la# *Hi definition version at*:

http://video.ted.com/talk/podcast/2013/None/RonFinley_2013-480p.mp4

Presentation: "Engaging in Urban Food Safety" at The Indian Habitat Centre Date: 14th July, 2015 **Presentation by:** Dr. S. Mukherjee , Secretary and COO – Club of Rome—India.

Slide 12 of 14

'HOW TO' (<u>*P-D-C-A</u> CYCLE*)</u>

A Home Aquaponics Farm (see video at https://www.youtube.com/watch?v=fCL68ETB_nM) can produce affordable, healthy, organic and pesticide-free fish and vegetables.

Urban residents in apartments may use their unused balcony and roof-top spaces to grow food in **Vertical Farms**—or develop **Edible Landscapes** outside.

Large-scale development of community eco-parks can be made through **Guerrilla Gardening**, to produce food for the poor and distribution in local food bazaars.



These modern <u>*Urban Agriculture*</u> initiatives will be ground-breaking achievements in ensuring food safety.

Presentation: "Engaging in Urban Food Safety" at The Indian Habitat CentreDate: 14th July, 2015Presentation by: Dr. S. Mukherjee , Secretary and COO – Club of Rome—India.Date: 14th July, 2015

Slide 13 of 14



FOR YOUR ATTENTION