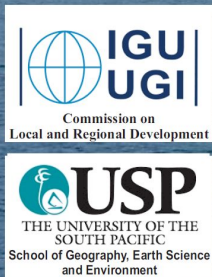


# Development challenges in Rural and Urban Areas



Suva, Fiji Islands  
June 25 - 28, 2019

*25–28 June, 2019, Marine (Lower) Campus  
Marine Lecturer Theatre  
The University of the South Pacific, Suva, Fiji*

## PROGRAMME

### Tuesday - June 25, 2019

8:30–9:30am Registration (registration desk will be open throughout conference)

9.30am **Morning Tea**

10.00am Presentation: Dynamics of Informal Settlements in Suva  
Eberhard Weber and Camari Koto

Rest of day excursions around Suva with emphasis on informal settlements

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## Wednesday - June 26, 2019

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9:45am Interfaith Prayer

10:00–10:30am Welcome to the University and Opening of the Conference by Vice Chancellor and President of The University of the South Pacific, Professor Pal Ahluwalia.

10.30 – 10.45am Welcome by Elena dell'Agnese, Vice President, International Geographical Union

10:45-11:15am **Morning Tea**

11.15–1:15am **Session 1 Education and Rural and Urban Development**

Development Challenges in Rural and Urban Areas of the Pacific Islands  
**Eberhard WEBER**

Regional higher education institutions as key development actors in geographic peripheries. A comparative study of Nordic and Baltic non-metropolitan university centres

**Garri RAAGMAA & Jari KOLEHMAINEN**

An inclusive and effective approach towards Climate Change Education? A critical examination of the Climate Change Resilience National Qualification in Fiji  
**Anuantaeka TAKINANA, Roger C. BAARS, & Jane SINGER**

Women's Education and Employment and the Gender Disparity: A Case Study of Usilamapatti Taluk, Madurai District, Tamil Nadu, India  
**I.K. MANONMANI**

1:30–3:00pm **Lunch Break**

3:00–5:00pm **Session 2 Climate Change as Challenge to Rural and Urban Development**

Ontological security in a changing climate

**Carol FARBOTKO**

Internal climate-induced relocation narratives. Content analysis of planned relocation discourses in Fiji and in the global arena.

**Beatrice RUGGIERI**

Hazard and Resilience: The Case of Two Islands of the Maldives

**Marcella SCHMIDT DI FRIEDBERG, Elena DELL'AGNESE, & Stefano MALATESTA**

How to sustain sustainability? Past and future of the La Digue island (Seychelles)

**Maciej JEDRUSIK**

**Thursday June 27, 2019**

09:00–11:00am **Session 3 Tourism**

Resort islands spatialities in the Maldives

**Elena DELL'AGNESE**

Local and Metropolitan Economic and Social Entrepreneurship: Palestinian Heritage Tourism in Jaffa

**Tovi FENSTER**

The Republican China as Cultural Capital: A Case Study of Chang-Jiang Road Tourism Boulevard in Nanjing

**Cassidy I-Chih LAN & Chiung-Wen CHANG**

Transformation in Land Ownership of Tribal Communities in Rural Gujarat: A Post-Displacement Assessment of Sardar Sarovar Project Resettlement Sites, India

**Gaurav SIKKA**

11:00–11:30am **Morning Tea**

11:30–1:30pm **Session 4 Economic Challenges and Spatial / Sectoral Planning**

Urban Sprawl and Land Reuse in Bucharest-Ilfov Development Region. Integrated Spatial and Statistical Analyses

**Ines GRIGORESCU, Bianca MITRIC□, Cristina DUMITRIC□, Monica DUMITRAȘCU, & Gheorghe KUCSICSA14**

Accessibility changes versus inequality reduction

**Tomasz KOMORNICKI**

Economic clusters - towards supporting a creative economy in Romania

**Bianca MITRIC□, Claudia POPESCU, Ines GRIGORESCU, Irena MOCANU, Paul □ ERBAN, & Monica DUMITRA□ CU**

1:30–3:00pm **Lunch Break**

3:00–5:00pm **Session 5 Resources**

Sustainable Urbanization in Formation: Multi-Actor Governance of Urban Experimentation Sino-Singaporean Cases of China

**Ali CHESHMEHZANGI**

The evaluation of local resources from the point of view of their role as factors underpinning development in regions of eastern Poland

**Jerzy BAŁSKI**

Land use intensification in Fiji Islands: drivers, land tenure and swidden farming.

**David Lopez CORNELIO**

Implementing SDGs development plan in Indonesia; a dilemma of top-down and bottom-up approach

**Triarko NURLAMBANG**

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## Friday June 28

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10:00–12:00am **Session 6**

Doubling Farmer's Income – The Case of India

**Rohit SINGH**

Beyond the periphery: a comparative assessment of national social welfare responsiveness across diverse peri-urban spatial zones in West Papua, Nusa Tenggara, and Java

**Johani R.V. KORWA, Nicholas METHERALL, Barrisen RUMABAR, John Herman MAMPIOPER, & Tironi RANATHUNGA**

State of urban – rural cleavage in electoral preferences caused by socio-political situation in Patna, India

**Prerna BHARTI**

Kadavu Island: Thirty years of change in the Fijian periphery

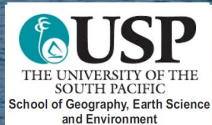
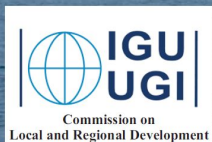
**Michael SOFER**

12:30pm **Lunch Break**

Afternoon: Trips in Suva

Evening: Start to the Field-trip to Kadavu

# Development challenges in Rural and Urban Areas



Suva, Fiji Islands  
June 25 - 28, 2019

Venue: Marine Lecture Theatre, M107A (if required).  
The University of the South Pacific, Marine (Lower) Campus



# Abstracts of the Conference

## **The evaluation of local resources from the point of view of their role as factors underpinning development in regions of eastern Poland**

Jerzy BAŃSKI

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Regional development is largely conditioned by the quality and quantity of internal resources, as well as the degree to which these are made use of. Local resources represent unique – and socially and economically utilisable – features, factors and phenomena in a given area that are able to shape its internal potential for development. Distinguished among these are material and non-material resources, with a further division into groups and types also applied. The work detailed here sought to identify the structure to local resources in three regions of eastern Poland, and to assess their development potential. The effort to evaluate local resources made reference to their utility and uniqueness, with indicator values applied to these features. The work showed that most resources were of average utilitarian and uniqueness value, often also characterised by considerable spatial differentiation. The several types of resource that were found to dominate included architectural forms and buildings, as well as valuable features helping to shape attractiveness to tourists. The resources of greatest utility in shaping local development in fact emerge as very positively evaluated from the point of view of uniqueness also. Equally, there is a group of highly-unique resources characterised by far more limited utility from the practical point of view. This may attest to still-unused potential where the local resources in the regions studied are concerned.

Paper prepared under the research projects of the National Science Centre, nb. UMO-2015/19/B/HS4/01298, Evaluation of the local resources and their spatial differentiation in the regions of Eastern Poland.

# **State of urban – rural cleavage in electoral preferences caused by socio-political situation in Patna, India**

Prerna BHARTI

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The electoral choice of individuals is modified by a wide range of social, economic, political, institutional legislative and psychological factors. Indian elections are mind bogglingly complex. The spatial pattern of electoral preferences based upon the various socio-political background creates a space for geographical research. Most societies are split along some fault lines which shapes political attitude and perception. There are several dimensions along which the social fault lines or cleaves are manifested. Such as social class, religion, gender, occupation, age etc. One of the classic cleavages is framed by urban- rural conflict line. As city dwellers are usually politically different from countryside people in terms of source of income, living condition, education and social and economic priorities. The characteristics of rural- urban cleavage is to be evaluated in present paper using example of Patna district located in eastern India. The time period of upcoming analysis is from 2005 to 2015. Indians in urban and rural communities have different views when it comes to social and political issues. The objective of the study is to find out how geographical locality of a voter predict her political attitude? Secondly, to compare voting motivation and restraints among the urban and rural areas. Lastly, to study gender perspective of rural urban cleavage in electoral preferences. The research is based upon the field survey, primary data and secondary data as well as newspaper reports and articles. Apart from that government data from Election Commission of India, District Election Portal itself has been used to enrich the work.

**Keywords:** rural- urban, spatial, cleaves, electoral preferences, political attitude

# Sustainable Urbanization in Formation: Multi-Actor Governance of Urban Experimentation Sino-Singaporean Cases of China

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Joint venture projects of China in the form of urban experimentation play a major part in development of new zones, districts and towns that address the main theme of sustainable urban development (SUD) and formation of sustainable urbanisation. These urban experimentation projects address urban sustainability in various forms of eco-, smart-, green-, knowledge-, low carbon-, and etc. Of all Sino-foreign projects, Sino-Singaporean projects tend to be more influential in terms of their development patterns and progress. They also offer diversity of development pattern and various mode of urban experimentation at various scales. To discuss this through an evidence-based approach, three cases of Sino-Singaporean projects are studied with analyses of their commonalities and differences in terms of their experimentation and sustainability pathways. These cases include: 1) the well-known national flagship project of SinoSingaporean Tianjin Eco-City (SSTEC), 2) the strategic economic partnership project of SinoSingaporean Suzhou Industrial Park (SIP), and 3) the new knowledge transfer platform of SinoSingaporean Guangzhou Knowledge City (SSGKC). This study evaluates differences of these projects from multiple aspects of geographical, size, location, and actor involvement. It also explores the commonality of multi-actor governance between these projects and from their nature of urban experimentation as their development mode. While existing studies on SinoSingaporean projects focus on their business aspect, this study addresses the role of multi-actor structure of such projects in association to their governance, urban sustainability pathways and planning directions. Hence, main discussion of this study are focused on urban experimentation aspects and multi-actor governance structures that are in place for development and delivery of these projects in forming sustainable urbanisation in China. As well as shedding light on multiactor governance of such joint venture projects, the concluding points provide knowledge for future similar projects.

**Keywords:** Urban Sustainability; Urban Experimentation; Sino-Singaporean; Governance; Sustainability; Multi-actor; China.



## **Land use intensification in Fiji Islands: drivers, land tenure and swidden farming.**

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Shifting cultivation is a common agricultural practice in the Pacific Islands and the tropics in general; it is a sustainable practice if the fallow periods are long enough. The intensification of land use respond to the demand of higher profits in the short term, farms fragmentation, uncertainties in land tenure and population growth among others. Official statistical data and maps were utilized to build up choropleth maps indicating the areas of high land use intensity according to farm size ranges and socioeconomic parameters (treatments) for the country. Critical maps built by boolean operations displayed areas in which both the land use and the socioeconomic driver were simultaneously ranked as high or very high. Treatments showed significant differences ( $p < 0.05$ ), being the most influential those related to human demography; therefore it is recommended to enforce policies that will des-accelerate the rates of land use, such as the facilitation of land ownership over farms of bigger sizes, the gradual replacement of mono cropping by agroforestry systems, and the creation of more employment opportunities in the industry, tourism and services sectors.

## **Ontological security in a changing climate**

Carol FARBOTKO

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‘Existential threat’ narratives in the context of climate change impacts, particularly population displacement, are frequent. But such narratives are generally accompanied by very little debate, discussion or reflection by what such a threat means. Introducing the idea of ontological security, it may be possible to sensitively and productively grapple with ‘existential threat’ of climate change among those at risk of displacement. This paper explores the concept of ontological security with reference to cultural resilience and indigeneity in the Pacific Islands.

# **Local and Metropolitan Economic and Social Entrepreneurship: Palestinian Heritage Tourism in Jaffa**

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The paper presents an ongoing research of Palestinian heritage in Jaffa. This work combines two main lines of research, the first engages with the information and knowledge regarding the histories of specific houses which were owned by Palestinian owners pre 1948 and are now inhabited either by them or by other Palestinian families.

In this part we formulate what we term 'the historiographic file' of each address, mainly based on archival planning information and oral histories.

The second line of research focuses on the economic and social benefits of the Palestinians living in Jaffa with the knowledge we have formulated on the first stage in using it to promote heritage tourism in the specific houses and area in Jaffa.

This stage includes formulating a dialogue between four main actors: the Palestinian residents of these homes, the academic researchers, the municipality of Tel Aviv-Jaffa and local Palestinian leaders and NGO's which are interested in promoting social and economic quality of life of the local community.

The end result of this project is expected to be a formulation of a Local Economic and Social Entrepreneurship Program which will be carried out in collaboration between the mentioned actors mentioned. It is expected that this kind of program will promote local entrepreneurship in Jaffa which is so missing today.

# **Urban Sprawl and Land Reuse in Bucharest-Ilfov Development Region. Integrated Spatial and Statistical Analyses**

Ines GRIGORESCU, Bianca MITRICĂ, Cristina DUMITRICĂ,

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Urban sprawl (through built-up areas dynamics) and changing the patterns of industry had caused the foremost spatial and structural transformations of the post-communist period in Romania (after 1990). In the context of rapid urbanization and suburbanization processes, these changes have resulted in increased land consumption, often including the reuse of abandoned land or post-industrial sites. The key research questions of the present paper are: (1) to analyse the past (before 1990) and current (after 1990) former urban land grouped in three main categories: research & development institutions, industrial and transport (2) to identify the current functions/use of former urban sites, (3) to understand the relationships between former urban sites and the current urban growth/sprawl and (4) to identify the potential of maintaining former urban sites (e.g. industrial heritage). The current analysis relies on integrating spatial (topographic maps & plans, satellite images) and statistical (National Institute for Statistics, Chamber of Commerce and Industry) data necessary to perform quantitative and qualitative interpretations of the structural and functional changes. The analysis has revealed as key features related to former urban land reuse after 1990: significant spatial shrinkage, intensive fragmentation, functional diversification, tertiarization and change of patterns – transition from compact to mosaic-like outline. Five main types of reshaping former urban land have been identified (maintenance, conversion, replacement, abandonment and demolition). Overall, between 1990 and 2018, in the study area nearly 3,250 ha (over 50%) loss of industrial sites has been recorded. The study results will help identify areas prone to future development through the adaptive reuse of former urban lands (mainly industrial) in order to predict future urban growth spatial trends and patterns.

## How to sustain sustainability? Past and future of the La Digue island (Seychelles)

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The notion of sustainable development is a very popular one. Yet, it remains controversial issue in the case of small islands and their communities. La Digue is a tiny island (some 10 sq. kms) in Seychelles. Inhabited only in late 18th century, the Island had for many years developed in a strong isolation, using its natural environmental features. Hills up to 350 meters asl constitute a substantial part of the island, the shore is well developed, and a couple of the island's several dozen beaches have gained worldwide reputation for their beauty. The western part of the island houses the largest plateau in Seychelles that produces conditions perfect for agriculture (growing coconut palm, vanilla, as well as self-supply agriculture.) For two centuries, the changes to the natural environment were minor, the resources did not decrease, and the economy satisfied the needs of the island's population – in other words, it was characterized with sustainable development. Since late 20th century, touristic boom has exerted growing pressure on local resources. Relations with the outside world have become intense, and the structure of economy, as well as land development have changed significantly. In 2018, the area could hardly be further adapted to the new situation. Is it possible to plan rational, sustainable development of the territory? What scenarios should be adopted? For many island communities the situation has turned out to be very different from previously envisaged scenarios. On La Digue the reality in 2018 was far from scenarios for touristic development proposed in 2004 – “Free development”, “Authentic Creole Style”, “Nature Preservation”, “Five-Star-Eco-Tourism” (Günther, 2004). Such a situation resulted from both local and global processes which very hard to envision and over which the small island communities had little control. So perhaps the very idea of sustainable development is merely a charming slogan, and not a reachable target.

## **Accessibility changes versus inequality reduction**

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The purpose of the paper is to present the relationship between transport accessibility improvement and regional/local inequalities reduction. The measures of isochronal and potential accessibility will be applied. They will be related to the situation on the labor market and to the provision of the services of general interests. The study considers also prerequisites for the positive impact of construction or upgrading of transport infrastructure on territorial development as well as gives some evidence on the obstacles that may have occurred while achieving the objectives.

Theoretical considerations are based on the results of studies on the changes in road and railway accessibility in Poland in the years 2004-2023 (both ex-post and ex-ante analysis). These two decades are the period of substantial improvement in transport network. This allows for the analysis of the impact on inequalities at different geographical scales. It was found that fast development of the transport network has increased the disparities in spatial accessibility and in economic competitiveness between various areas. Accessibility growth is supporting policentricity on the national level, but probably not on the regional one. Medium size cities could be both winners or losers of the accessibility changes. Better accessibility could balance demographic losses (in terms of the labour force availability), but long commuting becomes a challenge for transport development. On the other hand, smaller cities are at risk of transport exclusion (even if the infrastructure is developed). New investment seem to improve the access to services located at bigger distances from the peripheral areas, not exerting positive influence on servicing of population at the local scale.



# **The Republican China as Cultural Capital: A Case Study of Chang-jiang Road Tourism Boulevard in Nanjing**

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This research focuses on the place-branding of historical buildings in promoting urban cultural tourism in Nanjing. We take the project of ‘Chang-jiang Road Tourism Boulevard’, which was officially launched in 2016, as a case study to illustrate how historical heritages of Republican China (1912-1949) are translated into the tourist destination. Our analysis draws on a semiotic dimension of political economy to identify the preservation of Republican China’s historical buildings as a strategy of urban cultural tourism to re-figure Nanjing’s tourist place-remaking at the municipal level. It is found that the political symbol of Republican China which was used to be seen a taboo in an ideological context of nationalism is now dramatically turned into tourist narratives favoring economic benefits in post-Socialist transition. From a perspective of cultural political economy, we take a critical look at the transformation of the politically-symbolic built environment along the Chang-jiang Road into a lucrative catalyzer of capital circulation. We argue that the preservation of cultural heritages is associated with capital circuit of built environment. The research concludes by conceptualizing the terms of ‘cultural fix’ to explore the dynamics of capital accumulation which is made by combining cultural/semiotic sphere with spatio-temporal specificity transformed as a capitalist vigor.

# **Beyond the periphery: a comparative assessment of national social welfare responsiveness across diverse peri-urban spatial zones in West Papua, Nusa Tenggara, and Java.**

Johni R.V. KORWA, Nicholas METHERALL, Barrisen RUMABAR  
John Herman MAMPIOPER, Tironi RANATHUNGA

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The paper aims to shed light on the impacts of peri-urbanisation processes across two case studies in Port Numbay within the Province of Papua. The case studies of Abe Pantai and Koya Barat are selected as novel examples of peri-urban spatial zones of a peripheral province near the border between Indonesia and Papua New Guinea. The core research question is how have peri-urbanisation processes impacted upon local social, economic, agricultural and environmental health systems? Three methods were used including: (a) focus-discussion groups for the collection of primary data in order to better understand local perspectives; (b) secondary data collection from local government offices and bureau of statistics datasets analysed to compare case study profiles; and (c) spatial observation and historic time-lapse analysis through the use of 'Google Earth Pro' visual cartography tools. The results included three main thematic findings: (1) that the lasting legacy of historic transmigration and decentralisation policies have influenced processes of peri-urbanisation in shaping the social and economic conditions within these communities, (2) that within these case-studies, peri-urbanisation has impacted biophysical environments including agricultural-ecosystems and environmental health systems; (3) historic geospatial and cartographic visualisation analysis yields useful insights into a range of peri-urbanisation trends: particularly land clearing, deforestation and expansion of settlements over time. The paper concludes that approaches to decentralisation, health service delivery and sustainable development interventions into peri-urban zones should take into account local conditions by recognising cases of peripheral provinces as unique to core provinces. Recommendations for policy and further research are also offered.

**Keywords:** Peri-urbanisation, Indonesia, transmigration, agricultural, Port Numbay, West Papua.

# **Women's Education and Employment and the Gender Disparity: A Case Study of Usilampatti Taluk, Madurai District, Tamil Nadu, India**

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Women of any nation are the mirrors of its civilization. If women enjoy good status it shows that the society has reached a level of maturity and sense of responsibility while a decadent image conjures up if the opposite is true. Sex ratio is an important parameter of women status in society. The major cause of the decrease of the female birth ratio in India is due to the violent treatments met out to the girl children from the time of their birth.

The sex ratio of India was almost normal during the phase of the years of independence, but thereafter it started showing gradual signs of decrease in rural areas. Literacy and education are the most essential inputs for empowerment of women. The low level of literacy, social and cultural bindings in most of the Indian communities create an imbalance in the gender aspect. The social and economic development of any region depends on the number of persons who are economically active, regularity of their work and the regularity of their employment.

Usilampatti Taluk is one of the backward regions in Tamil Nadu, located in the western part of the Madurai District are notorious for the past few decades for female infanticide and female foeticide and this is due to one of the reasons for economic backwardness. Female infanticide in Tamil Nadu was first identified in 1985 by Usilampatti taluk, so for the present investigation in four time points selected that is a time gap of 40 years has been chosen (1981-2011). Considering this in mind, an attempt has been made to outline the literacy, gender disparity in literacy, female work participation and gender disparity in work participation in terms of space and time in Usilampatti taluk. To analyze the gender disparity Kundu & Rao's (1986) method of gender disparity index method is applied in the present study.

**Keywords:** Sex ratio, Literacy, Female work participation, Gender Disparity

## **Economic clusters - towards supporting a creative economy in Romania**

Bianca MITRICĂ<sup>1</sup>, Claudia POPESCU<sup>1</sup>, Ines GRIGORESCU<sup>2</sup>, Irena MOCANU<sup>1</sup>, Paul ȘERBAN<sup>1</sup>,  
Monica DUMITRAȘCU<sup>3</sup>

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Recently, innovation has been identified as one of the main challenges of the Romanian economy. So far, the insufficient level of innovation of the Romanian companies is highlighted in the document Romania: National Competitiveness Strategy 2014-2020 as a major challenge. According to the Global Competitiveness Report, Romania ranks 54<sup>th</sup> for the period 2015-2016 (out of 140 countries) in terms of global competitiveness index, and 84<sup>th</sup> in terms of innovation and complexity. According to the European Innovation Scoreboard, Bulgaria and Romania have been defined as “Modest Innovators” with performances well below EU average. Investments in R&D are considered essential for the enhancement of the country's innovative capacity. Under the Europe 2020 Strategy, the national target for Romania is 2.0% of GDP invested in R&D (the European target is 3%). According to latest data, Romania is still far from achieving this target (0.38% in 2014 vs. 0.45% in 2010).

Compared to the EU, the development of a creative economy in Romania is influenced by several structural differences mirrored by the values of relevant statistical indicators: share of employment in agriculture and mining, share of employment in high and medium high-tech manufacturing, services and public administration, share of foreign controlled enterprises, number of top R&D spending enterprises, share of enterprise births, GDP per capita, population growth rate.

The main objective of this paper is to demonstrate the importance of economic clusters for sustainable regional development towards fostering a creative economy in Romania. Using a quantitative-based approach (socio-economic and location indicators), the authors will identify and analyse specific economic clusters defined by their functionality (e.g. industrial, cultural, commercial) or pattern (e.g. agglomerated/non-agglomerated).

Economic clusters bring competitive advantages for their members, influence structural changes, revitalize economic sectors, and deliver the necessary frame for research of innovation and local and regional development. For a creative economy, cross-border and cross-sectoral collaboration, innovation and entrepreneurship across different regions and value chains shall be promoted.

# Implementing SDGs development plan in Indonesia; a dilemma of top-down and bottom-up approach

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SDGs has become considered in Indonesia Spatial and Development Plan in the last three years. Actually Sustainable Development has been main-streamed as stated in the Law of Environment Management and Protection since 2009. There are different operational definition of Sustainable Development in Indonesia development plan. Consequently there are two ways in accomplishing the spatial and development plan based on sustainable development achievement, especially at local level. By using policy and implementation evaluation method then it can be indentified which development plan policy approach used more at what level. The evaluation technique through cascading manner has found that national policy level does not really match to bottom-up local development plan. There is mis-match on the conceptual framework which then might influence its local staretgic development plan. This occurred in either at provoncial or district development plan.

**Keywords:** Sustainable Development, national development strategic plan, local development strategic plan, SEA, top-down and bottom-up approach

# **Regional higher education institutions as key development actors in geographic peripheries. A comparative study of Nordic and Baltic non-metropolitan university centres**

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Jari KOLEHMAINEN

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Being part of globalising economy requires intensive knowledge exchange and this is challenging geographic peripheries all over the world. Regional higher education institutions (HEI) have been taken as key knowledge agents, by some authors even as Development Anchor Institutions, actors pushing regions beyond their borders. However, the existence of a university campus itself does not guarantee the well-functioning entrepreneurial ecosystem. Entrepreneurial processes and learning are driven by individuals: HEI people can boost human capital, promote a conducive entrepreneurial culture, enable innovative policies, improve availability of appropriate finances, extend creative product markets, and provide a wide range of institutional support.

Peripheries with low organisational thickness might be able to innovate much faster than core regions characterised by thick and rigid institutional structures. In the case of well-orchestrated leadership, significant changes can be carried out in a very short time. The question of survival makes peripheral HEIs proactive and agile actors: they try to influence not only local/regional decision-making bodies but also intra-university and national policy processes.

So far, we have little comparative knowledge about the place based institutional environments whereby HEIs and other regional innovation system structures operate. In this paper, we going to investigate two groups of regional HEIs: university colleges (7) in Estonia and university consortiums (6) in Finland. We going to identify the critical policy processes, actors, and the motivation behind their decisions. The second ring of questions deals with regional HEIs sustainability. And third, we're going to use the entrepreneurial ecosystem framework when analysing the agency, entrepreneurial activity and economic development impact of regional HEIs. The study applies (1) desk research of policy documents, statistics and published surveys; (2) data provided by the regional HEI representatives and (3) semi-structured interviews with regional stakeholders and regional HEI leaders.



# **Internal climate-induced relocation narratives. Content analysis of planned relocation discourses in Fiji and in the global arena.**

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Climate change narratives of vulnerabilities and resilience are not new in the Pacific Region, nor are discourses about climate change and human mobility, especially if referred to climate refugees, environmental migrants or disappearing states and consequent international displacements and relocation which would cause understandable concerns about citizenships, human rights and socio-cultural disruptions. All of this enormous amount of information led, firstly, to specific imaginaries of victimization, hopelessness and inevitability, subsequently partially contexted and reframed in a more proactive way using different terminologies related to the concept of resilience. Even if still present and pervasive, especially in institutional, mediatic and art sectors, such discourses and representations have been fiercely contexted in different contexts and by multiple actors in those past years. However, with the emerging political discourse of planned internal relocation as a more and more necessary adaptation strategy, these discourses risk to rapidly resurface and affect people perception and construction of both their present and future time. If well planned, community internal relocation can be a good and positive adaptation strategy. But what does it mean to “plan well”? The recent Planned Relocation Guidelines and the leadership assumed by the Fijian government at the regional and global level are a good attempt to give an answer to this question. Nevertheless, if we look at multiple scales, it seems that things are moving at different speeds and theories don’t necessarily correspond to practices. Multiple narratives on internal relocation in Fiji have flourished in the last decade, both from national and international actors and sources. As learnt by many historical and more recent development-project induced relocations and as stated in the Guidelines, community relocation must be a last resort option. Yet, too simplistic current textual and visual narratives at different spatial scales risk to recreate the same umpteenth rethoric of an unavoidable future of «moving to higher ground» for many coastal communities. At the same time, such discourses could prevent developed nations to change their economic paradigm and implement mitigation actions. For these reasons, careful planning should also be applied to the way climate-induced internal relocations are narrated and represented.

## Hazard and Resilience: The Case of Two Islands of the Maldives

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The Maldives are at risk of storm surges, monsoonal flooding, swell waves, tsunamis and climate change as sea-induced natural hazards: no island could be considered “safe”. In 2004 the country was directly affected by the tsunami, with nearly 12,000 people displaced and another 8,500 temporarily relocated within their islands. The government is working hard to implement the Sendai Framework, linked with the Sustainable Development Goals and the Paris Agreement on climate change. Disaster risk reduction and resilience are essential for the country’s efforts to achieve sustainable development and deal with the challenge of climate change. In the presentation, we consider the cases of two islands affected by the tsunami, where social and economic resilience produced two different development models. The economy of Meedhoo, the most inhabited island in the Dhaalu Atoll (population: 1400) depends on fishing. The 2004 tsunami severely hit Meedhoo, two people died. The people have recovered quickly, and the island is fast developing. The main threat to the development of the island is its size and soil erosion. To prevent this problem an area of about 50 feet was reclaimed around the island in 2006, and new land reclamation projects have started. Land reclamation on the reef flat, especially on the oceanward side can alter the natural defensive mechanisms of the islands and the drainage systems. Ribudhoo island (population: 545), the island of the jewellers, has been severely affected by the tsunami in 2004; here also there were two casualties and many infrastructural damages, forcing many people to migrate. On the island, no land reclamation projects are foreseen. The recovery of the island starts from specific historical and cultural heritage and the revival of traditional handicraft and the art of jewellery, involving young people — two islands two different stories of resilience.

**Keywords:** Hazard; Resilience; SIDS; Maldives; Land reclamation

## **Doubling Farmer's Income – The Case of India**

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Agriculture, in most of the developing and under-developed countries, is the primary sector responsible for employment and livelihood of majority of population, especially rural. This sector is entrusted with the responsibility of poverty alleviation in rural areas and contribution to overall economic growth. Hence, designing optimal policy and setting objectives have always been a concern area for the policy makers. In the last fiscal year, policy objective of doubling farmer income by the year 2022, was announced by the government. This paper analyses the historical aspects of doubling of farmer's income using NSSO situation assessment survey and draws projection for the future at degenerate level across land holding and states. What actually would it require to double the farmer's income, the optimal mix of policies that should be adopted by the government for successful achievement of objective? The paper also presents a comparative analysis with such policy objective being successfully achieved in Chinese economy.

**Keywords:** Doubling of farmer's income, NSSO situation assessment survey, policy mix in agriculture sector.

## **Kadavu Island: Thirty years of change in the Fijian periphery**

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The outer island of Kadavu located in the Eastern Division has been considered for long time as a representative of the Fijian periphery. It has been revisited and researched for thirty years and this presentation deals with the changes it has gone along this period. The aim was to study its infrastructural conditions and village economic activities with the aim of understanding the changes its population has experienced since the early 1980s. A combination of micro-geographic studies in two villages and a meso-geographical analysis of its infrastructural services, together with the changing government policy, show that the pattern of development found initially in Kadavu in the early 1980s has changed to a limited extent. The kava (yaqona) economy is still dominant. The current pattern of cash crop production and trade is almost entirely dependent on the kava beverage crop; infrastructure lags behind; the island suffers from the phenomenon of peripheral penalty; and government initiatives to change the trend are very limited. The current form of non-capitalist production and its derived benefit forced villagers into a strategy of adaptation which, under certain degree of stagnation, might actually be preferable for them under the current conditions of peripheralisation.

# **Transformation in Land Ownership of Tribal Communities in Rural Gujarat: A Post-Displacement Assessment of Sardar Sarovar Project Resettlement Sites, India**

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Land is a critical resource that forms an integral part of the tribal society. The tribes of Narmada valley identified themselves with their lands and the river. The customs of the tribal people affected by the Sardar sarovar project has the direct relevance to the resettlement and rehabilitation policies. The majority of tribals enjoyed customary access and cultivate the lands but do not formally own them. Moreover, the authority negates any claim of customary rights on land. The post colonial India went on a spree of creating large development projects encompassing large swathes of land for the functionality of the project. The tribes, especially of mainland India, have lost their lands and livelihoods to development projects which have not brought them any benefits (Xaxa, 2018)

Importantly, the Land Acquisition Act, 1894 which was operational made for only 'cash' compensation for the displaced persons. Further, the Narmada Water Dispute Tribunal Award (1979) ignored any land compensation for tribals without previous land ownership. However, today Gujarat sets out most liberal resettlement and rehabilitation (R&R) policy in the country (Sah and Tomar, 2011) as it provided 'land-for-land' compensation to all the affected families of tribal communities irrespective of their land tenure status.

The idea of land compensation under the Gujarat policy is a significant one because land is not only a mode of production, but also a commodity that can be used as collateral in obtaining credit. This also resonates well with the New India vision of our Prime Minister which has 'Sabka Saath, Sabka Vikas' as its basic premise.

The paper attempts a post displacement assessment of the Gujarat R&R policy to understand the transformation in terms of ownership of land in the tribal communities. Land being a critical resource for affected community, the quality of land given and dynamics of land as a finite resource is also discussed. The research has adopted a complementarity of quantitative and qualitative methods in data collection. Data has been collected through household surveys, focus group discussions and in-depth interviews with key informants.

# **An inclusive and effective approach towards Climate Change Education? A critical examination of the Climate Change Resilience National Qualification in Fiji.**

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Climate Change Education can be regarded as an important tool to foster a better understanding of and to increase community resilience towards the future impacts of climate change. Small Island Developing States (SIDS) are predicted to experience potentially devastating effects of climate change. Therefore, it is critical to educate society as a whole to acquire the skills needed to engage effectively in climate change adaptation strategies. The Fijian government is currently in the process of defining the objectives, criteria, curriculum and learning approaches for climate change education programs targeting stakeholders in the government, education and business sector as well as local communities. The overall goal of the recently created Climate Change Resilience National Qualification was to combine not only the interests and expertise of all stakeholder groups involved but also to foster a more holistic concept of sustainable development based on both scientific and traditional knowledge. However, we argue that rather than creating an inclusive and effective program the content and objective of the new qualification was predominantly shaped by the business sector pushing for conservative and limited concepts of development. This paper offers a first account of the recently implemented climate change resilience qualification and suggests that a more refined and inclusive approach to climate change resilience and sustainable development is required to create a more effective and sustainable program.



## **Development of Informal Settlements in Suva (possibly as excursion on June 25)**

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Climate change is one of the urgent challenges of the 21st century. An important part of the discourses around climate change is about mobility. Many argue that mobility in connection to climate change, natural hazards, or similar is to bring people to safety, or to support them in their own efforts to reach safe grounds or as McAdam (2015) puts it: to take people away from “danger zones”.

The presentation investigates aspects around mobility of people living in informal settlements in Suva, the capital of Fiji. It is expected that the intensity of hazards arising from climate change will increase. It is surely timely to reflect on how hazards impact on vulnerable people and their agency to deal with such hazards. This chapter, however, concentrates on the astonishing fact that people are moving to highly exposed areas.

How can we explain when people move to “danger zones” like it is happening in many informal settlements in the Pacific Island region (and surely elsewhere)? Are people not aware that the locations are dangerous, do they not bother, or do they consciously chose such ‘danger zones’?

The study made interviews and observations in two informal settlements in Suva. Research supports suggestions that the two locations where people established informal settlements were chosen because of their unfavorable environmental conditions. Whether this happen consciously or more in a reflexive learning process that directed people to locations were they did not face evictions need to be established in future research.

It is becoming evident, however, that in Suva space is become scare. Locations which some decades ago nobody was interesting in are now in high demand. This also puts people who live in many informal settlements at risk to get ‘evicted’ by governments’ plans of relocation and / or by market forces. This situation can be seen as a special form of gentrification.