



Cooperative Sustainable **Development**

A Geostrategic Band-Aid to **Energy Insecurity**

RS Aswani Shambhu Sajith

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RS Aswani · Shambhu Sajith

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A Geostrategic Band-Aid to Energy Insecurity



RS Aswani School of Liberal Studies UPES Dehradun, India Shambhu Sajith Centre for Continuing Education UPES Dehradun, India

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FOREWORD

As humanity confronts unprecedented global challenges, the imperative for sustainable development has never been more urgent. Rapid urbanisation, climate change, and socio-economic disparities are issues that impact people everywhere, especially the world's poor and vulnerable populations. In this critical era, innovative solutions rooted in cooperation are paramount.

It is with great enthusiasm that I introduce this seminal work on cooperative sustainable development by Aswani and Shambhu. Throughout my journey as the Founder of KiiT—Kalinga Institute of Industrial Technology and KiSS—Kalinga Institute of Social Sciences and as a former Member of Parliament, I have been a passionate advocate for sustainable development that harmonises human progress with environmental preservation. In this pursuit, I have come to understand that real progress can only be achieved through cooperation and collaboration that transcends national boundaries.

This book makes a vital contribution to the discourse on sustainable development. It introduces a new paradigm that emphasises the essential role of SDG 17—revitalising the global partnership for sustainable development—as the linchpin for achieving all the other Sustainable Development Goals. Employing the Cooperative Sustainable Development (CSD) model, the authors cogently argue that the complex challenges we face require a comprehensive approach harnessing the collective wisdom and efforts of all stakeholders.

Notably, they recommend synergising SDG 7 (affordable and clean energy), SDG 13 (climate action), and SDG 17 to address the critical issue of energy security. This synergistic framework forms the foundation of the CSD model presented in the book. What sets this work apart is its steadfast focus on the transformative power of cooperation and collaboration. In a world too often marred by division and discord, the authors compellingly remind us of the immense potential inherent in partnership. Through real-world examples and case studies, they vividly illustrate how cooperation between governments, businesses, civil society, and communities can catalyse positive change and propel us towards a truly sustainable future.

As part of the SDG series, this book represents a milestone, introducing a refreshing paradigm that underscores the indispensable role of cooperation in attaining the Sustainable Development Goals. It echoes the timeless African wisdom: "If you want to go fast, go alone. If you want to go far, go together." By embracing the ethos of cooperative sustainable development, we enhance our collective resilience and pave the way for a more just, prosperous, and sustainable world for generations to come. I wholeheartedly commend this book to all who are passionate about effecting meaningful change. May it serve as a beacon, inspiring and guiding our shared journey towards a better future for humanity and our planet.

Bhubaneswar, Odisha, India April 2024 Prof. (Dr.) Achyuta Samanta

PREFACE

Given the pressing environmental challenges and inequalities, the pursuit of sustainable development has become a symbol of optimism for our future. However, as we approach a time of global transformation with only five years left to achieve these goals, it's critical to consider the path ahead towards realising the Sustainable Development Goals (SDGs). Building global partnerships and cooperation, as emphasised by SDG 17, is essential not only for achieving the SDGs but also for fostering peace and prosperity on our planet. Cooperation is the key to realising these global aspirations.

This book explores the interconnection of three global goals: SDG 7 (clean energy), SDG 13 (climate action), and SDG 17 (partnerships). It advocates for more such synergies and trade-offs among various SDGs. It is important to acknowledge SDG 17 as the most significant of all SDGs, as its disregard is the leading cause of not accomplishing even half of our targets despite ten years of working on SDGs.

The Indo-Pacific region, an emerging geopolitical hotspot of global politics, is the focus of this book. The book examines the various dimensions of sustainability, renewable energy transition, climate change adaptation, and geopolitics in the region. Its objective is to provide a comprehensive understanding of the geopolitics of energy and climate in the Indo-Pacific by introducing the unique concept of 'Cooperative Sustainable Development'. This approach views earth's resources through the prism of geopolitics and political great games. The book advocates

for cooperation among all stakeholders—government, civil society, and private players—to achieve the United Nations SDGs.

However, this book utilises the latest research and case studies from around the world, not just limited to the Indo-Pacific, to demonstrate the complex interplay between geopolitics, climate, energy policies, and exploring synergies between SDGs using a systems thinking approach. Whether you are a scholar, climate activist, policymaker, or a concerned global citizen, this book offers a journey through the intricate tapestry of sustainable development in the Indo-Pacific. With a blend of theory, policy, data, inquiry, and prognosis, this book provides a comprehensive perspective on sustainable development.

The world is interconnected, and this book serves as evidence of that fact. It reminds us that achieving our goals through global cooperation is intricately intertwined with geopolitics. The book calls on policymakers, practitioners, scholars, and citizens to adopt the Cooperative Sustainable Development model of thinking and explore the synergies that exist between the SDGs. By doing so, we can build resilience, foster hope, and promote environmental stewardship, leading us towards a better future.

Together, we must draw upon the collective wisdom of humanity to address the unprecedented challenges we face in the world today. It is our responsibility to ensure a sustainable and just future for all. We have come a long way from our ape-like ancestors through our ability to reason and cooperate for the greater good. We have not weathered wars, revolutions, pandemics, famines, and catastrophes to be consumed by the biggest threat to modern humanity-climate change! Fossil fuels are responsible for approximately 65 per cent of carbon emissions, and it is imperative that we work together in a sustainable and cooperative manner to transition to clean and green energy sources worldwide. This collaboration between stakeholders can help address climate change and build synergy between SDG 7, 13, and 17. It is also possible to find synergies between other SDGs, making the Cooperative Sustainable Development model a valuable resource for creative solutions to ensure the future of our planet and our species. Let us join hands to create a green and clean planet, marked by cooperation rather than conflict.

May this book be a beacon of hope in our shared pursuit of a greener, cleaner, more peaceful, and sustainable planet.

Dehradun, India

RS Aswani Shambhu Sajith

ACKNOWLEDGEMENTS

This book is the culmination of years of our passionate work in developing the concept of cooperative sustainable development (CSD). The idea first took root in 2021 as we analysed the geopolitical turmoil in the Indo-Pacific region and the need for a counterbalancing strategy. Publishing four research papers on CSD cemented our belief that this model deserved an expanded volume to fully conceptualise it.

But unlike the research papers, writing an entire book demanded a resilience that often felt superhuman. We faced countless sleepless nights, hunched over our laptops, fuelled only by the glow of the screens and our dogged belief in this purpose. Mornings would come too soon, our bodies weary but our spirits lifted by the progress of the previous night's work.

This is our firstborn child in the literary world, and like all firsts, it will forever hold a sacred place in our hearts. We poured our sincerest hope into these pages—that they may spark thoughts, ignite discussions, and help nudge the world, even if just a tiny bit, towards a better place. But we cannot claim full ownership of this work. It belongs equally to our loved ones who buttressed us every step of the way.

The scenic foothills of the lower Himalayas that embrace our work-place, (UPES) provided a restorative backdrop during moments of doubt. Our colleagues transcended the title, becoming an extension of our family, celebrating each tiny victory and drying our tears after set-backs. You know who you are.

Our parents—Sreedevi, Sylaja, and Sajith—their eternal love and support were the wind at our backs, propelling us forward. Our siblings—Gokul, Rashmi, Devika, and Arvind—cheered us on relentlessly. And our dearest Achu showered us with Swiggy deliveries during the inevitable writing binges.

Most importantly, we have each other to thank. For being the shoulder to lean on when the other felt like crumbling under the weight of it all. For stoking the belief in our shared vision when doubts crept in. For loving each other undyingly.

This book is a testament to our partnership of mind and heart. May it continue to inspire us.

With eternal gratitude,

RS Aswani Shambhu Sajith

Introduction

Humanity faces multiple existential crises, leaving us with limited options. However, one option stands out as particularly powerful: cooperation, signified through trust and mutual benefit. These values have underpinned human civilisation and driven significant advancements in science and technology. Unfortunately, we seem to have lost the ability to maintain these values over time. After a brief period of peace following the Cold War, the Indo-Pacific was hit with the threat of terrorism and later with the rise of China. Although the region's growth was remarkable, it was met with disapproval by the occidental world. Currently, if we are concerned about the rise of China, we must also address the rising issue of conventional warfare.

The peace that prevailed in the late 90s ensured that the world would not be dragged into another catastrophic war. However, tensions are mounting in the South China Sea. China's territorial claims could lead to conflicts with neighbouring countries like the Philippines, Vietnam, or Indonesia. China's powerful naval force could initiate a conventional war as devastating as the Pacific battle during World War II. The weapons used in modern warfare are more precise and advanced, and the infrastructure is more complex and vulnerable to air strikes and torpedoes. The ongoing war in Ukraine is a prime example of how a strong military, sophisticated weaponry, and an autocratic political system can lead to a prolonged conflict. In the Middle East, wars are still fought based on religious beliefs. Russia, China, and Israel are all nuclear states, and they

can potentially use their nuclear power to intimidate weaker countries. However, attacking another nuclear state could lead to a catastrophic nuclear winter. A full-scale attack could trigger escalation—nuclear war, leading to massive retaliation and the destruction of both countries. The mushroom cloud could form a layer above the stratosphere, blocking the sun's rays and contaminating the drinking water. The death toll would be unimaginable, and the radiation fallout would make everything inedible. The nuclear winter would shrink the population, and future generations' health would be at-risk. Nuclear winter—fuelled by conventional warfare, could be the most glaring risk that humanity of the twenty-first century would face.

Climate change is a topic that is being discussed at length in recent times. The Industrial Revolution brought about the rise of megacities, improved lifestyles, and a significant increase in the human population, now reaching eight billion. However, one cannot choose to look the other way and ignore humanity's obliteration of the environment. In that case, nature will ensure that we face the consequences in the form of wildfires, tropical storms, floods, heat waves, rising sea levels, and droughts. The losses due to climate change are mounting. Still, this is seen as a good thing for a capitalist economy—because rebuilding is an exercise that increases the Gross Domestic Product of every economy. However, for less developed countries, this is a different story. Rebuilding is not a viable option, and they are forced to abandon their homes and communities. These countries are most affected by climate change, and they have little to no role to play in the emissions that trigger the catastrophes. Mitigation and adaptation efforts require significant investments, which are lacking in these vulnerable communities. Developed nations, the historical emitters, are responsible for stepping up and making mitigation and adaptation efforts possible. Unfortunately, only a fraction of the pledged funds have reached these countries, and most of it has been in the form of loans, pushing economically backward countries into debt and a debt

Hence, Climate change is no longer an issue centred in a handful of countries; it is a global issue that affects everyone. The extinction rate due to climate change is increasing at an alarming rate. By 2100, at 2 degrees Celsius, 18 per cent of all species on earth face a high risk of extinction. Countries need to find more loss and damage funds to save our species and the fellow species with whom we share this planet. The idea that a catastrophe can be a GDP multiplier should be discarded. Instead,

measures should be implemented where GDP declines as catastrophes hit. This would catch the attention of governments and encourage them to take action.

Autocratic leaders are ruling many countries worldwide, outnumbering the existing democracies. The concept of liberal democracy is fading away, leaving behind a mere shadow of its former self. In 2024, more than 80 elections are expected to occur, with the United States presidential election being the most significant event of the year, testing the strength of democracy. A potential second term for Donald Trump can seriously affect democracy, leading to a dangerous rift in the United States. It may fuel the rise of far-right sentiments or authoritarianism. On the other hand, Joe Biden's proposed Inflation Reduction Act offers hope for effective mitigation efforts. However, if Trump wins again, the act may be scrapped to favour coal jobs and the exploration of new oil and gas wells. This could prompt the United States, the world's second-largest and historical emitter, to distance itself from the global energy transition and isolate itself from the rest.

This shift towards sustainable energy calls for critical minerals such as lithium, nickel, copper, zinc, cobalt, manganese, and rare-earth materials. These minerals are concentrated in a few countries, and every nation worldwide needs them for the energy transition. Predictions suggest that by 2050, the demand for lithium will reach an unprecedented 60 million metric tonnes, which is over ten times the current annual production. Cobalt production is also expected to double by 2050 compared to 2020. These minerals are vital in powering battery storage systems, solar panels, wind turbines, and magnets.

There is a growing concern about China's monopoly on refining rare-earth materials. If left unchecked, China could dictate the terms of the global energy transition, setting prices, and deciding whether to export finished goods or refined raw materials. This fear has prompted Western countries to explore reshoring, near-shoring, and friend-shoring options. Vietnam, which boasts substantial rare-earth deposits and a favourable investment climate, could greatly benefit from the de-risking of China policy. Vietnam's cooperation with India, Australia, and the United States looks promising. On the other hand, China is moving away from the philosophy of the finished good and focusing on intermediate and specialised machinery. These specialised machines are pivotal for Vietnam to produce the finished goods the West requires. Therefore, China needs

Vietnam, the West needs Vietnam, and Vietnam needs every country. This could be the start of much-needed cooperation.

The Suez Canal, the Strait of Malacca, the Panama Canal, and the Strait of Hormuz are critical locations for global trade. As the world transitions, energy goods must pass through these choke points. Any blockage of these routes could cause tensions that may escalate into wars. In 2021, the *Ever Given* ship blocked the Suez Canal recently, stopping global trade for six days. This incident highlights how interconnected our world is and how a single event could affect people on the other side. The possibility of multiple naval ships deliberately blocking world trade is not far-fetched. If this happens, the energy transition will be in jeopardy, and economic engines will halt. Poverty could come back in most countries, undoing all the progress made in the last century.

The pandemic has forced the world to rely on quantitative easing to keep the economy running. However, a year later, the aftereffect of this policy was felt in the form of inflation. Consequently, the interest rate had to be raised to reduce it. This has led to a new set of problems. For instance, countries manufacturing solar panels and wind turbines have reduced the quantity produced, waiting for the interest rate to dip to make more profit. This reduction in supply could lead to a shortage of solar panels, wind turbines, and battery storage systems, which are essential for the energy transition. Without a consistent supply of these resources, governments may resort to less environmentally friendly options. Meanwhile, China is facing severe deflation, which has resulted in the construction of ghost skyscrapers. These abandoned buildings are examples of a lack of money among the public. China's economy is slowing down after years of fast growth.

The world's population surpassed 8 billion in the year 2023. Nonetheless, the world is rapidly ageing, with fewer children being born per woman, causing the population to shrink. Countries like Japan, Italy, and South Korea have a median age of 49.1, 46.4, and 42.8, respectively. This demographic shift has resulted in more expenses on healthcare and support for older people, which the government has to bear. However, some countries like India, Pakistan, and Nigeria have a demographic advantage, which they could use to benefit. These countries can provide a skilled workforce to other countries struggling to meet their employment requirements. This would allow more people to contribute to the

economy, pay taxes, and enable governments to utilise the funds for support systems and healthcare.

As we enter an era of Artificial Intelligence (AI), the widespread use of this technology poses a threat to the stability of our society. While AI has the potential to create new job opportunities, it could also eliminate many existing jobs and widen the economic gap between developed and developing nations. This could lead to a significant imbalance in wealth and knowledge, making the entire democratic system meaningless. If AI could do all the necessary work to keep politicians in power, they would have little incentive to invest in social capital, giving citizens even less power in the system. The race for AI dominance between the United States and China is shrouded in secrecy, with both sides engaging in espionage to gain access to breakthroughs and sabotage their competitors' infrastructure.

In this new world, we can expect all the pressing issues addressed above, including the threat of a nuclear winter brought on by World War III. The key to survival lies in one word: cooperation. By working together, we can achieve a future of sustainable development that powers wind farms, ends poverty, and ends the curse of oil. We can easily export green hydrogen from South America to the Middle East and see Chinese solar panels enter the United States duty-free. With cooperation, we can usher in a new era of peace, stability, and harmony and create a world where global warming is reversed, and humans live sustainably, peacefully, and contentedly in the year 3024.

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CHAPTER 1

Theorising Cooperative Sustainable Development

In September 2015, the United Nations made a landmark decision to embrace the Sustainable Development Goals as a universal call for building a sustainable future for our planet. These goals are 17 in number and are designed to balance social, economic, and environmental sustainability. They have replaced the Millennium Development Goals (MDGs) introduced in 2000 with a 15-year vision to tackle poverty globally. The MDGs (2000–2015) addressed various development issues. They set specific targets for reducing poverty and hunger, providing elementary education and preventing deadly illnesses. These targets were agreed upon by countries worldwide, and governments and organisations across the globe were working together to achieve them. However, one of the most significant shortcomings of the MDGs was their failure to critically analyse the underlying reasons for both the continually high levels of regional inequality in categories like global poverty, infrastructure, food security, employment, and education within the Global South, as well as between the Global South and North. The MDGs were explicitly designed for developing countries. They failed to consider how development initiatives carried out or mandated by financial institutions and governments in the North would affect the South.

The Sustainable Development Goals (2015) were established to overcome these shortcomings and to improve the global sustainability

framework through Agenda 2030, i.e., achieving 17 goals in 15 years. However, with the deadline looming, there is a growing concern about whether we are making enough progress towards achieving these goals. As we approach 2024, we are yet to reach even halfway towards the target, indicating that notable efforts are still required to accomplish the SDGs within the designated time frame. Several studies have shown that the progress towards achieving the SDGs has stopped, and the efforts to meet the 2030 deadline are not as promising as they should be. A closer look reveals that one of the primary reasons behind the SDGs' failure is the lack of cooperation and collaboration among numerous stakeholders, including governments, private sector units, civil society groups, and individuals. The SDGs are a complex and interconnected set of goals that require the collective effort of all stakeholders to enhance their effectiveness. To achieve these goals, there is a need to recognise the significance of cooperation and work together towards a common goal. This calls for a coordinated effort fostering mutual trust, shared responsibility, and collaborative action to address today's world's challenges. Only through this approach can we create a more sustainable future for all [1].

The European Union is known for being a leader in setting standards. Hence, it is rightly called the "Superpower of Norms". They have earned this reputation through various measures, such as implementing the Carbon Border Adjustment Mechanism, which imposes a penalty/ price on carbon-intensive goods entering Europe. These steps advance cleaner energy generation in non-EU countries through tariffs on carbonintensive products like electricity and cement, which may also decrease imports from countries like India and China. How ready are the developing countries to align to EU's "super norms" when this is the era of development for them—Countries like India are actively seeking to advance their manufacturing industry through campaigns such as the Make in India, cement and steel production is the backbone of the manufacturing industry. In international politics, sending solid messages with immediate and significant consequences is essential. However, the EU's Carbon Border Adjustment Mechanism (CBAM) is not a cooperative sustainable development model and can be classified as counterproductive to the goal of sustainable development. It neither gives space nor time for non-EU countries to transition to sustainable options. Similarly, due to abrupt decisions and lack of preparedness, Sri Lanka's decision to promote sustainability by banning chemical fertilizers hit a roadblock.

Focusing on SDG 17—"Partnerships for the Goals" is essential to achieve the United Nations' Sustainable Development Goals successfully. This target highlights how important it is for governments, private actors, civil society groups, and other stakeholders to cooperate to promote innovation, information exchange, and resource mobilisation to achieve the SDGs. The objective is to improve the implementation methods and revive global collaboration to achieve sustainable development. Thus, establishing global and regional collaborations is essential to accomplishing the SDGs. SDG 17 should be the foundation of all bilateral and multilateral relations. By working together, we can power each other's strengths and expertise to accelerate progress towards a sustainable and equitable future for all. Let us consider the case of China's expanding influence in Asia, which has disturbed the existing balance of power in the region, highlighting the opportunity to implement SDG 17, as it promotes cooperation and partnership for sustainable development.

The Belt and Road Initiative has completed ten years of existence. However, the geopolitical implications of this initiative have been damaging the balance of power in the continent. The negative impacts of debt traps and hidden military usage of facilities have increased the security dilemma of smaller regional powers. This has driven them to join alliances that are either pro or anti-China. As a major power with the largest economy and the largest democracy in the region, India must act to restore the balance. According to the Balance of Power concept, "states cooperate to maintain equilibrium" in the global order [2]. China's military alliances with Pakistan create geopolitical risks in Asia, upsetting this very existing balance of power system. To maintain peace in the region and avoid any war, India needs to act by counterbalancing China in its periphery [3]. For example, India engages with Vietnam to counter China's renewed friendship with Pakistan. Vietnam has been quietly enduring China's forceful tactics and its various methods of expansion. These include the mismanagement of Mekong River water, attacks on Vietnamese fishermen, and claims over its EEZ (Exclusive Economic Zones).

India's search for a trusted partner in China's fringe region ends with Vietnam. India and Vietnam share a common historical and cultural heritage, and both countries have been at the receiving end of China's hegemonic tactics and globe-trotting strategy. Therefore, they are natural partners in the Indo-Pacific region. By promoting sustainable trade practices without restrictions and trade barriers and investing in new and

renewable energy, this bilateral relationship can become a model for SDG 17—partnering with one another to move forward on sustainable practices. Unlike the EU's CBAM, this Cooperative Sustainable Development model envisions both countries as equal partners. It is a partnership where both countries collaborate without imposing their norms on each other.

Other countries can replicate this Cooperative Sustainable Development model to create an ideal standard for bilateral relationships. The underlying idea in this model is that as one country progresses and grows, so does the partnering country. The message conveyed is that Cooperative Sustainable Development is interdependent and mutually beneficial. Countries invest in green trade, transportation, technology, and renewable energy and build partnerships. Imagine a scenario where India and Vietnam strengthen their bilateral partnership based on UN SDG 17 to promote sustainable development. Both countries collaborate to address greenhouse gas emissions and bilateral trade, aiding each other in achieving climate goals by 2050. This is the basis of Cooperative Sustainable Development—the future of SDGs.

In trade, there can be no "other." Everyone involved in a trade transaction should be considered equal partners with mutual benefits. Trade drives the global economy forward by fostering connections between individuals, communities, and civilizations. In today's globalised world, it's nearly impossible to separate economies. Therefore, a subtle push similar to the CBDM of the European Union is necessary. However, adequate climate funding and cooperation based on trust in emerging economies must be balanced. Those low-income developing countries that could not meet sustainability standards should be given time, space, and resources to green their economy and cooperate without being ostracised. Encouraging alignment with the SDGs can be accomplished via climate financing.

ENERGY SECURITY VS ENERGY INSECURITY

The concept of energy security has been widely discussed in academic and policy circles, but there is no consensus on its precise definition. The definition of energy security varies depending on several factors, such as whose security we are discussing—national, regional, or global and what qualifies as energy insecurity—resource depletion, geopolitical conflicts, price volatility, or environmental damages.

Generally, energy security is defined as having an uninterrupted availability of energy sources at an affordable price. However, this broad definition can be interpreted differently based on the context and perspectives. There is a lack of agreement on a universal definition because energy security is a multidimensional concept encompassing various economic, environmental, social, and political considerations. It means different things to stakeholders based on their unique circumstances, priorities, and vulnerabilities.

Reaching a consensus on a comprehensive and widely accepted definition of energy security remains a challenge, as it involves balancing and reconciling the diverse interests and concerns of nations, industries, communities, and individuals regarding their energy needs, risks, and aspirations for a secure and sustainable energy future. However, energy insecurity is a pressing concern across various levels, from global and regional to national, local, and household. It is a multifaceted challenge requiring a nuanced understanding of stakeholders' diverse strategies and priorities to achieve energy security and mitigate insecurity. This book looks into these complex dynamics, comprehensively analysing the various approaches adopted by different entities while proposing a cooperative, sustainable model as a governance solution.

During the past decade, concerns about energy security have resurged in major developed democracies like Britain, France, Germany, Japan, and the United States to levels not seen since the 1970s oil shocks. Unlike in the earlier period when high oil prices and uncertain supplies were the primary worries, recent energy security fears have been more diverse. This has prompted each of these countries to conduct major reviews of their energy policies and initiate significant changes. Reminiscing on the 1970s, there have also been proposals for increased international cooperation to bolster energy security, mainly through organisations like the International Energy Agency (IEA), NATO, and the European Union (EU).

In the context of ASEAN and South Asia, the energy security landscape is shaped by many factors, including rapid urbanisation, rising energy demands, and balancing economic growth with environmental sustainability. These regions are home to some of the world's fastest-growing economies and burgeoning populations, which inevitably translate into escalating energy requirements. Within ASEAN, countries like Singapore and Malaysia have prioritised diversifying their energy mix by investing in renewable energy sources, such as solar and wind power. This strategy

aims to reduce their reliance on imported fossil fuels and aligns with their commitments to mitigate climate change. On the other hand, nations like Indonesia and Vietnam, rich in coal reserves, have focused on exploiting these resources to meet their energy needs, albeit with growing concerns about environmental implications.

India's energy security strategy in South Asia has been multifaceted, from expanding its nuclear power capabilities to exploring alternative sources like biofuels and hydrogen. The country's ambitious renewable energy targets and initiatives, such as the International Solar Alliance, reflect its commitment to sustainable energy solutions. Meanwhile, Pakistan has grappled with chronic energy shortages, prompting efforts to diversify its energy mix through initiatives like the China-Pakistan Economic Corridor (CPEC), which includes the development of coal-fired power plants and renewable energy projects.

Energy security has emerged as a critical issue in international relations due to rapid increases in energy prices and demand, concerns over potential resource depletion, and the social and political impacts of global warming. In the Asian region, energy security has been an increasing concern over the past decades, driven by the high economic growth rates and rising living standards of developing and emerging economies. Rapid population growth and urbanisation in Asia have also contributed to the region's surging energy demand, particularly for oil in countries like China and India.

This book analyses these diverse strategies and priorities, highlighting the need for a cooperative, sustainable model that fosters collaboration among nations, sectors, and stakeholders. By promoting partnerships and knowledge sharing, this model aims to address energy insecurity holistically, accounting for economic, environmental, and social considerations. It recognises that energy security is not just a national or regional concern but a global imperative that requires collective action and cooperation. Through case studies and in-depth analyses, the book explores potential governance solutions that leverage the strengths and resources of various stakeholders, from governments and international organisations to private enterprises and local communities. By fostering synergies and promoting sustainable practices, the cooperative sustainable model seeks to achieve energy security while minimising environmental impacts and promoting equitable access to energy resources.

Anarchy and International Cooperation

Security institutions like alliances, cooperations, etc., play a central role in shaping patterns of conflict and cooperation in international politics but are often overlooked by International Relations (IR) scholars who focus narrowly on anarchic institutions, which creates selection biases that weaken causal inferences about the effects of institutions. Institutions like the United Nations (UN) can tap into the flexible, locally grounded, and partnership-oriented nature of decentralised cooperation as a complementary mechanism to support capacity building, knowledge sharing, and multi-stakeholder collaboration for localising and achieving the Sustainable Development Goals (SDGs). These SDGs can be achieved by recognising local governments' vital role in decentralised cooperation, especially poverty eradication, reducing inequalities, promoting environmental sustainability, and strengthening local governance. This enables supra-national entities such as the UN to efficiently deliver services and drive regional development aligned with the SDGs.

The UN has been called upon to promote, facilitate, and mainstream cooperation for SDGs across its agencies and programmes. Cooperation for Sustainable Development has emerged as a robust framework for developing countries to cooperate through exchanging knowledge, skills, resources, and technical expertise to pursue shared capacity development objectives through dialogue, analysis, partnership building, knowledge brokering, and resource mobilisation to create an enabling environment for cooperation. There are increasing calls for the UN to strategically harness and institutionalise cooperation frameworks across its peace-making, peace-keeping, and peace-building mandates beyond just development cooperation.

International Cooperation: Insights from the Lens of IR Theories

The question of whether nations can work together for the betterment of all is a complex one with various interpretations and implications. The classical liberalists within IR (International Relations) theory argue that promoting cooperation and peace among nations can create a better world for everyone. This can also lead to positive developments within individual countries as they seek to promote peace and prosperity for their