SIHANOUKVILLE FOR ALL:
promoting a Smart, Sustainable and Inclusive City

" **THE SMART SIHANOUKVILLE (SHV) CASE STUDY** "

22 September 2021

UNITED NATIONS
HUMAN RIGHTS
OFFICE OF THE HIGH COMMISSIONER

UN@HABITAT
FOR A BETTER URBAN FUTURE

UNITED NATIONS Trust Fund for Human Security

UNITED NATIONS CAMBODIA

INTRODUCTION

The "Smart Sihanoukville (SHV) Case Study" has been developed as a result of the project "Sihanoukville for All: promoting a Smart Sustainable and Inclusive City" promoted by the UNCT - Cambodia and led by OHCHR and UN-Habitat funded by UN Trust Fund for Human Security. The project conducted a comprehensive assessment to launch Sihanoukville as a smart sustainable and inclusive city, by following the *Human Security methodology* and embedding the philosophy of the *UN Habitat global Flagship "People focused Smart cities"*.

The "Smart Sihanoukville Case Study" provided a Smart, Sustainable, and Inclusive City Concept and Masterplan for Sihanoukville, which has been developed through a people-focused, gender-based approach and a human rights lens. The Case Study has been strictly developed following the SDGs, and *the New Urban Agenda* with a sound focus on the concrete smart opportunities to involve the marginalized and vulnerable groups and communities because "no city can truly be considered "smart" if it ignores the interests of the poor" as said by Pauline Tamesis, Resident Coordinator at United Nations in Cambodia. '

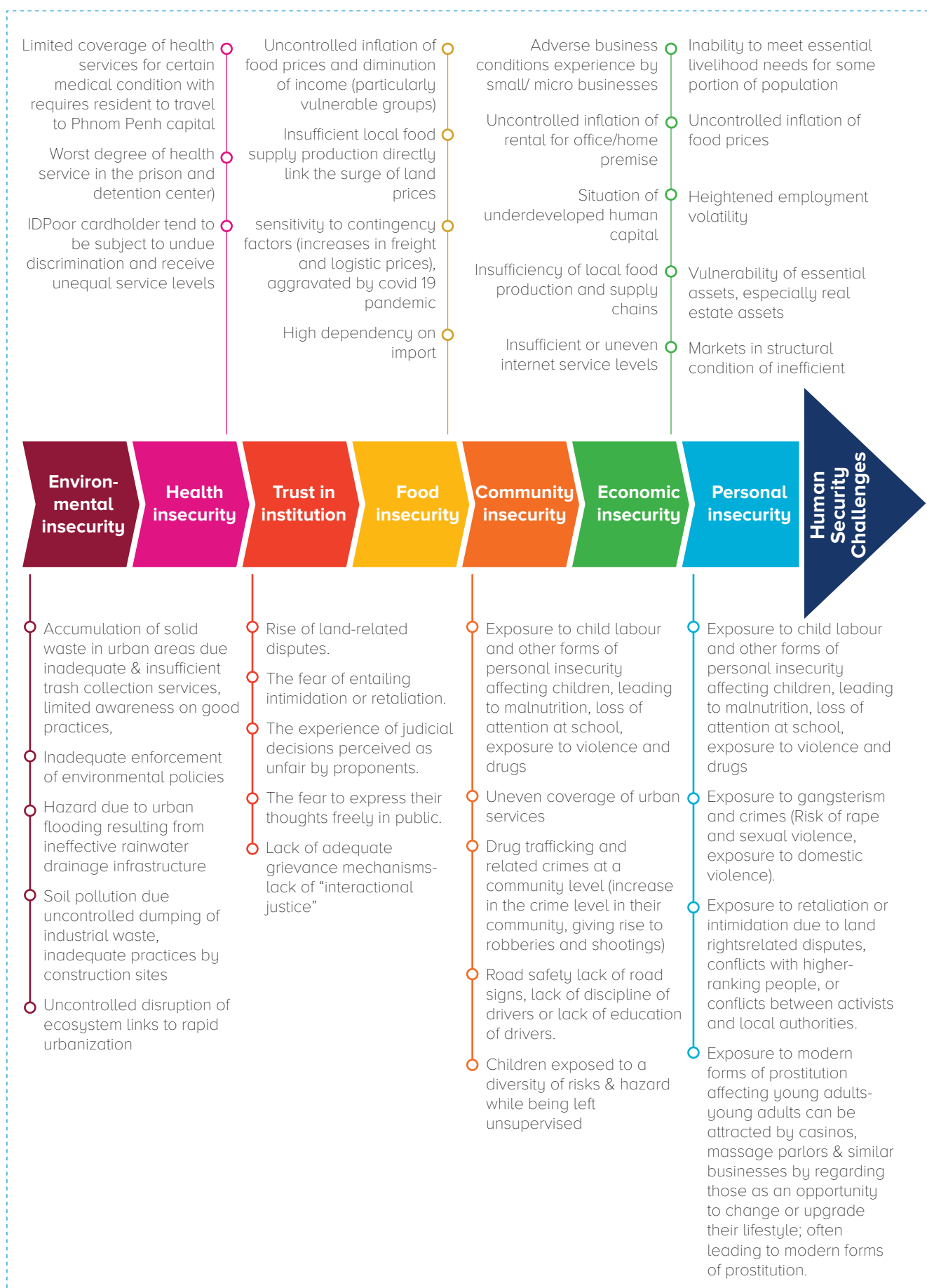©Preah Sihanouk Province Administration

THE INNOVATIVE APPROACH AND FORWARD-LOOKING APPROACH

The concept to promote smart, sustainable, and inclusive city in Sihanoukville was conceived from the analysis of existing development gaps, the emerging urban challenges, policy framework and lesson learned from global smart cities case studies, identified through desk study, interviews, consultations with local stakeholders, and the results of human securities assessment conducted following the United Nations (UN) Human Security Framework (HSF) which human security through seven dimensions, such as (1) Economic security, (2) Food security, (3) Health security, (4) Environmental security, (5) Personal security, (6) Community-level security, and (7) Fairness of institutions.

The results of assessment present the factors interlinkages and Root Causes of existing human securities challenges along with strategic recommendations which are the foundations to build a people-focused smart, sustainable, and inclusive city framework. The existing human security challenges in Sihanoukville are pertaining to various factors, provided in Figure 1. In response to these existing challenges 10 strategic recommendations aiming at promoting inclusiveness, sustainability, and smart engagement are identified, considering the communities' prospects, and in alignment with the existing national policies and development strategy. They are:

A. Reinforce a higher autonomy of decision-making at the local level and a higher degree of participation of residents in the local policymaking process.

B. Enhance citizen-government dialogue, including through adequate digital participation platforms and effective grievance/redress mechanisms.

C. Improve awareness about laws, rights, and obligations set in the laws.

D. Achieve higher environmental sustainability and life quality standards.

E. Achieve more effective climate change practices and preparedness.

F. Foster a business ecosystem that is conducive to entrepreneurship and economic diversification.

G. Reclaim sustainability through improved food autonomy.

H. Provide residents with adequate healthcare services.

I. Provide all residents with adequate food security and nutrition.

J. Provide all residents with improved safety and security.

Figure 1: Factors pertaining to human securities challenges facing by Sihanoukville residents

Human Security Challenges (arrow containing categories):
- Environ-mental insecurity
- Health insecurity
- Trust in institution
- Food insecurity
- Community insecurity
- Economic insecurity
- Personal insecurity

Top factors (above the arrow):

Health insecurity:
- Limited coverage of health services for certain medical condition with requires resident to travel to Phnom Penh capital
- Worst degree of health service in the prison and detention center)
- IDPoor cardholder tend to be subject to undue discrimination and receive unequal service levels

Food insecurity:
- Uncontrolled inflation of food prices and diminution of income (particularly vulnerable groups)
- Insufficient local food supply production directly link the surge of land prices
- sensitivity to contingency factors (increases in freight and logistic prices), aggravated by covid 19 pandemic
- High dependency on import

Community insecurity:
- Adverse business conditions experience by small/ micro businesses
- Uncontrolled inflation of rental for office/home premise
- Situation of underdeveloped human capital
- Insufficiency of local food production and supply chains
- Insufficient or uneven internet service levels

Economic insecurity:
- Inability to meet essential livelihood needs for some portion of population
- Uncontrolled inflation of food prices
- Heightened employment volatility
- Vulnerability of essential assets, especially real estate assets
- Markets in structural condition of inefficient

Bottom factors (below the arrow):

Environmental insecurity:
- Accumulation of solid waste in urban areas due inadequate & insufficient trash collection services, limited awareness on good practices,
- Inadequate enforcement of environmental policies
- Hazard due to urban flooding resulting from ineffective rainwater drainage infrastructure
- Soil pollution due uncontrolled dumping of industrial waste, inadequate practices by construction sites
- Uncontrolled disruption of ecosystem links to rapid urbanization

Trust in institution:
- Rise of land-related disputes.
- The fear of entailing intimidation or retaliation.
- The experience of judicial decisions perceived as unfair by proponents.
- The fear to express their thoughts freely in public.
- Lack of adequate grievance mechanisms- lack of "interactional justice"

Community insecurity:
- Exposure to child labour and other forms of personal insecurity affecting children, leading to malnutrition, loss of attention at school, exposure to violence and drugs
- Uneven coverage of urban services
- Drug trafficking and related crimes at a community level (increase in the crime level in their community, giving rise to robberies and shootings)
- Road safety lack of road signs, lack of discipline of drivers or lack of education of drivers.
- Children exposed to a diversity of risks & hazard while being left unsupervised

Personal insecurity:
- Exposure to child labour and other forms of personal insecurity affecting children, leading to malnutrition, loss of attention at school, exposure to violence and drugs
- Exposure to gangsterism and crimes (Risk of rape and sexual violence, exposure to domestic violence).
- Exposure to retaliation or intimidation due to land rightsrelated disputes, conflicts with higher-ranking people, or conflicts between activists and local authorities.
- Exposure to modern forms of prostitution affecting young adults- young adults can be attracted by casinos, massage parlors & similar businesses by regarding those as an opportunity to change or upgrade their lifestyle; often leading to modern forms of prostitution.

Building on the above human security foundations, the framework to promote Smart, Sustainable, and Inclusive Sihanoukville is established. The innovative approach the framework embraces the principle of "**leaving no one behind**" and the philosophy that "if we plan a city for girls, it will work for everyone"; therefore, it positioned the "people", and especially women, girls, and the marginalized groups, in the heart of the smart city vision. It aims to promote a Novel Alliance between Citizens and Local Authorities through 13 initiatives that can be grouped in three pillars, such as:

1. **People-focused Smart Planning & e-governance through Innovative digital Participation:** aimed at involving citizens in participating at the decision-making process, focused on a transparency and equal e-governance system to allow citizens obtaining information and being included in the city life.

2. **Smart services through crowdsourced data and information:** aimed at collecting useful data information to re-design citizens services (transportation, land management, housing, health care, etc) through a collaborative approach which directly involve the local communities.

3. **Digital empowerment to reduce the digital divide and foster human rights:** aimed at providing equal opportunities to benefit the digital transformation by promoting an adequate.

The 13 initiatives are aligned with human security principle which is people-focused, comprehensive, context-specific, and prevention-oriented while addressing the 10 strategic recommendations aiming to promote inclusiveness, sustainability, and smart engagement. The implementing strategic of each initiative entails the mechanisms to promote protection and empowerment of people and communities. Summary of the initiatives are presented in Table 1.

Table 1. Human Security Strategic Recommendations addressing the Sustainable, Inclusive, Smart City Framework for Sihanoukville

Pillars of the Smart, Sustainable, and Inclusive SHV	Initiatives / Actions Plan to be promoted	Corresponding human securities strategic recommendations
Pillar 1: People-focused Smart Planning & e-governance through Innovative digital Participation	**Initiative 1.1.** Smart Sihanoukville Platform for e-participation **Initiative 1.2.** E-Governance services for citizens **Initiative 1.3.** Smart neighborhood centers **Initiative 1.4.** Playful smart urban planning for youth	**Promoting "Smart Engagement"** 1. Reinforce a higher autonomy of decision-making at the local level and a higher degree of participation of residents in the local policymaking process. 2. Enhance citizen-government dialogue, including through adequate digital participation platforms and effective grievance/redress mechanisms. 3. Improve awareness about laws, rights, and obligations set in the laws.

Pillars of the Smart, Sustainable, and Inclusive SHV	Initiatives / Actions Plan to be promoted	Corresponding human securities strategic recommendations
Pillar 2: Smart services through crowdsourced data and information	**Initiative 2.1.** Digital crowdsourced resources maps on environmental issues (waste management, water, flooding) **Initiative 2.2.** Smart solutions for urban mobility **Initiative 2.3.** Smart agriculture and food **Initiative 2.4.** Smart Solution for Housing and Land Tenure **Initiative 2.5.** Safer city **Initiative 2.6.** Health care for community **Initiative 2.7.** Smart inclusive economic system	**Promoting "Sustainability and inclusiveness"** 4. Achieve higher environmental sustainability and life quality standards. 5. Achieve more effective climate change practices and preparedness. 6. Foster a business ecosystem that is conducive to entrepreneurship and economic diversification. 7. Reclaim sustainability through improved food autonomy. 8. Provide residents with adequate healthcare services. 9. Provide all residents with adequate food security and nutrition. 10. Provide all residents with improved safety and security.
Pillar 3: Digital empowerment to reduce the digital divide and foster human rights	**Initiative 3.1.** Accessible free internet zones in strategical urban and rural areas, especially addressed to poor and marginalized people Initiative **Initiative 3.2.** Permanent programme of computer/ technology literacy for citizens, ensuring equal opportunities and focusing on the underprivileged people through "digital ambassadors" and schools' involvement	**Promoting "Inclusiveness"** 11. Build media/information/data literacy among all social groups 12. Build the capacity of residents to report information on issues and concerns their community 13. Enable internet connectivity throughout Sihanoukville City on a inclusive basis 14. Inclusion in the sense of equal treatment and gender

LESSONS LEARNED FROM IMPLEMENTATION

The development of an inclusive sustainable smart city concept for a city of the Developing Countries as Sihanoukville in Cambodia is only possible through a holistic, sound participative approach which positions the most excluded people in the heart of the smart city philosophy.

The developed methodology has forecasted desk and field research, local stakeholders consultations, sound collaboration between project partners and the up-scaling of the existing smart/technological initiatives promoted by the UN Agencies and other international or local organization.

The "Smart Sihanoukville (SHV) Case Study" has foreseen the following steps:

- Establishment of **a Local Working Group**, composed by Local Authorities at Municipal and Provincial Level, Local NGOs, Private bodies, CSOs and UN agencies, which group has been engaged in the process to identify smart city concept for Sihanoukville through different approaches, including consultation meetings and interview.

- Elaboration of an overall "**Human Security assessment**" led by OHCHR developed through the United Nations Human Security Framework, which defines seven types of human securities (Economic security, Food security, Health security, Environmental security, Personal security, Community-level security, and Fairness of institutions). The findings revealed the current state of human securities in Sihanoukville, through identifying the interlinkages and root causes of human securities on each of the seven human securities dimensions. The recommendations resulted by the assessment have guided the development of the 13 smart initiatives.

- Provision of a **Succinct Lesson Learned on Global Smart City Case studies** which has inspired the development of the Smart Action Plan.

- Up-scaling of some existing digital tools developed by UN-Habitat such as Block by Block[1], **Her city toolbox[2]**, and S**ocial Tenure Domain Model[3],** with the purpose to boost a collaboration between other territories and implement in Sihanoukville some successful experiences already experienced in other places.

---

1   https://www.blockbyblock.org/
2   https://hercity.unhabitat.org/
3   https://stdm.gltn.net/

LOOKING FORWARD

The elaboration of the Sustainable, Inclusive and Smart City Concept for Sihanoukville is a first step for the Local Authorities to promote and implement the Smart City philosophy. It is expected to create a fertile framework before implementing the strategy by providing a set of actions to build local capacity to guarantee the project sustainability such as: the Capacity building for public institution staff; a Permanent collaboration with Academia and Education centers; a Permanent Stakeholders partnership team; a tailored communication campaign; pilot smart activities testing and Data Updating.

Three pilot smart actions will be selected among the 13 initiatives in order to test the tools and the local capacity to use and benefit from that.

© Preah Sihanouk Province Administration

OVERALL REFERENCES

https://futurecities.catapult.org.uk/project/global-review-smart-city-strategies/

https://unhabitat.org/people-focused-smart-cities

https://sgtechcentre.undp.org/content/sgtechcentre/en/home/playbook-on-smart-urban-innovations.html

https://unhabitat.org/sites/default/files/2020/10/chapter_6_innovation_technology_and_the_value_of_sustainable_urbanization.pdf

https://unhabitat.org/sites/default/files/documents/2019-05/rwanda_smart_city-master_plan.pdf

https://media.nesta.org.uk/documents/rethinking_smart_cities_from_the_ground_up_2015.pdf

https://www.rhizomatica.org/

Human Rights lens for Smart city

https://www.hlrn.org.in/documents/Smart_Cities_Report_2018.pdf

Women focused Smart City

https://en.globalutmaning.se/plan-city-girls-will-work-everyone/

https://hercity.unhabitat.org/about/