

Urban Hydroponics for Diversified Agriculture: Part II

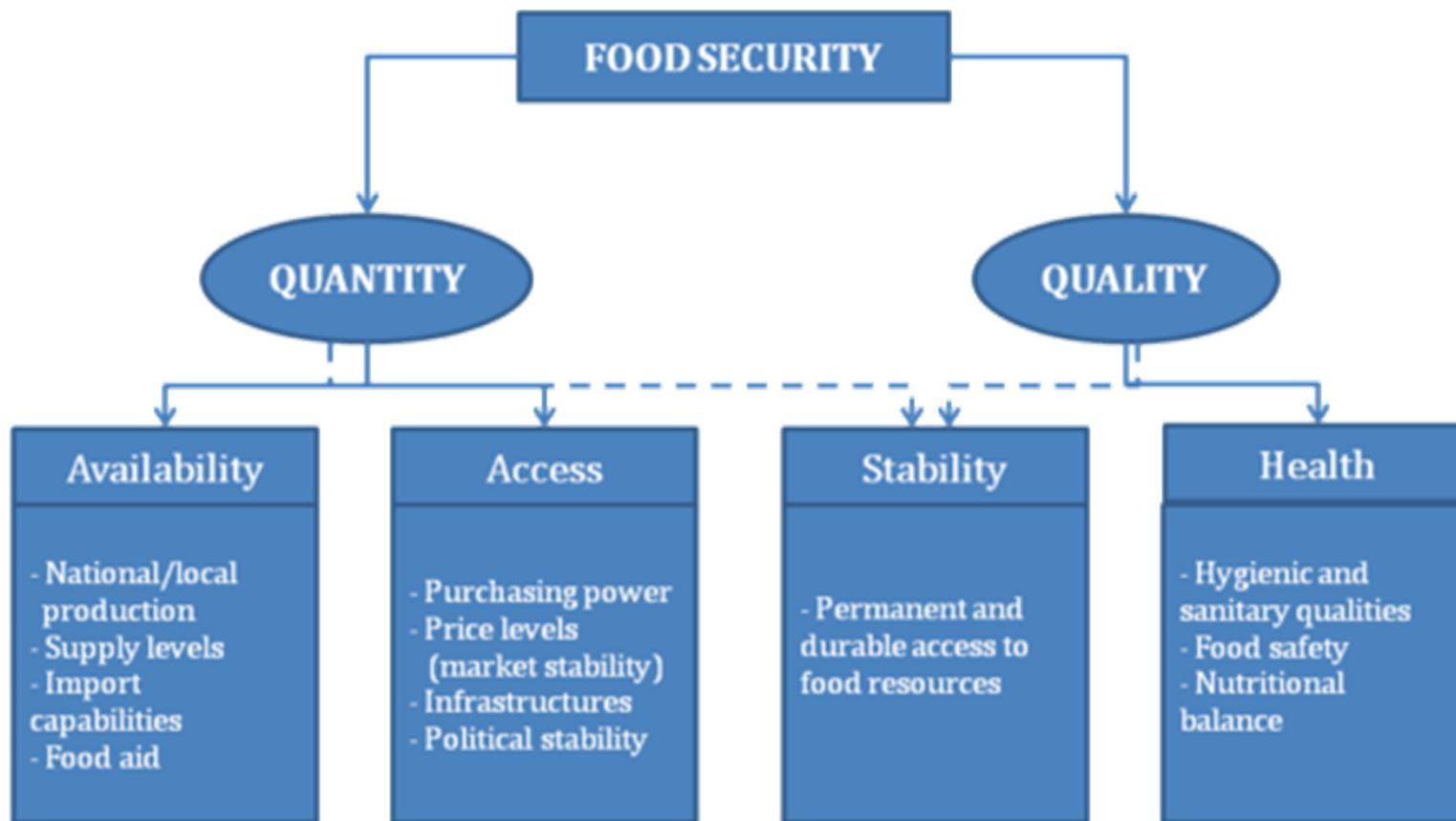
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AKI PROJECT

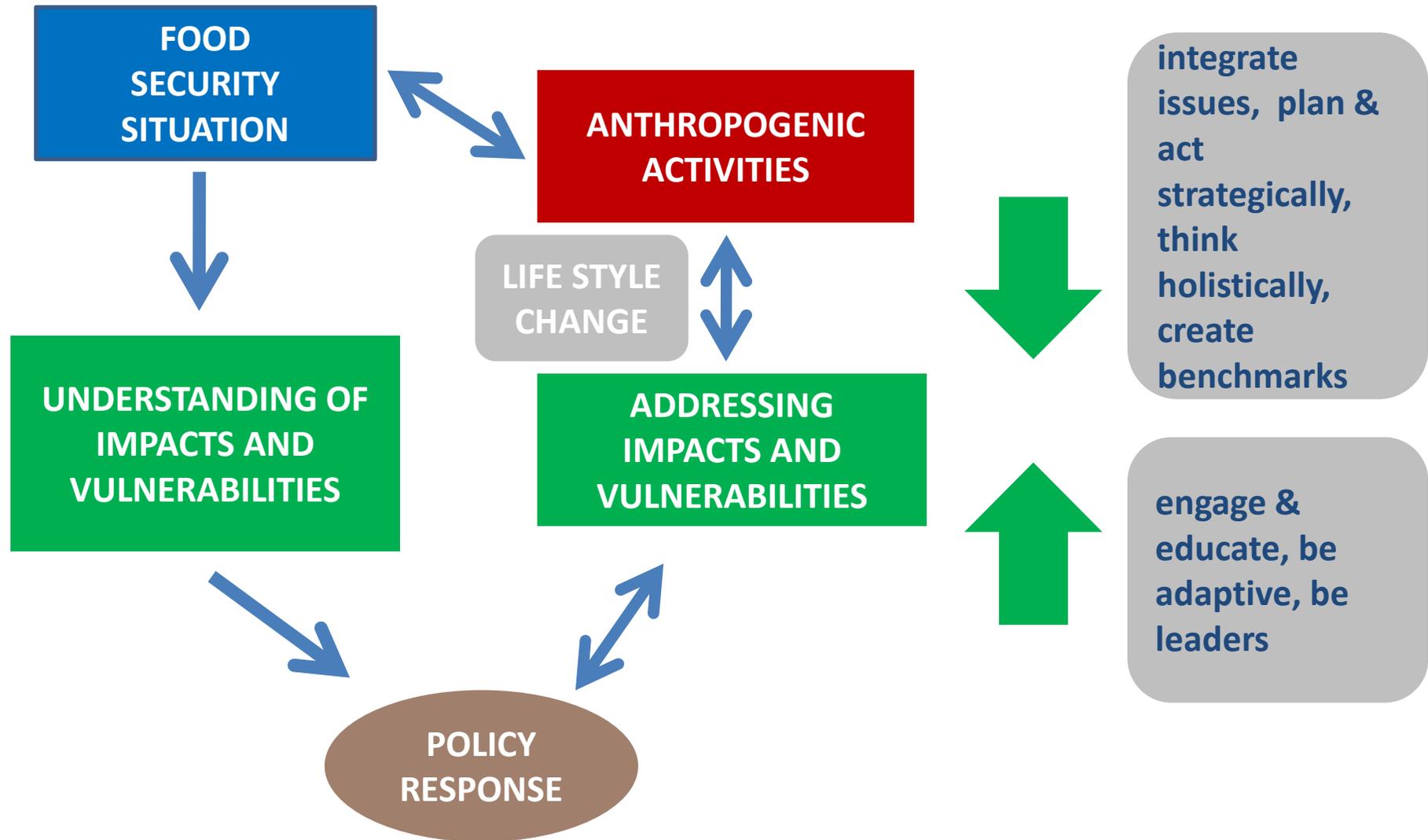


The quest for food security can be the common thread that links the different challenges we face and helps build a sustainable future.”

— *José Graziano da Silva, United Nations Food and Agriculture Organization (FAO) Director-General*



“Food security is guaranteed when, at all times, all people benefit from economic, social and physical access to sufficient, safe and nutritious food to meet their nutrition needs and food preferences, so that they can lead an active and healthy life.” 1996 Food Summit.





Lactuca sativa





**BOTH 85%
GERMINATION**



**HYDROPONICS
YIELD**

**ORGANIC
METHOD
YIELD**



**FASTER
GROWTH**

**BIGGER
PLANTS**

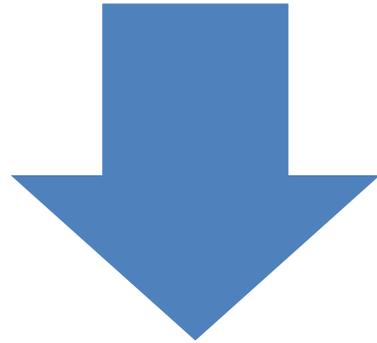


NUTRIENT	HYDRO-PONICS LEVELS (µg/10g)	ORGANIC METHOD LEVELS (µg/10g)	RECOM-MENDED DAILY INTAKE (adults)	VITAMINS OR MINERAL INFORMA-TION	OVER DOSAGE (mg or µg/d) (primary reference is USEPA or USFDA)
Vitamin A	600-830	586-694	600 µg	Vitamin A in food and as a supplement	Extremely high doses (>9000 mg) can cause dry, scaly skin, fatigue, nausea, loss of appetite, bone and joint pains and headaches
Vitamin D (cholecalciferol)	0.0-446	59-61	5 µg	Vitamin D in food and as a supplement	Large doses (>50 µg) obtained from food can cause eating problems and ultimately disorientation, coma and death
Vitamin E (tocopherol)	24.3-235.8	82.9-88.2	10 mg (10,000 µg)	Vitamin E in food and as a supplement	Doses larger than 1000 mg cause blood clotting, which results in increased likelihood of haemorrhage in some individuals
Copper	2.3-6.3	6.3-959	2 mg (2,000 µg)	Copper in food and as a supplement	As little as 10 mg copper can have a toxic effect and gram quantities is potentially lethal

CONTAMINANT	CATEGORY	HYDRO-PONICS LEVELS (µg/10g)	ORGANIC METHOD LEVELS (µg/10g)	LD ₅₀ (adult human; at 70 kg)	REFERENCE
Cadmium	heavy metal	69-110	75-110	1,400-9,100 mg (1,400,000 - 9,100,000 µg)	United States Food & Drug Administration
Lead	heavy metal	2.2	1.9-3.1	49,980 mg (49,980,000 µg)	United States Center for Disease Control
Copper	as heavy metal	2.3-6.3	6.3-959	gm quantities (adult individual)	United States Environmental Protection Agency
Oxirane, Tetradecyl	bioactive compound or sterilant	69-110	75-110	7,000-14,000 mg (7,000,000 - 14,000,000 µg)	United States Public Health Service
1,2 Dithiane	bioactive compound or pesticide	940	130	410 mg/kg (in rodent; adult rats may weight 0.5 kg) 14,350 mg (14,359,000 µg equivalence in humans)	America Chemical Society
Endosulfan	insecticide	7.4-14.6	4.8-13.4	2,450 mg (2,459,000 µg)	United States Environmental Protection Agency

HYDROPONICS

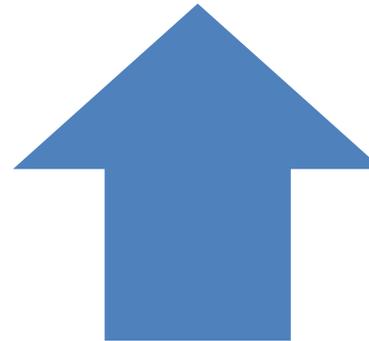
- SMALLER FOOTPRINT
- CLEAN FOOD
- NUTRITIOUS
- LESS POLLUTION
- SAFE FOOD



GROWS FAST



SPECIFIC MARKET



- SMALLER FOOTPRINT
- CLEAN FOOD
- NUTRITIOUS
- LESS POLLUTION
- SAFE FOOD

ORGANIC METHOD

URBAN AGRICULTURE METHODS

HYDROPONICS

- REDUCES ECOLOGICAL FOOTPRINTS
- ADDRESS FOOD SAFETY

ORGANIC FARMING

- REDUCES POLLUTION
- NUTRIENT CONTENT
- SPECIFIC MARKET

LETTER CARRIERS'

FOOD DRIVE

SATURDAY,
MAY 14, 2011

JOIN US
IN HELPING
TO STAMP OUT
HUNGER!



JEFF
and
Pete
KEANE



PUT YOUR NON-PERISHABLE DONATION IN A BAG BY YOUR MAILBOX.
WE'LL DELIVER IT TO A LOCAL FOOD BANK.



NATIONAL PARTNERS



Valpak



AFL-CIO

FEEDING AMERICA

Uncle Bob's self storage

