Aligning Urban Health and Well-being Indicators for Sustainable Urban Planning

The growing emphasis on healthy cities and urban populations reshapes urban development by placing health at the core of sustainable planning

Manager Decorption of the Control of			NUA
sustainability, while maintaining a clear fo	ocus on health ar	nd well-being.	
alignments. The similarities enable down	scaling SDG indi	cators to urban	
to identify overlapping priorities and thus	establish potenti	al indicator	
(including physical and social environment	nts). This framew	ork was conduc	cted
between increasing and diverging urban	systems and thei	ir inhabitants	
agendas. Urban health and well-being re	sult from comple	x interactions	
urban development by placing health at t	ne core or sustai	nable planning	

METHODOLOGY

- 62 SDG indicators align with urban health via the Health in All Policies (HiAP)
- 27 indicators align with urban health via the New Urban Agenda (NUA)
- 137 city services and quality of life indicators from ISO 37120
- 144 smart cities indicators from ISO 37122
- 115 urban resilience indicators from ISO 37123

While each of these frameworks offers critical insights - HiAP in health equity, NUA in policy direction, and ISO in measurable urban performance - they often function independently.

If a given SDG indicator correlated with at least four of the instruments considered (i.e. HiAP, NUA and ISOs), it was categorized as a critical parameter for specifically measuring urban health.

Goods and suggest Spous the 2018 Agends for Nanoinable Bevelopments	Livius health targets and indicator by HAP key superts (Names-Rotos et al., 2018 - 51 Persente	1		Separate and the second	Sustainable Cities and Communities			
		pleasing and health pathway	NGA indicators for the city plausing and health patterny (Geo-Cort et al., 2008) 34 parameters)	USO STEEN (Sustainable critic and communition — Indicators for (40) services and quality of life (157 parameters)	1840 STEE2 (Therapeuble colors and constraints — Indicators for straint colors: 144 passistens)	ISO 3753 Demandile cram and commentum — Indicators for another class 111 parameters	Indicators Selection	
protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	3.3.1 Coverage of essintial health services	Crireral health care coverage			11.2 Number of in-patient hospital hoch per 500 (000 population (core authoritor)	11.1 Percentage of the city's population with an entire meltinf health fits accessible to health care providers	11.1 Percentage of hospitals equipped with back-up electricity supply	3
						11.2 Annual number of medical appointments conducted sensotely per 100 000 population	11.3 Percentage of children that are fully immunited	
							15.4 Number of hospital beds in the city destroyed or damaged by satural hazards per 100 000 population	
	3.3.2 Proportion of population with large liceselectd expenditures on health as a share of total horsehold expenditure or accura-	Universal health care coverage					11.2 Percentage of population with basic health innumice	
3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	3.9.1 Martality rate attributed to basasebold and archient air pollution	Contamination related diseases	Injury and disease outcomes		11.1 Average life expectancy (core sodicator)	8.2 Number of real time periods air quality monitoring stations per square kilometer (km2)	11.4 Number of infectious disease outbreaks per year	4
						8.3 Percentage of public buildings equipped for numbering indeen air quality		
						11.3 Percentage of the cits population with access to real-time public elect systems for air and water quality adminories		
	3.9.2 Montality rate attributed to unuside water, smaller sanitation and lark of hygiene (exposure to usuafe Water, Sanitation and Mygiene for All (WASH) services)	Contamination related discusses	lajary and disease outcomes			23.1 Percentage of drinking water under water quality mountaining by a real-time mater quality mountaining		
						23.3 Percentage of the city's water distribution services mentioned by a smart water system.		
	3.9.3 Mortality rate attributed to spiritestional poisoning							

RESULTS

The 21 selected SDGs indicators for health and well-being:

- 1.4.1 Proportion of population living in households with access to basic services
- 3.6.1 Death rate due to road traffic injuries
- · 3.8.1 Coverage of essential health services
- · 3.9.1 Mortality rate attributed to household and ambient air pollution
- 6.1.1 Proportion of population using safely managed drinking water
- 6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water
- 7.1.1 Proportion of population with access to electricity
- 9.1.2 Passenger and freight volumes, by mode of transport
- 9.c.1 Proportion of population covered by a mobile network, by technology
- 11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing
- 11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities
- 11.3.1 Ratio of land consumption rate to population growth rate
- 11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically
- 11.4.1 Total per capita expenditure on the preservation, protection and conservation of all cultural and natural heritage, by source of funding (public, private), type of heritage (cultural, natural) and level of government (national, regional, and local/municipal)
- 11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)
- 11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities
- 11.7.2 Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12
- 12.5.1 National recycling rate, tons of material recycled
- 15.1.1 Forest area as a proportion of total land area
- 16.6.1 Primary government expenditures as a proportion of original approved budget, by sector (or by budget codes or similar)
- 16.7.2 Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group

CONCLUSIONS

The study proposes a **21 selected SDGs indicators** as cohesive and actionable framework for urban health and wellbeing that bridges policy, measurement, and implementation.

