Smart Villages And Smart Cities Nptel

An unflinching look at the aspiring city-builders of our smart, mobile, connected future. From Beijing to Boston, cities are deploying smart technology—sensors embedded in streets and subways, Wi-Fi broadcast airports and green spaces—to address the basic challenges faced by massive, interconnected metropolitan centers. In Smart Cities, Anthony M. Townsend documents this emerging futuristic landscape while considering the motivations, aspirations, and shortcomings of the key actors—entrepreneurs, mayors, philanthropists, and software developers—at work in shaping the new urban frontier.

This is an edited book based on the selected submissions made to the conference titled "International Conference in Smart Cities". The project provides an innovative and new approach to holistic management of cities physical, socio-economic, environmental, transportation and political assets across all domains, typically supported by ICT and open data.

The smart city is a driver of change, innovation, competitiveness, and networking for businesses and organizations based on the concept of the Sustainable Development Goals for the 2030 agenda. The importance of a new paradigm regarding the externalities of the environment, citizen welfare, and natural resources in cities as an impact of urban ecosystems is the main objective for sustainable development in cities through 2030. Smart Cities, Citizen Welfare, and the Implementation of Sustainable Development Goals provides innovative insights into the key developments and new trends associated with online challenges and opportunities in smart cities based on the concept of the Sustainable Development Goals. The content within this publication represents research encompassing corporate social responsibility, economic policy, and city planning. This book serves as a vital reference source for urban planners, policymakers, managers, entrepreneurs, graduate-level students, researchers, and academicians seeking coverage on topics centered on conceptual, technological, and design issues related to smart city development in Europe.

Increasing depopulation is causing huge problems for rural communities, leading to a reduction in services and infrastructure in areas with ageing populations. This book examines the concept of the Smart Village, an ICT-conscious integrated strategy which provides a sustainable solution to these problems, helping to revitalize rural areas.

Smart City Emergence

Smart Villages in the EU and Beyond

Affordable Housing for Smart Villages

The Smart Enough City

Handbook of Research on Implementation and Deployment of IoT Projects in Smart Cities

Digital Twin Technologies and Smart Cities

The International Conference on Emerging Trends in Engineering, Science and Technology (ICETEST) was held at the Government Engineering College, Thrissur, Kerala, India, from 18th to 20th January 2018, with the theme, “Society, Energy and Environment”, covering related topics in the areas of Civil Engineering, Mechanical Engineering, Electrical Engineering, Chemical Engineering, Electronics & Communication Engineering, Computer Science and Architecture. Conflict between energy and environment has been of global significance in recent years. Academic research needs to support the industry and society through socially and environmentally sustainable outcomes. ICETEST 2018 was organized with this specific objective. The conference provided a platform for researchers from different domains, to discuss and disseminate their findings. Outstanding speakers, faculties, and scholars from different parts of the world presented their research outcomes in modern technologies using sustainable technologies.

The scope of the conference includes (but not limited to) Computing, Electronics & Communications Engineering and other relevant aspects of engineering sciences applications

This book clarifies the smart city concept that is gaining application in Sub - Saharan Africa. It shows how the smart concept can be used to address problems that would be difficult and more expensive to solve using traditional techniques such as employment creation. This is done through elaboration of the African interpretation of smartness, using tools for smart solid waste management, e-governance, smart energy, and smart infrastructure. The case studies selected, and each chapter explain a different dimension of the smart city concept and offer innovative solutions to problems of rapid urbanization. It lays the theoretical foundation for further research on smart cities and rural areas in Africa.

The book about the Smart Village Movement. "On the Road to Mori proves that Solomon Darwin's vision of the Smart Village can become a reality for the more than 3 billion people living in rural villages all over the world. The Smart Village Movement will dramatically improve their lives and what Darwin calls their "happiness index". It will also, at the same time, enable corporations to find new and exciting markets - rural villages are by far biggest marketplace for innovative products and services. I hope you find Professor Darwin's book as inspiring and thought-provoking -- and in many ways eye-opening -- as I do."

Concepts and Developments

Creating Spaces for Technological, Social and Business Development

Smart Cities, Citizen Welfare, and the Implementation of Sustainable Development Goals

Proceedings of the National Conference on Sustainable Built Environment 2015

The Smart Village Concept : Examples from Poland

Case Studies, Current Trends, and Future Steps

Over the last years, soph ...

This book initiates a fresh discussion of affordability in rural housing set in the context of the rapidly shifting balance between rural and urban populations. It conceptualises affordability in rural housing along a spectrum that is interlaced with cultural and social values integral to rural livelihoods at both personal and community level. Developed around four intersecting themes: explaining houses and housing in rural settings; exploring affordability in the context of aspirations and vulnerability; rural development agendas involving housing and communities; and construction for resilience in rural communities, the book provides an overview of some of the little understood and sometimes counter-intuitive best practices on rural affordability and affordable housing that have emerged in developing economies over the last thirty years. Drawing on practice-based evidence this book presents innovative ideas for harnessing rural potential, and empowering rural communities with added affordability and progressive development in the context of housing and improved living standards. For a student aspiring to work in rural areas in developing countries it is an introduction to and map of some key solutions around the critical area of affordable housing For the rural development professional, it provides a map of a territory they rarely see because they are absorbed in a particular rural area or project For the academic looking to expand their activities into rural areas, especially in rural housing, it provides a handy introduction to a body of knowledge serving 47% of the world's population, and how this differs from urban practice For the policy makers, it provides a map for understanding the dynamics around rural affordability, growth potential and community aspirations helping them to devise appropriate intervention programs on rural housing and development

Smart Cities and the UN's SDGs explores how smart cities initiatives intersect with the global goal of making urbanization inclusive, resilient, and sustainable. Topics explored include digital governance, e-democracy, health care access, public-private partnerships, well-being, and more. Examining smart cities concepts, tools, strategies, and obstacles and their applicability to sustainability, the book exposes key structural problems that cities face and how the imperative of sustainability can bypass them. It shows how smart city technological innovation can boost citizens' well-being, serving as a key reference for those seeking to make sense of the issues and challenges of smart cities and SDGs. Includes numerous case studies from around the world Features interdisciplinary insights from academic and practitioner experts Offers an extensive literature review

This book is a comprehensive document visualizing the future of built environment from a multidisciplinary dimension, with special emphasis on the Indian scenario. The multidisciplinary focus would be helpful for the readers to cross-refer and understand others' perspectives. The text also includes case studies substantiating theoretical research. This method of composition helps the book to maintain rational balance among theory, research and its contextual application. The book comprises selected papers from the National Conference on Sustainable Built Environment. The chapters provide varied viewpoints on the core issues of urbanization and planning, especially in the economically diverse Indian market. This compilation would be of interest to students, researchers, professionals and policy makers.

Smart Cities for Technological and Social Innovation

Planning, Housing and Infrastructure for Smart Villages

Proceedings of the International Conference in Emerging Trends in Engineering, Science and Technology (ICETEST 2018), January 18-20, 2018, Thrissur, Kerala, India

Building the Future

Smart Cities: Big Data, Civic Hackers, and the Quest for a New Utopia

Wireless Sensor and Actuator Networks for Smart Cities

"This book examines the implementation and deployment aspects of smart Internet of Things projects in urban and rural areas. It covers a wide range of domain research such as smart transportation, waste management, health care, water distribution, and energy and power supply management in metropolitan cities and villages"--

This paper makes the case for smart policy development in Central, Eastern and South-Eastern Europe (CESEE). It uses EIB Investment Survey (EIBIS) 2017 results for CESEE cities to outline local infrastructure gaps and demonstrate the productivity and innovation gaps between CESEE cities and other EU cities. It discusses negative demographic trends in Central, Eastern and South-Eastern Europe, and evaluates capital and non-capital regional convergence in CESEE countries. Introducing a Smart Region Index, to allow the identification of gaps in CESEE regions compared with the EU, it also uses EIBIS to provide further conclusions on obstacles to investment for CESEE municipalities and highlights the importance of the use of EU funds.

Smart City Emergence: Cases from Around the World analyzes how smart cities are currently being conceptualized and implemented, examining the theoretical underpinnings and technologies that connect theory with tangible practice achievements. Using numerous cities from different regions around the globe, the book compares how smart cities of different sizes are evolving in different countries and continents. In addition, it examines the challenges cities face as they adopt the smart city concept, separating fact from fiction, with insights from scholars, government officials and vendors currently involved in smart city implementation. Utilizes a sound and systematic research methodology Includes a review of the latest research developments Contains, in each chapter, a brief summary of the case, an illustration of the theoretical context that lies behind the case, the case study itself, and conclusions showing learned outcomes Examines smart cities in relation to climate change, sustainability, natural disasters and community resiliency

Building the Future Machiavelli famously wrote, “ There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success than to take the lead in the introduction of a new order of things. ” That's what this book is about—innovation far more audacious than a new way to find a restaurant or a smart phone you can wear on your wrist. Amy C. Edmondson and Susan Salter Reynolds explore large-scale systemic innovation that calls for “ big teaming ” : intense collaboration between professions and industries with completely different mindsets. This demands leadership combining an expansive vision with deliberative incremental action—not an easy balance. To explore the kind of leadership required to build the future we need, Edmondson and Reynolds tell the story of Living PlanIT. This award-winning “ smart city ” start-up was launched with a breathtakingly ambitious goal: creating a showcase high-tech city

from scratch to pilot its software—quite literally setting out to build the future. This meant a joint effort spanning a truly disparate group of software entrepreneurs, real estate developers, city government officials, architects, construction companies, and technology corporations. By taking a close look at the work, norms, and values in each of these professional domains, we gain new insight into why teaming across fields is so challenging. And we get to know Living PlanIT's leaders, following them and their partners through cycles of hope, exhaustion, disillusionment, pragmatism, and renewal. There are powerful lessons here for anyone, in any industry, seeking to drive audacious innovation.

Mapping Political, Social and Economic Risks and Threats

Advances in Smart Cities

Approaches to Building a Smart Community

An Exploration through the Concept of the Digital Village

Cases From Around the World

Smart Villages of Tomorrow

This book is a printed edition of the Special Issue "Sustainable Smart Cities and Smart Villages Research" that was published in Sustainability

The transformation of rural areas and the broadly understood problems of their development have been the subject of scientific analyses and lively public debate for many years. The ongoing discussions stem from a reflection on the increased effectiveness of rural development policies and the search for new approaches to their programming at the local level. They are also the result of a growing feeling that it is necessary to achieve sustainable development objectives more effectively and reduce social and economic disparities between rural and urban areas. Among the emerging challenges in the last decade, the transition to an information society has come to the fore, however it should be stressed that the changes taking place are dependent on global technological and digital development. The fact that rural areas are inhabited by about one quarter of the European Union's population makes us aware of the importance of these changes in rural areas. In Poland, this proportion is much higher and amounts to 40%. Being aware of this fact, it may be assumed that adaptation to transformations cannot be treated as an opportunity, but as a necessity, as more and more activities are carried out in the virtual world. The importance of digital and communication technologies has been reinforced in recent months due to the COVID-19 pandemic, which has transferred some activities to the virtual sphere. Equipping rural populations with digital and communications skills will make it possible to "reduce" distance, thereby increasing accessibility to goods and services, especially public ones. In this context, information and communication technologies (ICT) are treated as an opportunity to overcome development-related difficulties. However, their use depends on access to the internet in a given area. Its lack or poor coverage in a particular area deprives it of the opportunities for development based on smart technologies or smart initiatives. As regards the local dimension, it is not only digital technologies that are growing in importance, but also activities aimed to improve broadly understood living conditions of rural residents, also on a micro scale. In these transformations, people and their skills are of unique value, and waiting passively for change does not make much sense. In this context technology can only be a tool, as human competences are becoming the major driver for the improvement of the standard of living and quality of life. Well-identified local human resources form the basis for social innovation, and consequently contribute to increased resilience of rural areas, allowing them to solve problems faced by local communities. The transition to an information society understood in this way has a significantly broader context than digital and communication technologies and comprises a range of social and agri-environmental issues.

This book constitutes the refereed proceedings of the 9th International Conference on Electronic Government and the Information Systems Perspective, EGOVIS 2020, held in Bratislava, Slovakia, in September 2020. The 15 full and one short papers presented were carefully reviewed and selected from 24 submissions. The papers are organized in the following topical sections: Knowledge representation and modeling in e-Government; e-Government theoretical background; E-Government cases - data and knowledge management; identity management and legal issues; artificial intelligence and machine learning in e-Government context.

This book provides a holistic perspective on Digital Twin (DT) technologies, and presents cutting-edge research in the field. It assesses the opportunities that DT can offer for smart cities, and covers the requirements for ensuring secure, safe and sustainable smart cities. Further, the book demonstrates that DT and its benefits with regard to: data visualisation, real-time data analytics, and learning leading to improved confidence in decision making; reasoning, monitoring and warning to support accurate diagnostics and prognostics; acting using edge control and what-if analysis; and connection with back-end business applications hold significant potential for applications in smart cities, by employing a wide range of sensory and data-acquisition systems in various parts of the urban infrastructure. The contributing authors reveal how and why DT technologies that are used for monitoring, visualising, diagnosing and predicting in real-time are vital to cities' sustainability and efficiency. The concepts outlined in the book represents a city together with all of its infrastructure elements, which communicate with each other in a complex manner. Moreover, securing Internet of Things (IoT) which is one of the key enablers of DT's is discussed in details and from various perspectives. The book offers an outstanding reference guide for practitioners and researchers in manufacturing, operations research and communications, who are considering digitising some of their assets and related services. It is also a valuable asset for graduate students and academics who are looking to identify research gaps and develop their own proposals for further research.

Putting Technology in Its Place to Reclaim Our Urban Future

Big Teaming for Audacious Innovation

Rethinking Security, Safety, Well-being and Happiness

Smart Village Technology

9th International Conference, EGOVIS 2020, Bratislava, Slovakia, September 14–17, 2020, Proceedings
Empowering Citizens through Intelligent Technologies

Smart Cities for Technological and Social Innovation establishes a key theoretical framework to understand the implementation and development of smart cities as innovation drivers, in terms of lasting impacts on productivity, livability and sustainability of specific initiatives. This framework is based on empirical analysis of 12 case studies, including pioneer projects from Europe, Asia, the Middle East, and more. It explores how successful smart cities initiatives nurture both technological and social innovation using a combination of regulatory governance and private agency. Typologies of smart city-making approaches are explored in depth. Integrative analysis identifies key success factors in establishing innovation relating to the effectiveness of social systems, institutional thickness, governance, the role of human capital, and streamlining funding of urban development projects. Cases from a range of geographie scales, social and economic contexts Explores how smart cities can promote technological and social innovation in terms of direct impacts on livability, productivity and sustainability Establishes an integrative framework based on empirical evidence to develop more innovative smart city initiatives Investigates the role of governments in coordinating, fostering and guid innovations resulting from smart city developments Interrogates the policies and governance structures which have been effective in supporting the development and deployment of smar cities

This book includes nine chapters presenting the outcome of research projects relevant to building, cities, and construction. A description of a smart city and the journey from conventional smart cities is discussed at the beginning of the book. Innovative case studies of underground cities and floating city bridges are presented in this book. BIM and GIS applications on diffe projects, and the concept of intelligent contract and virtual reality are discussed. Two concepts relevant to conventional buildings including private open spaces and place attachments are included, and these topics can be upgraded in the future by smart technologies.

There is ever more research on smart cities and new interdisciplinary approaches proposed on the study of smart cities. At the same time, problems pertinent to communities inhabiting r areas are being addressed, as part of discussions in contigious fields of research, be it environmental studies, sociology, or agriculture. Even if rural areas and countryside communities h previously been a subject of concern for robust policy frameworks, such as the European Union's Cohesion Policy and Common Agricultural Policy Arguably, the concept of 'the village' h been largely absent in the debate. As a result, when advances in sophisticated information and communication technology (ICT) led to the emergence of a rich body of research on smart cities, the application and usability of ICT in the context of a village has remained underdiscussed in the literature. Against this backdrop, this volume delivers on four objectives. It delinea the conceptual boundaries of the concept of 'smart village'. It highlights in which ways 'smart village' is distinct from 'smart city'. It examines in which ways smart cities research can enrich smart villages research. It sheds light on the smart village research agenda as it unfolds in European and global contexts.].

Become empowered to build and maintain smarter cities At its core, a smart city is a collection of technological responses to the growing demands, challenges, and complexities of impro the quality of life for billions of people now living in urban centers across the world. The movement to create smarter cities is still in its infancy, but ambitious and creative projects in all typ of cities—big and small—around the globe are beginning to make a big difference. New ideas, powered by technology, are positively changing how we move humans and products from place to another; create and distribute energy; manage waste; combat the climate crisis; build more energy efficient buildings; and improve basic city services through digitalization and th smart use of data. Inside this book you'll find out: What it really means to create smarter cities How our urban environments are being transformed Big ideas for improving the quality of lif for communities Guidance on how to create a smart city strategy The essential role of data in building better cities The major new technologies ready to make a difference in every comm Smart Cities For Dummies will give you the knowledge to understand this important topic in depth and be ready to be an agent of change in your community.

Emerging Trends in Engineering, Science and Technology for Society, Energy and Environment
Open Innovation Solutions for Emerging Markets
Sustainable Development in Rural Areas
Smart Cities: Issues and Challenges
From Poverty, Inequality to Smart City
Smart Cities and Construction Technologies

This book offers a transdisciplinary perspective on the concept of "smart villages" Written by an authoritative group of scholars, it discusses various aspects that are essential to fostering the development of successful smart villages. Presenting cutting-edge technologies, such as big data and the Internet-of-Things, and showing how they have been successfully applied to promote rural development, it also addresses important policy and sustainability issues. As such, this book offers a timely snapshot of the state-of-the-art in smart village research and practice.

This book brings together technical expertise, best practices, case studies and ground-level application of the ideas for empowering the rural population of the world to live economically prosperous, environmentally sustainable, and socially progressive lives, on par or comparable with the quality of life enjoyed by the global urban population. The idea of Smart Villages takes on greater urgency in light of the investments made in this millennium on "Smart Cities", taking advantage of the technological advances, particularly in digital connectivity. These investments have and will continue to expand the urban-rural divide, unless similar investments are made in the villages as well. The book provides a much-needed guide for a holistic development of a Smart Village, by defining the need, developing the framework, and describing the delivery, complete with

successful case studies. Contributors to the book, from Canada, USA, Africa and India bring years of academic, industry and governmental experience, including organization of several Smart Village conferences. The knowledge base in the book will be of great value to anyone interested in or active in rural planning, including governmental and non-governmental organizations, industrial solution providers, public healthcare professionals, public policy professionals and students, as well as rural communities around the world. Consolidates all the aspects of creating/developing a Smart Village; Delivers an effective tool-kit for practitioners in the area of Smart Villages; Provides a policy-based framework for the development of an ideal Smart Village; Illustrates, through case studies, the fulfillment of key requirements of a Smart Village; Brings together experts from around the world to share their vision of a Smart Village; Highlights the importance of balancing development with social/gender equity and cultural traditions.

The unique approaches proposed in this book are 'glocal' in character, as they draw on the experiences of South Africans to address the global issue of 'smart communities'. The book blends together social and technical aspects, and presents the experiences from a range of community practitioners, academics, architects and engineers.

Why technology is not an end in itself, and how cities can be "smart enough," using technology to promote democracy and equity. Smart cities, where technology is used to solve every problem, are hailed as futuristic urban utopias. We are promised that apps, algorithms, and artificial intelligence will relieve congestion, restore democracy, prevent crime, and improve public services. In The Smart Enough City, Ben Green warns against seeing the city only through the lens of technology; taking an exclusively technical view of urban life will lead to cities that appear smart but under the surface are rife with injustice and inequality. He proposes instead that cities strive to be "smart enough": to embrace technology as a powerful tool when used in conjunction with other forms of social change—but not to value technology as an end in itself. In a technology-centric smart city, self-driving cars have the run of downtown and force out pedestrians, civic engagement is limited to requesting services through an app, police use algorithms to justify and perpetuate racist practices, and governments and private companies surveil public space to control behavior. Green describes smart city efforts gone wrong but also smart enough alternatives, attainable with the help of technology but not reducible to technology: a livable city, a democratic city, a just city, a responsible city, and an innovative city. By recognizing the complexity of urban life rather than merely seeing the city as something to optimize, these Smart Enough Cities successfully incorporate technology into a holistic vision of justice and equity.

Smart Cities and Smart Communities

Electronic Government and the Information Systems Perspective

Smarter People, Governance, and Solutions

Smart cities

2020 International Conference on Computing, Networking, Telecommunications and Engineering Sciences Applications (CoNTESA)

Smart Cities and the UN SDGs

This volume provides the most current research on smart cities. Specifically, it focuses on the economic development and sustainability of smart cities and examines how to transform older industrial cities into sustainable smart cities. It aims to identify the role of the following elements in the creation and management of smart cities:• Citizen participation and empowerment • Value creation mechanisms • Public administration• Quality of life and sustainability• Democracy• ICT• Private initiatives and entrepreneurship Regardless of their size, all cities are ultimately agglomerations of people and institutions. Agglomeration economies make it possible to attain minimum efficiencies of scale in the organization and delivery of services. However, the economic benefits do not constitute the main advantage of a city. A city's status rests on three dimensions: (1) political impetus, which is the result of citizens' participation and the public administration's agenda; (2) applications derived from technological advances (especially in ICT); and (3) cooperation between public and private initiatives in business development and entrepreneurship. These three dimensions determine which resources are necessary to create smart cities. But a smart city, ideal in the way it channels and resolves technological, social and economic-growth issues, requires many additional elements to function at a high-performance level, such as culture (an environment that empowers and engages citizens) and physical infrastructure designed to foster competition and collaboration, encourage new ideas and actions, and set the stage for new business creation. Featuring contributions with models, tools and cases from around the world, this book will be a valuable resource for researchers, students, academics, professionals and policymakers interested in smart cities.

Smart Cities: Issues and Challenges: Mapping Political, Social and Economic Risks and Threats serves as a primer on smart cities, providing readers with no prior knowledge on smart cities with an understanding of the current smart cities debates. Gathering cutting-edge research and insights from academics, practitioners and policymakers around the globe, it identifies and discusses the nascent threats and challenges contemporary urban areas face, highlighting the drivers and ways of navigating these issues in an effective manner. Uniquely providing a blend of conceptual academic analysis with empirical insights, the book produces policy recommendations that boost urban sustainability and resilience. Combines conceptual academic approaches with empirically-driven insights and best practices Offers new approaches and arguments from inter and multi-disciplinary perspectives Provides foundational knowledge and comparative insight from global case-studies that enable critical reflection and operationalization Generates policy recommendations that pave the way to debate and case-based planning

This book is a printed edition of the Special Issue "Wireless Sensor and Actuator Networks for Smart Cities" that was published in JSAN

Over the last years, sophisticated policy making propositions for sustainable rural and urban development have been recorded. The smart village and smart city concepts promote a human-centric vision for a new era of technology-driven social innovation. This Special Issue offers a useful overview of the most recent developments in the frequently overlapping fields of smart city and smart village research. A variety of topics including well-being, happiness, security, open democracy, open government, smart

education, smart innovation, and migration have been addressed in this Special Issue. They define the direction for future research in both domains. The organization of the relevant debate is aligned around three pillars: Section A: Sustainable Smart City and Smart Village Research: Foundations • Clustering Smart City Services: Perceptions, Expectations, and Responses • Smart City Development and Residents' Well-Being • Analysis of Social Networking Service Data for Smart Urban Planning Section B: Sustainable Smart City and Smart Village Research: Case Studies on Rethinking Security, Safety, Well-being, and Happiness • Exploring a Stakeholder-Based Urban Densification and Greening Agenda for Rotterdam Inner City—Accelerating the Transition to a Liveable Low Carbon City • The Impact of the Comprehensive Rural Village Development Program on Rural Sustainability in Korea • Analyzing the Level of Accessibility of Public Urban Green Spaces to Different Socially Vulnerable Groups of People • Consumers' Preference and Factors Influencing Offal Consumption in the Amathole District Eastern Cape, South Africa • Sustainable Tourism: A Hidden Theory of the Cinematic Image? A Theoretical and Visual Analysis of the Way of St. James • Future Development of Taiwan's Smart Cities from an Information Security Perspective • Towards a Smart and Sustainable City with the Involvement of Public Participation—The Case of Wroclaw Section C: Sustainable Smart City and Smart Village Research: Technical Issues • Detection and Localization of Water Leaks in Water Nets Supported by an ICT System with Artificial Intelligence Methods as a Way Forward for Smart Cities • A Study of the Public Landscape Order of Xinye Village • Spatio-Temporal Changes and Dependencies of Land Prices: A Case Study of the City of Olomouc • Geographical Assessment of Low-Carbon Transportation Modes: A Case Study from a Commuter University • Performance Analysis of a Polling-Based Access Control Combined with the Sleeping Schema in V2I VANETs for Smart Cities.

The Road to Mori

shaping the society of 2030

Bridging the Global Urban-Rural Divide

Sustainable and Smart Spatial Planning in Africa

Sustainable Smart Cities and Smart Villages Research

Smart Cities For Dummies

Some 7.3 billion people currently live on the planet. Of these, 3.4 billion live in rural areas. In just a few regions—Latin America, the Middle East and North Africa—less than 50 per cent of poverty is now located in rural areas. But for the rest of the world's regions between 55 per cent and 80 per cent of the poor continue to live in the countryside. Progress is being made, but much of the knowhow needed is not disseminated outside of a small coterie of professionals who work in the area. With urban development attracting a great deal of attention lately, poorer rural areas deserve the same and new knowledge for empowerment of rural communities is urgently needed. This book provides an overview of current thinking and practices that have emerged over the last thirty years for uplifting rural communities in developing economies. Drawing on a body of knowledge across a spectrum of relevant disciplines, this book provides a range of innovative ideas for rural planning, housing and infrastructure development. Governments in many emerging economies, where rural poverty is often most acute, have attempted to improve livelihoods. Approaches and techniques that have been used for urban development are often not applicable to rural communities. Studies show that money allocated for rural development is often not effectively spent due to distance, lack of infrastructure, lack of education, poverty and other factors. Meanwhile, the gap in development between the city and country continues to grow, sometimes leading to social and political instability, in both developing and developed countries. This book seeks to provide a guidebook for meeting such challenges. Through in-depth enquiry of global practices and thinking about rural development, and selected case studies, the authors argue that careful consideration must be given to incorporating issues of resilience, resourcefulness and the involvement of communities at grassroots levels in realising the transformation of rural settlements into Smart Villages.

Sustainable development is the core principle underpinning land use planning. The policies in this statement apply to the rural areas, including country towns and villages and the wider, largely undeveloped countryside up to the fringes of larger urban areas. The key principles identified are: (i) decisions on development should be based on sustainable development principles; (ii) good quality accessible development within towns and villages should be allowed where it benefits the local community; (iii) accessibility should be a key consideration, with emphasis on access by public transport, walking and cycling; (iv) new building in the open countryside away from existing settlements should be strictly controlled; (v) priority should be given to the reuse of brownfield sites. This PPS replaces PPG 7 (1997) with the exception of PPG7's Annex E, which provides further guidance on permitted development rights for agriculture and forestry and will remain extant pending a review by ODPM of the General Permitted Development Order 1995.

The COVID-19 Crisis is a game-changer that will eventually benefit rural economies around the world. Around 3.4 billion people are living in rural areas lacking access to resources, tools, knowledge, and markets to find their way to prosperity. The exodus of millions of migrant workers from cities and back to their villages in India demonstrated that digital infrastructure that connects rural populations to the rest of the world is critical. Governments singlehanded providing all required solutions to its population are reaching their limits. How to Create Smart Villages shows how large corporations and startups can take upon the responsibility in solving villagers' needs while tapping into exciting growth markets. To get valuable results from innovation, businesses, governments, academics, and civil society must be reconciled while opening up their relevant resources, knowledge, and expertise. Solomon Darwin, Professor and Executive Director at the Haas School of Business, also known as the father of the Smart Village Movement, inspired the start of the Smart Villages Movement at UC Berkeley in 2016. This movement created a platform for innovators from private and public sectors to empower the underserved communities in rural India and beyond. Alongside Henry Chesbrough, Adjunct Professor and Faculty Director at the Haas School of Business, UC Berkeley, and father of the Open Innovation paradigm, both define Smart Villages as "a community empowered by digital tools and Open Innovation platforms to access global markets". To the present, the Smart Village idea is being executed in three Indian states in close collaboration with the Indian government alongside companies such as Google, Ericsson, Intel, TATA group, TechMahindra, Dell, VMWare, Nvidia, Reliance, IBM, Airtel, Wipro, AWS, Intel, Adobe, Autodesk, Microsoft, ThyssenKrupp, Siemens, Enel Energy, SAP, Xerox, Oracle, and Salesforce. Solomon Darwin and Werner Fischer, an expert in sustainable development and a more recent scholar of Open Innovation at UC Berkeley, bring to this book their on-ground research and use cases from Indian villages. Alongside Henry Chesbrough, author of several management books and recognized as one of the top 50 business and technology leaders by Scientific American, they offer a thought-provoking process to unlock innovation in rural emerging markets.

This book provides rare, unique insights from business-driven innovation in a demanding territory like rural India through powerful Open Innovation ecosystems to accelerate economic and social impact. It captures all the successes, learnings, and failures since 2016 to be finally shared with the world for contributing towards more effective sustainable development. Village communities are the source of food production and hence the source of life for human lives around the world. Join the Smart Village Movement to light up the dark world when providing a new, exciting way towards villagers' prosperity.

How to Create Smart Villages

Smart Cities, Smart Investment in Central, Eastern and South-Eastern Europe

Smart Villages

Sustainable Smart Cities