



# DEVELOPMENT OF INDUSTRIAL PARK/FREEZONE GUIDELINES

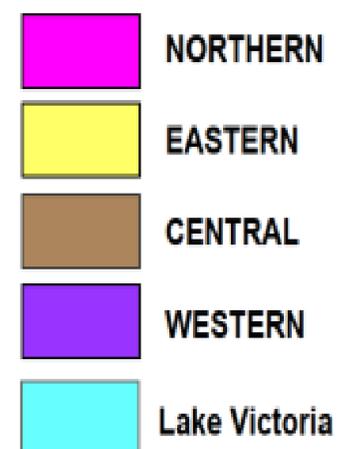
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# National Industrial Parks Development Strategy (2020/21 – 2024/25)

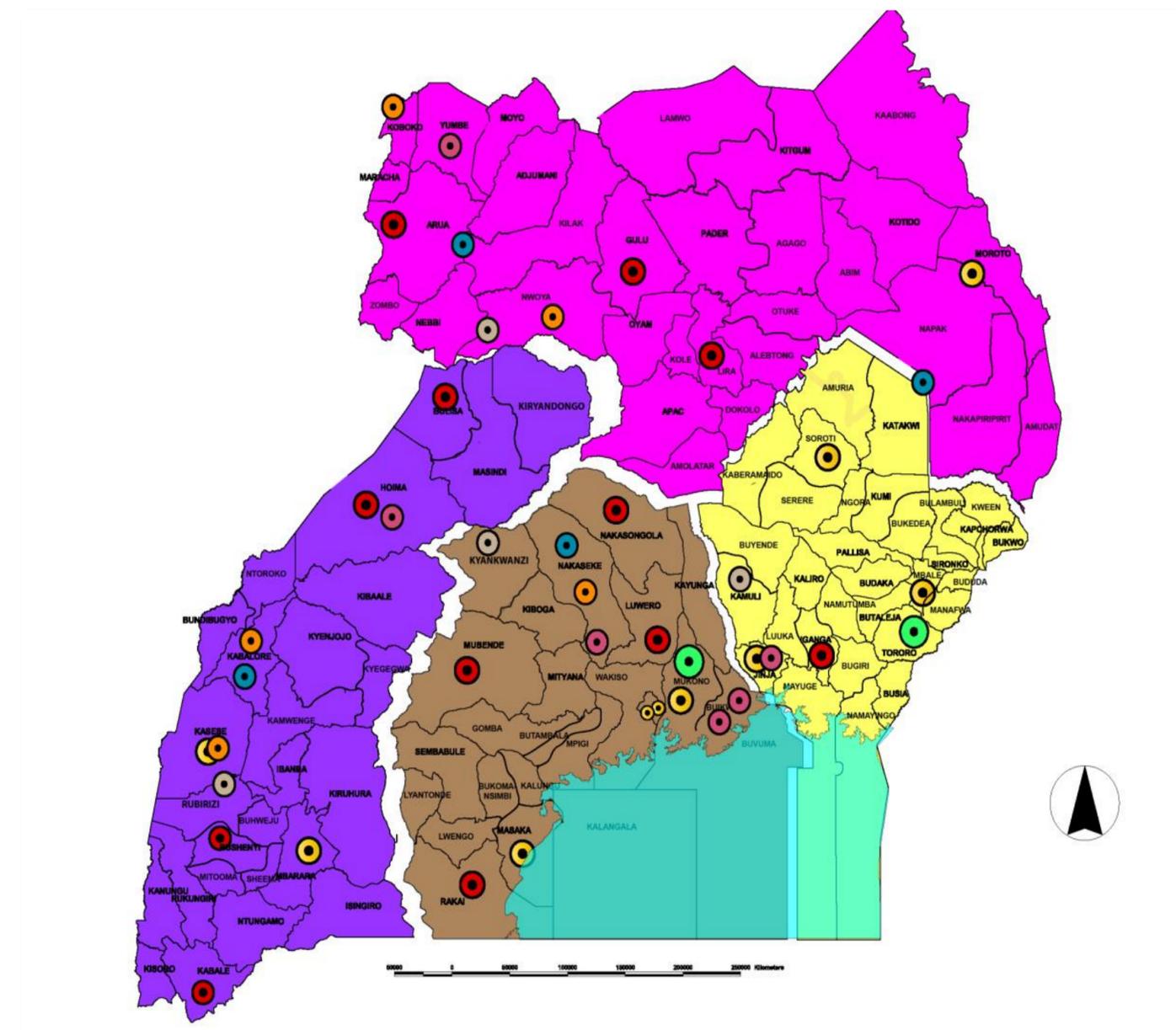
## LEGEND:

### Regions within Uganda :

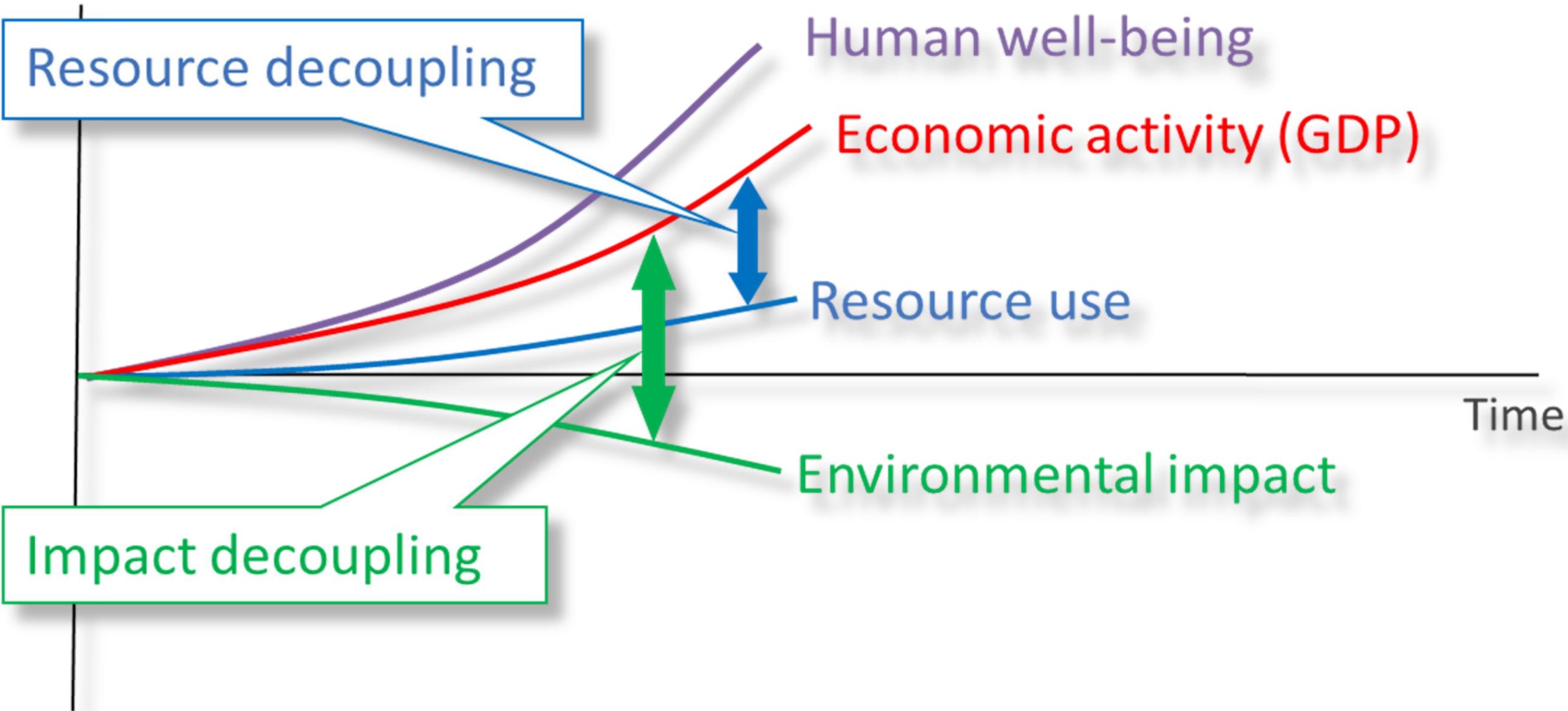


### National Industrial Parks Development:

- 9 Gazetted Industrial and Business Parks under Development
- 13 gazetted Industrial and Business Parks not yet developed
- 2 Proposed Large Scale Industrial & Business Parks specific to the (SGR) Project
- Proposed 4 regional Science, Technology and Industrial Parks (STIPs)
- Proposed Industrial Parks under the Forum on China–Africa Cooperation (FOCAC) Programme
- Proposed 4 Regional Science, Technology, Engineering, Innovation (STEI) Parks
- Other Developed Private Industrial Parks



# What is green industry?



# Objectives of the guidelines

To initiate/advance the implementation of green (industrial ecology) principles, in particular, circular economy and symbiotic infrastructures



To perform/refine a sectoral prioritization taking into account economic, environmental, and social impacts.



To support govt (UFZA, UIA) in refining its value proposition for Industrial Parks and Freezones.



To identify/refine opportunities for green innovation when developing bankable projects and designing/updating the parks' masterplans



# Overarching Concept

The definition adopted by UNIDO since 2016 describes Eco-Industrial Parks as “a community of manufacturing and service businesses located on common property. Members seek enhanced environmental, economic and social performance through collaboration in managing environmental and resource issues.” (Lowe 1997). A particular emphasis is placed on park management. “Industrial-urban symbiosis fosters inclusive and sustainable industrial development through outward integration”



# Free Zone/Industrial Park implementation stages



**1** **Stage 1**  
Site Selection



- Apply eligibility criteria.
- Identify relevant legislations.

**2** **Stage 2**  
Business Case Development



- Business Case.
- Leadership committee/board.
- Select Developer and Operator.
- Land acquisition and site masterplan.
- Infrastructures needs.
- Mobilize businesses and co-investors.
- Design incentives packages.
- Companies' selection.
- Marketing, KPIs skills strategy, partnerships

**3** **Stage 3**  
Setup



- Park management structure
- Land acquisition process and site masterplan.
- Lease and rental agreements
- Natural resource governance

**4** **Stage 4**  
Construction



- Update the industrial park Business Case
- Monitor green growth KPIs related to construction phase.
- Operational arrangements for the management of common infrastructures including PPP.
- Plot allocation to favor RECP and symbiosis
- Ecosystem services payment set-up
- Community infrastructure upgrade
- Vocational training

**5** **Stage 5**  
Operational



- Industrial Park Operational Plan
- Compliance and financial incentives
- Manage infrastructures and services/ One Stop Center facilities.
- Community, ecosystem or training initiatives.
- Marketing and communication

**6** **Stage 6**  
M&E

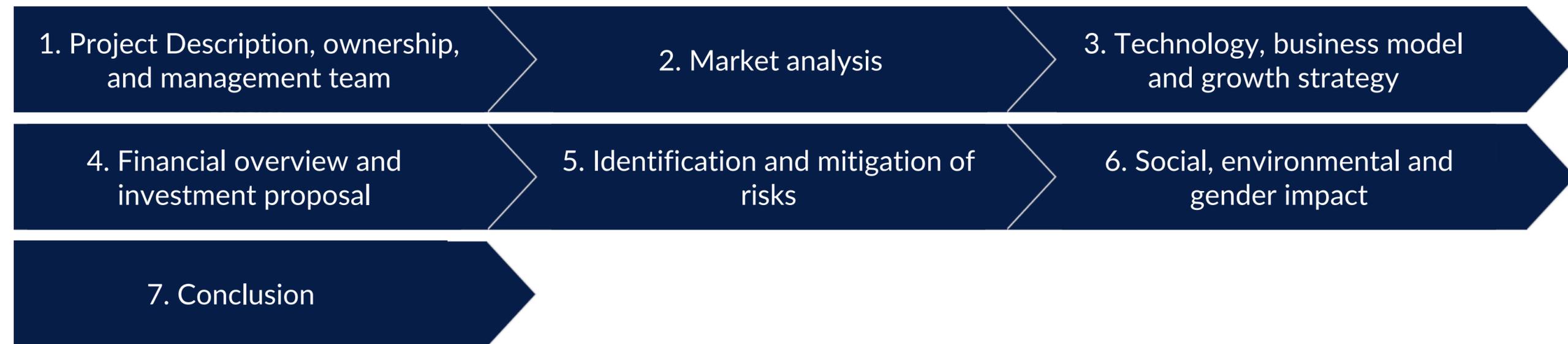


- Self- monitoring and reporting of collective performance
- Assist in individual companies Green Growth performance.
- Capacity building initiatives (ex. RECP training) and peer-to-peer learning (together with partners)
- External audits & certifications

**7** **Evolution**



- Scale-up, equilibrium, merger, revitalization or spill-over of the industrial park.



## ECO-INDUSTRIAL PARK (EIP) BUSINESS PROPOSAL

The business case provides justification for undertaking the Industrial park or freezone project. These must be built on a business case that demonstrates why serviced industrial lands are needed and what the benefits of the project will be when it is finalized. The business case should be prepared early in the project cycle before any decision is made to initiate the project. A carefully developed business case must examine both the project's opportunities as well as its risks, and convincingly detail the project's rationale.

## Economic Performance Considerations in Planning

- Profitability
- Level of exports, import replacement
- Employment: direct, indirect, decent, wage
- Income above Household Economic Analysis value (and minimum wage)
- Level of local procurement
- Reduction of post-harvest loss
- Local Business & SME promotion
- Business continuity, etc.

## Environmental Performance Considerations in Planning

- Water, energy consumption
- Waste, hazardous materials
- Carbon emissions
- Biodiversity conservation
- Risk management frameworks, etc.

## Social Performance Considerations in Planning

- Social inclusion
- Occupational health
- Social infrastructures
- Vocational skills training
- Women Employment
- Grievance mechanism, etc..

# Types of Risks

## 1. PLANNING RISKS

- Planning compliance
- Surrounding population density
- Traffic and congestion
- Adjacent project
- Utilities capacity
- Enterprise layout
- Land acquisition (see Chapter 5.1)
- Demand risks
- Economic justification

## 2. STRATEGIC & OPERATIONAL RISKS

- Construction risks
- Supplier and partner nonperformance risks
- Policy instability
- Promoter capacity
- Operations
- Governance
- Technology
- Regulatory framework

## 3. FINANCIAL RISKS

- Stock exchange /capital market fuctuations
- Exchange and interest rate fluctuation
- Liquidity / cash low
- Fraud
- Financial viabilit

## 4. MARKET, COMMERCIAL & INTELLECTUAL PROPERTY RISKS

- Competitors/ Market Share Reputational.
- Business interruption.
- Counterfeits.
- Copyright pirates.
- Trade secret thieves.

## 5. HUMAN RESOURCE, OCCUPATIONAL & SOCIAL RISKS

- Accidents/health
- Operational safety
- Knowledge management
- Emergency support
- Management
- Community conflicts
- Discrimination, Gender.

## 6. ENVIRONMENTAL & HAZARDS

- Natural disasters (ex: storm, flood, fire...)
- Industrial disasters (hazardous materials handling, wase and wastewater disposal...)
- Climate Change
- Interruption of ecosystems services or depletion of natural stocks.
- Pests control
- Genetic contamination

## 7. FIXED ASSET RISKS

- Security
- Energy supply
- Property/Infrastructure damage
- Machinery breakdown

## 8. GLOBAL RISKS: EPIDEMICS, POLITICAL, ECONOMICS

- Covid-19
- Global
- Financial crisis
- Conflict

## 9. IT/DATA PROTECTION RISKS

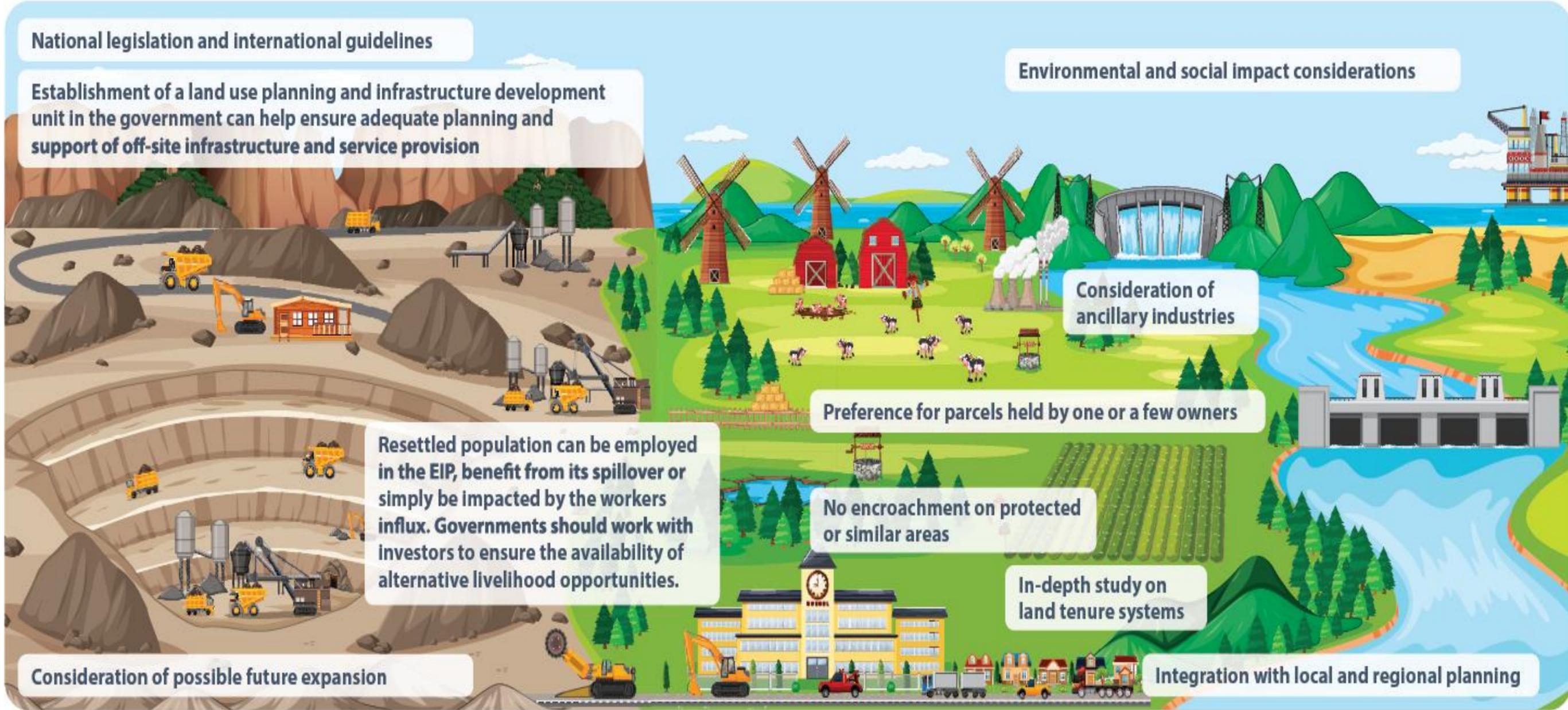
- Hardware and software failure
- Malicious attacks and viruses
- Loss & theft of personal data

# INDUSTRIAL PARK (IP) ELIGIBILITY CRITERIA FOR UGANDA

**(BLACK) SPECIAL ECONOMIC ZONES REQUIRE ADDITIONAL CONDITIONS (IN GREEN)**



# EIP LAND ACQUISITION



**National legislation and international guidelines**

Establishment of a land use planning and infrastructure development unit in the government can help ensure adequate planning and support of off-site infrastructure and service provision

**Environmental and social impact considerations**

Consideration of ancillary industries

Preference for parcels held by one or a few owners

No encroachment on protected or similar areas

In-depth study on land tenure systems

Integration with local and regional planning

Resettled population can be employed in the EIP, benefit from its spillover or simply be impacted by the workers influx. Governments should work with investors to ensure the availability of alternative livelihood opportunities.

Consideration of possible future expansion

# IP LAND ACQUISITION : resettlement/relocation



Greenfield parks are designed as part of urban masterplan. IP land allocated on a cost base and negotiating PPP arrangements for common infrastructures. Land cost valorization as a motivator for environmental compliance and good management of public goods (not market price based). May refrain to clear public (free of charge) landscapes (Corruption risks)

Avoid relocation and resettlement. Resettlement management plan and appropriate compensation using the best valuation methodology. Compensation for lost earnings. The plan should feature the resettlement sites selection and preparation, influx management, relocation schedule, and assistance, replacement of services and enterprises, restoration of livelihood, cultural property, greenspaces, entertainment/wellbeing, and special assistance to vulnerable groups. eCBA to assess different land acquisition scenarios.

Negotiation with landholders and/or users, based on free, prior, and informed Inclusive consultation mechanism. Communication campaigns and services, grievance redress mechanism

Avoid impediment on access to natural resources. Baseline survey and cadastre map, the location of common resources and infrastructure; any sacred grounds and physical property. Determine whether critical conservation objectives for a particular area/species can coexist with the respect of the rights of resource dependent communities

7 Stages	Primary Responsible	Greenfield IP Implementation Stages Key activities (see roles and responsibilities in the tables above)
1. Site selection	Regulator	<ul style="list-style-type: none"> <li>Apply eligibility criteria for site selection to identify possible sites or to verify the acceptability of a site proposal. Identify relevant legislations applying for the site and if there are hampering or enabling ones.</li> </ul>
2. Business Case Development (proposal)	Regulator/ Developer	<ul style="list-style-type: none"> <li>Develop Business Case on a range of analysis: goals, stakeholders, feasibility analysis comprising Productive, Natural and Social capitals and impacts assessment and extended cost-benefit analysis eCBA including to justify site selection.</li> <li>Establish a leadership committee/board to evaluate the IP Business Case, policies and targets. Business Case proposals examination.</li> <li>Select Developer and Operator: Hold a legal tender and use an objective scoring system to select a developer and operator. There should be a competitive tender especially if the IP is publicly-owned.</li> <li>Initiate the design of the land acquisition process and the site masterplan following green growth (sustainability) principles. Identify infrastructures needs both within and in the vicinity of the IP as well as PPP opportunities.</li> <li>Mobilize businesses and co-investors. Design incentives packages. Start companies' selection willing to meet industrial ecology/green growth principles based on pre-defined criteria (and Charter), manage purchase, lease and rental agreements.</li> <li>Identify or set up natural resource governance mechanisms.</li> <li>Initiate marketing</li> <li>Initiate KPIs definition</li> <li>Identify skills strategy needs</li> <li>Identify/Initiate possible partnerships</li> </ul>
3. Set-up	Developer/ Regulator	<ul style="list-style-type: none"> <li>Design a park management structure for both construction and operational phase.</li> <li>Finalize the land acquisition process and site masterplan</li> <li>Continue companies' selection and manage purchase, lease and rental agreements.</li> <li>Continue natural resource governance mechanisms set-up</li> </ul>
4. Construction	Developer/ Regulator	<ul style="list-style-type: none"> <li>Park Management to update the IP Business Case such as verification of compliance of good construction practices, review on site/ common infrastructures set-up, marketing, charter...</li> <li>Monitor green growth performance indicators related to construction phase.</li> <li>Setup the operational arrangements for the management of common infrastructures including PPP.</li> <li>Plot allocation to favor RECP and symbiosis</li> <li>Ecosystem services payment set-up</li> <li>Community infrastructure upgrade if applicable (housing, schools, hospitals)</li> <li>Vocational training initiation if applicable</li> </ul>

5. Operational	Operator/ Regulator	<ul style="list-style-type: none"> <li>• Development of an IP Operational Plan based on the Business Case</li> <li>• Monitor and enforce compliance. Attribute the performance based/ green fiscal and financial incentives</li> <li>• Continue to manage purchase, lease and rental agreements.</li> <li>• Manage infrastructures and services and coordinate One Stop Center facilities.</li> <li>• Pursue or start community, ecosystem or training initiatives.</li> <li>• Pursue marketing and communication efforts</li> </ul>
6. Monitoring and Evaluation	Operator/ Regulator	<ul style="list-style-type: none"> <li>• Park management to do self- monitoring and reporting of collective performance and preferably assist in individual companies Green Growth performance. Facilitate capacity building initiatives (ex. RECP training) and peer-to-peer learning (together with partners)</li> <li>• External audits &amp; certifications</li> </ul>
7. Evolution	Developer/ Regulator	<ul style="list-style-type: none"> <li>• Scale-up, equilibrium, merger, revitalization or spill-over of the IP.</li> </ul>

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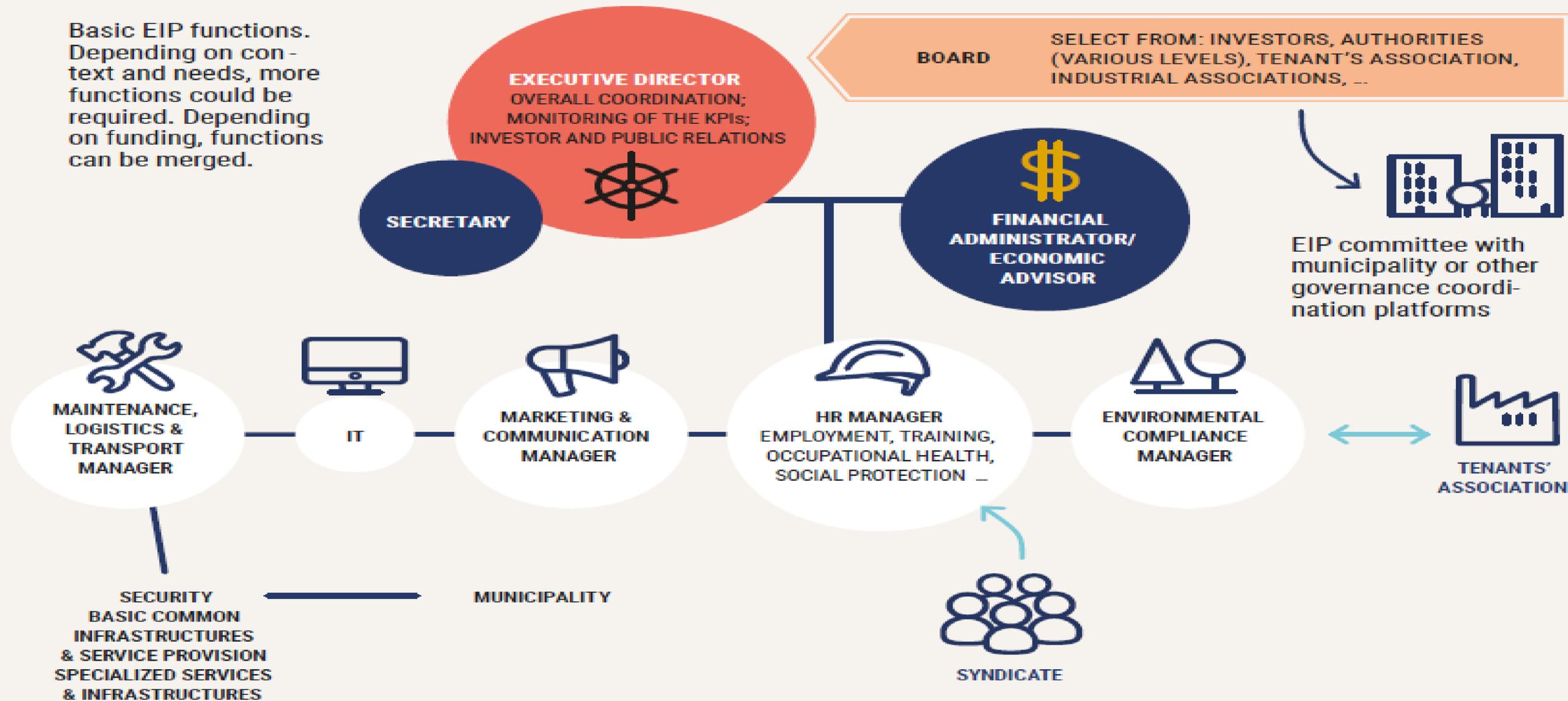
7 Stages	Primary Responsible	Brownfield IP Revitalization Stages Key activities (see roles and responsibilities in the tables above)
1. Site selection	Regulator	<ul style="list-style-type: none"> <li>Apply eligibility criteria for site selection to identify possible revitalization sites, to verify the acceptability of a site proposal or relocation.</li> </ul>
2. Business Case Development (proposal)	Regulator/ Developer	<ul style="list-style-type: none"> <li>Develop an IP Revitalization Business Case.</li> <li>Establish a leadership committee/board to evaluate the IP Revitalization Business Case, policies and targets. Business Case proposals examination. The IP should already present a leadership and management structures but those can be assessed and revised for better performance.</li> <li>Select Developer and Operator in case the activities are not directly implemented by the EIP management.</li> <li>Initiate the design of the land acquisition process and the site masterplan following green growth (sustainability) principles in case of IP extension, infrastructures upgrades or off-site PPP are required. This includes possible remediation.</li> <li>Mobilize businesses and co-investors. Review incentives packages. Enforce compliance through appropriate penalties and if applicable start companies' selection willing to meet industrial ecology/green growth principles based on pre-defined criteria (and Charter), manage purchase, lease and rental agreements.</li> <li>Identify or set up natural resource governance mechanisms if not already existing.</li> <li>Review marketing strategy</li> <li>Review KPIs definition to integrate Green Growth</li> <li>Identify skills strategy needs</li> <li>Initiate possible partnerships</li> </ul>
3. Set-up (optional)	Developer/ Regulator	<ul style="list-style-type: none"> <li>If applicable, land acquisition process and site masterplan for park extension or PPP infrastructures.</li> <li>Companies' selection in case of extension or companies' replacement and manage purchase, lease and rental agreements.</li> <li>Natural resource governance mechanisms set-up if not already existing.</li> </ul>
4. Construction (optional)	Developer/ Regulator	<ul style="list-style-type: none"> <li>Park Management to update the IP Revitalization Business Case such as verification of compliance of good construction practices, review on site/ common infrastructures set-up and construction, nature-based redesign, marketing, charter... If applicable land remediation or relocation.</li> <li>Monitor green growth performance indicators related to construction phase.</li> <li>Set up the operational arrangements for the management of common infrastructures including PPP.</li> <li>Plot reallocation to favor RECP and symbiosis if applicable</li> <li>Ecosystem services payment set-up if not already existing</li> <li>Community infrastructure upgrade if applicable (housing, schools, hospitals)</li> </ul>

5. Operational	Operator/ Regulator	<ul style="list-style-type: none"> <li>• Development of an IP Operational Plan based on the Business Case</li> <li>• Monitor and enforce compliance. Attribute the performance based/ green fiscal and financial incentives</li> <li>• Continue to manage purchase, lease and rental agreements.</li> <li>• Manage infrastructures and services and coordinate One Stop Center facilities.</li> <li>• Pursue or start community, ecosystem or training initiatives.</li> <li>• Pursue marketing and communication efforts</li> </ul>
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# EIP MANAGEMENT ORGANIZATIONAL CHART EXAMPLE

Basic EIP functions. Depending on context and needs, more functions could be required. Depending on funding, functions can be merged.



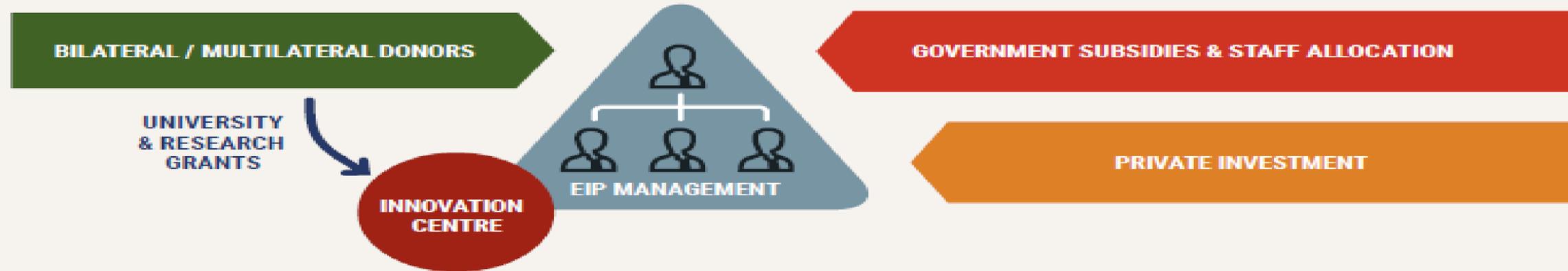
# EIP SOURCES OF REVENUE (NON-EXHAUSTIVE)

EIP operational management should aim for self-sustainability and value for money in service provision.



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

Consultant Nadia Zuodar



**TENANTS' INDUSTRIES DIRECT CONTRIBUTIONS**

- DIRECT FEES
- ASSOCIATION FEES
- SOCIAL CORPORATE RESPONSIBILITY
- STAFF APPOINTMENT

**LAND LEASE/ PURCHASE**

- LAND PURCHASE IF EIP MANAGEMENT WAS INCLUDED FOR SUFFICIENT DURATION OR IF PROFITABLE MONEY PLACEMENT
- RENTAL FEES
- HIGHLY DEPENDENT ON TENURE MODALITIES

**WATER**

- WATER DISTRIBUTION FEED IF OWNED BY THE PARK
- TOP UP MUNICIPAL FEES IF LEGALLY POSSIBLE
- USER'S GROUP COORDINATION FEES FOR RESOURCE PRESERVATION

**WASTE MANAGEMENT SERVICES**

- DIRECT FEES FROM TENANTS
- USAGE FEES FROM NON-TENANTS
- PUBLIC-PRIVATE COLLABORATION (SUBSIDIES) FOR DOMESTIC WASTE
- WASTE VALORIZATION

**ENERGY**

- ENERGY DISTRIBUTION
- TOP UP ON MUNICIPAL FEES AND RESALE IF LEGALLY POSSIBLE
- USER'S GROUP COORDINATION FEES
- PUBLIC-PRIVATE COLLABORATION (SUBSIDIES)
- USER'S GROUP COORDINATION FEES FOR RESOURCE PRESERVATION

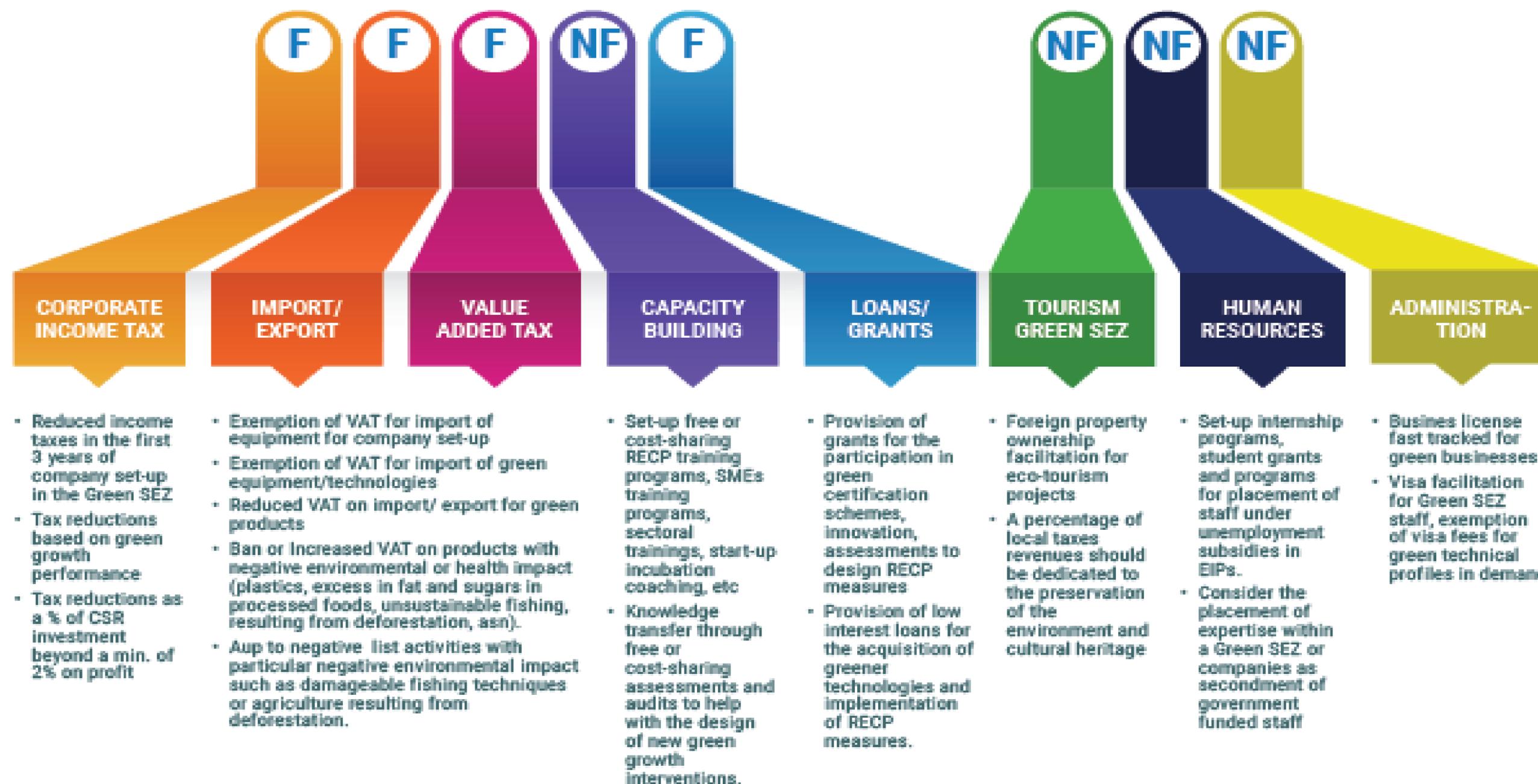
**COMMON SERVICES & INFRASTRUCTURES**

- DIRECT FEES FROM TENANTS
- USAGE FEES FROM NON-TENANTS COMPANIES OR MUNICIPALITY
- PUBLIC-PRIVATE COLLABORATION & SUBSIDIES (EX. TRAININGS)
- CONSULTING & EXPERTISE VALORIZATION

**ECO-CITIES**

- MUTUALISATIONS OF INFRASTRUCTURES, SERVICES AND RESOURCES WITH THE WIDER ECO-CITY ENABLING MUNICIPALITY BUDGET EARMARKING, TWINNING CITIES, AND ENHANCED SOCIAL CORPORATE RESPONSIBILITY INVESTMENT

# Main fiscal and non fiscal incentives for IP/freezones/ Green sez

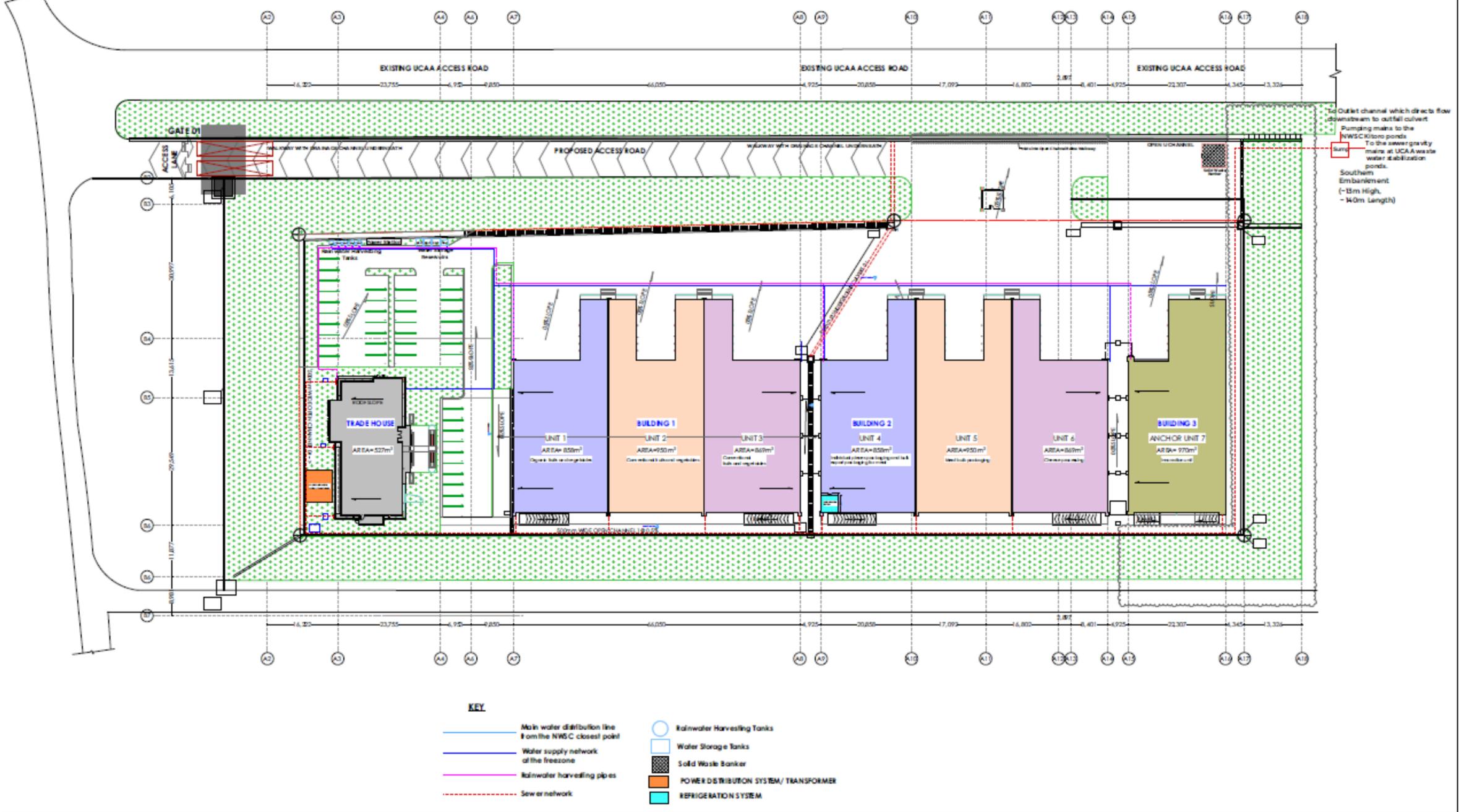


# Entebbe Zone

- Small size (5 acres), 7 units, unallocated
- Vicinity to lake Victoria, the airport and upcoming Fresh Handling Facility.
- Partly built, not operational
- From 2022 mission, option close to finish processing retained



# Entebbe Freezone Draft Masterplan

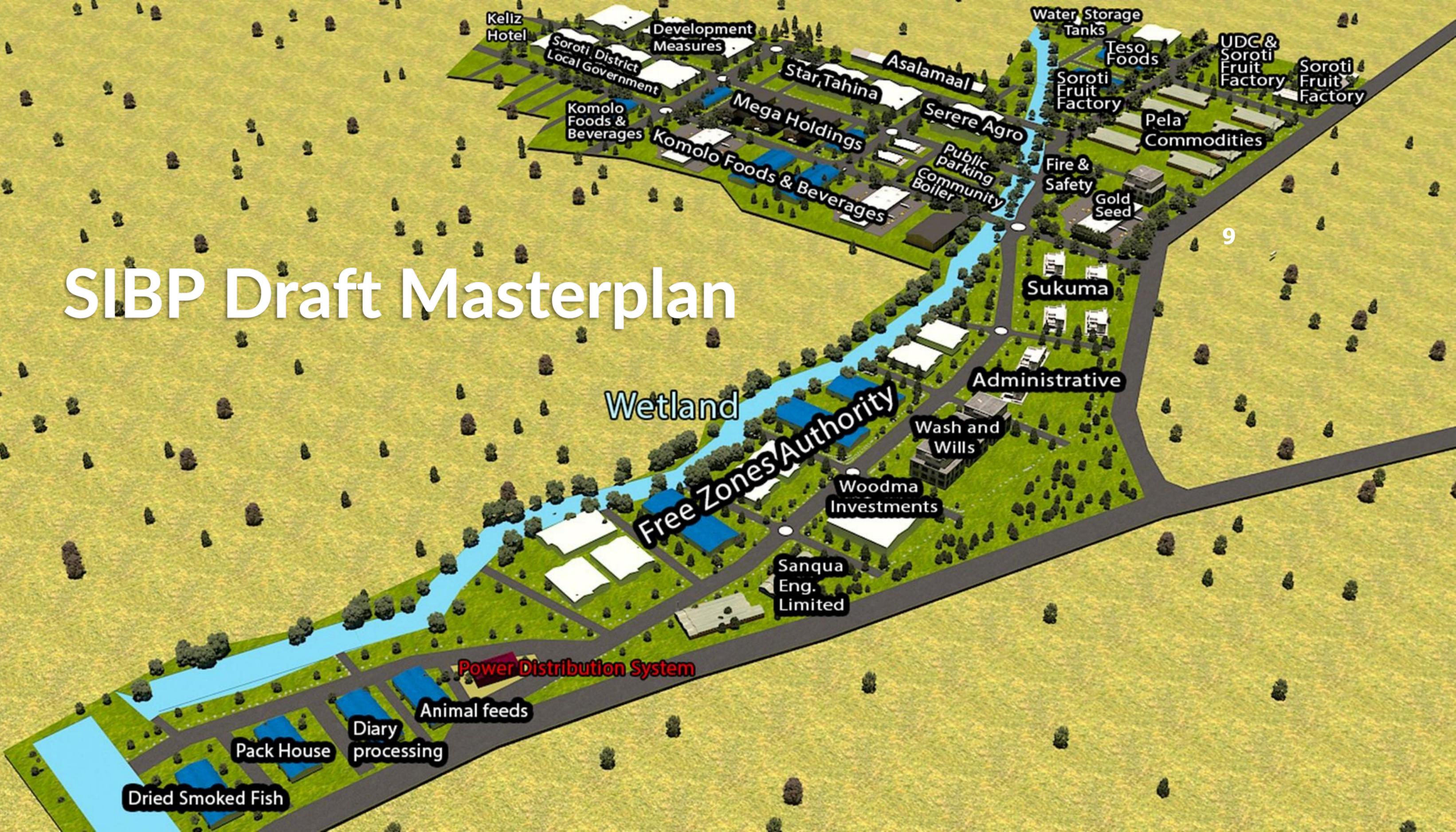


# Soroti Industrial and Business Park (SIBP) key features:



- 219 acres mostly allocated
- 20 acres for Freezone
- 6 acres for SMEs
- Some companies quasi operational, others halted or haven't started. Park only operational at 20% capacity
- Close to a swamp
- Watsan contamination is already noticeable. Heavy dependence on Aमित Landfill and Telogot Village Dumping Site.

# SIBP Draft Masterplan



## Pakwach Industrial Park: (Private Sector) key features:

- Pakwach is the start point of the Albert Nile with close proximity to Kabalega National Park/Murchison Falls with high Tourism potential
- Greenfield park with Park inside infrastructures dependant on GoU funding
- Export potential in general of South Sudan and Congo. Planned extension of Uganda Railway (Gulu-Pakwach Line) into South Sudan. Lake Albert Port and Ferry Project.
- Logistical support for Kibali Mines in DRC almost entirely through Uganda.



# Pakwach Draft Masterplan





Urban Industrial Symbiotic projects to prevent environmental disasters: e.g water supply, industrial waste water management, solid waste management



Resource Efficiency – Cleaner production infrastructure to catalyze circular economy and symbiosis principles. These include shared boilers, energy efficiency infrastructure, waste valorization infrastructure



Productive Infrastructure to catalyze SME development and innovation. These include innovation center with test labs and small scale production space, dairy collection point, seed oil cold press, cold chain and possibly freeze dry infrastructure



Services that will support promotion of the park like logistics, employee well being like hospital, training center

## Infrastructure Project Proposals

**(140M USD) for now**

<b>Concept Notes</b>	<b>Investment Amounts (M usd)</b>	<b>Reduced CO2 (M tonnes)</b>	<b>Green Jobs Created</b>	<b>Access to sustainable energy</b>	<b>Access to Sanitation</b>	<b>Access to waste management</b>
Waste water	47	23	107,597		311,396	
water supply	49		11,005			
Solid waste	4	0	592			374,036
blue green	12		2,384			
Renewables	18	1	1,363	131,069		
others	10					
<b>Total</b>	<b>139</b>	<b>24</b>	<b>122,940</b>	<b>131,069</b>	<b>311,396</b>	<b>374,036</b>

# Next steps and GGGI support areas

- Concept Notes Project Proposal Development
- Urban Symbiosis Concept Notes integration in Urban Development Program
- Masterplan and Concept Plan Implementation Support
- Park Management Capacity Building
- Replication to other sites

	No. of Concept Notes		
	Entebbe	Soroti	Pakwach
Watsan Urban Symbiosis	5	4	4
RECP	2	3	2
Productive	1	3	3

# Lessons Learnt



**Local government Involvement** : This should not be overlooked in planning.



**Balancing of economic, social and environmental aspects:** Environmental and Social problems have the potential to become economic



**The role of private sector and outward integration:** Parks should support development of an ecosystem of private sector players and SMEs beyond the park boundaries. They should not be stand alone enclaves

**Value proposition:** This should guide the decision to setup a park. This can be well articulated in the business plan for sustainability developed.



**Park Management Structure:** We cannot say enough.



**Incentive Scheme:** A very sensitive topic that needs to balance innovation and growth but not at the expense of some parties.



This work was done to show the practical application of the green industrial park and freezone guidelines GGGI developed in 2022.





# Thank you



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