



# National Urban & Peri-Urban Agriculture Program:

## Responses & Prospects amidst Challenges in Food Security

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# RATIONALE



- ✓ The Philippines has an estimated urban areas population of 51M (*World Bank, 2020*)
- ✓ High poverty and low income especially among the rural population that are generally engaged in agriculture where poverty in rural areas is 12%
- ✓ The Philippines is among the most vulnerable to climate change impacts
- ✓ Continuing higher food prices and population growth



# CHALLENGES TO FOOD SECURITY



- ✓ Increasing population growth
- ✓ Increasing food demand and consumption
- ✓ Increasing urbanization
- ✓ Food price volatility
- ✓ Logistics
- ✓ Limitations of availability of agricultural land
- ✓ Climate change, pandemic and other extreme calamities
- ✓ Geopolitical conflicts
- ✓ Plant and animal diseases



# URBAN AGRICULTURE



- ✓ Addressing food shortage in the community
- ✓ Ensuring adequate supply of readily available safe and nutritious food within the community
- ✓ Improving the environmental status of the community
- ✓ Stabilizing food prices and strengthening market potential



# National Urban and Peri-urban Agriculture Program (NUPAP)



Administrative Order No. 3 elevated NUPAP as new banner program with the goals of:

- ✓ Food accessibility and availability
- ✓ Alternative source of livelihood through mass production
- ✓ Build climate resilient and sustainable UA technologies
- ✓ Promote food safety for urban and peri-urban farming
- ✓ Rehabilitate communities through urban farming
- ✓ Minimize logistics costs by producing local food
- ✓ Collaborate with LGUs, NGAs, international organizations, private sectors, social enterprises, marginal groups and other interested stakeholders

Republic of the Philippines  
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**ADMINISTRATIVE ORDER**  
No. 03  
Series of 2022

**SUBJECT: CREATION OF THE NATIONAL URBAN AND PERI - URBAN AGRICULTURE PROGRAM (NUPAP), A BANNER PROGRAM OF THE DEPARTMENT OF AGRICULTURE**

**WHEREAS**, the Department of Agriculture (DA) promotes agricultural development and growth through policies, public investments, provision of support services, in partnership with local government units (LGUs) necessary to make agriculture and agriculture-based enterprises profitable and help spread the benefits of development to the poor;

**WHEREAS**, Chapter 8 of the Philippine Development Plan (PDP), which contains the Strategic Framework to Expand Economic Opportunities in Agriculture, Forestry, and Fisheries, 2017-2022, highlights the government's commitment to promote resilient measures such as urban agriculture and multi-stakeholder partnerships;

**WHEREAS**, pursuant to Sagip Saka Act (RA 11321), it is a declared policy of the State to achieve sustainable modern agriculture and food security by helping the agricultural and fishing communities to reach their full potential, increasing farmers' and fisherfolks' incomes, and bridging gaps through public-private partnerships, thereby improving their quality of life.

**WHEREAS**, the Philippines is one of the top countries with the highest urban area population with an estimated forty-seven percent (47%) or 52 million citizens (World Bank, 2020).

**WHEREAS**, the country is faced with rising pressures due to unstable food supplies, climate change, and growing unemployment as a consequence of the COVID-19 pandemic;

**WHEREAS**, Urban Agriculture (UA) or the practice of agriculture in limited space in the metropolis, is seen as an intervention in achieving food security and provide alternative source of livelihood;

**NOW THEREFORE**, this Administrative Order provides the guidelines in the implementation of the National Urban and Peri-Urban Agriculture Program (NUPAP).

*A food-secure and resilient Philippines*  
with empowered and prosperous farmers and fisherfolk

Masaganang ANI  
Mataas na KITA

# PROGRAM COMPONENTS



1

**Distribution  
of agricultural  
inputs**



2

**Site  
Establishments  
(community farms,  
vertical farms,  
rooftop gardens)**



3

**Establishment  
of Corporate  
Farms for  
commercial  
scale**



4

**Establishment  
of Urban and  
Peri- urban  
Agriculture  
Technology and  
Training Centers**



5

**Research**

# NUPAP Anchored on One DA Reform Agenda



## CONSOLIDATION

- ✓ Urban – Network of Urban Agriculture, Gardens and Farms
- ✓ Peri Urban – Government properties, partner agencies

## INDUSTRIALIZATION

- ✓ Supply to Agro-industrial Business Corridor (ABC)
- ✓ Export opportunities
- ✓ Logistics

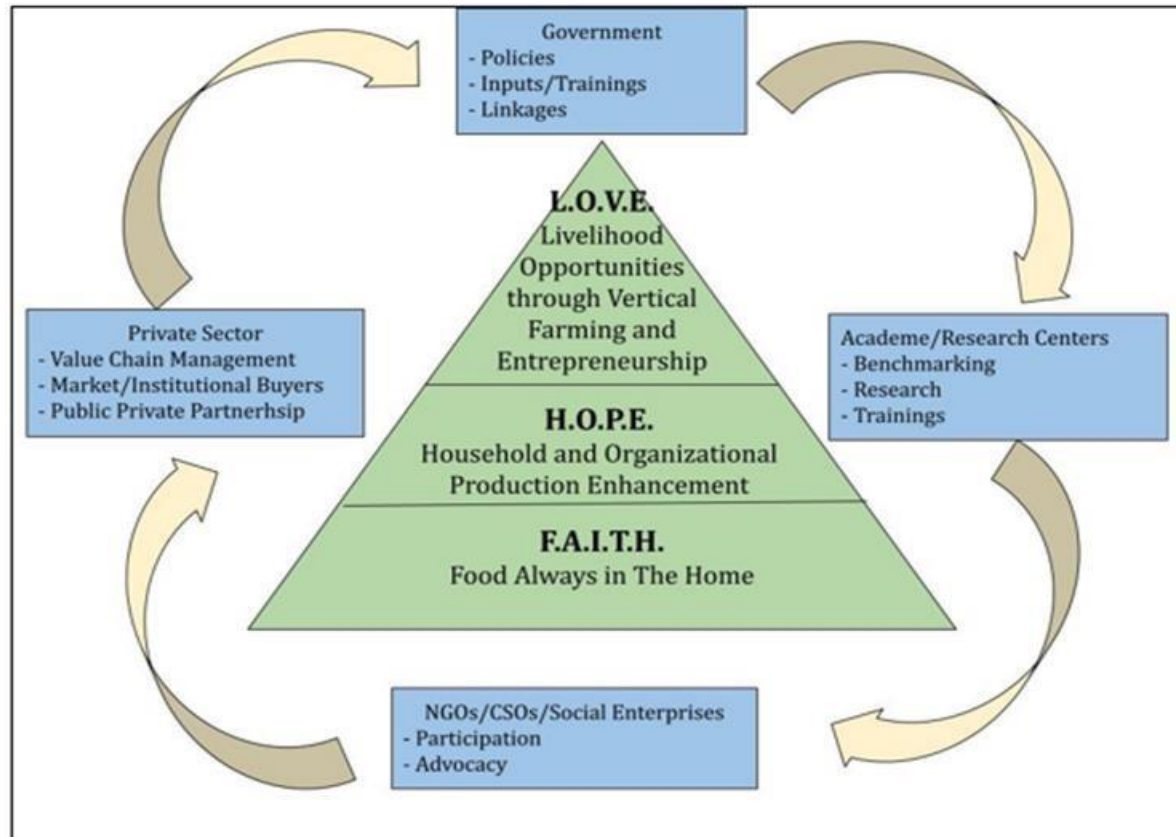
## MODERNIZATION

- ✓ Modernization of UA set up
- ✓ Digital agriculture
- ✓ Food safety

## PROFESSIONALIZATION

- ✓ Institutionalize training
- ✓ Education and training
- ✓ Involvement of youth and women

# CONCEPTUAL FRAMEWORK: COMMUNITIES OF SUPPORT



## CONSOLIDATION

- Consolidation comes from the community growers associations we build with our network of urban farms

## MODERNIZATION

- Modernization envisions technology and innovation by using advanced farming practices (e.g. IoT in agriculture); food safety and regulations

## INDUSTRIALIZATION

- Industrialization envisions that these network of urban and peri-urban farms can complement and feed to the ABCs; opportunity for future exports; collaborate with AMAS for logistic support and marketing support

## PROFESSIONALIZATION

- Professionalization envisions UA centers to be centers of experimental agriculture which is modern yet practical; tapping agribusiness expertise of academe and industry to develop UA farms



# INDOOR VERTICAL FARMS



- ✓ No pesticides
- ✓ Safe and high-quality produce
- ✓ Prevents fertilizer run-off into ecosystem
- ✓ Reduced labor
- ✓ May be located closer to urban centers
- ✓ Resilient to typhoons, drought and other calamities



# ROOFTOP GARDENS



- ✓ Absorb rainfall, reducing run-off in rainy weather
- ✓ Reduce heat flow through the roof and insulate the building
- ✓ Reduce building energy consumption
- ✓ Provide shade
- ✓ Reduce temperatures of the roof surface and improves air quality
- ✓ Beautification in urban city buildings
- ✓ Improve mental health



# IMPACTS OF URBAN AGRICULTURE in the SDGs



**2** ZERO HUNGER



**8** DECENT WORK AND ECONOMIC GROWTH



**11** SUSTAINABLE CITIES AND COMMUNITIES



**13** CLIMATE ACTION



**17** PARTNERSHIPS FOR THE GOALS



# Expected Harvest of DA-Regional Field Offices from Urban Agriculture Technology



UA Technology	Expected Harvest (kgs/month)	No of Established Site	Estimated Yield (kgs/month)
Greenhouse	500	27	13,500
Modernized (Hydroponics)	50	63	3,150
School Garden	7	2,513	17,591
Community Garden	8	840	6,720
Containerized	2	59	118
<b>TOTAL</b>			<b>41,079</b>

# NUPAP Impacts on FOOD SECURITY



- ✓ Improve food access among low-income communities in urban areas
- ✓ Improve diversification of crops and vegetables
- ✓ Access to local, fresh and nutritious foods and products
- ✓ Reduce hunger
- ✓ Reconnecting with the community through food, jobs, and economic development



# NUPAP Impacts on FOOD SAFETY



- ✓ Observe food safety practices (prior to planting, during production stage, harvest and post harvest)
- ✓ Conduct microbial analysis for water and fresh produce
- ✓ Create food safety plan to minimize possible hazards



# NUPAP Impacts on LIVELIHOOD



- ✓ Increase income producing high value crops
- ✓ Produce are consumed by the producers, or sold in retail markets
- ✓ Increase popularity of farmers markets in the cities
- ✓ Improve production, processing and marketing systems, and urban planning
- ✓ Help provincial governments and city administrations optimize their policies and support services for urban agriculture



# NUPAP Impacts on LOGISTICS



- ✓ Reduce distribution chains
- ✓ Partnership with food delivery applications
- ✓ Reduce transportation costs which also offers lower emissions
- ✓ Linkages to direct consumers and buyers





# CONCLUSIONS



FOOD SECURITY is **everybody's responsibility.**

Those who eat **should know how to plant.**

Hence, the need to **PLANT, PLANT, PLANT.**

**Thank You!**