

Table 3.4 The SETS codebook developed to capture SETS components of governance mechanisms in strategies

SETS domain	SETS code	SETS component	Strategies exemplifying component
Social	S1	Social safety nets	Social safety nets and social protection, food banks and distribution of food surplus, municipal services (including water and sanitation), vaccination programs, essential public health services (including reproductive health services), enhanced emergency medical services
	S2	Educational	Awareness raising and integrating into education, gender equity in education, extension services, sharing local and traditional knowledge, integration of local and traditional knowledge into adaptation planning, participatory action research and social learning, community surveys, knowledge-sharing and learning platforms, international conferences and research networks, communication through media, operations training. *S2 includes any type of knowledge transfer to stakeholders delineated within a strategy
	S3	Informational	Hazard and vulnerability mapping, early warning and response systems, systematic monitoring and remote sensing, climate forecast services, downscaling climate scenarios, longitudinal datasets, integrating indigenous climate observations, community-based adaptation plans (including community-driven slum upgrading and participatory scenario development). *S3 involves with data and information development
	S4	Behavioral	Household preparation and evacuation planning, retreat and migration, soil and water conservation, livelihood diversification, changing livestock and aquaculture practices, changing cropping practices, patterns and planting dates, reliance on social networks, grass-root approaches

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Table 3.4 (continued)

SETS domain	SETS code	SETS component	Strategies exemplifying component
	S5	Economic	Financial incentives (including taxes and subsidies), insurance (including index-based weather insurance schemes), catastrophe bonds, revolving funds, payments for ecosystem services, water tariffs, savings groups, microfinance, disaster contingency funds, cash transfers
	S6	Legal	Land zoning laws, water regulations and agreements, requirements to support disaster risk reduction, laws to encourage insurance purchasing, defining property rights and land tenure security, eminent domain protected areas, marine protected areas, fishing quotas, patent pools and technology transfer
	S7	Institutional	New research, cross-institutional coordination, partnerships, changes in institutional structure. *S7 captures interactions among agencies (including governmental institutions, non-governmental organizations, and public–private partnerships)
Ecological	E1	Ecosystem-based	Ecological restoration, wetland and floodplain conservation and restoration, increasing biological diversity, afforestation and reforestation, conservation and replanting mangrove forest, bushfire reduction and prescribed fire, assisted migration or managed translocation, ecological corridors, ex situ conservation and seed banks, green and open space
	E2	Green infrastructure	Green infrastructure (e.g., shade trees, green roofs), urban gardens, rain gardens, engineered or constructed ecosystem services
	E3	Ecosystem management practices	Community-based natural resource management, adaptive land use management, controlling overfishing, fisheries co-management, ecosystem focused plan, management of natural resources and ecosystem features/services

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SETS domain	SETS code	SETS component	Strategies exemplifying component
Technological	T1	Built environment planning and design	Urban planning and design, design storm, building codes, standards, engineering, planning and design codes, certification, and specification
	T2	Engineered infrastructure	Seawalls and coastal protection structures, flood levees, sewage works, improved drainage, beach nourishment, pavement, physical buildings, green infrastructure, solar shade, flood and cyclone shelters, elevate buildings, new system construction and existing system modification and improvement
	T3	Infrastructure operation and maintenance	System inspection and monitoring, operator training program, facility and equipment maintenance/repair, drainage cleaning, best management practices (BMPs)
	T4	Technological solution development and improvement	New crop and animal varieties, genetic techniques, traditional technologies, efficient irrigation, water-saving technologies, conservation agriculture, food storage and preservation facilities, hazard mapping and monitoring technology, early warning systems, building insulation, mechanical and passive cooling, renewable energy technologies, second-generation biofuels

viable adaptation actions. Shaping climate adaptation goals and instigating governance strategies by integrating social, ecological, and technological domains in a systems perspective is essential for building urban resilience, and ultimately, for enabling transformation to sustainable pathways toward the resilient future.