

Beyond 2030

*Rethinking the SDGs through
Systems, Power, and Responsibility*

Nattakitt Udomphol, Ph.D.

Copyright Page

BEYOND 2030

Rethinking the SDGs through Systems, Power, and Responsibility

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Author's Preface

This book began with a growing sense of unease.

The Sustainable Development Goals offer one of the most important shared frameworks the world has created for protecting human dignity and the planet's future. Yet, as I followed discussions about poverty, inequality, education, climate, institutions, and development, I repeatedly encountered the same pattern: problems were being discussed separately even though people experience them together.

A person does not experience poverty independently from health, education, work, water, housing, or political voice. A community does not experience climate disruption independently from food, migration, infrastructure, debt, and institutional capacity. The goals may be numbered separately, but human life is not.

This realization led me to ask a different question.

What would happen if we read the SDGs not only as seventeen goals to be achieved, but as a map of the systems that continually produce security or insecurity, dignity or exclusion, regeneration or destruction?

That question became the starting point of this book.

My intention is not to replace the official SDG framework, technical research, or policy expertise. It is to help readers look beneath targets and indicators toward the causes, relationships, institutions, and forms of power that shape actual outcomes.

This approach is informed by Buddhist wisdom, especially the understanding that suffering arises through causes and conditions. Problems are neither isolated nor inevitable. They are produced and sustained through particular arrangements—and because they are conditioned, they can be changed.

But change requires more than good intentions.

It requires us to see who has the power to shape systems, who benefits from existing arrangements, who bears their costs, and where responsibility should properly be placed. It also requires us to distinguish actions that temporarily relieve suffering from transitions that alter the conditions producing it.

The title *Beyond 2030* does not suggest that the year 2030 or the Sustainable Development Goals no longer matter. It asks what responsibility will be required when the deadline passes, and the deeper causes of poverty, inequality, ecological decline, conflict, and mistrust remain.

I offer this book as an invitation to see those causes more clearly—and to recognize that the future is being created through the systems, institutions, and choices we sustain today.

Nattakitt Udomphol, Ph.D.

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Introduction

Reading the SDGs Beyond Separation

The Sustainable Development Goals represent one of the most ambitious attempts to define a shared direction for human development.

Together, the seventeen goals address poverty, hunger, health, education, gender equality, water, energy, employment, infrastructure, inequality, cities, production, consumption, climate change, oceans, terrestrial ecosystems, institutions, peace, justice, and international cooperation. Their breadth reflects an essential insight: human well-being cannot be separated from social justice, institutional capacity, or the ecological systems upon which life depends.

Yet the breadth of the SDGs also creates an analytical difficulty.

Because the goals are presented separately, they can easily be approached as independent policy areas and fields of expertise. Poverty becomes the responsibility of social-protection agencies. Hunger is a matter of agriculture and food policy. Health is assigned to medical institutions. Education becomes the domain of schools. Climate change is treated as an environmental issue. Peace and justice are addressed through governance and law.

This division is useful for administration, specialization, measurement, and accountability. Complex problems require clear mandates and identifiable areas of action.

But the categories used to organize policy are not the same as the systems through which people actually live.

A person does not experience poverty independently from health, education, housing, work, food, water, gender, environmental exposure, or political voice. A farmer does not experience drought separately from debt, market prices, access to land, energy, transport, insurance, or public support. A city does not experience climate change separately from housing, infrastructure, mobility, inequality, health, and institutional capacity.

The visible problem may appear under one goal while the forces producing it operate through several others.

This book therefore advances a central proposition:

The Sustainable Development Goals should be read not only as seventeen objectives, but as an interconnected system of causes, reinforcing loops, institutional power, differentiated responsibility, and possible transition.

This proposition does not reject the SDG framework.

It asks us to read it more deeply.

Instead of asking only whether a goal is progressing, this book asks:

- What systems are producing the observed outcome?
- What makes the problem persistent?

- Which feedback processes continually recreate it?
- Which institutions possess the power to alter its direction?
- How should responsibility be distributed according to power, benefit, contribution to harm, and capacity to act?
- What would distinguish genuine transition from temporary improvement?

These questions form the intellectual structure of the book.

From Goals to Systems

The SDGs are often represented as a list, a circle of icons, or a dashboard of targets and indicators. These representations communicate range and ambition, but they do not fully reveal causal relationships.

A systems perspective begins with interdependence.

It recognizes that interventions in one field can produce benefits, burdens, or unintended consequences in another. Economic growth may increase employment while intensifying resource extraction and emissions. Clean-energy infrastructure may reduce carbon dependence while displacing communities or reproducing unequal ownership. Agricultural modernization may raise production while increasing farmer debt, soil degradation, water stress, or dependence on concentrated input markets. Conservation may protect ecosystems while excluding communities that have historically cared for them.

No intervention should therefore be evaluated entirely within the boundaries of a single goal.

A policy may appear successful when measured against a narrow indicator yet weaken another system on which that success depends. Energy may become cleaner but less affordable. Urban development may increase investment while displacing low-income residents. Digital education may expand access while deepening dependence on private platforms and excluding those without connectivity. Food may become cheaper while farmers, workers, soil, and water absorb the hidden cost.

The relevant question is not only whether an intervention advances one SDG.

It is whether it strengthens or weakens the wider human and ecological system.

This book organizes the seventeen goals through five interconnected systems:

1. Human Security
2. Human Capability and Equality
3. Economic and Infrastructural Systems
4. Planetary Life-Support Systems
5. Public Power and Collective Action

These systems provide the book's architecture. They are not official United Nations classifications, nor are they intended to create rigid boundaries. Each goal is located

according to its primary function within the argument, but every goal crosses into the others.

Human Security concerns the foundations required for people to survive and remain protected from preventable harm. Human Capability and Equality concern the real freedom to learn, participate, exercise agency, and shape one's future. Economic and Infrastructural Systems organize work, production, energy, technology, mobility, cities, and material life. Planetary Life-Support Systems establish the ecological conditions within which all social and economic activity must operate. Public Power and Collective Action determine how rules are made, resources are allocated, rights are protected, and transition becomes governable.

These are not five separate worlds.

They form one structure of dependence.

Security without capability can leave people protected but powerless. Capability without material security can remain merely formal. Economic systems can expand opportunity while undermining both social equality and ecological stability. Planetary limits cannot be respected without institutional capacity. Public power cannot remain legitimate when insecurity, exclusion, and unequal burden-sharing persist.

The Five-System Map that follows this Introduction will show how these relationships shape the book's sequence.

From Symptoms to Drivers

Many development interventions begin with visible symptoms.

Food is provided where people are hungry. Medical services are expanded where illness is widespread. Training is offered where employment is limited. Infrastructure is built where access is inadequate. Emergency assistance is delivered after disaster.

Such responses can be necessary, urgent, and morally indispensable.

But symptoms do not explain themselves.

Hunger may arise from low wages, insecure land tenure, conflict, debt, climate disruption, market concentration, unequal household power, or unaffordable healthy food. Poor health may be caused by unsafe working conditions, polluted environments, inadequate housing, discrimination, commercial practices, weak public services, or delayed access to treatment. Educational exclusion may result from poverty, language, geography, care responsibilities, disability, digital inequality, discrimination, or unequal school quality.

This book uses the term **drivers** to describe the deeper forces that make harmful outcomes normal, profitable, convenient, politically protected, or difficult to change.

Drivers may include unequal ownership, concentrated market power, insecure work, extractive incentives, weak regulation, short political time horizons, harmful infrastructure, discrimination, institutional fragmentation, unequal access to information, and dominant assumptions about growth, consumption, technology, or success.

Drivers matter because they shape the environment in which decisions are made.

They determine what institutions reward, what they ignore, whose costs remain invisible, and which forms of harm become treated as unavoidable. They influence whether organizations profit by preventing harm or by transferring it to workers, communities, ecosystems, future generations, or public institutions.

This distinction prevents the analysis from becoming moralistic.

Individuals make decisions, but they do so within systems that structure the available choices. A person cannot choose affordable housing where none exists. A worker cannot negotiate fairly where employment is precarious and collective representation is weak. A family cannot consume sustainably if products are designed for disposability and alternatives remain inaccessible. A community cannot protect an ecosystem when extraction rights are granted elsewhere.

Agency remains real, but its range is institutionally shaped.

A serious reading of the SDGs must therefore move beyond asking why individuals fail to adapt and toward asking why systems repeatedly generate conditions to which people are required to adapt.

From Drivers to Reinforcing Loops

Persistent problems are rarely sustained by a single cause.

They endure through feedback processes in which the consequences of a problem strengthen the conditions that produced it.

Poverty can reduce access to education and healthcare. Reduced capability can limit employment and bargaining power. Insecure work can prevent saving and increase debt. Debt can force acceptance of still more insecure work.

Inequality can weaken political voice. Weak voice allows policy and institutions to reflect concentrated interests. Those arrangements deepen inequality and further weaken the influence of excluded groups.

Ecological degradation can undermine livelihoods. Livelihood insecurity can create pressure for more intensive extraction. Further extraction weakens ecological resilience and makes future livelihoods more precarious.

Institutional failure can reduce public trust. Declining trust weakens participation, compliance, oversight, and cooperation. Reduced participation and accountability can make institutions still less effective and legitimate.

These are **reinforcing loops**.

A reinforcing loop explains why a problem can return after temporary improvement, why apparently rational responses can generate long-term harm, and why interventions aimed at one point in a system may fail to alter its direction.

The task of systems analysis is therefore not only to identify an initial cause.

It is to locate the loop that keeps the problem in motion.

This is the difference between treating a crisis and transforming the conditions that reproduce it.

Emergency food assistance may prevent immediate hunger while leaving unequal income, land access, market power, and conflict untouched. Disaster relief may rebuild damaged infrastructure without reducing exposure or correcting unsafe development. Educational access may increase while school quality, discrimination, and unequal labor markets continue to reproduce unequal life chances.

Relief remains necessary.

But relief should not be mistaken for transformation.

From Interdependence to Power

Systems language can become misleading if it suggests that every actor shares equal responsibility for an interconnected world.

They do not.

Individuals, households, communities, businesses, investors, governments, international institutions, and financial organizations possess very different capacities to shape laws, markets, technologies, infrastructure, information, and public priorities.

A household may change how it consumes but cannot independently regulate product design or national energy systems. A worker may seek different employment but cannot, on their own, establish labor rights. A farmer may adopt more sustainable practices while remaining constrained by debt, insecure land tenure, buyer concentration, unavailable infrastructure, or policies that reward short-term production. A community may protect local ecosystems even as decisions about mining, water, forests, or energy are made elsewhere.

This book therefore connects interdependence with power.

Interdependence explains why actions and consequences cross boundaries.

Power explains who has the capacity to determine those actions, distribute their benefits, and transfer their costs.

Responsibility must consequently be understood as both shared and differentiated.

It is shared because every actor participates in social and ecological systems.

It is differentiated because actors do not possess equal control, receive equal benefit, contribute equally to harm, or possess equal capacity to create change.

Those with greater control over rules, resources, technologies, investment, infrastructure, and information carry greater responsibility. Those who receive greater benefit from harmful arrangements carry a greater obligation to support repair and transition. Those who have contributed more to a problem cannot ask those who contributed least to bear an equal burden.

Without this distinction, the language of shared responsibility can transfer obligation downward:

- from governments to households;
- from corporations to consumers;
- from employers to workers;
- from wealthy societies to vulnerable countries;
- from decision-makers today to generations who have no voice in present choices.

A systems approach without power analysis can describe interdependence while leaving injustice untouched.

Institutional Leverage

Recognizing power directs attention toward institutions.

Institutions establish rules, allocate resources, authorize infrastructure, define rights, govern markets, enforce standards, shape incentives, and determine whose knowledge and interests count in public decisions.

They can reinforce harmful systems or redirect them.

Institutional leverage may be found in laws, budgets, taxation, social protection, labor standards, public services, ownership arrangements, procurement, financial regulation, technological standards, infrastructure, access to information, participation, enforcement, and international agreements.

The question of leverage is more specific than the question of what should change.

It asks:

Who possesses the authority, resources, legitimacy, and operational capacity to change it?

This distinction matters because many sustainability discussions end in general appeals. Governments should act. Businesses should become responsible. Citizens should participate. Institutions should cooperate.

These statements may be morally correct but analytically incomplete.

A useful analysis must identify the relevant decision point. It must ask which rule, budget, contract, standard, infrastructure choice, ownership arrangement, enforcement mechanism, or distribution of authority sustains the outcome.

It must also ask what prevents that leverage from being used.

Institutions may lack capacity, but they may also lack political will. They may be fragmented across agencies. They may be constrained by debt, captured by powerful interests, dependent on short-term funding, or rewarded for reporting activity rather than changing outcomes.

Institutional leverage therefore concerns both formal authority and the power relations surrounding its use.

From Improvement to Transition

The final movement of this book is from insight to transition.

Not every positive intervention constitutes systemic change.

This book distinguishes among three levels of response.

Immediate response protects people and ecosystems from present harm. It includes emergency assistance, direct services, temporary protection, humanitarian response, and urgent risk reduction.

Institutional reform changes rules, incentives, resources, procedures, representation, or accountability within existing institutions.

System transition alters the deeper structures through which harmful outcomes are repeatedly produced. It may require changes in ownership, infrastructure, financial systems, economic priorities, technological direction, governance arrangements, social norms, or distributions of power.

All three levels matter.

Immediate protection cannot be postponed while societies wait for long-term reform. Institutional improvements can produce meaningful and lasting gains. But neither should be presented as sufficient when the underlying system continues to generate insecurity, inequality, extraction, exclusion, or ecological decline.

Transition therefore asks not only whether conditions are improving.

It asks whether the system is changing direction.

A transition is not defined by the scale of a project or the language used to describe it. A large initiative may reproduce the same ownership, incentives, and unequal burdens. A smaller institutional change may alter an important rule or feedback process.

The relevant test is causal.

Does the intervention merely reduce a symptom, or does it weaken the mechanisms that recreate the problem?

The 3+1 Transformative Reading

Each chapter applies a common analytical sequence called the **3+1 Transformative Reading**.

1. Seeing the Drivers

What makes the problem normal, profitable, convenient, politically protected, or resistant to change?

2. Mapping the Reinforcing Loops

How do the consequences of the problem reproduce or intensify its causes?

3. Identifying Institutional Leverage

Which institutions, rules, resources, decision points, or distributions of authority have the capacity to redirect the system?

+1. Moving from Insight to Transition

What immediate responses, institutional reforms, and longer-term transitions are required?

Responsibility is examined throughout all four dimensions.

Each chapter asks:

- Who possesses power?
- Who receives benefit?
- Who produces or enables harm?
- Who bears the consequences?
- Who has the capacity to change the relevant conditions?

The framework is not intended to generate one universal solution. The causes of poverty, inequality, ecological decline, or institutional weakness vary according to history, geography, political economy, culture, and institutional capacity.

Its purpose is to discipline inquiry.

It helps prevent three recurring errors:

- treating symptoms as causes;
- treating unequal actors as equally responsible;
- treating limited improvement as full transformation.

Buddhist Wisdom as a Mode of Inquiry

The book is informed by Buddhist wisdom, especially the understanding that suffering arises through causes and conditions.

This perspective does not offer a technical policy formula. Nor does it imply that contemporary social and ecological problems can be solved through personal spirituality alone.

Its contribution is methodological and ethical.

It encourages us not to treat harmful conditions as isolated, permanent, or inevitable. It directs attention toward the relationships, habits, institutions, incentives, and forms of desire through which suffering is produced and sustained.

Because conditions are produced, they can also be changed.

But Buddhist wisdom contributes more than causal analysis.

It asks whether development reduces or reproduces harm. It draws attention to craving without limit, to the consequences of excess, to the moral importance of restraint, and to the responsibility that arises when one's choices affect the lives of others.

Compassion, in this context, is not only emotional concern. It asks whether institutions prevent avoidable suffering or merely respond after harm becomes visible.

Non-harm is not only a personal ethic. It becomes a criterion for evaluating policies, technologies, markets, supply chains, and infrastructure.

Moderation is not opposition to development. It asks what should grow, what should stop growing, what should be protected, and what should remain within limits.

Interdependence without responsibility can become abstraction.

Compassion without structural analysis can remain charitable but insufficient.

Technical expertise without ethical judgment can make harmful systems more efficient rather than more just.

The book therefore brings empirical evidence, systems analysis, institutional inquiry, and ethical reflection into one conversation.

Wisdom, in this sense, means the capacity to see causes clearly, recognize consequences honestly, distinguish levels of responsibility, and act without reproducing further harm.

The Meaning of Beyond 2030

The year 2030 remains an important benchmark.

It provides a deadline against which commitments, progress, delay, and failure can be assessed. It creates political visibility and gives governments and institutions a shared horizon.

But the work of sustainable development cannot end with a reporting period.

The infrastructures, markets, institutions, technologies, and ecological conditions operating after 2030 will continue to distribute security, opportunity, risk, wealth, voice, and environmental cost.

Moving beyond 2030, therefore, does not mean abandoning the SDGs.

It means moving beyond a deadline-centered interpretation of them.

It means asking whether governments can coordinate across systems, whether businesses are changing their core operations, whether finance supports long-term resilience and transition, whether communities possess meaningful decision-making power, and whether international cooperation reduces or reproduces dependency.

The decisive measure is not how many institutions adopt the language of sustainability.

It is whether the systems producing harm are changing direction.

The Argument of This Book

The argument developed across the book can be summarized in six propositions.

First, the seventeen SDGs describe interconnected outcomes within a shared human and ecological system.

Second, persistent problems are produced by deeper economic, political, institutional, technological, cultural, and psychological drivers.

Third, these drivers are sustained through reinforcing loops that allow harmful outcomes to reproduce themselves.

Fourth, systems are shaped by unequal power; responsibility must therefore be shared but differentiated.

Fifth, institutions constitute the principal sites of leverage because they organize rules, resources, incentives, infrastructure, representation, and accountability.

Sixth, sustainable development requires movement from immediate response to institutional reform and, where necessary, system transition.

The Five-System Map that follows translates these propositions into the architecture of the book.

The sequence begins with Human Security because deprivation immediately narrows the possibility of health, learning, participation, and agency. It then moves toward Human Capability and Equality, because survival alone does not guarantee the freedom to shape one's life. The analysis proceeds to Economic and Infrastructural Systems, where energy, work, technology, production, and cities organize material life. These systems are then placed within Planetary Life-Support Systems, whose ecological limits cannot be negotiated away. The final system, Public Power and Collective Action, asks how rules, responsibility, institutions, and cooperation must be organized for transition to become possible.

The sequence is analytical rather than hierarchical.

Each system depends upon all the others.

Taken together, the book asks a question that will remain urgent beyond any global deadline:

Can humanity transform the systems that distribute power, risk, opportunity, responsibility, and ecological cost before today's inequalities become tomorrow's irreversible conditions?

The Five-System Map

The Architecture of the Book

The seventeen Sustainable Development Goals are organized in this book through five interconnected systems:

1. **Human Security**
2. **Human Capability and Equality**
3. **Economic and Infrastructural Systems**
4. **Planetary Life-Support Systems**
5. **Public Power and Collective Action**

This Five-System Map outlines the book's architecture.

It is not an official United Nations classification, nor does it suggest that each SDG belongs exclusively to one system. The goals are grouped according to the principal function they perform within the book's argument. Their boundaries remain open because the causes and consequences addressed by one goal frequently extend into several others.

The map serves three purposes.

First, it shows how the seventeen goals form a coherent structure rather than a collection of isolated priorities.

Second, it explains the sequence of the five Parts.

Third, it provides a test for evaluating whether an intervention advances sustainable development as a whole or merely improves one outcome while weakening another.

At the center of the map is:

A Just and Sustainable Transition

The central position of transition is deliberate.

The purpose of the five systems is not only to classify problems. It is intended to show the conditions that must change together for development to become more secure, equal, regenerative, and accountable.

Each system contributes something that the others cannot replace.

Human Security protects the foundations of life.

Human Capability and Equality expand people's real freedom to participate and shape their futures.

Economic and Infrastructural Systems organize the material conditions of society.

Planetary Life-Support Systems establish the ecological boundaries within which all human activity must operate.

Public Power and Collective Action determine whether rules, resources, responsibility, and cooperation can be organized fairly.

No system can flourish by weakening another.

System I Human Security

SDG 1 — No Poverty

SDG 2 — Zero Hunger

SDG 3 — Good Health and Well-Being

SDG 6 — Clean Water and Sanitation

Human Security concerns the conditions required for people to live without preventable deprivation and destructive vulnerability.

Income, food, health, water, sanitation, shelter, care, and social protection form a connected foundation. When one of these conditions fails, the effects often spread quickly into the others.

A loss of income may reduce access to food and healthcare. Illness may interrupt work and education. Unsafe water may deepen poverty through disease and care burdens. Hunger may weaken learning, health, and future livelihood.

Human insecurity is therefore cumulative.

Part I begins with these goals because people cannot fully exercise freedom, participate in institutions, or plan for the future when everyday life is dominated by survival and exposure to shocks.

What foundations must be guaranteed so that no person's dignity and future are destroyed by preventable insecurity?

From managing deprivation to establishing durable foundations of security.

System II Human Capability and Equality

SDG 4 — Quality Education

SDG 5 — Gender Equality

SDG 10 — Reduced Inequalities

Human Capability and Equality concern people's real ability to learn, develop, participate, exercise agency, and influence the conditions shaping their lives.

Basic security is necessary but not sufficient.

People may survive while remaining excluded from meaningful education, decision-making, safe participation, ownership, representation, or opportunity. Formal access may exist without substantive capability.

A child may attend school without gaining the knowledge and judgment required to flourish. Women may enter employment while continuing to carry disproportionate care burdens and exposure to violence. Economic growth may raise average income, even as wealth, status, mobility, and political influence become more concentrated.

Part II therefore examines the difference between nominal inclusion and real freedom.

Do people possess the capability and power to shape their lives, or only formal access within unequal conditions?

From nominal inclusion to substantive equality, agency, and voice.

System III Economic and Infrastructural Systems

SDG 7 — Affordable and Clean Energy

SDG 8 — Decent Work and Economic Growth

SDG 9 — Industry, Innovation and Infrastructure

SDG 11 — Sustainable Cities and Communities

SDG 12 — Responsible Consumption and Production

Economic and Infrastructural Systems organize how societies produce, work, move, build, innovate, consume, and use energy and material resources.

These systems determine:

- what forms of work are created;
- how energy is generated and distributed;
- which technologies are developed;
- what infrastructure receives investment;
- how cities and communities are designed;
- what products enter the market;
- and where social and ecological costs are placed.

Economic systems can expand human possibility. They can create livelihoods, mobility, access, resilience, and technological capacity.

They can also normalize insecurity, extraction, pollution, displacement, waste, surveillance, and ecological lock-in.

Part III, therefore, asks not only whether economies grow or technologies advance, but also what purposes they serve, whose interests shape them, and what forms of life they make possible.

What should economies, technologies, infrastructure, and systems of production be designed to serve?

From extractive and disposable systems to dignified, regenerative, and socially purposeful economies.

System IV Planetary Life-Support Systems

SDG 13 — Climate Action

SDG 14 — Life Below Water

SDG 15 — Life on Land

Planetary Life-Support Systems concern the climatic, oceanic, terrestrial, and biological conditions upon which every society and economy depends.

Climate stability, healthy oceans, fertile soil, forests, biodiversity, and functioning water cycles are not separate environmental interests.

They are the conditions that make food, health, livelihoods, settlements, and economic activity possible.

Part IV therefore places human development within ecological reality.

The economy operates within the biosphere, not beside it. Economic activity that destroys the conditions supporting life cannot be considered sustainable development, even when it produces short-term income, investment, or output.

This system also raises questions of ecological justice. Environmental damage is not distributed evenly. Communities that contribute least to climate disruption, biodiversity loss, pollution, or extraction frequently possess the fewest resources to adapt or recover.

Can human systems remain within ecological limits while protecting dignity, justice, and the regenerative capacity of the living world?

From treating nature as an unlimited resource to governing human activity within the conditions required for life.

System V Public Power and Collective Action

SDG 16 — Peace, Justice and Strong Institutions

SDG 17 — Partnerships for the Goals

Public Power and Collective Action concern the institutions through which societies make decisions, establish rights, allocate resources, resolve conflict, enforce accountability, and cooperate across sectors and borders.

This system appears last in the book, but it operates through all the others.

Human security requires public capacity.

Equality requires rights, representation, and access to justice.

Economic transition requires law, regulation, investment, and coordination.

Ecological protection requires enforcement, long-term governance, and international cooperation.

Institutional strength should not be confused with institutional power alone. An institution may possess authority while remaining unjust, unaccountable, or captured by concentrated interests.

Strong institutions require legitimacy, competence, transparency, participation, accountability, access to remedy, and the capacity to correct failure.

Partnership must also be examined critically. Cooperation is not automatically fair when one actor controls finance, technology, data, agendas, or evaluation. Genuine partnership requires not only shared tasks, but fairer distributions of voice, capacity, responsibility, and decision-making power.

How must power, institutions, and cooperation be organized so that responsibility becomes enforceable and transition becomes possible?

From fragmented authority and symbolic partnership to accountable institutions and fair collective action.

How the Five Systems Work Together

The Five-System Map should not be read as a hierarchy.

No system can be completed before the others begin.

Human Security provides the foundation for participation and agency.

Human Capability and Equality determine whether people can influence economic and institutional life.

Economic and Infrastructural Systems organize the material conditions through which security and capability are expanded or restricted.

Planetary Life-Support Systems establish the ecological limits within which all three must operate.

Public Power and Collective Action direct, regulate, coordinate, or neglect the whole.

The systems therefore form a continuous relationship:

Security enables capability.

Capability shapes participation.

Economic systems organize material opportunity.

Planetary systems establish ecological viability.

Public power determines whether transition can be governed fairly.

Failure also moves across the map.

Weak human security can reduce capability and voice.

Unequal capability can concentrate economic and political power.

Extractive economic systems can deepen inequality and ecological decline.

Ecological disruption can undermine food, health, housing, work, and public finance.

Weak or unjust institutions can allow all of these conditions to become self-reinforcing.

The map therefore asks readers to evaluate every major intervention across all five systems.

The Five-System Test

A policy, project, technology, investment, or institutional reform should be examined through five questions:

1. **Human Security**
Does it strengthen or weaken the foundations of a secure life?
2. **Human Capability and Equality**
Does it expand real agency, equality, participation, and voice?
3. **Economic and Infrastructural Systems**
Does it create dignified, resilient, and regenerative forms of material life?
4. **Planetary Life-Support Systems**
Does it remain within ecological limits and protect the conditions required for life?
5. **Public Power and Collective Action**
Does it strengthen accountability, fair participation, institutional capacity, and cooperation?

A solution that advances one system by seriously weakening another is incomplete.

Economic growth that destroys ecological security is not sustainable progress.

Clean energy that dispossesses communities is not a just transition.

Conservation that excludes local people from decision-making is not durable protection.

Education that expands enrolment while preserving unequal life chances is not substantive capability.

Partnership that shares responsibility without sharing power is not genuine cooperation.

The Five-System Map therefore serves both as the architecture of the book and as a framework for evaluating development itself.

The Logic of the Five Parts

The sequence of the book follows a deliberate intellectual movement:

Security → Capability → Economic Organization → Planetary Limits → Public Power and Transition

Part I begins with what people require to live without preventable deprivation.

Part II moves from survival toward agency, equality, and participation.

Part III examines the systems that organize work, energy, technology, cities, production, and consumption.

Part IV places those systems within the ecological conditions required for life.

Part V asks how institutions, accountability, justice, and cooperation must be organized to ensure that transformation is durable and enforceable.

The sequence is analytical rather than hierarchical.

Each Part deepens the central argument while remaining connected to the others.

The journey begins with Human Security because deprivation immediately narrows human possibility.

Poverty, hunger, ill health, and lack of clean water are not simply four separate policy failures. Together, they weaken agency, increase vulnerability, restrict participation, and reduce people's capacity to shape the institutions that govern their lives.

Yet Human Security cannot be achieved within its own boundaries alone.

Its causes are connected to education, inequality, work, infrastructure, climate, institutions, and political power.

Part I is therefore the point of entry, not the limit of inquiry.

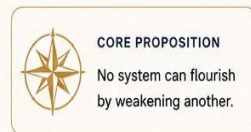
The first task is to examine how security is lost, how insecurity becomes cumulative, and which systems must change so that ordinary shocks no longer result in permanent exclusions from dignity, capability, and voice.

FIGURE 1

The Five-System Map:

The Architecture of a Just and Sustainable Transition

The seventeen SDGs are organized into five interconnected systems. Each system performs a distinct function, but no system can flourish by weakening another.



THE SEVENTEEN SDGs IN FIVE SYSTEMS

1 HUMAN SECURITY

- 1 No Poverty
- 2 Zero Hunger
- 3 Good Health and Well-being
- 6 Clean Water and Sanitation

2 HUMAN CAPABILITY AND EQUALITY

- 4 Quality Education
- 5 Gender Equality
- 10 Reduced Inequalities

3 ECONOMIC AND INFRASTRUCTURAL SYSTEMS

- 7 Affordable and Clean Energy
- 8 Decent Work and Economic Growth
- 9 Industry, Innovation and Infrastructure
- 11 Sustainable Cities and Communities
- 12 Responsible Consumption and Production

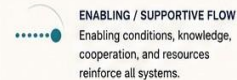
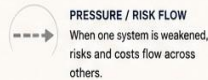
4 PLANETARY LIFE-SUPPORT SYSTEMS

- 13 Climate Action
- 14 Life Below Water
- 15 Life on Land

5 PUBLIC POWER AND COLLECTIVE ACTION

- 16 Peace, Justice and Strong Institutions
- 17 Partnerships for the Goals

HOW THE FIVE SYSTEMS WORK TOGETHER



Sustainable development is achieved when all five systems are strengthened together and no one is left behind.

Part I: Human Security

Protecting the Conditions Without Which No Life Can Flourish

Sustainable development begins with a simple but demanding question:

What must be protected before people can meaningfully shape their own lives?

Before individuals can learn, participate, innovate, care for others, or contribute to society, they require a minimum foundation of security.

They need food.

They need water.

They need health.

They need shelter.

They need income or reliable access to essential resources.

They need protection from shocks that can destroy years of effort in a single moment.

These conditions are often discussed separately.

Poverty is treated as an income problem.

Hunger is treated as a food problem.

Health is treated as a medical problem.

Water and sanitation are treated as infrastructure problems.

But people do not experience them separately.

A household facing low income may reduce food quality, postpone healthcare, live in unsafe housing, or depend on unreliable water.

Illness can reduce work capacity and increase debt.

Unsafe water can create disease, care burdens, lost schooling, and reduced income.

Food insecurity can weaken health, learning, productivity, and resilience.

A climate shock can damage crops, homes, water systems, employment, and public services at the same time.

Human insecurity is therefore cumulative.

One form of insecurity increases exposure to another.

The result is not simply a collection of disadvantages.

It is a system in which vulnerability reproduces itself.

Part I examines this system through the lens of SDGs 1, 2, 3, and 6.

The purpose is not merely to ask whether people have crossed a statistical threshold.

It is to ask whether they possess a sufficiently secure foundation from which a dignified and capable life becomes possible.

Human Security Is More Than Survival

Human security is sometimes understood as protection from immediate danger.

That is part of its meaning.

People need freedom from violence, hunger, preventable disease, displacement, and extreme deprivation.

But security is more than physical survival.

It includes the ability to live without the constant fear that a single shock will cause collapse.

A household may have income today but remain insecure if that income is unstable.

A person may have access to healthcare but remain insecure if one serious illness creates unmanageable debt.

A community may possess a water connection but remain insecure if supply is intermittent, contaminated, or unaffordable.

A farmer may produce enough food in one season but remain insecure if drought, debt, or market volatility threatens the next.

Human security therefore has at least four dimensions.

Protection

People must be protected from severe and preventable harm.

Reliability

Essential goods and services must be available consistently, not only occasionally.

Affordability

Access is not meaningful when essential needs consume an unsustainable share of income.

Resilience

People and institutions must be able to absorb shocks without losing the foundations of life.

These dimensions shift the analysis from temporary provision toward durable security.

The Insecurity Loop

Across the four goals in this Part, a common reinforcing loop appears:

low income or weak access

→ reduced food, health, water, housing, and service security

→ lower physical and economic resilience

- greater damage from illness, unemployment, disaster, or price shock
- deeper insecurity

This loop helps explain why isolated interventions often produce limited results.

Food assistance may relieve hunger but cannot fully solve insecurity if income, health, water, and housing remain unstable.

Health insurance may expand access but cannot prevent illness caused by unsafe water, poor nutrition, or hazardous work.

A new water system may improve supply but remain ineffective if households cannot afford connection or institutions cannot maintain it.

Human security requires mutually reinforcing protections.

The task is not simply to deliver more services.

It is to build systems capable of preventing one insecurity from becoming another.

Security and Capability

Human security is not the final purpose of development.

It is the foundation of capability.

People who live in constant insecurity are forced to focus on immediate survival.

They may be unable to invest in education, health, enterprise, community participation, or long-term planning.

Their choices become narrower not because they lack aspiration, but because risk consumes their available resources.

Security creates the room within which agency becomes possible.

A child who is adequately nourished and healthy can learn more effectively.

A worker with healthcare and income protection can make decisions with less fear.

A household with reliable water and sanitation gains time, health, and dignity.

A community protected from repeated disaster can invest in its future.

This is why Part I precedes the later discussion of capability and equality.

Freedom requires more than formal opportunity.

It requires a secure base from which to use opportunity.

Responsibility for Security

Human security is often presented as a matter of personal effort.

Individuals are expected to work, save, eat well, maintain health, and prepare for emergencies.

Personal action matters.

But the conditions of security are shaped by systems beyond individual control.

Wages, food prices, healthcare financing, water infrastructure, land rights, housing markets, social protection, taxation, and disaster preparedness are institutional decisions.

A household cannot independently build a public-health system.

A worker cannot alone determine labor protections or wage standards.

A farmer cannot control climate, input prices, global markets, or water governance.

A low-income community cannot absorb unlimited environmental and economic risk through resilience training alone.

Responsibility must therefore follow system-shaping power.

Governments carry responsibility for rights, public services, regulation, redistribution, and protection.

Employers influence income, safety, working time, and social insurance.

Utilities and service providers determine reliability and affordability.

Financial institutions influence debt and access to capital.

International institutions shape finance, trade, food systems, and crisis response.

Communities and individuals contribute to security, but they should not be asked to compensate for institutional failure.

From Minimum Provision to Security Architecture

A narrow approach asks whether people receive a minimum quantity of income, calories, medical services, or water.

A systems approach asks whether the institutions surrounding those resources create reliable security.

This distinction matters.

A household may receive temporary income support while rent and debt continue rising.

Food may be available nationally while nutritious diets remain unaffordable.

A clinic may exist while staff, medicine, transport, or continuity of care remain inadequate.

Water infrastructure may be constructed while maintenance and watershed protection are neglected.

Human security should therefore be understood as an architecture.

That architecture includes:

- universal access to essential services;
- social protection;
- fair and secure income;
- public-health capacity;
- food-system resilience;
- reliable water and sanitation;
- affordable housing;
- disaster preparedness;
- and institutions capable of responding before shocks become crises.

The strength of the architecture is determined by its weakest connections.

One System, Four Entry Points

The four chapters in Part I examine different entry points into the same system.

SDG 1 — No Poverty

Poverty is examined not only as insufficient income, but as exposure to cumulative risk, weak assets, debt, and inadequate social protection.

SDG 2 — Zero Hunger

Hunger is examined through food access, nutrition, agricultural livelihoods, ecological resilience, markets, and the power shaping food systems.

SDG 3 — Good Health and Well-Being

Health is examined as an outcome of healthcare, living conditions, work, environment, prevention, and social protection.

SDG 6 — Clean Water and Sanitation

Water and sanitation are examined as public-health foundations, essential services, ecological systems, and questions of affordability and governance.

Each goal has its own institutions and policy mechanisms.

But none can be achieved securely in isolation.

How can societies build a foundation of security strong enough that poverty, hunger, illness, and water insecurity no longer reinforce one another?

This question requires attention to immediate need.

People facing hunger, illness, unsafe water, or severe poverty cannot wait for long-term system reform.

Relief, treatment, emergency support, and service provision are essential.

But emergency response should not become the permanent design of the system.

The deeper task is to prevent insecurity from being reproduced.

That means moving through three levels of action:

protect now

→ respond to urgent deprivation and prevent irreversible harm;

reform institutions

→ improve access, affordability, reliability, and social protection;

change structurally

→ redesign the economic, public-service, and ecological systems that repeatedly produce insecurity.

Poverty is the first entry point because it exposes how insecurity accumulates.

It affects what people can eat, where they can live, whether they can seek healthcare, how they access water and energy, and whether they can recover from crisis.

But poverty is not simply the absence of money.

It is a condition in which people have insufficient protection against systems they do not control.

SDG 1 therefore begins with a deeper question:

What would it mean to move beyond temporary poverty reduction toward a system in which people possess the income, services, assets, rights, and resilience required for lasting security?

SDG 1: No Poverty

Chapter 1: Poverty as the Loss of Security, Choice, and Voice

1. Why This Goal Matters Now

A household may appear financially stable until one event changes everything: a serious illness, a lost job, a failed harvest, an unexpected rent increase, a flood, or a period of rapidly rising food prices. Income disappears, savings are exhausted, bills accumulate, and choices narrow. Healthcare is postponed. A child's education is interrupted. Safer housing becomes unaffordable. Work must be accepted on whatever terms are available.

Poverty often begins, or deepens, not with a complete absence of effort, but with the absence of protection when life becomes unstable.

This is why poverty cannot be understood only as a low number on an income statement. It is also the condition of living without sufficient room for error. People with financial assets, secure employment, insurance, accessible public services, and supportive networks can absorb a shock. Those without such protections may be pushed into debt, displacement, hunger, or unsafe work by the same event.

The urgency of SDG 1 has increased as multiple risks converge. Climate hazards destroy homes and livelihoods. Conflict displaces communities and fragments institutions. Inflation erodes household purchasing power. Digital transformation creates new opportunities while excluding people without connectivity, skills, or legal identity. Population aging expands the need for income security and care, while informal and precarious employment leaves many workers outside contributory protection.

Global poverty has declined dramatically over the longer term, but the pace of improvement has slowed sharply. Using the World Bank's updated international poverty line of \$3.00 per person per day in 2021 purchasing power parity terms, roughly one person in ten still lives in extreme poverty. The March 2026 update estimated that 847 million people were living below this line in 2024. Extreme poverty is increasingly concentrated in sub-Saharan Africa and in places affected by fragility and conflict.

SDG 1 therefore asks more than whether incomes can rise. It asks whether societies can build enough security beneath every life that a crisis does not automatically become a catastrophe.

2. What the Goal Actually Means

SDG 1 calls for an end to poverty in all its forms everywhere. The phrase **“in all its forms”** is essential.

Extreme income poverty remains one of those forms, but it is not the only one. Poverty may also involve inadequate housing, unsafe water, poor nutrition, interrupted education, inaccessible healthcare, insecure land tenure, lack of electricity, exclusion from financial services, weak social protection, and limited influence over decisions that shape one's life.

The 2025 Global Multidimensional Poverty Index illustrates this wider reality. It estimates that 1.1 billion of the 6.3 billion people covered by the index experience acute multidimensional poverty. More than half are children. Common deprivations include inadequate housing, sanitation, clean cooking fuel, electricity, nutrition, and school attendance.

Poverty is therefore both a **material condition** and a **distribution of vulnerability**.

Two households with similar current incomes may face very different futures. One may have secure housing, public healthcare, reliable transport, savings, and legal protection. The other may depend on irregular work, informal debt, expensive private services, and housing exposed to disaster. Income alone may not reveal the difference, but the next crisis will.

SDG 1, consequently, includes more than just raising earnings. It concerns social protection, equal access to economic resources, basic services, resilience to climate-related and other shocks, and policies that prevent people from repeatedly falling back into deprivation.

It also concerns voice.

People living in poverty are frequently treated as beneficiaries of policies designed elsewhere. Yet they often possess the clearest knowledge of administrative barriers, informal costs, discriminatory routines, unsafe environments, and gaps between official provision and lived reality. A poverty strategy that excludes their experience may expand programs while leaving the most important obstacles untouched.

The meaning of SDG 1 can therefore be expressed through four connected conditions:

- **Security:** protection against shocks that can destroy a household's stability
- **Choice:** the ability to make decisions without constant coercion by scarcity
- **Voice:** meaningful participation in institutions and decisions
- **Capability:** real access to the conditions required to learn, work, care, and develop

Ending poverty does not mean making every life economically identical. It means preventing unequal starting points and ordinary misfortune from becoming permanent exclusions from dignity and opportunity.

3. Global Progress and Reversal

The global reduction of extreme poverty since 1990 is one of the most significant development achievements of the modern era. The World Bank estimates that the number of people living in extreme poverty declined from approximately 2.3 billion in 1990 to about 831 million in 2025. Much of this progress was associated with broad-based economic