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## Chapter 2

# Synthesis of Contributions to the 2024 Research Conference on Human Settlements Planning

Janssen Andrew S. Calvelo <sup>1</sup>

**Abstract** With over half of the global population concentrated in cities, cities and human settlements became the forefront of current global challenges. About one-third of the 234 UN indicators and 17 SDGs are inextricably linked to SDG 11, highlighting the role of cities and human settlements towards addressing environmental degradation, economic inequality, and ensuring social justice. The DCERP's 2024 Research Conference on Human Settlements Planning aimed to contribute to the development of science-based policy-making, improving well-being in urban and rural areas, and ensuring safe, sustainable, resilient, and inclusive cities and human settlements. This chapter aims to synthesize the contributions from the said students' conference. Specifically, this aims to state the overarching themes of the conference, discuss how the presented researches contribute to the broader field of study, summarize the main themes and trends, and identify potential research directions. This further aims to provide recommendations on making future students' research conferences inclusive, participative, collaborative, and comprehensive, relating SDG 11 with other SDGs.

**Keywords:** *DCERP, human ecology, human settlements, SDG-11, sustainable cities and communities*

## 2.1 Introduction

Study on Human Settlements Planning was introduced by Constantinos Doxiadis in his seminal work "An Introduction to the Science of Human Settlements", which conceptualized Human Settlements as a system of the physical settlement including the natural environment and man-made elements that sustain it [2]. While the

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concept of human settlements has further developed and steadily gained attention, empirical analysis and definitions of human settlements, in urban and rural areas remain ambiguous [3]. Moreover, the demographic and physical boundaries of what constitutes an urban or human settlement lack academic consensus based on the diversity of country-specific urban definitions in the literature [4].

Although existing challenges in urban-rural, and human settlement typologies exist, the overall trend of urbanization is clear. Today over half of the global population is now concentrated in cities, this figure is projected to increase to 70% in 2025 [5]. Cities became the forefront of current global challenges in health [6], air quality [7], crime and inequality [8], and climate change [9] and arena of local action for sustainable development.

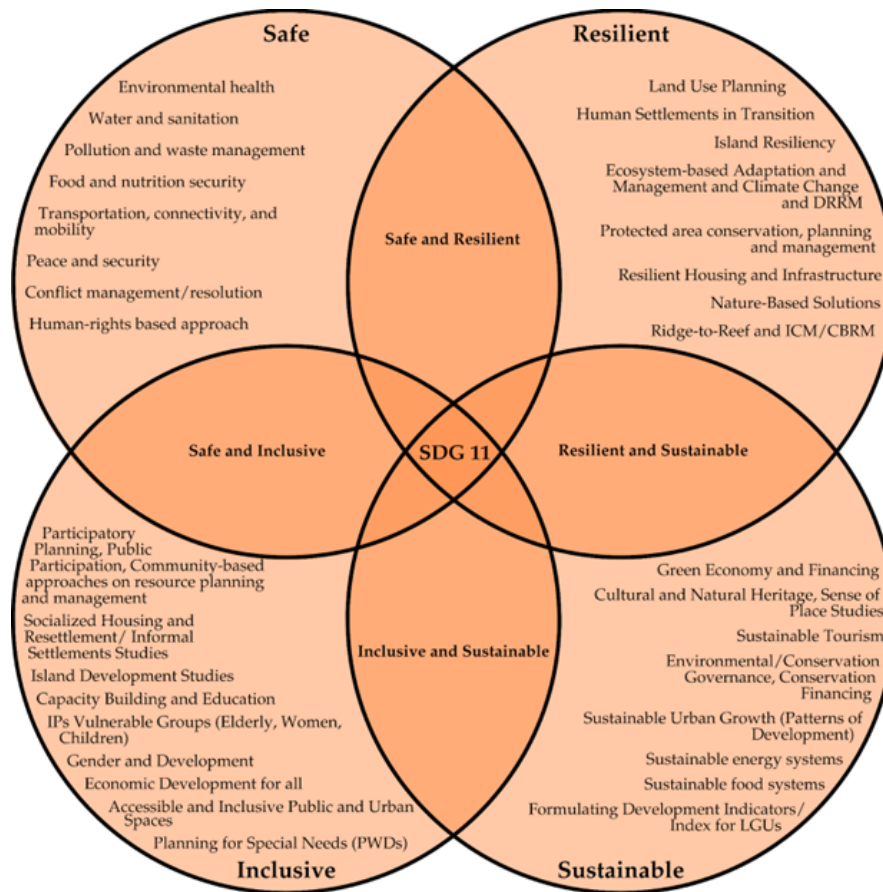
The Sustainable Development Goals (SDGs) were adopted in 2015 to provide overall direction for all stakeholders to achieve sustainable development addressing environmental degradation, economic inequality, and ensure social justice [10]. With SDG 11, human settlements and cities have emerged as a focal point of the SDGs. About one-third of the 234 UN indicators and 17 SDGs are inextricably linked to SDG 11 as evidenced by numerous studies [11, 12, 13]. Despite this, many cities possess limited research capacity on urbanization and human settlements. Localized studies and knowledge base on urban centers remain challenging in adopting SDG 11 [14].

The Department contributed to addressing this challenge by showcasing the students' research in SDG 11 through a colloquium-type activity held last May 20, 2024, at the UPLB. This chapter aims to synthesize the 2024 Research Conference on Human Settlements Planning (HSP) contributions. Specifically, this aims to state the overarching themes of the conference, discuss how the presented researches contribute to the broader field of study, summarize the main themes and trends, and identify potential research directions.

## **2.2 Trends in Research in Human Settlements Planning**

Research on Human Settlements Planning, based on SDG 11, aims to contribute to the development of science-based policy-making, improving well-being in urban and rural areas, and ensuring safe, sustainable, resilient, and inclusive cities and human settlements [15].

At the 2024 Research Conference on Human Settlements Planning, a total of 69 research abstracts were presented. From these, 11 were thesis studies on human settlements while 58 were research poster presentations on Human Ecology. An analysis of 69 research abstracts show that 31 research abstracts are Human Settlements Planning research. As shown in Figure 2.1 the contributions are aligned with



**Fig. 2.1** DCERP's research thrust aligned with themes of SDG 11 - Sustainable Cities and Communities

an SDG 11 theme based on DCERP's research thrust, including but not limited to the following themes and sub-topics:

**SAFE:** Ensuring safety and security in cities and communities. Studies on cities and the safety of human settlements involve environmental health, water and sanitation, pollution and waste management, food and nutrition security, transportation, connectivity and mobility, peace and security, conflict management/resolution, and human-rights-based approach.

**RESILIENT:** Building resilient communities and ecosystems. HSP studies on resilience explore topics such as land use planning, human settlements in transition, island resiliency, ecosystem-based adaptation and management and climate change and DRRM, protected area conservation, planning and management, resilient housing and infrastructure, nature-based solutions, ridge-to-reef, and ICM/CBRM.

**INCLUSIVE:** Breaking barriers for inclusive human settlements. Research on the theme of inclusive involves participatory planning, public participation, community-based approaches on resource planning and management, island development studies, socialized housing

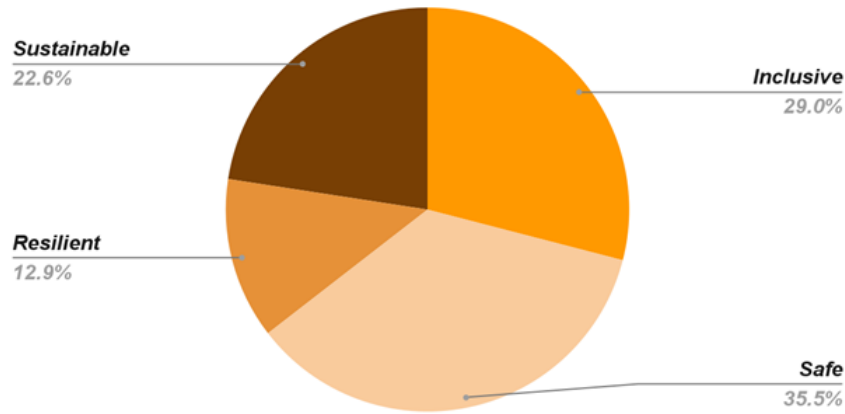
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and resettlement/informal settlements studies, capacity building and education, indigenous peoples and other vulnerable groups (elderly, women, children), gender and development, economic development for all, accessible and inclusive public and urban spaces, planning for special needs (PWDs).

**SUSTAINABLE:** Advancing efforts towards a sustainable future. This includes green economy and financing, cultural and natural heritage, sense of place studies, sustainable tourism, environmental/conservation governance, conservation financing, sustainable urban growth (patterns of development), sustainable energy systems, sustainable food systems, and formulating development indicators/Index for LGUs.

Furthermore, of the 31 research projects in Human Settlements Planning, 35.5% (11 studies) align with the theme of "Safe – Ensuring Safety and Security in Cities and Communities." The majority of these studies fall under the sub-themes of Transportation, Connectivity, and Mobility, or Pollution and Waste Management. Meanwhile, 29% (9 studies) are aligned with the theme of "Inclusive – Breaking Barriers for Inclusive Human Settlements," with most focused on Accessible and Inclusive Public and Urban Spaces. Additionally, 22.6% (7 studies) are aligned with the theme of "Sustainable – Advancing Efforts Towards a Sustainable Future," primarily categorized under the sub-theme of Cultural and Natural Heritage, Sense of Place Studies. Finally, the theme of "Resilient – Building Resilient Communities and Ecosystems" has the least number of HSP researches, with 12.9% (4 studies) most are classified under the sub-themes of Ecosystem-based Adaptation and Management, and Climate Change and Disaster Risk Reduction and Management, as shown in Figure 2.2.

**2024 Research Day SDG 11 Trends in Human Settlements Planning**



**Fig. 2.2** Trends in Human Settlements Planning Research at the 2024 Research Day, Aligned with DCERP's research thrust on SDG 11

Furthermore, the best 5 of the 69 contributions were selected and presented at the 2024 International Conference in Human Settlements Planning and Development (ICHSPD), a conference co-organized by UPLB DCERP and the Association of Pacific Rim Universities - Sustainable Cities and Landscapes (APRU-SCL) held at the SMX Convention, Bonifacio Global City, Taguig, Metro Manila last August 6-8, 2024. Among the selected presentations are (1) *Analysis and Characterization of Waste Generated by Households in the Poblacion of Irosin, Sorsogon: A Case Study* (J.G. Elegado) [16], (2) *A Coastal Community's Readiness, Response, And Recovery To Volcanic Eruptions: The Case Of Lemery, Batangas During The 2020 Taal Eruption* (A.J.M. Sabo-o) [17], (3) *Landscape analysis on the Pansipit River in Batangas, Philippines: A social-ecological systems perspective* (F. G. Isla III & J.P.P. Talubo) [18], (4) *Beyond the Stalls, Within the Alleys: Socioeconomic Provisions of Biñan Public Market and the Informal Settler Families' Sense of Place* (B.A.Y. Dulay) [19] and (5) *Feasibility Study of the Integrated Waste Management Technology System (IWMTS) in Bay, Laguna* (Alvarez et. al) [20].

## 2.3 Future Directions

The DCERP Research Day highlighted the significance of research in Human Settlement Planning in advancing knowledge on SDG 11. Presented HSP studies were revealed to be aligned with all themes of SDG 11 contributing to the broader field of Human Ecology and sustainable development.

The synthesis of contributions presented some future directions as summarized below:

- **Address SDG 11 Thematic Research Gaps.**  
Future research may focus on the SDG 11 theme of Resilient – Building Resilient Communities and Ecosystems to further advance this research theme while maintaining the research base for other themes.
- **Explore comprehensive SDG 11 research.**  
Comprehensive research on Human Settlements Planning encompassing multiple SDG 11 research themes, can also be explored.
- **Consider emergent and nascent topics.**  
Topics on contemporary trends on smart cities and the role of Internet of Things (IoT) present significant potential in Human Settlements Planning research.
- **Engage with other stakeholders.**  
The department should conduct transdisciplinary research, together with practitioners and policy makers, in creating a more holistic approach and addressing societal and environmental problems.

- **Involve graduate studies on Human Settlements Planning.**  
In the future, the department should organize a colloquium-style event aimed to highlight research outputs of Diploma in Environmental Planning (DEnP) and Master of Arts in Environmental Planning (MAEnP) students.
- **Include Urban Lab and TAP-HSP research.**  
Succeeding iterations of the Research Day can also serve as a platform to showcase the research outcomes from the department's public service initiatives and extension work through Urban Lab and TAP-HSP programs.

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