

# The role of the building sector in the delivery of Malaria Smart Housing in a changing climate

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RBM MSWG meeting, 16 August 2023



PennState

GLOBAL BUILDING  
NETWORK

# SDG# 11: Sustainable Cities and Communities

**Make cities and human settlements inclusive, safe, resilient and sustainable.**

## 11.1: SAFE AND AFFORDABLE HOUSING

- Access for all to adequate, safe & affordable housing & basic services and, upgrade slums.

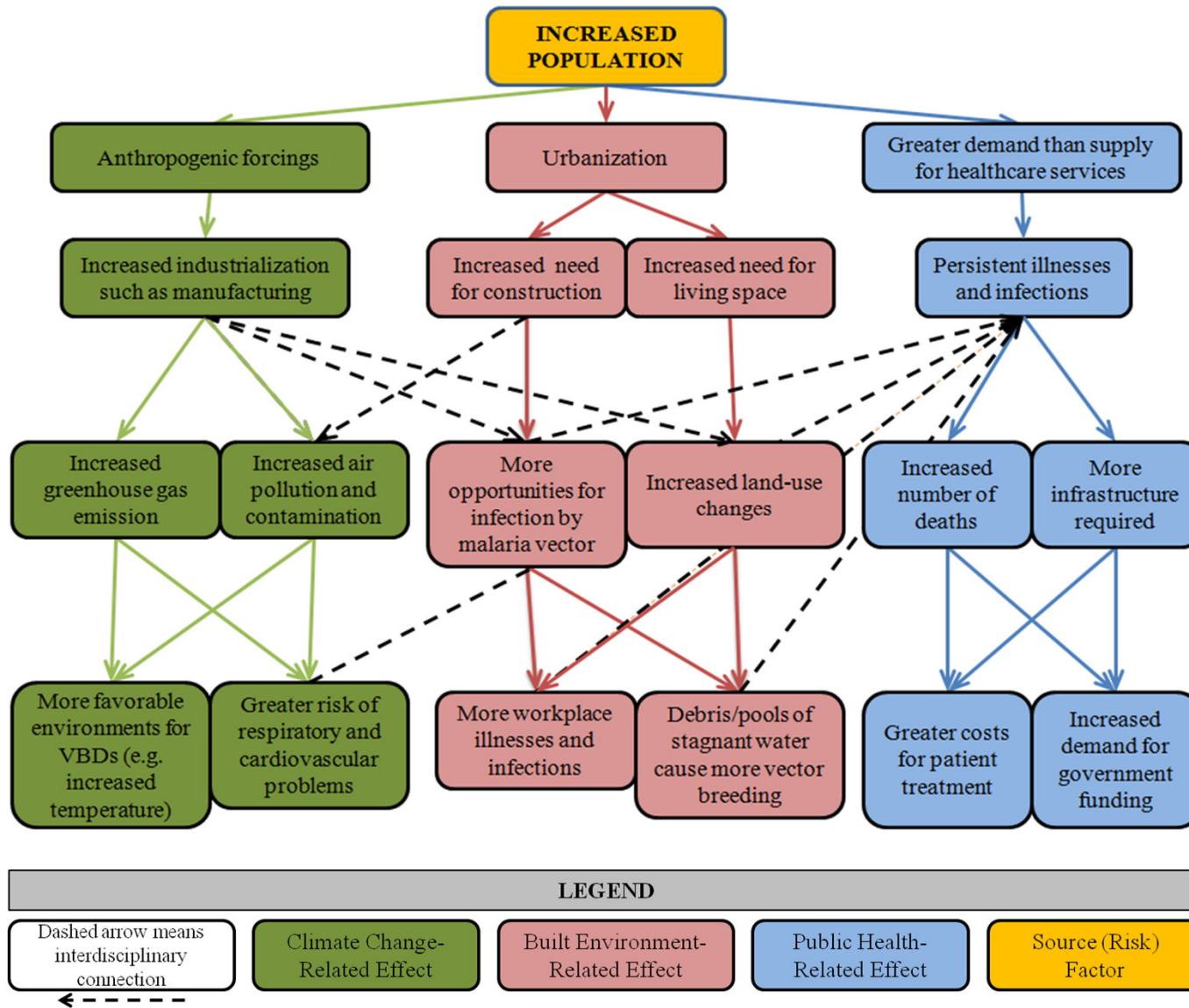
## 11.3: INCLUSIVE AND SUSTAINABLE URBANIZATION

- Enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

## 11.9: REDUCE THE ADVERSE EFFECTS OF DISASTERS

- Significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, with a focus on protecting the poor and people in vulnerable situations.

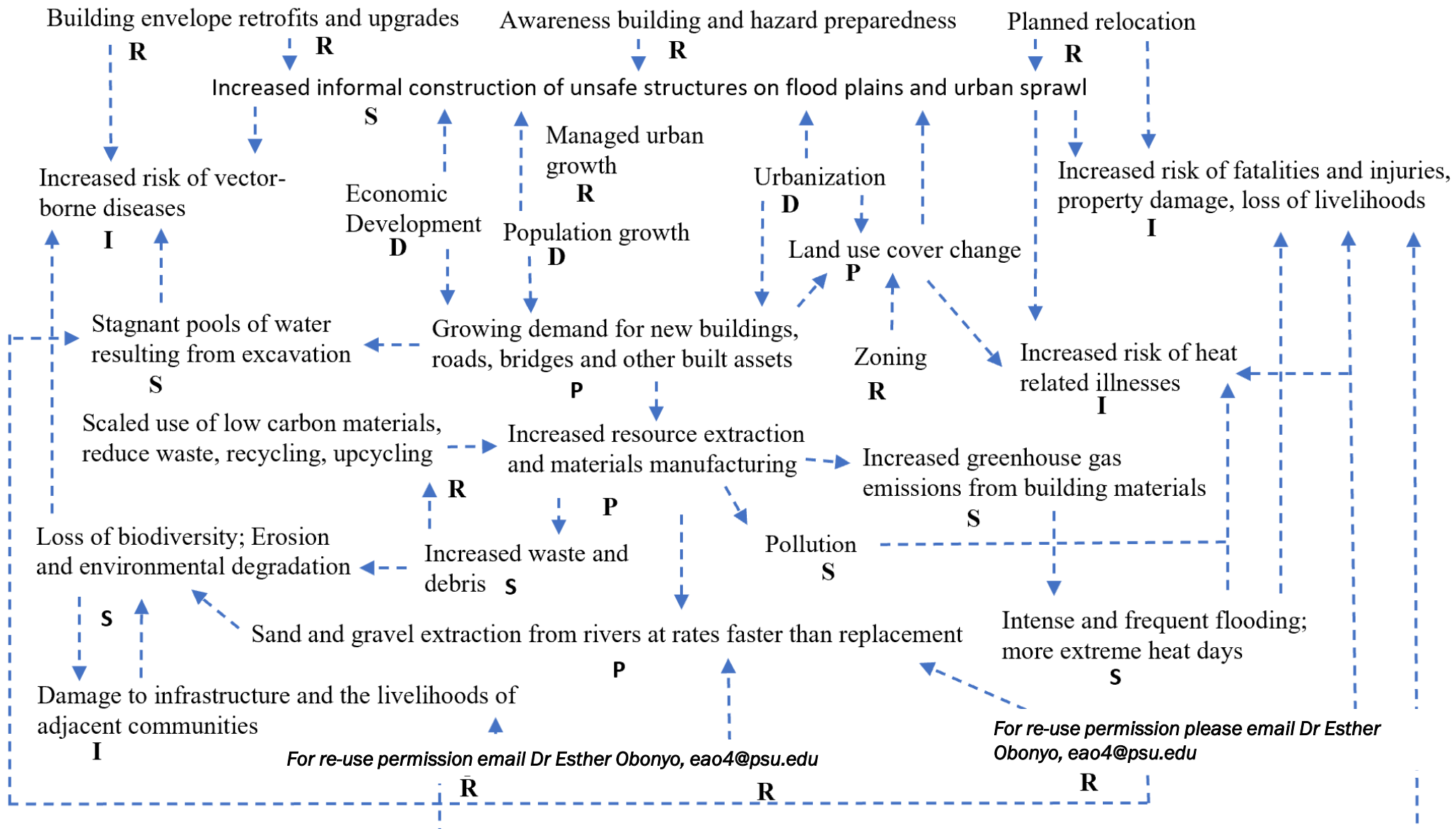




Obonyo, E.; Pareek, S.; Woldu, D.O. Decision Making within the Built Environment as a Strategy for Mitigating the Risk of Malaria and Other Vector-Borne Diseases. Buildings 2019, 9, 2.

# Belmont Forum Project: Housing as a function of urban system risk





## Data-enhanced understanding interlinkages, interdependencies, co-benefits and the potential for unintended consequences

- Driver (D):
  - Population growth
- Pressure (P)
  - Increased material extraction, increased demand for new construction
- State (S):
  - More stagnant pools of water from excessive material extraction
- Impact (I)
  - Increase in vector-borne diseases
- Response (I)
  - Scaled use of low-carbon materials, recycling, upcycling

Obonyo, E, (2023) Exploring interdependencies and synergies to meet Sustainable Development Goal 11. *Research Features*, 148. Available at: [10.26904/RF-148-4826621339](https://doi.org/10.26904/RF-148-4826621339)



Thank you for listening!

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