





About the Conference

Humanities, Social Sciences and Housing Building and Planning cover wide range of disciplines and different methodologies ranging from qualitative and quantitative analysis to cultural and historical documents of the past society, which focus on empowering human being towards betterment of the society and environment. Various environmental and social issues ranging from environmental degradation to poverty and inequalities nowadays are due to the failure of human beings to act accordingly in planning and managing the physical and cultural environments. Thus, it is timely that experts and academics in these three main disciplines come together to discuss and share ideas, knowledge and experience towards sustainable future. This conference brings together experts and academics from various disciplines to exchange ideas and experience and develop interdisciplinary link towards empowering humanities and social sciences for sustainable future.

As part of USM's ambition to be a Global University, it is imperative that activities are designed to maximize their full potential in regard to performance, resources and profit. 'Going Global' pushes everyone to be part of international committees by not only participating in international conferences and networking with international higher institutions but also organizing international events. This motivates School of Social Sciences, School of Humanities and School of Housing, Building and Planning to co-organize an international conference abroad.

The main conference is '2016 Humanities, Social Sciences and Environment Conference' with a specific theme of 'Integrating humans, societies and the environment for a Sustainable Future'. Three individual conferences of the three different schools are '1st International Conference on Society, Space and Environment' (ICSSE), '2nd International Conference on Contemporary Economic Issues' (ICCEI) and '1st International Conference on Livable Built Environment' (ICLBE).

The general objectives of the conferences are

- 1. To discuss the current humanities, social sciences and environment issues let them be empirical, theoretical and policy implications that provides a transdisciplinary discussion over many spectrum on the world economic issues or Malaysia specifically.
- 2. To discuss the issues and challenges of current humanities, social sciences and environment issues such as poverty, unemployment, development and finance faced globally and Malaysia specifically, particularly in promoting sustainable and inclusive growth.
- 3. To discuss the issues related to society, space and environment such as land use planning and management, environmental management and physical and cultural environment.
- 4. To provide platform to share ideas, experiences and research results about all aspects related to current economic issues.

Message Vice Chancellor



It is a great pleasure to welcome all delegates to the inaugural 2016 USM-Bali Conference. My heartiest congratulations to the School of Social Sciences, School of Humanities and School of Housing, Building & Planning for the initial step taken in making transdisciplinary research and activities become a reality among the different schools in USM. It is the vision of the university to set a benchmark in higher education not only in Malaysia but globally, with the emphasis on academic research, industry-community collaborations, employable skills and leadership qualities for its graduates. Most importantly, the university aspires to provide holistic education so that all are well-equipped to face the transformation of the society and economy in their life-long learning pursuits to deliver relevant and impactful research. The collaboration of three

important disciplines in the social sciences, humanities and built environment illustrates that transdisciplinary research is vital to understand the challenges and opportunities faced by the world in promoting justice, equality, growth and sustainable development.

My heartiest appreciation and gratitude goes to the organizing committee for a job well done and to all delegates in taking the time and effort to be part of this prestigious event. I trust that this conference will not only be a useful forum for delegates to share their research in their respective areas, but it will also provide a platform to be professionally engaged in the transcendence of knowledge, know-how, collaboration and networking for advanced studies and research. I congratulate the efforts to publish the conference papers in ISI-indexed proceedings, journal publications and book chapters as paths for knowledge documentation and research continuity.

I know that choosing a location for a large global event is a challenging task. Hence, selecting Bali as the location to host this conference is an ideal choice to forge new ties and nurture closer links among researchers, practitioners and partners from all over the world. Bali is exemplary in being the 'best of both worlds', where a flurry of new development to attain growth has somehow not risked the tranquil atmosphere of the quaint Balinese way of life, amidst the island's radiant green rice fields and rich cultural heritage. What better way to balance hectic work schedule with some peace and greenery of the island to stimulate better thinking and enhance productivity!

Before I take my leave from this inaugural conference, I fervently hope that all delegates will have a comfortable stay and will enjoy the hospitality and tranquility that Bali has to offer. I wish everyone a fruitful and memorable conference.

Thank you.

Professor Datuk Dr. Asma Ismail Vice Chancellor Universiti Sains Malaysia

Message Conference Chair



Welcome to the **2016 USM-Bali Conference**. The 2016 USM Bali Conference is a consortium of four conferences, namely The 1st International Conference on Humanities, Social Sciences and Environment, The 2nd International Conference on Contemporary Economic Issues, The 1st International Conference on Society, Space and Environment and The 1st International Conference on Livable Building Environment.

This inaugural conference is our first attempt to work with academics and practitioners from different areas ranging from pure arts to applied

sciences. It is always a challenge to work with individuals from diverse backgrounds and distinct interests. Nevertheless, we have managed to bring together a total of 47 abstracts and 75 full papers for all the four conferences. I strongly believe that the diversity of speakers, presenters and participants from various backgrounds, institutions and industries would contribute towards the sharing of new ideas, perspectives and discoveries on a wide range of topics related to the humanities, social sciences and built environment.

Organizing a conference is not an easy task, what more a multidisciplinary conference such as this one that involves the collaboration of three different schools with varying philosophies and the fact that this conference is held in a foreign country outside of Malaysia. For this, I am highly indebted towards all members of the organizing committee for their hard work during the past one year in ensuring a top quality program and successful delivery of this conference. It has been a real honour and privilege to serve as Chair of this conference and to work with an excellent team!

This conference would not have been possible without the support from all the participants and paper reviewers. I sincerely thank them for their patience and support throughout the process from abstract submission, paper reviewing until full paper acceptance. We will put in our best efforts to secure ISI indexing for the conference proceedings and proceed with journal publications for the papers that have been submitted to this conference. Last but not least, do take some time to appreciate what the beautiful island of Bali has to offer. A famous quote by Alan Cohen says "There is virtue in work and there is virtue in rest. Use both and overlook neither."

Thank you.

Associate Professor Dr. Saidatulakmal Mohd Chair USM-Bali Conference

SCHOOL OF SOCIAL SCIENCES



The School of Social Sciences at Universiti Sains Malaysia has played a key role in establishing and developing the discipline of social sciences in Malaysia. It is one of the oldest school in Universiti Sains Malaysia and also one of the first social sciences school in the country. It was established in 1970 with the main mission of knowledge advancement to understand and facilitate desirable social transformation to Malaysian society at that time. Today we remain committed to provide quality teaching, and to research and scholarship that will contribute to nation building.

We offer three undergraduate programmes which are Bachelor of Social Sciences, Bachelor of Economics and Bachelor of Social Work. At the post-graduate level, we offer Master of Public Administration (coursework programme), Master of Economic Management (coursework programme), Master of Social Work (mixed mode programme) and Master of Social Sciences (research mode). Our Ph.D. programme is by research in the discipline of Social Sciences.

There are 53 academic staff and about 1500 undergraduate and postgraduate students in our school. We collaborate with major universities and scholars from around the world. We also have good links with local businesses, public and third sector organisations, policy makers and practitioners.

SCHOOL OF HUMANITIES



The School of Humanities was one of the earliest schools to be established at Universiti Sains Malaysia and one of the largest to offer arts based courses. Since its inception in 1970, the school has built up a reputation as one of the leading Humanities faculties in the country.

Courses offered at the School of Humanities are designed to attain our goal of achieving academic excellence and producing well rounded students. The curriculum is thus structured specifically to produce graduates who are able to meet the manpower needs of the country and are well prepared to face various challenges at the workplace in the present era of ICT and

globalisation.

In line with these goals, the school is well-equipped with relevant facilities to support the teaching and learning process. These include computer labs (language interpreting, audio visual and GIS), physical labs (hydrology, physical geography, cartography), a resource room, a microfilm room and a postgraduate room.

Research and publication is the main priority at this school. Manned by experienced, dedicated and qualified academic and ancillary staff, members of the school are actively involved in numerous research projects geared towards fulfilling the complex and specialized demands of contemporary society.

SCHOOL OF HOUSING, BUILDING AND PLANNING



Established in 1972, the School of Housing, Building and Planning (HBP), Universiti Sains Malaysia, is one of the nation's oldest built environment school. For over four decades, HBP is home to seven undergraduate programs: architecture, interior design, building surveying, building technology, construction management, urban and regional planning, and quantity surveying. The academic programs in the HBP have an accreditation process from the professional bodies of each discipline such as Malaysian Institute of Architects, Boards of Malaysia, Royal Architects Institutes Oſ Malaysia, Survevor Roval Institution of Chartered Surveyor, Pacific Association of

Quantity Surveyors, and Malaysian Institute of Planners.

At postgraduate levels, HBP offer doctoral and master's degrees. The current coursework and research spans the breadth of built environment, in areas of building technology, urban planning, project management, architecture, landscape architecture, interior design, housing and quantity surveying.

HBP is also home and the frontiers of interdisciplinary research and partnerships. As of September 2015, HBP academic staffs and researchers holds: 76 projects (active research grants), from 11 different funding bodies/scheme, and bringing more than RM12 millions in research investment.

KEYNOTE SPEAKERS BIODATA

DISTINGUISHED PROFESSOR DATUK DR. SHAMSUL AMRI BAHARUDDIN



Distinguished Professor Shamsul A.B. is one of the only three Distinguished Professors in Malaysia to date. Currently, he is Deputy Chair, National Council of Professors, Malaysia and the Pro-Tem Chair, Academy of Social Science & Humanities, Malaysia. Trained as a social anthropologist in Malaysia and Australia, he was a post-doctoral fellow at the CNRS, Paris, in 1986. Since 1973, he has researched, lectured and published extensively on the theme 'economic development, culture and politics,' with an empirical focus on maritime Southeast Asia & Malaysia. He is often consulted by public and private sector interests on matters

relating to risk study/issues. He also comments on local and international mass media, on history and current affairs of the region, such as in the Al-Jazeera, National Geographic Channel, Channel News Asia, BBC London, ABC Melbourne, and Wall Street Journal. For successfully promoting Asian Studies globally, in 2008, he was awarded the prestigious Academic Prize, Fukuoka Cultural Award, Japan, the only second Malaysian to have received the award since its inception in 1990.

PROFESSOR DR. J. SOEDRADJAD DJIWANDONO



Dr. J. Soedradjad Djiwandono is Professor at the S. Rajaratnam School of International Studies (RSIS), a Graduate School of Nanyang Technological University, Singapore. He is also Emeritus Professor of Economics, the University of Indonesia. Before joining RSIS, he was a senior visiting scholar at the Institute of Southeast Asian Studies. He worked as a Development Associate at the Harvard Institute for International Development (HIID) and was a Visiting Scholar, John F. Kennedy School of Government, Harvard University, 1998-2000. While remaining in his post as professor at UI, he worked in the Government of Indonesia in different capacities, including State Minister of Trade (1988-1993) and Governor of Bank Indonesia, the central bank of Indonesia (1993-1998). Professor Djiwandono authored several books on trade and

development, monetary and banking in Indonesia. He co-chaired with Binhadi a team of writers of a sixvolume book, The History of Bank Indonesia, published in Bahasa Indonesia. A shortened English version was published, Bank Indonesia: Its Journey through Indonesia's Development, 1953-2003, Jakarta: Bank Indonesia, 2009. He contributed chapters in a number of books as well as articles in journals, newspapers and news magazines on issues in monetary and banking, international trade and economic development of Indonesia.

PROFESSOR DR. EUSTON QUAH



Professor Euston Quah is presently Head, Division of Economics; Vice-Chair, Sustainable Earth Office and immediate Past Chairman of the Senate Committee on University Policy Matters at the Nanyang Technological University (NTU), Singapore. He was formerly Chair, School of Humanities and Social Sciences at NTU. Prior to joining NTU, Professor Quah was at the National University of Singapore (NUS) where he was Vice-Dean, Faculty of Arts and Social Sciences; Deputy Director of the Public Policy Program (now called the Lee Kuan Yew School of Public Policy); and headed the economics department there. Presently, also an Adjunct Principal Research Fellow of the Institute of Policy Studies at the Lee Kuan Yew School of Public Policy, NUS, and a prolific writer, Professor Quah had published over 100 articles and opinion pieces.

Professor Quah advises the Singapore Government in various Ministries and was a Member of the recent Prime Minister's Economic Strategies Sub-Committee on Energy and the Environment, and served on the Committee of the Fare Review Mechanism of the Ministry of Transport, as well as being a Board Member of the Energy Market Authority. He presently sits on the Boards of Energy Market Company, the Energy Studies Institute at NUS; and the Complaints Committee of the Singapore Medical Council. He is also a Review Panel Member for the Bill and Melinda Gates Foundation project hosted by the Overseas Development Institute, London; a Technical Reviewer for the National Research Foundation (Singapore), Humanities and Social Sciences Research Council (Canada), and the Australian Research Council. Professor Quah is Editor of the ISI (SSCI) journal, The Singapore Economic Review (since 2002), and the President of the Economic Society of Singapore (since 2009). Professor Quah is often cited and interviewed by the local and foreign media on news, and documentary shows and foreign presses in France, Taiwan, Thailand, Malaysia, Germany and Denmark. He is one of the most highly cited and influential university economists in Singapore.

ASSOCIATE PROFESSOR DR. ISMAIL SAID



Dr. Ismail Said is an academic manager for generic program at the School of Graduate Studies, Universiti Teknologi Malaysia. As an associate professor, he also teaches at Department of Landscape Architecture, Faculty of Built Environment since 1993. His major research area is children's environment including investigation of garden as restorative milieu in healthcare setting. He has produced 19 PhD and 11 Master graduates since 2007. Currently, he is supervising 14 PhD candidates studying on ecosystem services, children and outdoor environment, pedestrian wayfinding, and city resilience. He has published 44 papers in indexed journals, 120 papers conference proceedings, 6 book chapters, and 5 books on materials of landscape architecture and architecture.

Bali Conference

CONFERENCE PROGRAM

Wednesday, 2nd November 2016

0800 - 0830	Registration	Foyer in front of Bintang Ballroom
0830 – 1000	Welcoming Address Assoc. Prof. Dr. Saidatulakmal Mohd Chair, USM Bali Conference	Bintang Ballroom
	Keynote Address 1 Distinguished Professor Datuk Dr Shamsul Amri Baharudd	in
1000 – 1030	Morning Tea Break	Foyer in front of Bintang Ballroom
1030 – 1230	Parallel Session 1	Komodo Flores Nias Sawu
1230 - 1330	Lunch Break	Sawu
1330 - 1430	Keynote Address 2 Professor Dr Euston Quah	Komodo
1430 - 1700	Parallel Session 2	Komodo Flores Nias Sawu
1700	Afternoon Tea Break	Foyer in front of Bintang Ballroom
Thursday, 3rd N	lovember 2016	
0800 - 0830	Registration	Foyer in front of Bintang Ballroom
0900 – 1000	Keynote Address 3 Associate Professor Dr. Ismail Said	Bintang Ballroom
1000 – 1030	Morning Tea Break	Foyer in front of Bintang Ballroom
1030 – 1200	Parallel Session 3	Komodo Flores Nias
1200 - 1330	Lunch Break	Sawu
1330 - 1430	Keynote Address 4 Professor Dr. J. Soedradjad Djiwandono	Komodo
1430 -1700	Parallel Session 4	Komodo Flores Nias
1700	Afternoon Tea Break	Sawu Foyer in front of Bintang Ballroom

Friday, 4th November 2016

Field trip

Conference General Information

Registration

The USM Bali Conference Registration and Information Desk for all the four conferences will be situated at the lobby of the Bintang Ballroom throughout the conference. If you have already paid online, or by bank transfer, you will be able to pick up your conference pack: conference bag, USM Bali Conference abstract and programme book, official certificate of attendance, e-proceedings pendrive and receipt of payment. At this time, you will also be provided a lanyard and a name card. For those who have granted permission to pay on-site, please note that we will not be able to process credit cards and will only be accepting cash payments in US Dollars.

Welcoming Address and Keynote Addresses

There will be a welcoming address on Wednesday (2nd November) morning at 830 a.m. in Bintang Ballroom. This will be followed by a Keynote Address in the same room. Please arrive on time for this session. Do refer to the conference program for details information on the other three Keynote Addresses.

Parallel Sessions

Parallel Sessions are on Wednesday and Thursday (2nd and 3rd November 2016), 90 to 150 minutes in length, and have between five to seven presenters in each session. Each presenter has 20 minutes including Q and A sessions.

Presentations and Equipment

All rooms will be equipped with a laptop (Windows OS) pre-installed with Powerpoint and LCD projector. If you wish, you may directly link your own laptop, although we advise you to use the laptop provided by plugging in your USB. We recommend that you bring copies of your presentation in the case that one fails.

Session Chairs

Session Chairs are expected to briefly introduce themselves and other speakers and ensure that the session begins and ends on time, and that the time is fairly divided between the presentations. Each presenter should have no less than 20 minutes to present her (his) paper. Please follow the order as stated in the programme. In the case of a no show of a presenter, please try to keep to the original timeslots as the delegates use the programme to plan their attendance. Session Chair is expected to assume the timekeeping role of the session.

A Polite Request to All Participants

Participants are requested to arrive in a timely fashion for all sessions, keynote addresses included. Presenters are reminded that the time slots should be divided fairly and equally between the number of presentations, and that they should not overrun.

Refreshments and Lunch

Complimentary coffee, tea and light snacks will be provided twice a day, for 1.5 hours in the morning and again in the afternoon for 2nd and 3rd November. Lunch will also provided for the two days at the coffee house.

What to Wear and Weather in Bali

Delegates generally wear business casual attire. Bali is approximately 8 degress south of the equator and you can expect a tropical, warm and humid climate all year round with two main distinctive seasons: dry and rainy seasons. The rainy season is typically from October to March. As weather is normally unpredictable, please take the necessary precautions.

PARALLEL SESSIONS PROGRAM

Parallel Session 1 2nd November 2016 1030 – 1230

Komodo	Flores	Nias	Sawu
HSSEC	ICLBE / HSSEC	ICCEI / HSSEC	ICLBE
(Partial Session in Bahasa Melayu) Chair: Mohamad Shaharudin Samsurijan	Chair: Suet Leng Khoo	Chair: Dinh Van Oanh	Chair: Azizi Bahauddin
Krisis Hak Asasi Pengungsi : 'Penguatan Program Pemberdayaan Pengungsi di Indonesia sebagai Negara Transit untuk Mereduksi Potensi Konflik' (HSSEC 1048) FinahLiyah Hasan	Human Capital Issues in Built Heritage Conservation: What's Happening in The Historic City of George Town, Penang? (ICLBE 1001) Suet Leng Khoo & Yoke Mui Lim	The Study of Solutions to Destination Branding for Hanoi Capital: Approaching from The Perspective of Foreign Tourists (ICCEI 1022) Vu Tri Dung & Dinh Van Oanh	Effectiveness of Cross-Sectional Ratio to SSTT-Confined High- Strength Concrete (ICLBE 1008) Hoong-Pin Lee, Jie-Sheng Lee, Perng-Shen Tai, Abdullah Zawawi Awang & Wahid Omar
Pembangunan Inklusif Untuk Golongan Isi Rumah B40: Realiti Malaysia Untuk Mencapai Negara Maju Menjelang 2020 (HSSEC 1003) Radieah Mohd Nor & Wan Norhaniza Wan Hasan	Cultural Diversity and Conflict in The Construction Industry of Malaysia (ICLBE 1017) Teh Jun Ren & Amin Akhavan Tabassi	Examining Behaviour of Staple Food Price using Multivariate BEKK-GARCH Model (ICCEI 1027) Kumara Jati & Gamini Premaratne	SteFib Column as New Invention to the Liveable Built Environment (ICLBE 1018) Nurharniza Abdul Rahman, Amirullah Maat, Najiah Adam Tong & Deepak Tirumishi Jada
Dr. Burhanuddin Al-Helmi Dan Alam 'Melayu Raya' (HSSEC 1002) Hafizul Adnen & Mohamad Muzammil Mohamad Noor	Integrating Sustainable Construction Approach in Post-Disaster Housing Reconstruction (ICLBE 1028) Farrah Zuhaira Ismail, Anthony Halog & Carl Smith	A Seasonal Approach on Energy Consumption Demand Analysis in Thailand (ICCEI 1018) Sakkarin Nonthapot	Bullying Behavior: An Overview of Environmental Design with School Bullying and Future Crime (ICLBE 1010) Azna Abd Wahab & Siti Rasidah Md Sakip
Peranan Kontraktor dan Tukang Paip dalam Pengurusan Air Tidak Berhasil (NRW) Secara Efisien: Kajian Kes di Bechah Tendong, Pasir Mas, Kelantan, Malaysia (HSSEC 1045) Mohammad Ghazi Hj Ismail, Chan Ngai Weng & Aminuddin Ab Ghani	Influence of Green Campus Application to Quality of Life (ICLBE 1032) Hilma Tamiami Fachrudin & Khaira Amalia Fachrudin	Energy Subsidy and Economic Production: The Evidence from Malaysia and Indonesia (ICCEI 1013) Dzul Hadzwan Husaini, Hooi Hooi Lean & Jerome Swee- Hui Kueh	Enhancing Architects' Quality of Work in Building Project Delivery Proces (ICLBE 1016) Amy Marisa & Nor'Aini Yusof
Pembangunan Lestari dan Konsep Halal-Hijau: Kontradiksi dalam Kesatuan (HSSEC 1009) Wan Norhaniza Wan Hasan & Norazilawati Md Dahlal Aligning Malaysia New Economic Model with Knowledge Transfer Programme (HSSEC 1036) Mohamad Shaharudin Samsurijan, Siti Rahyla Rahmat, Saidatulakmal Mohd, Azlinda	An Overview of Snatch Theft Crime and Physical Environmental Attribute (ICLBE 1009) Anith Nabilah Mustafa & Siti Rasidah Md Sakip Sustainable Pillars for Township Tools Core Criteria of Community Planning & Design (HSSEC 1027) Rostam Yaman, Suwattana Thadaniti, Hamimah Adnan &	Motives for Demand for Religion: A Confirmatory Factor Analysis (ICCEI 1019) Sotheeswari Somasundram & Muzafar Shah Habibullah The Problems in The Poultry Value Chain in Vietnam (HSSEC 1028) Pham Hong Hoa, Nguyen Hoai Long & Le Pham Khanh Hoa	The Communal Dwelling of The Rungus Longhouse, Sabah, Malaysian Borneo (ICLBE 1006) Azizi Bahauddin & Aldrin Abdullah
Azman & Arman Abdul Razak A Comparison of Relationship Between Gynecological Age with Birth Weight and Chronological Age with Birth Weight in Teenage Mothers in Eight Public Health Center in Kota Bekasi West Java (HSSEC 1050) Siti Masyitah	Noraini Ahmad		

USM Bali Conference 2016

12

Parallel Session 2 2nd November 2016 1430 - 1700

Komodo HSSEC	Flores ICSSE	Nias ICCEI	Sawu ICLBE
Chair: Intan Hashimah Mohd Hashim	Chair: Chan Ngai Weng	Chair: Abdelhak Senadjki	Chair: Zul Zakiyuddin Ahmad Rashid
Towards the Development of Competency Areas for Student Affairs and Services Administrators: Perspectives for Professionalization (HSSEC 1047) Melfi M. Caranto	Taman Bandar dan Manfaat Perkhidmatan Ekosistem Budaya: Kajian Taman Jubli Perak, Sungai Petani, Kedah (ICSSE 1006) Nurul Fadziiana Abu Hassan & Asyirah Abdul Rahim	Assets, Risks and Vulnerability to Poverty Trap: A Study of Northern Region of Malaysia (ICCEI 1012) Abdelhak Senadjki, Saidatulakmal Mohd, Abdul Fatah Che Hamat & Zakaria Bahari	Influencing Factors of Construction and Demolition (C&D) Wastes Generation in Malaysia (ICLBE 1021) Mohd Reza Esa, Anthony Halog & Lucia Rigamonti
A Modern Quran Interpretation (Tafsir): A Reform in The Methodology of The Quran Interpretation (HSSEC 1005) Cecep Alba, Qoriah A. Siregar & Sansan Ziaul Haq	Tackling Poverty Issues in Malaysia: A Spatial Dimensional Approach (ICSSE 1010) Narimah Samat & Ruslan Rainis	Inflation Hedging Property of Housing Market in Malaysia (ICCEI 1002) Geok Peng Yeap & Hooi Hooi Lean	Clay-PFA Eco-Bricks for Low- Impact Construction (ICLBE 1023) Norsalisma Ismail & Mohamad Nidzam Rahmat
Examining the Relevance of Pancasila as the Indonesian State Philosophy (HSSEC 1007) Prima Roza	Colonial Complexity: Focalisation and Realism in Agnes Keith's Novel, Beloved Exiles (ICSSE 1004) Mohamad Rashidi Pakri & Anis Abdul Rahim	Globalization and Sustainable Development: Evidence from Indonesia (ICCEI 1017) Abdul Rahim Ridzuan, Nor Asmat Ismail & Abdul Fatah Che Hamat	Strength Properties of Stabilised Marginal Clay- Industrial Waste with Traditional Binder (ICLBE 1027) Ani Maslina Saleh & Mohamad Nidzam Rahmat
Exploring Women's Relationships: An Analysis of Malaysian Women's Lifestyle Magazines (HSSEC 1015) Intan Hashimah Mohd Hashim, Azman Azwan Azmawati, Noraida Endut & Surayah Abd Aziz	Urban Revitalization of Quiapo District in Manila: Re-establishing Identity through Heritage Conservation (ICSSE 1009) Lorelei D.C. de Viana	Structural Monetary Model for an Emerging Market (ICCEI 1028) Tze-Haw Chan	Energy Efficiency of Green Highway Assessment for Tropical Climate (ICLBE 1029) Asmalia Che Ahmad, Nur Illiana Husin, Abdul Muhaimin Ab Wahid & Syahrul Nizam Kamaruzzaman
Crime, Meaning in Life and Well- Being in Three Residential Areas in Penang, Malaysia (HSSEC 1023) Intan Hashimah Mohd Hashim, Norzarina Mohd Zaharim, Premalatha Karupiah, Nor Hafizah Selamat, Noraida Endut & Azman Azwan Azmawati	Community Perceptions of the Cultural Ecosystem Services of River Corridors Recreational Spaces in Sungai Pinang Catchment Area, Malaysia (ICSSE 1012) Mohammad Izzamil M.N. & Asyirah Abdul Rahim	The Prevalence of Overemployment in Penang: A Preliminary Analysis (ICCEI 1016) Jacqueline Liza Fernandez & Ee Shiang Lim	Stormwater Management of Green Highway Assessment for Tropical Climate (ICLBE 1030) Asmalia Che Ahmad, Nur Illiana Husin, Abdul Muhaimin Ab Wahid & Syahrul Nizam Kamaruzzaman
The Perception of Sunway University Students on Green Products: A Case Study on Students of Department of Communication and Liberal Arts (HSSEC 1049) Azman Ramlie & Jacqueline Ting Zi Yee	The Role of The University in Community Engagement for Environmental and Water Education: The Example of Universiti Sains Malaysia (ICSSE 1001) Chan Ngai Weng, Hong Chern Wern, Lai Chee Hui, Lim Han Khim & Tang Soke Kwan	The Impact of Social Capital On Crowdfunding Performance: A Case Study of KITABISA.COM (ICCEI 1029) Lady Aprilia, Sigit S. Wibowo & Zaafri Ananto Husodo	Developing an Adaptive Reuse Model for Organization Management in Conservation of Heritage Building in Malaysia: A Conceptual Framework (ICLBE 1039) Mohd. Hanizun Hanafi, Zul Zakiyuddin A. Rashid, Arman Abdul Razak & Mohd Umzarulazijo Umar
A Review of the Underlying Constructs of Connectedness to Nature among Children (HSSEC1032) Nor Diyana Mustapa, Nor Zarifah Maliki, Nor Fadzila Aziz & Aswati Hamzah	Assessing Different Types of Flood Losses in Kelantan State in Malaysia During the December 2014 Flood (ICSSE 1002) Chan Ngai Weng, Ku Ruhana Ku Mahamud & Mohd Zaini Abd Karim	Investment Elasticity of GDP per Capita: A Comparative Analysis between the Developed and the Developing Economies (ICCEI 1033) Adulfo Revestir Arevalo	Barriers and Drivers of Construction Green Supply Chain Management (ICLBE 1038) Heng Yong Ming & Zul Zakiyuddin Ahmad Rashid

13

Parallel Session 3 3rd November 2016 1030 – 1200

Komodo ICSSE & HSSEC	Flores HSSEC	Nias ICCEI	Sawu ICLBE
Chair: Siti Rahyla Rahmat	Chair: Shariffah Suraya Syed Jamaludin	Chair: Jerome Kueh	Chair: Faizal Baharum
The Application of Spatial Statistics Analysis in Property Valuation Process for Service Improvement in Local Authority (ICSSE 1008) Oliver Valentine Eboy & Narimah Samat	Social Support During the Postpartum Period: Mothers' Views, Needs and Expectations (HSSEC 1038) Shariffah Suraya Syed Jamaludin	Estimation of The Public Debt Threshold of Malaysia (ICCEI 1005) Jerome Kueh, Venus Khim-Sen Liew, Sze-Wei Yong & Muhammad Asraf Abdullah	The Impact of Road Geometry with Respect to The Roadside Trees On Energy Implications of Road Adjacent Residential Buildings in Iran (ICLBE 1034) Nasibeh Faghih Mirzaei, Vida Taghvaei & Hossein Taghvaei
Conservation and Environmental Impacts of Tourism in Kinabalu Park, Sabah (ICSSE 1011) Normah Abdul Latip, Azizan Marzuki, Mohd Umzarulazijo Umar & Nadiatul Sarah Muhammad Rais	The Possibilities of Music Therapy for Healing and Positive Psychology among Sri Lankans (HSSEC 1046) S. M. K. D. Arunatileka, R. K. S. Liyanage, M. A. I. M. Dharmadasa, V. A. Isuru & S. W. A. D. M Samarasinghe	Dynamic Relationships Between Exchange Rates and Foreign Direct Investment in China (ICCEI 1026) Jung Wan Lee, Young-Ei Kim & Jong Ho Lee	Assessment of Public Procurement Guidelines Compliance towards achieving Construction Project Cost Performance in Nigeria: Mediation Approach Using Process Macro (ICLBE 1020) Abdullahi Nafiu Zadawa, Abdul Aziz Hussin, Atasya Osmadi & Aminu Garba Waziri
Protection Priority in Mountain Environment Using Analytic Hierarchy Process (AHP) on Kinabalu Park, Sabah (HSSEC1034) Normah Abdul Latip, A. Ghafar Ahmad, Azizan Marzuki, Mohd Umzarulazijo Umar & Nadiatul Sarah Muhammad Rais	The Readiness of Probation Officers of the Implementation of Restorative Justice in Malaysia (HSSEC 1020) Taufik Mohammad & Azlinda Azman	The Effect of Public Debt on Energy-Growth Nexus: Threshold Regression Analysis (ICCEI 1004) Sze Wei Yong, Hooi Hooi Lean & Jerome Kueh	Performance Measurement Dimensions for Sri Lankan Hotel Industry: An Expert Review (ICLBE 1007) Kaluthanthri P. C & Osmadi A
Migrant Farm Labourers Contribution in Oil Palm Plantations: A Case Study of Oil Palm Supply Chain in Johor, Malaysia (HSSEC 1004) Siti Rahyla Rahmat & Suziana Mat Yasin	Consumption-Savings Pattern of Low Income Households towards a Sustainable Livelihood – A Gender Perspective (HSSEC 1001) Saidatulakmal Mohd, Nurul Syifaa Mohd Shakil & Nur Azirah Zahida Mohamad Azhar	A Choice Experiment on Agricultural Chemicals Use Reductions (ICCEI 1008) Ke Nunthasen & Waraporn Nunthasen	The Iconography Preferences for the Malay Garden Hardscape Identity (ICLBE 1036) Ahmad Zamil Zakaria, Syazwani Ahmad & Mohd Sabrizaa Abd Rashid
Safeguarding Intangible Cultural Heritage: Law and Policy in Malaysia (HSSEC 1011) Noorfathehah Abdullah Sani	Examination of Cheating Attitudes of Students in the Vocational School of Health Sciences in Karabük University (HSSEC 1026) Mustafa Adibatmaz & Fatma Betül Kurnaz	Determinants of Malaysia's Rubber Medical Devices Export: Trade Agreements and the Gravity Model (ICCEI 1031) Lee Siu Ming, Radziah Adam & Ku'Azam Tuan Lonik	Managing Scaffolding for Safe Working Practices on Site (ICLBE 1025) Norhidayah Md Ulang, Ameera Mohd Nordin & Faizal Baharum

Parallel Session 4 3rd November 2016 1430 – 1700

Nias HSSEC & ICSSE		Sawu ICLBE	
Presentation in-absentia		Chair: Safial Aqbar Zakaria	
Farmers' Adoption Level for Quinoa Cultivation by Training and Visit Extension Approach in District Sargodha-Punjab, Pakistan (HSSEC 1012) Ejaz Ashraf, Hafiz Khurram Shurjeel & Nosheen Fatima	Theming and Imagineering as A Place-Making Strategy - A Case Study of Islamic Tourism in Malaysia (HSSEC 1021) Nurul Shakila Khalid & Hamzah Muzaini	Influence of Morphological Elements on Visual Privacy of House Facades (ICLBE 1033) Hussien Salman & Ahmad Sanusi	Materials and Experimental of Concrete Roof Tile Composite as Insulation Material (ICLBE 1024) An Nisha Nur Welliana Abd Rased, Noor Faisal Abas & Abdul Malek Abdul Rahman
The Relationship Between Malaysia's Residential Property Price Index and Residential Properties Loan Supply (ICCEI 1015) Chee-Hong Law & Lim Ghee-Thean	Pilot Study Questionnaire Analysis on Indoor Environmental Quality (IEQ) and Occupant's Self-Estimate Productivity in GBI Rated Office Building: Non Environmental Factors (ICLBE 1040) Muna Hanim Abdul Samad, Asniza Hamimi Abdul Tharim & Mazran Ismail	The Necessities of Having Lighting Designers in Built Environment in Malaysia (ICLBE 1015) Safial Aqbar Zakaria & Foong Fu Kai	The Windows of Security: Forming A Distinguished Architectural Style (ICLBE 1041) Molood Seifi, Aldrin Abdullah & Mina Seifi
Modern Building Services vs Heritage Shophouse Façade in Georgetown/ Penang (ICLBE 1022) Omar Adil Sabah & Muna Hanim Abdul Samad		Color Idea in Therapeutic Garden Design for Pediatric Patient (ICLBE 1037) Nor Izana Mohd Shobri	A Review of Criteria and Indicators for Heritage Trees Recognition (ICLBE 1011) Khalilah Hassan, Wan Noor Anira Wan Ali & Siti Norlizaiha Harun
			Improving Industrialised Building System (IBS) Construction Through The Adoption of Building Information Modelling (BIM) (ICLBE 1043) Mariati Taib, Sabreena Shukri & Teo Yu Shan



ABSTRACTS

2016 Humanities, Social Sciences and Environment Conference (HSSEC)

Consumption-Savings Pattern of Low Income Households towards a Sustainable Livelihood – A Gender Perspective

Saidatulakmal Mohd, Nurul Syifaa Mohd Shakil & Nur Azirah Zahida Mohamad Azhar

School of Social Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: eieydda@usm.my

A report by Khazanah Research Institute on the State of Households in 2015 revealed that majority of Malaysian households owned items such as cars, motorcycles, refrigerators, televisions, mobile phones, satellite TVs and internet subscriptions and that most low-income households acquired these items and services on credit. The report further concluded that this trend was also accompanied by low personal savings. While strong income growth, has, in turn, helped alleviate poverty and added to the legions of the middle-income, incidentally, this has fueled consumption, with households increasingly using debt for spending. Interestingly, low-income households not only have low personal savings due to high consumption, but low personal savings due to high consumption of assets (productive and non productive) that act as buffers against any unanticipated events such as loss of job or income. By using a structured questionnaire on 300 low-income households and (ii) to assess the consumption-savings pattern of low-income households and (ii) to assess the consumption-savings pattern between genders. Low-income households are identified as households earning MYR 3,600 per month. Data gathered on personal savings include cash savings, savings for pilgrimage, gold, kut (rotational savings scheme), community death benefits, land and property.

Keywords: sustainable livelihood, gender, savings, expenditure

Pembangunan Inklusif Untuk Golongan Isi Rumah B40: Realiti Malaysia Untuk Mencapai Negara Maju Menjelang 2020

Radieah Mohd Nor^a & Wan Norhaniza Wan Hasan^b

^aPusat Kajian Kelestarian Global, Universiti Sains Malaysia, 11800 Pulau Pinang, Malaysia ^bPusat Kajian Pengurusan Pembangunan Islam, Universiti Sains Malaysia, 11800 Pulau Pinang, Malaysia Email of corresponding author: radieah@usm.my

Terlalu banyak indikator yang perlu dipenuhi oleh Malaysia sekiranya ingin mencapai negara maju yang berpendapatan Tinggi menjelang 2020. Pembangunan inklusif yang digariskan dalam Rancangan Jangka Panjang Ke-11 (RMK-11) juga memaparkan masih banyak perkara yang perlu dipenuhi oleh Malaysia untuk mencapai matlamat menjadikan negaranya bertaraf negara maju. Walau bagaimanapun, dalam tempoh masa kurang empat tahun ini, Malaysia disarankan memfokuskan kepada isu yang lebih kritikal sebagaimanam hadis Rasulullah SAW mengenai empat perkara yang menjadi asas kebahagian manusia di dunia iaitu. Empat perkara tersebut ialah pasangan yang baik, kediaman yang selesa, jiran tetangga yang baik dan juga kenderaan yang selesa dijadikan kerangka konseptual untuk meneliti kemajuan yang telah dicapai oleh Malaysia. Analisis kandung berdasarkan data-data yang diperoleh daripada laporan-laporan kerajaan diselidik untuk menilai pembangunan inklusif yang telah dijalankan oleh pihak kerajaan khususnya terhadap isi rumah berpendapatan RM3855 ke bawah atau berpendapatan 40% terendah. Golongan ini lebih dikenali sebagai isi rumah B40. Berdasarkan kajian yang telah dijalankan ternyata masih banyak perkara yang perlu kerajaan laksanakan untuk mencapai pembangunan inklusif sebagaimana yang diuar-uarkan. Keempat-empat perkara yang menjadi kerangka konseptual tersebut masih memerlukan perhatian yang khusus daripada pihak kerajaan dan masyarakat secara keseluruhannya untuk mencapai status negara maju.

Kata kunci: negara maju, isi rumah B40, 2020, pembangunan inklusif

Dr. Burhanuddin al-Helmi dan Alam 'Melayu Raya'

Hafizul Adnen & Mohamad Muzammil Mohamad Noor

Pusat Pengajian Pendidikan Jarak Jauh, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: muzammil@usm.my

Dr. Burhanuddin merupakan pejuang kebangsaan Melayu. Perjuangannya dalam politik dan semangat nasionalisme cukup panjang dan berliku. Dasar perjuangannya yang tidak mahu bekerjasama dengan penjajah British telah dikatakan sebagai seorang nasionalis berhaluan kiri. Beliau berjiwa Melayu yang tebal dan bercitacita menyatukan bangsa dan bahasa Melayu dengan membawa idea-idea agama dan politik Islam di rantau Nusantara. Idea utama yang cuba dikendongkannya ialah idea gagasan 'Melayu Raya' atau dikenali juga dengan 'Indonesia Raya'. Idea dan cita-citanya itu yang mahu memerdekakan Tanah Melayu bersama-sama Singapura dan wilayah-wilah lain di Asia Tenggara bersama-sama Indonesia merupakan satu idea dan gagasan yang agak besar dan berat dilaksanakan. Menurut beliau, ada beberapa sebab kenapa gagasan 'Melayu Raya' perlu dilaksanakan; iaitu, wilayah Asia Tenggara mempunyai bahasa yang satu (bahasa Melayu), mempunyai penganut agama yang ramai (Islam), cara hidup atau budaya yang sama serta mempunyai sejarah penjajahan yang serupa iaitu dijajahi oleh kuasa-kuasa Barat. Kesemua idea perjuangan politik, nasionalisme dan gagasan 'Melayu Raya' itu diinterpretasikan dan diterjemahkan dalam buku-bukunya yang bertajuk Sejarah Perjuangan Kita (1946), Falsafah Kebangsaan Melayu – Tak Melayu Hilang Di Dunia (1954), Agama dan Politik (1954), Asas Falsafah Kebangsaan Melayu (1963) dan Ideologi Politik Islam (1957). Beliau juga turut dikenali sebagai seorang reformis Melayu Islam, golongan anti komunis, ahli politik dan seorang pemidato yang petah. Dalam artikel ini akan memperlihatkan adakah idea 'Melayu Raya' yang beliau kendongkan itu berjaya atau sebaliknya; perjuangannya itu dibantu oleh nasionalis- reformis Melayu Islam lain serta kesannya terhadap perkembangan sejarah nasionalisme dan politik di rantau dunia Melayu, khususnya di Tanah Melayu dan Indonesia. Dengan kata lain, adakah idea-idea 'Melayu Raya' yang cuba ditegakkan oleh Burhanuddin, misalnya telah membangkitkan semangat nasionalis pemimpin-pemimpin parti politik haluan kiri? Satu persoalan yang agak menarik untuk diperbincangkan.

Kata kunci: Dr. Burhanuddin, 'Melayu Raya', Indonesia Raya', reformis Melayu Islam, reformis Melayu Islam

Examining The Relevance of Pancasila as the Indonesian State Philosophy

Prima Roza

Humanities Research Group, Faculty of Fine Arts and Design, Institut Teknologi Bandung, Indonesia Email of corresponding author: primaitb@yahoo.com

Pancasila is the state philosophy (*Philosophische grondslag*) which became the main feature of the nation state of Indonesia. Pancasila contains five basic principles produced from a deep reflection and profound thought of the founding fathers upon the noble values espoused by the various ethnicities in the archipelago, as they sought to establish an independent state in 1945. The result of the deep reflection then plays a role as a collective conciousness of various different ethnicities. It unites the nations and raises awareness that there are similarities in differences, and the same conviction that they actually belong together and worthed to be united as a nation. This paper seeks to revisit the state philosophy of Pancasila in the context of the nation state in the era of globalization, and to analyze its role as a guidance of the nation to survive in the global era.

Keywords: state philosophy, collective conciousnes, interpretation, global era, survive

Migrant Farm Labourers Contribution in Oil Palm Plantations: A Case Study of Oil Palm Supply Chain in Johor, Malaysia

Siti Rahyla Rahmat & Suziana Mat Yasin

School of Social Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: rahyla@usm.my

Malaysian palm oil industry is continuously luring its sustainable palm oil in its production. Migrants in Palm Oil Industry are pivotal actors in the supply chain as working in oil palm plantation requires physical demand activities. We have conducted a field research in oil palm plantations in Johor. Johor was chosen to be representative of regions in Malaysia where the palm oil industry has a long history and migrant farm labourers may have their significant impact towards the oil palm fruits bunches productions. This study will examine critical issues in the oil palm oil industry specifically it will focus on plantations. The issue of migrant farm labourers in oil palm plantations is highly debated in Malaysia. In the Tenth Malaysia Plan, its fifth principle on 'Developing and Retaining a first World Talent Base' clearly indicated the Government's intention to reduce the dependency on unskilled foreign labour by increasing the levy payment imposed on employers. This also infers a preventive action taken by the government to overcome influx of immigrants in Malaysia. In addition, local mass media in Malaysia have also actively highlighted negative stories about immigrants and influenced the bad stigma among the Malaysians towards the presence of immigrants. However, at the same time, employers in the plantation sector have been urged to address issues of labour scarcity in this sector, which have already led to a loss of billions Ringgit due to its slow supply chain production. Furthermore, Malaysia has to a large extent dependency on immigrants in order to maintain certain economic sectors, especially rural economic sectors. In light of these challenges, this article will examine the policy related with migrant labours, including the newly introduced international migration policy (6Ps) which addresses the influx of irregular migrants in Malaysia.

Keywords: oil palm, supply chain, migrant labourers, migration policy

Sustainable Pillars for Township Tools Core Criteria of Community Planning & Design

Rostam Yaman^a, Suwattana Thadaniti^a, Hamimah Adnan^b & Noraini Ahmad^c ^aChulalongkorn University, Thailand ^bUniversiti Teknologi MARA, Malaysia ^cInternational Islamic University Malaysia Email of corresponding author: rostamyaman1@yahoo.co.uk

This paper aims to identify the sustainable dimension pillars (SDP) on neighborhood assessment sub-criteria of community planning & design particularly in Malaysia. The problem of the study is, does this townships assessment tools fully address sustainability? Or it might be 'green but not sufficient' to be sustainable? This paper aims to evaluate the adaptation and balance of SPD in Community, Planning and Design (CPD), which is one of the core-criteria of GBI Township/Neighborhood Assessment Criteria. The objective is to identify and evaluate the SPD indicators balance towards sustainable urban development in Malaysia. Questionaires survey and expert interview were gathered for the SPD indicators in the CPD sub-criteria. The significant contribution of research is the findings will be used as references/guides for future review and refinement GBI Township/Neighborhood Assessment Criteria.

Keywords: sustainable pillar dimensions, community, neighborhood development

A Modern Quran Interpretation (Tafsir): A Reform in the Methodology of the Quran Interpretation

Cecep Alba, Qoriah A Siregar & Sansan Ziaul Haq

Social Sciences and Humanities Research Group, FSRD ITB Labtek VII ITB, JI. Ganesa 10 Bandung, Indonesia Email of corresponding author: cecep_alba@yahoo.com

Quran is the source of the Islam teachings which has an absolute nature, while the tafsir of Quran is relative in nature. The *mufasirs* (interpreters) interpret the Quran in accordance to their educational background and capacity of knowledge. As a result, there are books of *tafsir* (interpretation) which have a tendency in certain areas. Based on the paradigm, Muhammad Abduh argues that the interpretation of Quran needs to be updated so that the guidance of the Quran illuminates the life of mankind. The research purposes. 1. To prove is it true that Abduh's renewal originated from the *tafsir* methodology. 2. How is the *tafsir* methodology of Abduh. 3. How is the pattern of Abduh's *tafsir*. Research methods are normative, doctrinal, descriptive analysis, because this research is concerned with aspects of theoretic i.e. the *tafsir* theories. Research results: It is recognized in the historical trajectory of the Islamic intellectual that Muhammad Abduh is a mujaddid (reformer) in Islam thought. It turns out that the Abduh's renewal was derived from the *tafsir* methodology of Quran. The *tafsir* methodology of Muhammad Abduh was meant to be standing on principles: 1. The Quran is absolute and universal 2). Common sense is the primary means to understand the Quran, so rationality becomes the measure of truth, hence for this principle, Abduh's *tafsir* is considered as modern *tafsir*. 3.) Very selective in interpreting verses with history (Hadith). 4.) Main function of the Quran is the guidance for mankind. 5). The pattern of Abduh's *tafsir* is behavioral and societal.

Keywords: renewal, rationality, modern, absolute, universal, relative

Exploring Women's Relationships: An analysis of Malaysian Women's Lifestyle Magazines

Intan Hashimah Mohd Hashim, Azman Azwan Azmawati, Noraida Endut & Surayah Abd Aziz Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: hashimah@usm.my

This study presented content analysis of two women's lifestyle magazines for the period of January until June 2016. Combining media studies and relationship research, this paper examined cover pages and cover stories of two highly popular and widely circulated women's lifestyle magazines in Malaysia; *Nona* and *Wanita*. Preliminary analysis indicated women who appeared in the cover page and cover story of the two magazines were attractive, successful and held prominent positions within society. They included businesswomen, actresses and politicians/activists. Portrayal of their sources of relationships included children, husbands, family as consistent with their private roles as mothers, wives, sisters and daughters. From the analysis, women in the cover pages of these two magazines continued to be presented in traditional, patriarchal gender roles including being nurturant and submissive with emphasis on their sexuality. This is in spite of them holding non-traditional roles as providers and representing success stories of women in public domain. The analysis provided support that gender roles and cultural expectations continue to shape people's social experiences and they shape and at the same time enhanced by the representations as appeared in the media.

Keywords: interpersonal relationships, gender, media

The Readiness of Probation Officers of the Implementation of Restorative Justice in Malaysia

Taufik Mohammad & Azlinda Azman

School of Social Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: fik@usm.my

Probation officers or pegawai akhlak working in Social Welfare Department of Malaysia are among the most significant authority figures in juvenile offender's life going through a criminal process. This implies that their voice and opinion is an important part of assessment process when it comes to delivering intervention measures for the juvenile offenders. The Malaysian government has already called for the implementation of restorative justice within its juvenile justice and this means that obtaining the probation officers' feedback on this would be pivotal which is this study's aim. Twelve probation officers working in several states in Malaysia were interviewed by phone and asked with their readiness and perception on three main components of restorative justice which included a dialogue/meet-up between an offender and his or her victim, apology/forgiveness, and reparation of harm. The responses showed a trend of acceptance but with a degree of wariness when it comes to reparation of harm which was seen material by the respondents. In addition, the probation officers also emphasized on the feasibility of restorative justice programmes on only certain types of crime. These probation officers' thoughts on restorative justice will be discussed further and the implication on the possible implementation will be discussed further.

Keywords: probation officers, restorative justice, juvenile offenders, Malaysia

Crime, Meaning in Life and Well-Being in Three Residential Areas in Penang, Malaysia

Intan Hashimah Mohd Hashim, Norzarina Mohd Zaharim, Premalatha Karupiah, Nor Hafizah Selamat Noraida Endut & Azman Azwan Azmawati

Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: hashimah@usm.my

This paper examined how crime and meaning in life can be associated with individual's well-being. Crime as part of life's negative experiences and meaning in life as part of the personal positive attributes can be related to constructs of well-being including affect, life satisfaction and subjective happiness. Semi-structured interviews assessing experience of crime, meaning in life, negative affect associated with crime, life satisfaction and subjective happiness were conducted with 240 residents from 3 urban residential areas in Penang Island, Malaysia. The three urban residential areas represented low, medium and high-cost categories. We argue that people in these different residential areas might have different experiences associated with crime. The study found some significant relationships between the constructs and evidence for specific experiences among people living in different residential areas. These findings highlight the need to understand the complex relationships between experience of crime, meaning in life and well-being among people living in different residential areas.

Keywords: crime, meaning in life, well-being

The Problems in The Poultry Value Chain in Viet Nam

Pham Hong Hoa, Nguyen Hoai Long & Le Pham Khanh Hoa Marketing Faculty, National Economic University, Vietnam Email of corresponding author: phamhonghoa.mkt@gmail.com

The Vietnamese poultry market has increased with the speed of 4.45% annually in the period of 2010 - 2015. However, the Vietnamese of poultry and feeding field has remained some obstacles: (1) small scale of husbandry which accounting for 65-70% of total market, (2) lacking of linkage between manufacturers and markets, (3) the low ability of controlling epidemic, (4) high cost of income materials, (5) manual slaughter and processing... resulting in high price but low economic efficiency. Theory of Global Value Chain, Gereffi and Kozeniewicz (1994) was used as a framework for the research. Research data included: reports from Vietnamese government bodies in the field of agriculture, husbandry; Vietnamese associations of husbandry, poultry feeding and primary data collected from in-depth interviews of managers, executives of associations, business owners, stakeholders and parties in the husbandry poultry value chain. Research results indicated model of Vietnam poultry market value chain including actors and drivers of chain, existing issues in the value chain including feeding, seeds, medical and veterinary, breeding, processing, delivering and the way to linking chains of the poultry value chain. The study also figured out reasons of these consequences.

Keywords: poultry value chain, poultry husbandry, food chain

Examination of Cheating Attitudes of Students in the Vocational School of Health Sciences in Karabük University

Mustafa Adibatmaz^a & Fatma Betül Kurnaz^b

^aVocational School of Health Sciences, Programme of Oral and Dental Health in Karabük University,Turkey ^bFaculty of Letters, Department of Educational Sciences in Karabük University,Turkey Email of corresponding author: mustafaadibatmaz@karabuk.edu.tr

Aim of this research is to assess cheating behaviors of students studying in the Vocational School of Health Sciences in Karabük University in terms of several variables such as gender, open admission right, efficiency of education and thought about the level of relation between exam and the lecture, belief in the contribution of exams to vocational development. Population of the study is consisted of 3500 students enrolled for the spring semester of 2015-2016 academic year; sample of the study is consisted of 373 students. For the analysis of data obtained during the research, data was tested to determine whether a normal distribution was presented. Descriptive statistics, Pearson correlation of momentum multiplication and t-test were used for data analysis. According to the results, morality of female students ($\overline{X} = 22,08$) was found to be higher than male students $(\bar{X} = 19,16)$. However, ability score of female students was not differentiated from male students in terms of environmental conditions and opportunity. This fact gives rise to the idea that despite female students seem to be approving ethical behavior; they may be inclined to act in the same way as males if environmental conditions are suitable. 83.9% (N=313) of students stated their prospective unhappiness are dependent on examination and 79.9% (N=298) of students stated that their exam results would not reflect their actual success. In addition, during lectures where effective teaching is achieved, it was determined that cheating tendencies decreased, even if opportunity rises, where exam questions are correlated with lecture content and students believe that exam questions contribute their vocational development. Based on obtained results, it can be said that there are several external (efficacy of education, correlation between exam questions and lecture content etc.) and internal (belonging to student) processes to explain cheating behaviors of students.

Keywords: cheating, attitude towards cheating, assessment and evaluation, higher education

Aligning Malaysia New Economic Model with Knowledge Transfer Programme

Mohamad Shaharudin Samsurijan^a, Siti Rahyla Rahmat^a, Saidatulakmal Mohd^a, Azlinda Azman^a & Arman Abdul Razak^b

^aSchool of Social Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia ^bSchool of Housing, Building and Planning, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: msdin@usm.my

The New Economic Model (NEM) launched in 2010 aims to improve quality of life of the Malaysians through the inter linkages of three elements: sustainability, inclusiveness and high income. Many agendas have been set to achieve such status among them are the National Priority Areas (NPAs) and Key Result Areas (KRAs) to help the nation move forward to be a high income nation by the year 2020. The productivity, creativity and innovative among the Malaysians is one of the priority, which aims to help them increase revenues. NEM and national agenda could be materialized through advanced knowledge transfer involving three major stakeholders: academia, graduate and postgraduate interns, industry and community. KTP is not a standalone agenda but a program that entails five focuses in KRAs (education, economy, sustainability and green technology initiatives, the disadvantage groups and developing industry relevant curriculum). As such, the objectives of this paper are (i) to identify the NEM elements with completed KTP projects in the five rolling plans (ii) to evaluate the outcome of the projects in line with NEM objective and (iii) to propose indicators as a way to fulfill the quality of life benchmark of each KTP KRAs. The outcome of these KRAs complements NEM objectives and that KTP is the anchor of such achievements.

Keywords: New Economic Model, Knowledge Transfer Program, key result areas, innovative

Social Support During the Postpartum Period: Mothers' Views, Needs and Expectations

Shariffah Suraya Syed Jamaludin School of Social Sciences, Universiti Sains Malaysia, Malaysia Email of corresponding author: shariffah@usm.my

Childbirth is one of the most important rites of passage in a woman's life and the event of great biological and social importance in many societies. People hold a common belief that women and infants are vulnerable during the postpartum period. Therefore, women in many societies need social supports from the people around her. The building of new interpersonal relationship with the child can be tasking for mother and become a stressful life event that can cause or develop a mood disorder or the postpartum depression. Research has indicated that social support is a major buffer of postpartum depression. Yet little is known concerning women's perceptions on social support during the postpartum period. The objective of this study was to explore postpartum women's views, needs and expectations on social support following childbirth. A sample size of 15 Malay mothers ages ranged from 20 to 40 years who had delivered at least one live baby were selected from the maternity ward of a government hospital in Perak for in-depth interviews. Data transcripts were later reviewed and analyzed for themes. The main themes identified in the interviews were protective function of confinement period, social support expectations and providers of support, and barriers to mobilizing support. The result of this study suggest that social support plays a significant role in meeting women's basic need during the postpartum period. Strong social support is important for mothers' recovery following childbirth. Future postpartum depression prevention efforts should integrate a strong focus on social support.

Keywords: childbirth, social support, postpartum mothers

Peranan Kontraktor dan Tukang Paip Dalam Pengurusan Air Tidak Berhasil (NRW) Secara Efisien: Kajian Kes di Bechah Tendong, Pasir Mas, Kelantan, Malaysia

Mohammad Ghazi Hj Ismail, Chan Ngai Weng & Aminuddin Ab Ghani

Universiti Sains Malaysia, 11800 Pulau Pinang, Malaysia Email of corresponding author: ghazi_4229@yahoo.com

Pengurusan Air Tidak Berhasil (NRW) secara efisien dalam sistem bekalan air telah menjadi suatu tajuk perbincangan yang hangat di Malaysia, khasnya di Negeri Kelantan. Bechah Tendong merupakan sebuah kawasan yang berada dalam Jajahan Pasir Mas di negeri Kelantan. Bechah Tendong mengalami NRW 62% disumbang oleh kehilangan air secara fizikal (Physical losses) yang sangat tinggi. Keadaan tersebut berpunca oleh sistem pengurusan NRW di tapak yang tidak efisien melibatkan peranan pihak kontraktor dan tukang paip yang terlibat secara langsung di tapak. Metodologi kajian melibatkan pemerhatian perlaksanaan kerja di tapak dan temu bual mendalam. Hasil pemerhatian dan temubual mendapati kebanyakan pihak kontraktor dan tukang paip yang terlibat tidak melaksanakan tugas dengan sepatutnya di mana perlaksanaan kerja adalah tidak mengikut spesifikasi yang ditetapkan walaupun telah dinyatakan dalam BQ yang dibekalkan oleh klien. Ada di antara kontraktor dan tukang paip yang masih tidak mengetahui cara penggunaan peralatan di tapak mengikut spesifikasi yang dikeluarkan oleh pembekal seperti penggunaan Mesin Electrofussion disamping cara pemasangan peralatan yang salah di tapak. Malahan ramai di antara mereka yang masih tidak mengetahui keperluan pematuhan Akta 655 oleh Suruhanjaya Perkhidmatan Air Negara (SPAN) yang menekankan kualiti kerja oleh pihak kontraktor dan tukang paip di tapak. Hasil kajian mencadangkan supaya peranan pihak kontraktor dan tukang paip perlu diberi perhatian serius. Perlaksanaan kerja di tapak oleh golongan ini perlu dipantau dengan sewajarnya memandangkan ia merupakan penyumbang utama kepada pengurusan NRW secara efisien di samping pihak klien juga perlu sentiasa bergerak bersama semasa perlaksanaan kerja di tapak tanpa memberikan ruang 100% kepada pihak kontraktor dan tukang paip melaksanakan kerja dengan sesuka hati dibawah pemerhatian yang sangat minimum dari pihak klien. Pengurusan NRW yang efisien adalah bermula dari tapak dan perlaksanaan kerja di tapak akan mempengaruhi keberkesanan pengurusan NRW secara keseluruhannya.

Kata Kunci: pengurusan NRW, kontraktor, tukang paip, klien

The Perception of Sunway University Students on Green Products: A Case Study on Students of Department of Communication and Liberal Arts

Azman Ramlie & Jacqueline Ting Zi Yee Sunway University, Malaysia Email of corresponding author: azmanr@sunway.edu.my

Since the year of 2000, green products has started to become a trend in the marketplace where increasing numbers of manufacturers has begin to use green attributes to associate with their products. This research is beneficial to companies are creating green products that are targeted towards students as their main target market. This research will help manufacturers to understand the perceptions of students toward green products and can later help them to improvise their products to meet the student demands and preference on green products. The purpose of this study is to understand Sunway University students' perception towards green products. Researcher examined four types of perceptions which are perceived value, perceived risk, perceived price, and perceived quality. Survey questionnaire was distributed to Department of Communication & Liberal Arts students. The data analysis was based on 150 respondents. The findings reveal that perceived value plays the main role in the students' perceptions on green products followed by, perceived value, perceived risk and perceived quality.

Keywords: green products, perception

The Possibilities of Music Therapy for Healing and Positive Psychology among Sri Lankans

S. M. K. D. Arunatileka, R. K. S. Liyanage, M. A. I. M. Dharmadasa, V. A. Isuru & S. W. A. D. M Samarasinghe UCSC, Sri Lanka Email of corresponding author: sda@ucsc.lk

This research focuses on using Music Therapy for psychological healing of young people as well as differently abled human beings of Sri Lanka. This is a very important study for Sri Lanka as it is one of the countries with highest suicides rates in the world where around 10 committing suicide each day and 100 being attempted. Music therapy is the use of sounds and music to support and encourage physical, mental, social, emotional and spiritual well-being. This first phase of this research identifies feelings that a song/music gives to Sri Lankans and the second phase is studying reactions of young people to different types of emotions through especially composed music for therapy. The team of researchers include experts from the music field, IT field and Counselors who interact in a day-today basis with young people. An extensive literature survey was carried out on the therapeutic and healing power of Music in India and Europe where Music therapy is used for prevention and cure of many diseases such as stomach related illnesses, hypertension, insomnia, gall stones, cough, headache, rheumatic arthritis, etc through Hindu Raaga Chikitsaa usingragas such as Bageshri, Gurjari todi, Puriya, Yaman, malkauns, hindolam, etc. A field study of over 500 persons have been used in a survey to identify how they react to different types of music through online surveys and music therapy sessions with young people, disabled solders and differently abled people. The results analysed using analytical software and tools reveal interesting characteristics of the impact of music on Sri Lankans where Music Therapy can be used to increase positive psychology. Continuous music therapy sessions were carried out among disabled soldiers with spinal cord injuries & brain damage and progress is monitored from a therapeutic angle.

Keywords: music therapy, positive psychology, healing

Towards the Development of Competency Areas for Student Affairs and Services Administrators: Perspectives for Professionalization

Melfi M. Caranto

Far Eastern University, Philippines Email of corresponding author: mcaranto@feu.edu.ph

The research is concerned primarily with establishing a set of competency areas for administrators of student affairs and services in the Philippines regardless of their area of specialization or positional role within the field. A total of twenty (20) representatives from major regions of the country participated in the study. The modified Delphi method was adopted as the process of obtaining data. There were nine competency areas presented, namely: Advising and Helping; Assessment; Evaluation, and Research; Equity, Diversity, and Inclusion; Ethical Professional Practice; Human and Organizational Resources; Law, Policy, and Governance; Leadership; Personal Foundations; and Student Learning and Development. It was found that: (1) the competency areas mentioned were relevant regardless of educational background, number of years in service, position or job designation, organization affiliation and type of school where they were working; (2) the competency areas presented were acknowledged and perceived to be most important and/or greatly important by administrators and practitioners of Student Affairs and Services; and (3) the identified competency areas may serve as guidelines for student affairs and services administrators toward the development of the profession.

Keywords: competency areas, student affairs, administrators

Krisis Hak Asasi Pengungsi: "Penguatan Program Pemberdayaan Pengungsi di Indonesia sebagai Negara Transit untuk Mereduksi Potensi Konflik"

FinahLiyah Hasan

Program Studi Hubungan Internasional, Universitas Bosowa Makassar, Indonesia Email of corresponding author: finahliyah.hasan@universitasbosowa.ac.id

Krisis kemanusiaan global berdampak pada besarnya arus gelombang pengungsi dari satu negara ke negara lain. Di negara tujuan mereka, pengungsi menjadi aktor yang sering menimbulkan permasalahan. Tak terkecuali di Indonesia yang merupakan negara persinggahan bagi pengungsi sebelum ke negara tujuan mereka. Karena status Indonesia hanya sebagai negara transit, hak-hak pengungsi seperti hak untuk bekerja, mendapatkan pendidikan dan kesehatan menjadi sangat terbatas bahkan tidak diperbolehkan. Karena keterbatasan ini pengungsi menjadi permasalahan sosial yang baru bagi Indonesia. karena minimnya kegiatan, pengungsi sangat potensial menimbulkan keresahan, mengganggu kehidupan sosial ekonomi dan berpotensi mempengaruhi stabilitas politik suatu negara. Beberapa instansi seperti IOM, Imigrasi dan Dinas Sosial memiliki beberapa kegiatan seperti program pemberdayaan bagi para pengungsi namun tidak merata dan tidak maksimal yang dikarenakan kurangnya sumber daya manusia. Kekurangan sumber daya manusia ini juga dikarenakan karena sulitnya akses untuk melakukan kerjasama dengan instansi terkait. Untuk itu perlu penguatan program pemberdayaan bagi pengungsi yang melibatkan pihak lain agar minimal hak mereka untuk mendapatkan pendidikan dan bekal untuk mendapatkan pekerjaaan dapat terpenuhi. Kegiatan pemberdayaan yang merata dan maksimal dapat mengurangi potensi permasalahan sosial khususnya dilingkungan tempat tinggal pengungsi. Dalam penelitian ini, penulis menggunakan participatory method, dimana teknik mengumpulkan data dilakukan dengan wawancara di beberapa lokasi pengungsi yang tidak tersentuh program pemberdayaan, observasi dan penelusuran pustaka. Setelah pengumpulan data, penulis kemudian menerapkan beberapa program pemberdayaan di lokasi tempat peneliti melakukan observasi.

Kata kunci: hak pengungsi, negara transit, krisis kemanusiaan, gelombang pengungsi

Protection Priority in Mountain Environment Using Analytic Hierarchy Process (AHP) on Kinabalu Park, Sabah

Normah Abdul Latip, A. Ghafar Ahmad, Azizan Marzuki, Mohd Umzarulazijo Umar & Nadiatul Sarah Muhammad Rais

School of Housing, Building and Planning, Universiti Sains Malaysia, 11800, Minden, Penang, Malaysia Email of corresponding author: norma_abdlatip@usm.my

Environmental degradation is one of the largest threats that are happening especially in protected areas. This is due to protected areas provide not only environmental benefits but also social and economic benefits to people and communities worldwide. Kinabalu Park, Sabah is declared by UNESCO as Malaysia's first World Heritage Site in 2000 and the park is classified into category II (National Park). National park is very close related with nature-based tourism, being a symbol of a high quality natural environment with a well-designed tourist infrastructure. Among the main reasons for people coming to Kinabalu Park is to enjoy the beauty of nature as its flora and fauna diversity and also the magnificent mountainous landscape. This paper focus on prioritizing the environment aspect that being effected by the tourism activities and some of the acts of irresponsible visitors. If the environmental degradation continues, this might harm the environment on the long term basis. The method that will be using is Analytic Hierarchy Process (AHP) to prioritize the protection of the environment on the study area. It can help desicion makers to prioritize on which matter that they need to focus more on and also enables to put more expert knowledge together allowing more precise desicions and moderating personal judgements.

Keywords: environmental degradation, conservation, Kinabalu Park.

26

Safeguarding Intangible Cultural Heritage: Law and Policy in Malaysia

Noorfathehah Abdullah Sani

Centre for Fundamental and Liberal Education (PPAL), University Malaysia Terengganu (UMT), Terengganu,

Malaysia

Email of corresponding author: fathehah18@gmail.com

Cultural heritage has been recognized as intrinsically, economically and environmentally valuable, yet it is under pressure from a range of processes and impacts of modernization. Many parties have acknowledged the threats to this dying cultural heritage, for example global community, state and local people. This valuable heritage must be given a comprehensive protection in order to be appreciated by future generations. Due to this, a rapid expansion of international heritage law is taken in the last decade, which complemented the national and local initiatives. Malaysia is a country with a rich of cultural heritage and also facing similar contemporary challenges to many other states. It is also a country that sought to develop a comprehensive law and policy to protect a broad range of its heritage. This includes ratification of key international heritage conventions, as well as national and local initiatives. This article examines the law, policies and program in Malaysia, which are focused on heritage protection and it highlights the safeguarding of intangible cultural heritage in Malaysia. This paper shed lights the strengths of the Malaysian approach, identifies the legal and administrative challenges that remain and offer recommendation for the future. This study gives an insightful contribution of Government's efforts in the protection of national heritage, especially the intangible cultural heritage.

Keywords: cultural heritage, Malaysia, intangible heritage, legal governance, heritage law

Farmers' adoption level for Quinoa cultivation by training and visit extension approach in District Sargodha-Punjab, Pakistan

Ejaz Ashraf^a, Hafiz Khurram Shurjeel^b & Nosheen Fatima^a

^aDepartment of Agricultural Extension & Rural Development, Faculty of Agriculture, University of Sargodha, Punjab, Pakistan ^bDepartment of Entomology, Faculty of Agriculture, University of Sargodha, Punjab, Pakistan

Email of corresponding author: ejazashraf60@hotmail.com

Farmers have key role in sustainable crop development and production. The dream of self-reliance in agriculture will not become true without their contribution. The demographic structure, climatic conditions and eating habits of people around the globe are changing so rapidly. Consequently, to meet future food requirements, farmers have to divert their attention toward crops which give maximum yield in shorter possible time. The crop like Quinoa (KEEN-WAH) has potential not only to overcome the issue of food insecurity but also to reduce malnutrition. In addition, farmers could increase their income to reduce poverty. In Pakistan Quinoa cultivation is at early stages in making space with other grain crops such as wheat and rice. The farming community needs awareness and advisory services for cultivation of Quinoa crop. In June, 2015 a training and visit program was initiated to train local farmers for cultivation of Quinoa crop. Initially, 80 contact farmers were randomly selected based on the selection criteria specified by researchers. Bi-weekly visits were arranged for contact farmers. These farmers were made responsible to train 60 non-contacted farmers. After six months, survey was conducted with contacted and non-contacted farmers to see the impact of training and visit program on adoption level of respondents for cultivating Quinoa. The data revealed that average age of respondents was 42 years with average experience of approximately 20 years having average farm size of 16 Acres. The results from regression analysis revealed that information sources, agronomic and plant protection practices are strong predictors explain 50% of variation in the dependent variable of adoption level of respondents. It is concluded that proper information delivery and training in agronomic and plant protection practices may be helpful in changing adoption level of respondents and hence opens alternative routes for improved food crops for provision of secure food in future.

Keywords: farmers, Quinoa, adoption, contact, training and visit

Theming and Imagineering as a Place-Making Strategy – A Case Study of Islamic Tourism in Malaysia

Nurul Shakila Khalid & Hamzah Muzaini

Cultural Geography Chair Group, Wageningen University and Research, Wageningen, The Netherlands. Email of corresponding author: nshakila89@gmail.com

Malaysia has deployed many different tourism themes, beginning with "Malaysia, Truly Asia" as the national theme to the more temporal-specific themes of "Visit Malaysia Year" and "MyFest 2015" to portray its uniqueness and promote tourism within the context of the multiracial country. In view of these developments, Malaysia has also attempted to reconstruct its image as a Muslim destination through the implementation of Islamic tourism and employing imagineering as a strategy to construct a moderate Muslim image to attract a specific group of tourists. This study attempts to explore theming and imagineering within Malaysian tourism practice as a dynamic process that has influenced its promotional campaigns as these were by emergent potential resources and local strengths at different points in time. Using the key concept of theming and imagineering as a place-making strategy, this study provides a better understanding not only on how local shape places materially, socially and symbolically but also the ways in which this has become a political process that has been contested. Drawing on in-depth interviews with local Malaysians as the indirect stakeholders who are not directly related to the Islamic tourism implementation process, this study examines how Islamic tourism has been received in terms of making the country unique and distinctive in order to enhance ethnic harmony, as much as attract the imagination and monies of potential tourists.

Keywords: theming, imagineering, place-making, politics, contestation

A Review of the Underlying Constructs of Connectedness to Nature among Children

Nor Diyana Mustapa^a, Nor Zarifah Maliki^a, Nor Fadzila Aziz^a & Aswati Hamzah^b

^aSchool of Housing, Building and Planning, Universiti Sains Malaysia, Pulau Pinang, Malaysia ^bSchool of Educational Studies, Universiti Sains Malaysia, Pulau Pinang, Malaysia Email of corresponding author: diyanamustapa@gmail.com

A strong connectedness to nature that developed during childhood forms a basis for human to have a positive attitude and behaviour towards nature in adulthood later. Acknowledging the importance of connectedness to nature during childhood, environmental psychologists have introduced various concepts of connectedness to nature, and various instruments have been employed to measure the concept. However, the underlying constructs to measure connectedness to nature among children seem unclear. Hence, it is worth to formulate a proper understanding on the underlying constructs of children's connectedness to nature. Based on a systematic review, this paper aims to delineate the constructs of connectedness to nature referring to the existing adult and children instruments. Issues pertaining to connectedness to nature conceptualization and uni-dimensional versus multi-dimensional also will be discussed. This paper further suggests the direction for future research.

Keywords: children, connectedness to nature, construct

A Comparison of The Relationship Between Gynecological Age With Birth Weight and Chronological Age With Birth Weight in Teenage Mothers in Eight Public Health Center in Kota Bekasi West Java

Siti Masyitah

University of Respati Indonesia Email of corresponding author: ummiita66@gmail.com

Background. Teenage pregnancy is high-risk pregnancies are associated with a high incidence of premature birth, low birth weight (LBW), and other adverse pregnancy outcomes. Aim. Knowing and examines the relationship between gynecological age with birth weight and chronological age with birth weight in teenage mothers in eight Puskesmas Kota Bekasi and determine differences in the strength of the relationship between gynecological age and chronological age with birth weight in teenage mothers in Bekasi. Research methods. This is a cross-sectional study to learn the correlation between gynecological age and chronological age as an independent variable, with a birth weight as the dependent variable. Result. Mothers with age gynecological <4 years at risk four times higher of having a baby weighing <3000 grams, which is the birth weight-related noncommunicable diseases in adulthood, and mothers with chronological age < 16 years 2 times higher risk of giving birth to babies weighing <3000 grams. Pre-pregnancy stature, pre-pregnant BMI, the addition of weiht during pregnancy and anemia as a confounding factors in the relationship gynecological age and chronological age with birth weight babies. Conclusion. Gynecological age and chronological age associated with infant birth weight in teenage mothers in Bekasi 2015. Gynecological age is more strongly correlated with birth weight compared with chronological age. Suggestion. It is advisable to delay the first pregnancy for women in Indonesia at least 18 years of age. Another research done by looking at the risk of gynecological age and chronological age with low birth weight and stunted.

Keywords: gynecological age, chronological age, teenage pregnancy, birth weight

Pembangunan Lestari dan Konsep Halal-Hijau: Kontradiksi Dalam Kesatuan CHANGE ABSTRACT

Wan Norhaniza Wan Hasan & Norazilawati Md Dahlal

Pusat Kajian Pengurusan Pembangunan Islam (ISDEV), Universiti Sains Malaysia, 11800 Pulau Pinang, Malaysia Email of corresponding author: wanhaniza@usm.my

Kemunculan konsep halal-hijau dalam pembangunan industri berlaku kesan daripada pembangunan lestari sedia ada. Pelaksanaan kedua-dua konsep dalam pembangunan dikatakan memberi impak berganda dalam menyepadukan matlamat keduniaan dan keagamaan. Pembangunan lestari sendiri memfokuskan kesejahteraan fizikal seperti persekitaran, ekonomi dan sosial. Sementara konsep halal-hijau pula diharapkan memberi impak keagamaan dengan mengaplikasikan konsep-konsep yang dijelaskan dalam al-Quran dan hadith bagi pembangunan lestari. Tinjauan awal mendapati pembangunan lestari amat signifikan dengan konsep halal-hijau. Walau bagaimanapun, wujud pendapat bahawa sebagai satu konsep yang berteraskan Islam, konsep halal-hijau tidak boleh dibentuk dalam kerangka pembangunan lestari yang bersifat konvensional. Sehubungan itu, makalah ini berhasrat untuk meneliti karekteristik pembangunan lestari dan konsep halal-hijau dengan lebih lanjut melalui tiga objektif. Pertama, meneliti sejarah kemunculan dan perkembangan pembangunan lestari dan konsep halal-hijau. Kedua, mengenal pasti asas pelaksanaan bagi pembangunan lestari dan konsep halal-hijau. Ketiga, merumuskan perbandingan konsep lestari dan halal-hijau. Penelitian dilakukan terhadap sumber bahan bertulis yang berkaitan dan dianalisis berdasarkan analisis kandungan kualitatif. Hasil analisis mendapati meskipun secara mekanisme wujud persamaan dalam pembangunan lestari dan konsep halal-hijau, namun wujud juga kontradiksi dalam kedua-dua konsep ini.

Kata kunci: pembangunan lestari, halal-hijau, Islam



ABSTRACTS 2nd International Conference on Contemporary Economic Issues (ICCEI)

Inflation Hedging Property of Housing Market in Malaysia

Geok Peng Yeap & Hooi Hooi Lean

Economics Program, School of Social Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia. Email of corresponding author: gpyeap@gmail.com

This paper aims to determine whether investment in housing is able to hedge against inflation in Malaysia. We examine the relationship between house prices and both consumer and energy inflation by using Autoregressive Distributed Lags (ARDL) approach. Consumer inflation is calculated from consumer price index while energy inflation is calculated from crude oil price. We find that, in the long-run, investment in housing has not effectively hedged against consumer inflation as well as energy inflation. In the short-run, investment in housing only provides partial hedge against energy inflation but it does not hedge against consumer inflation. The results suggest that housing is not a good investment asset in Malaysia.

Keywords: house prices, consumer inflation, energy inflation, hedge, Malaysia

Estimating Public Debt Threshold of Malaysia

Jerome Kueh^a, Liew Khim Sen^a, Muhammad Asraf Abdullah^a & Yong Sze Wei^b ^aDepartment of Economics, Faculty of Economics and Business, Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia

^bFaculty of Business and Management, Universiti Teknologi MARA Sarawak, 94300 Kota Samarahan, Sarawak,

Malaysia

Email of corresponding author: kshjerome@unimas.my

Public debt becomes an essential global issue where a country has a tendency to seek alternative to borrow abroad in order to cushion any severe negative impact due to economic shocks. This is due to the assumption that a country can run into deficit in current year with the expectation that it will turn into surplus in the future. Malaysia as one of the emerging economies experienced decreasing trend of public debt of GDP in the 1990s, but in the 2000s, the scenario has changed and settled at 55% of GDP in 2015. This study adopts Threshold Regression method to determine the public debt threshold from 1991:Q1-2014:Q4 and to estimate the impact of the different debt levels on the economic growth in the long-run. There is a positive impact of debt on growth when public debt is below 41% of GDP and marginal impact when the debt level between 41%-53% of GDP. However, there is a detrimental impact on growth when public debt exceeds 53% of GDP. Therefore, policy developed should address in managing optimal level of public debt position and the quality of the debt.

Keywords: Public debt, threshold, growth

Assets, Risks and Vulnerability to Poverty Trap: A Study of Northern Region of Malaysia

Abdelhak Senadjki^{a,} Saidatulakmal Mohd^b, Abdul Fatah Che Hamat^{b,c} & Zakaria Bahari^c ^aUniversiti Tunku Abdul Rahman, Perak, Malaysia ^bSchool of Social Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia ^cCentre of Islamic Development Management, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: abdelhak@utar.edu.my

Most policies, strategies and programs implemented by the government alleviated poverty in Malaysia, particularly in the Peninsular Malaysia, but a few people remain suffering and being marginalized. Given the nature and extent of weather and climate-driven vulnerability and poverty being experienced by rural households in Malaysia, the government put in place policies and strategies based on ex-post approaches. These policies and approaches only paid attentions to hardcore poor people and those below poverty line, while neglecting considerable number of people, who are vulnerable to poverty. They are not poor today, but they may become poor in future owing to some conditions. These groups, vulnerable non-poor people are excluded from various anti-poverty policies, programs and schemes. Their exclusion implies that the ex-post policies are less effective and efficient in eradicating poverty in Malaysia. Following the defects in the government poverty alleviation schemes to capture all categories of poor people, including rural households, whose lives and works are likely to expose them to climatic factors that increase farmer vulnerability to poverty, this research examines the link between exposure to risks and vulnerability to poverty among rural households in Malaysia. It also analyze and assess the extent to which rural households assets are able to secure rural households from being vulnerable to poverty and how various risks can affect rural household assets and therefore their vulnerability to poverty. Data was collected from 300 respondents in both rural and urban areas in several states in Northern region of Malaysia. Data is analyzed by STATA 14 software. The results indicated that preventing poverty is not only about monetary dimension but non-monetary dimensions need to be considered as well. Lacking access to assets and resources and exposure to threats made the process of escaping from poverty ineffective. The study suggests the need to develop policies and programs that are forward-looking in nature and to develop programs that could provide skills and knowledge to the vulnerable groups especially those who experience high severity of risks and shocks.

Keywords: vulnerability, risks, assets, Malaysia

Examining Behaviour of Staple Food Price using Multivariate BEKK-GARCH Model

Kumara Jati^a & Gamini Premaratne^b

^{a,b}School of Business and Economics, Universiti Brunei Darussalam ^aTrade Policy Analysis and Development Agency, Ministry of Trade of Republic of Indonesia Email of corresponding author: kumara_jati@yahoo.com

Understanding of staple food price behaviour is important for determining the unpredictability of staple food market. In this research, we examine the volatility spillover of commodity prices of sugar, rice, soybean and wheat using BEKK GARCH model. The empirical results show that the own-volatility spillover are relatively significant for all food prices. However, only in wheat market, the price volatility increases during food crisis more than it does when there is stable condition.

Keywords: staple food price, multivariate BEKK-GARCH, volatility, food crisis

Energy Subsidy and Economic Production: The Evidence from Malaysia and Indonesia

Dzul Hadzwan Husaini^a, Hooi Hooi Lean^b & Jerome Swee-Hui Kueh^a

^aFaculty of Economics and Business, Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia ^bEconomic Program, School of Social Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: hdhadzwan@unimas.my

Energy subsidy policy is one of the most favorable policies implemented by most oil producer countries in improving their economic development. However, its economic outcome is still under debated due to its several implications on economic efficiency, fiscal policy and et cetera. As part of oil producer countries in ASEAN 5 economies, both Malaysia and Indonesia had allocated 5% of energy subsidy (% of GDP), averagely throughout the period 1990-2014. This paper is intended to study the impact of energy subsidy on economic production in Malaysia and Indonesia by employing a dynamic panel data analysis. Our finding suggests that the energy subsidy affects the growth output, positively in the long run. In addition, the short run causality shows a bidirectional relationship between energy subsidy and output. We conclude that the energy subsidy is significant to promote the economic growth in our panel countries. The absence of energy subsidy will bring harm to the economic growth. However, if a reduction of energy subsidy is essential to improve efficiency and fiscal pressure, we are suggesting the policymaker to implement some offsetting policy to cushion an economy from any shock due to the nonexistent of energy subsidy in an economy.

Keywords: energy, subsidy, output, panel data analysis

The Relationship Between Malaysia's Residential Property Price Index and Residential Properties Loan Supply

Chee-Hong Law & Ghee-Thean Lim

Economics program, School of Social Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: cheehong@usm.my

This paper aims to examine the linkages between residential properties prices and residential properties loans in Malaysia from 1999 to 2015, in addition to income level and the impact of the economic crisis. Even though residential properties are a basic necessity, there is no previous study that attempts to estimate the long-run and short-run relationship between loans and price level in residential properties in Malaysia. It is believed that property price level moves in the same direction as loan supply. The estimations are divided into two parts: the detection of long run relationships and the estimation the long-run and short-run elasticities from an ARDL model. The results support the hypothesis that the loan supply has a positive impact on the residential price levels; the robustness test also supports this conclusion. This implies the importance of closely monitoring the housing loan activities of banks to control residential property prices.

Keywords: residential properties price, residential property loan, Malaysia

The Prevalence of Overemployment in Penang: A Preliminary Analysis

Jacqueline Liza Fernandez & Ee Shiang Lim School of Social Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: lfjacq@usm.my

Nowadays, workers tend to face the problem of overemployment where desired working hours are less than their actual working hours. Some overemployed workers desire to work less hours although there may be a concomitant decline in earnings. This research is conducted to study the factors that are related to the employment status of workers in Penang; i.e. overemployed or otherwise. This research uses primary data that was collected in a survey that was done in one particular state in Malaysia, i.e. Penang. The questionnaires were distributed to workers in different areas in Penang. A total of 525 respondents were surveyed in this study. This paper reports the preliminary findings of the study by presenting the bivariate relationship between the employment status of workers and various demographic, socio-economic and work-related variables. The initial findings of this study provide the basis for some general conclusions and policy implications on the issue of overemployment in Penang.

Keywords: overemployment, hours mismatch, actual hours of work, preferred hours of work

Globalization and Sustainable Development: Evidence from Indonesia

Abdul Rahim Ridzuan^a, Nor Asmat Ismail^b & Abdul Fatah Che Hamat^b,

^aFaculty Business Management, Universiti Teknologi MARA, Melaka City Campus, Malaysia ^bSchool of Social Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: aimaz84@yahoo.com

In this study, we analyze the impact of globalization which are characterized by higher foreign direct investment (FDI) inflows, increase in openness to trade (TO), and deepening in financial development (FD) on the three main pillars of sustainable development (SD) consists of model of growth, model of income distribution and model of environmental quality for Indonesia. The results based on Autoregressive Distributed Lag Model (ARDL) estimation showed that FDI inflows have lead towards higher growth, lower income inequality and better environmental quality in Indonesia. Meanwhile, TO has lead towards higher economic growth, however, this variable has worsened the environmental quality. On the other hand, there is no significant relationship detected between TO and income distribution. As for the last characteristic of globalization, FD seems to have a positive impact on growth and also improve income equality but it leads to negative impact towards environmental quality in this country. The outcome of this studies reveals that FDI could be the best potential driver for SD in the country while the other two variables, TO and FD have positively influenced at least two out of three pillars of SD. Thus, it is important for the policy maker to continually improvise its existing policy especially on trade liberalization on income distribution and financial development on environmental quality to ensure that the goal to achieve SD is attainable.

Keywords: sustainable development, economic growth, income distribution, environmental quality, globalization

A Seasonal Approach on Energy Consumption Demand Analysis in Thailand

Sakkarin Nonthapot

Economics Program, Indo-China Country International Trade and Economic Research Sector, Faculty of Integrated Social Sciences, Khon Kaen University, Nong Khai Campus, Thailand Email of corresponding author: Sakkno@kku.ac.th

This study investigates the energy consumption demand in Thailand by using seasonal factors in the analysis. The quarterly data from 2000-2014 which are analyzed by employing the Seasonal Unit Root test, the Cointegration test and the Dynamic Ordinary Least Squares (DOLS) procedures. The results show that all variables are stationary as in the same order integration at I(1, 0, 0). The model is cointegrated. The income factor is positively related to the energy consumption demand in Thailand in both the short run and the long run. Seasonal factors affect the energy consumption demand in only the short run. Therefore, energy consumption in Thailand depends on the income level. Energy policymakers should maintain energy prices at a stable level, develop renewable energy and implement efficient green energy for the upper middle income group to be an alternative energy policy in Thailand.

Keywords: energy, energy consumption, seasonal unit root, demand of energy

Motives for Demand for Religion: A Confirmatory Factor Analysis

Sotheeswari Somasundram^a & Muzafar Shah Habibullah^b

^aTaylor's University, Malaysia ^bUniversiti Putra Malaysia, Malaysia Email of corresponding author: sothees@hotmail.com

This study investigates the motivation for religious demand among Christians using the International Social Survey Program (ISSP) data on Religion for 2008. This study using both exploratory and confirmatory factor analysis identified two motives, afterlife motive and the current life motive that influences demand for religion. The afterlife motive, aligned to the Christian doctrine of belief in afterlife, heaven and hell, was one of the dimensions of motives for religious demand. For gains in the current life, although the various studies highlight two construct of personal gains and social gains, however, for this study, all items loaded onto only one construct, which is broadly termed as current life motives where religion is said to provide solace, inner peace; as well as social support and networking opportunities.

Keywords: religion, economics, demand, afterlife, current life.
The Study of Solutions to Destination Branding for Hanoi Capital: Approaching From The Perspective of Foreign Tourists

Vu Tri Dung^a & Dinh Van Oanh^b

^aThe Vietnamese – French Center of Management Education (CFVG), Vietnam ^bFaculty of Marketing, National Economics University, Hanoi, Vietnam, Hanoi, Vietnam Email of corresponding author: vtdung@cfvg.org

The global choice of destinations is growing and certain of these possess similar resources, giving rise to a situation where one can be replaced byanother as the notion of destination choice sets implies (Goodall, B. 1991), so differentiation through promotion is vital. In order to build a brand for a nation, it is substantial to make a explicit strategy for city branding. However, the research of destination branding for Hanoi – capital of Vietnam is limited. Therefore, it is important to understand and appreciate rightly the attitude of foreign tourists about Hanoi's destination brand. This study goes deeper into the habit of foreign tourists in Hanoi and the factors affecting Hanoi's destination brand from the perspective of foreign tourists. Major research method is quantitative method through questionaires with the sample size of 101 Hanoi's foreign tourists have positive attitudes to Hanoi's destination brand, (2) there are 4 factors that influence Hanoi's destination brand: (1) history – culture, (2) entertainment – service, (3) infrustructure, (4) food.

Keywords: destination brand, destinations branding, foreign tourists, Hanoi

Dynamic Relationships between Exchange Rates and Foreign Direct Investment in China

Jung Wan Lee^a, Young-Ei Kim^b & Jong Ho Lee^c

^a Boston University, Administrative Sciences Department. 808 Commonwealth Avenue Boston, MA 02215 United States

^b Seoul Digital University, Department of Business Administration. 424 Gonghang-dong Gangseo-gu, Seoul,

Korea

^c Kongju National University, Department of Business Information Education.182 Sinwan-dong Gongju-si,

Chungnam, Korea

Email of corresponding author: kimyei@naver.com

The paper examines the short-run and long-run dynamic relationships between exchange rates and foreign direct investment (FDI) in China. The monthly data retrieved from the National Bureau of Statistics of the People's Republic of China from January 1999 to May 2010 are examined. A co-integration test, vector error correction model, Wald test, impulse responses and variance decomposition techniques have been applied to analyze the data. This study finds: first, there exists long-run causation from exchange rates to FDI inflows, which implies that a change in exchange rates negatively affects the FDI inflow in the long-run. Second, this study finds no evidence of short-run causation from exchange rates to FDI inflows, which confirms that there is no reciprocal feedback between the two variables in China. Finally, the study finds evidence of a structural break from the global financial crisis of 2007-2009 shock to FDI inflows in China.

Keywords: exchange rates, foreign direct investment, cointegration, China

Structural Monetary Model for an Emerging Market

Tze-Haw Chan Graduate School of Business, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: thchan@usm.my

The impact of Ringgit fluctuations on Malaysian economy is far-reaching but the modelling of Ringgit remains a difficult task, given the combat between economic fundamentals and speculative activities in the floating era. A new modelling strategy (VARX and VECMX) that provides a practical approach to incorporating long-run structural relationships is employed to develop a system-based monetary model for Malaysia. Empirical results reveal that our monetary model is both theoretically and empirically coherent, as supported by the structural and restrictions tests on the five macro-finance theories, namely the Fisher relation, Uncovered Interest Rate Parity, Purchasing Power Parity, Money Demand and Output Gap functions. Overall, movements of the Malaysian Ringgit are still supported by monetary fundamentals in parallel with trade and investment expansion but significantly responded to exogenous shocks of global crises and oil price fluctuations. The persistence profiles of shocks exhibit 1.5-3 years of adjustments in the respective market equilibriums. Our study provides insights into the functioning of the Malaysian monetary system against exogenous shocks.

Keywords: Structural monetary model, Malaysian ringgit, exogenous shocks, VARX, VECMX

Determinants of Malaysia's Rubber Medical Devices Export: Trade Agreements and the Gravity Model

Lee Siu Ming, Radziah Adam & Ku'Azam Tuan Lonik

Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: lsm15_pjj028@student.usm.my

Malaysia is the world's largest exporter of rubber medical device (RMD) but the export share has dropped from 59.6% in 2008 to 48.2% in 2013, for medical gloves and sheath contraceptives. Demand for medicine and medical care usually has highly inelastic demand, however, no studies have been conducted to show if distance and income are significant determinants of the demand of rubber medical devices (RMD). This study examines the determinants of export of Malaysia's cessable rubber medical devices (RMD) to the top twenty export destinations, as well as countries with bilateral or regional free trade agreement (FTA) with Malaysia. Data from 1989-2013 on export of Malaysia's RMD, manufacturing value added, distance, FTA membership, production of natural rubber and exchange rate are used to estimate the modified resource-based manufactured export gravity model by using ordinary least square, fixed effect and random effect models. Manufacturing value added variable is used for the first time as a proxy of income variable for the manufacturing sector in gravity model. The results show manufacturing value added, importer GDP, exporter and importer GDP per capita, ASEAN FTA, and Japan FTA are significant determinants of the export of Malaysia's RMD. It is observed that the income has more significant role than distance in the export of RMD. The findings may enable policy makers to formulate policies based the effect of FTAs on export of RMD to maximize the full benefit of participating in the FTAs for Malaysian exporters.

Keywords: gravity model, specific commodities, rubber medical devices, commodity-specific gravity model, export

The Impact of Social Capital on Crowdfunding Performance: A Case Study of KITABISA.COM

Lady Aprilia, Sigit S. Wibowo & Zaafri Ananto Husodo

Department of Management, Faculty of Economics and Business, Universitas Indonesia, Depok 16424 Indonesia Email of corresponding author: oline_simanjuntak@ymail.com

This study aims to analyze the effects of social capital namely: structural, relational, and cognitive dimensions, to the crowdfunding performance using Kitabisa.com as a case study for 2013-2015. Using robust ordinary least squares methods, we find two important results. Structural dimension, which is measured by Facebook friends owned by an entrepreneur, affects crowdfunding success. Cognitive dimension, which is measured by the number of a word that is written by entrepreneurs in the platform, also affects crowdfunding opportunities in order to get a successful campaign. Using logistic regression technique, this study finds same result, structural dimension and cognitive dimension have positive relationship to the performance of crowdfunding. From a logistic regression we can conclude that the number of Facebook friends and the amount of words to describe the project significantly positive influence the chances of success of the project, the more the number of friends and the number of words on a project the greater chance of a project to achieve success category. This study concludes Facebook friends owned by entrepreneur and number of words affect positively crowdfunding opportunities in order to get a successful campaign.

Keywords: crowdfunding, agency theory, social capital, social entrepreneurship

Investment Elasticity of GDP per Capita: A Comparative Analysis between the Developed and the Developing Economies

Adulfo Revestir Arevalo

Far Eastern University Email of corresponding author: arevaloaldie13@gmail.com

Investment is an economic issue that requires serious attention relative to its impact on the gross domestic product per capita. The objective of this study empirically investigate the link between gross capital formation (% of GDP) and real gross domestic product per capita in four specific levels of human development or between the developed and the developed and the developing economies. The study will also measure the coefficient of investment elasticity of GDP per capita in the developed and the developing economies. In this study, the direction is to determine whether or not the development effort in both types of economies is anchored significantly on the level of capital formation. The 2015 Report by the United Nations' on Human Development Index (HDI) was utilized for the groupings of countries as developed or developing economy. The statistical method for the coefficient of elasticity measure was employed for determining the sensitivity of GDP per capita to gross capital formation. The gross capital (% of GDP) and the GDP per capita over the time series 2005-2014 were used as the dependent and the independent variables respectively. By using the simple regression analysis, the results of this study indicated that a negative relationship exists between the gross capital formation and GDP per capita in the developed economies, and a significant positive relationship exists in the developing economies. This study concluded that the development effort in the developing economies is significantly anchored on the level of investment. On the contrary, the development effort in the development economies is less anchored on its level of investment.

Keywords: Human Development Index (HDI), gross capital, GDP per capita, developed economies, developing economies

The Effect of Public Debt on Energy-Growth Nexus: Threshold Regression Analysis

Sze Wei Yong^a, Hooi Hooi Lean^b & Jerome Kueh^c

^a Faculty of Business & Management, Universiti Teknologi MARA Sarawak, Sarawak, Malaysia
^b School of Social Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia
^c Faculty of Economics & Business, Universiti Malaysia Sarawak, Sarawak, Malaysia
Email of corresponding author: yongszewei@sarawak.uitm.edu.my

ASEAN countries are dealing with challenging external environment recently with the deterioration of the global commodity price and the volatility of oil price. Most of the developing countries rely heavily on the energy consumption for the economic development purpose especially ASEAN countries which are the major energy exporter like Malaysia and Indonesia. This study aims to examine the relationship between energy consumption and economic growth from the perspective of public debt for Indonesia and Malaysia between periods of 2000 - 2013 via the threshold regression analysis. Our empirical results indicate that there are significant relationship between energy consumption and economic growth from the public debt threshold perspective for both countries. The analysis of Indonesia shows that higher level of public debt will lead to greater impact on energy consumption and economic nexus. In contrast, the impact of the energy consumption on economic growth for the case of Malaysia indicates a diminishing trend in the energy and economic growth nexus when the public debt is above the threshold level. Important policy implication from this study suggests that Indonesia and Malaysia should be more careful in formulating the energy consumption related policy by considering different perspectives such as public debt level of the nation. Moreover, both countries should consider reducing their dependence on the non-renewable energy resources and shifting to renewable energy resources such as solar, hydro, landfill gas for their economic development in the future.

Keywords: energy consumption, economic growth, public debt, threshold regression analysis

A Choice Experiment on Agricultural Chemicals Use Reductions

Ke Nunthasen & Waraporn Nunthasen Faculty of Economics, Maejo University, Chiang Mai, Thailand Email of corresponding author: ke_nunt@hotmail.com

The use of agricultural chemicals has not only successfully increased productivity but it has also significantly caused negatively environmental problems and has greatly effected on human health. The record shows four-fold increase of pesticide poisoning rate of farmers in Chiang Mai. Therefore, this research investigated on the factors influencing rice farmers' willingness to accept and to estimate their preferences for reducing agricultural chemicals use by applying the Choice Experiment (CE). The results of influencing rice farmers' willingness to accept factors included the attribute factors and the socio-economic factors. There were 5 attributes factors that some factors as shown 1) decreased 50% of chemical fertilizers use and increased 50% of organic fertilizers use and 2) decreased 75% of chemical insecticides use and increased 25% of organic insecticides use, etc. For socio-economic factors were age of farmers, education level, farming experience, number of household labors, farm size, cost of fertilizers and annual income. The empirical results of farmers' preferences for reducing agricultural chemicals use evaluated that farmers will decrease 25% of chemical fertilizers use and increase 75% of organic fertilizers use if they receive 28.88 Thai Baht per Rai (5.125 USD per hectare), they will decrease 50% of chemical fertilizers use and increase 50% of organic fertilizers use if they receive 81.88 Thai Baht per Rai (14.5 USD per hectare), or they will decrease 75% of chemical insecticides use and increase 25% of organic insecticides use if they receive 95.00 Thai Baht per Rai (16.875 USD per hectare). The government policy makers can apply these results to promote the suitable policy to stimulate farmers to change their behaviors to organic agriculture which good for farmers, consumers as well as environment.

Keywords: agricultural chemicals, willingness to accept (WTA), choice experiment (CE)



ABSTRACTS 1st International Conference on Society, Space and Environment (ICSSE)

The Role of the University in Community Engagement for Environmental and Water Education: The Example of Universiti Sains Malaysia

Chan Ngai Weng, Hong Chern Wern, Lai Chee Hui, Lim Han Khim & Tang Soke Kwan

School of Humanities, Universiti Sains Malaysia, 11800 Penang, Malaysia. Email of corresponding author: nwchan@usm.my

The modern university in the current era is more than just an institution of teaching, learning, research, discovery and knowledge depository. Times have changed and society is more demanding. To stay relevant, universities need to evolve and change to serve a wider scope of societal needs. A university needs to serve and benefit communities, and in order to do that effectively, it needs to engage with communities in a symbiotic relationship. This paper looks at how a university can form smart-partnerships with communities (which include the private sector, non-governmental organisations (NGOs) and the wider public) to enhance environmental and water stewardship. The project is focused on environmental education, specifically on water, involving Universiti Sains Malaysia (USM), Penang Water Supply Authority (PWSA), Salcon Berhad (SB), Water Watch Penang (WWP) and local schools. It involves creating greater awareness and education on environment and water amongst the students. USM and WWP facilitators give talks and demonstrate various water sampling and water testing methods. Observation and measuring equipment are employed to test the physical, chemical and biological water quality of a selected river. Participants are evaluated before and after the activity. Pre and post assessment results showed that participants score better in the latter. Results show that their level of awareness and knowledge on the environment, river and water has significantly improved. This project exemplifies how USM has engaged communities effectively and successfully carried out its corporate social responsibility (CSR).

Keywords: university-community engagement, smart partnership, river water quality assessment, environmental education, water conservation

Urban Revitalization of Quiapo District in Manila: Re-establishing Identity through Heritage Conservation

Lorelei D.C. de Viana Far Eastern University, Philippines Email of corresponding author: Ideviana@feu.edu.ph

Quiapo in the city of Manila was founded as a sixteenth century town by the Franciscan religious. Since then, it has emerged as one of the city's first suburban towns to develop and grow. It is home to the famous statue of the Black Nazarene, brought from Mexico and the object of deep veneration among Catholics, and the all-steel San Sebastian Church, built in the nineteenth century. Now, Quiapo has evolved to become a multi-ethnic district, with heritage buildings dating back to the nineteenth century that are in different states of preservation. Many have been demolished to give way for supposed urban development. Recently, however, a move to revive the district through the conservation of its extant heritage buildings has been undertaken. While some buildings have transferred ownership, there is a concerted effort even among new owners to join in this heritage revival. This paper studies the efforts that have been made to revitalize the district through the conservation of its old buildings with the intent to re-establish and preserve the district's history and culture. Through library research, interviews and field work, this study affirms the role of conservation and the community in confronting the challenges of modern districts in structuring, framing and re-establishing local identity through conservation.

Keywords: heritage conservation, urban revitalization, volunteerism, genius loci

Assessing Different Types of Flood Losses in Kelantan State in Malaysia During the December 2014 Flood

Chan Ngai Weng^a, Ku Ruhana Bt Ku Mahamud^b & Mohd Zaini Abd Karim^b

^aUniversiti Sains Malaysia, 11800 Penang, Malaysia ^bUniversiti Utara Malaysia, 06010 UUM Sintok, Kedah, Malaysia Email of corresponding author: nwchan@usm.my

Malaysia is a flood-prone country, especially in the east coast state of Kelantan which is exposed to seasonal monsoon floods. Floods are a major seasonal environmental disaster affecting Kelantan state, bringing significant flood lose, viz. direct or indirect losses and tangible or intangible losses. The December 2014 flood that hit Kelantan state was a very severe flood that brought flood losses in terms of loss of lives, injury, infrastructure destruction, property damage, crop loss, loss of livelihoods, disruption to normal services and losses due to expenses in healthcare. The methodology uses a questionnaire-based cross sectional convenience sampling method in three pre-selected flood hit sites of Gua Musang, Kota Bharu and Kuala Krai. The total number of respondents interviewed was 477. The results indicate that both direct and indirect, as well as tangible and intangible flood losses were exceptionally large. Of the 477 flood victims, 407 (85.3 %) suffered losses. A total of 346 suffered direct losses in house damage averaging RM3,945.00 per family. A total of 376 victims also suffered losses to house contents, averaging RM5,250.66 per family. Another 179 victims suffered damages to vehicles (including boats) averaging losses of RM23,427.09 per family. In terms of crop losses, 14 victims reported losses averaging RM11,255.36 per family. Another 49 victims reported business lose. The reported overall direct and tangible total losses averaged RM26,622.27 per family. Yet, only a small number of victims received flood relief from government. Results also showed that during huge floods, victims cannot rely on relatives to help them as almost everyone was a victim. However, strong social capital in the form of help from family members, friends, NGOs and the Malaysian public was significant in helping victims cope and recover.

Keywords: direct flood damage, indirect flood damage, tangible flood damage, intangible flood damage

Tackling Poverty Issues in Malaysia: A Spatial Dimensional Approach

Narimah Samat & Ruslan Rainis School of Humanities, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: narimah@usm.my

Poverty has been major problems for many years. This eradicating poverty is, in fact, the first agenda of the United Nation Sustainable Development Goals (SDG). Malaysia has succeeded to reduce poverty rate from 49.3% in 1970 to 15% in 1990, then, to just 1.7% in 2015. Policy implemented since 1970s has succeeded in reducing the number of poor households, however, this poverty rate may not be a true reflection of poverty in the country. At present, poverty rate is reported at a state level which might be too coarse to visualize true picture of poverty. Taking the Northern Region of Peninsular Malaysia as an example, this study used Geographic Information System to map poverty rate by sub-districts and investigate local differentiation among sub-districts in the region. Poverty data was obtained from *e-kasih* database. The study indicated poverty rate is highly correlated with regional differentiation, where location played significant role in identifying areas with high number of poor population. In eradicating poverty, a uniform policy implemented at national level may not be sufficient to tackle pocket of poverty within the region. It is timely, therefore, a spatial dimensional approach is be used to complement existing poverty eradication strategy.

Keywords: poverty, Malaysia, Geographic Information Systems

Taman Bandar dan Manfaat Perkhidmatan Ekosistem Budaya: Kajian Taman Jubli Perak, Sungai Petani, Kedah

Nurul Fadzliana Abu Hassan & Asyirah Abdul Rahim

School of Humanities, Universiti Sains Malaysia, 11800 Pulau Pinang, Malaysia Email of corresponding author: asyirah@usm.my

Taman bandar merupakan infrastruktur hijau utama dalam sesebuah bandar lestari. Manfaat perkhidmatan ekosistem yang terdapat di taman bandar dapat memenuhi sebahagian daripada permintaan komuniti bandar terhadap kawasan semulajadi seperti hutan, laut dan lain-lain. Namun kajian manfaat perkhidmatan ekosistem taman bandar yang berfokus kepada manfaat budaya masih kurang diselidik. Persoalan kajian adalah berkisar kepada apakah persepsi pengunjung taman terhadap manfaat perkhidmatan ekosistem budaya yang diberikan oleh taman bandar tersebut. Sehubungan itu, objektif kertas kerja ini ialah mengenalpasti tujuan penduduk pergi ke taman dan menganalisis persepsi responden terhadap manfaat perkhidmatan ekosistem budaya yang diperoleh daripada taman. Kajian telah dilakukan di Taman Jubli Perak, Sungai Petani, Kedah yang terletak di utara Semenanjung Malaysia. Kaedah soal selidik telah dijalankan ke atas 100 orang pengunjung Taman Jubli Perak secara pensampelan mudah. Soalan berkaitan tujuan dan persepsi manfaat perkhidmatan ekosistem budaya yang diterima adalah berbentuk soalan tertutup menggunakan skala Likert. Analisis Indeks Kepentingan Relatif (RII) menunjukkan tujuan utama responden datang ke taman adalah untuk 'berjalan-jalan dan duduk' (RII = 0.844), 'berehat' (RII = 0.844) dan 'berada dalam suasana hijau' (0.814). Manfaat budaya utama yang diterima lebih berbentuk spiritual dan interaksi sosial iaitu 'kagum dengan ciptaan alam' (RII = 0.862) dan 'erat hubungan keluarga' (RII = 0.862). Komponen rekreasi dan kesihatan iaitu 'fikiran menjadi lapang', 'emosi menjadi stabil' dan 'tenang dan positif'turut diberikan nilai yang tinggi oleh responden dengan nilai RII sebanyak 0.836, 0.832 dan 0.830 masing-masing. Kesimpulannya, taman bandar menyediakan keperluan komponen budaya berbentuk spiritual dan interaksi sosial kepada komuniti bandar. Komponen manfaat budaya ini merupakan perkara yang perlu diberi perhatian dan tindakan oleh pihak pengurusan bandar supaya fungsi taman bandar dapat dipertingkatkan lagi untuk kesejahteraan bandar dan komuniti lestari.

Kata kunci: taman bandar, perkhidmatan ekosistem, infrastruktur hijau, bandar dan komuniti lestari

Colonial Complexity: Focalisation and Realism in Agnes Keith's Novel, Beloved Exiles

Mohamad Rashidi Pakri & Anis Abdul Rahim

Universiti Sains Malaysia, 11800 Penang, Malaysia

This paper aims to demonstrate how the fiction of Agnes Newton Keith, the American wife of a British colonial officer in Sabah, balances multiple points-of-view through the use of "focalisation," as a means of creating an ideologically ambivalent mode of realism. Gerard Genette's theory of focalisation (1972) will be applied, as this model—which coincidentally appeared in print for the first time, in the same year as *Beloved Exiles* was published in 1972—provides an entirely appropriate method for analysing narrative technique in fiction, and Keith's fiction in particular. The narrative technique in *Beloved Exiles*, works to disclose, in an even-handed manner, the inner conflicts and motivational forces of the major characters, thus enabling Keith to conduct a psychological exploration of both native and colonial figures or types, within the one novel. We therefore argue that the text achieves Genette's notion of "impartiality," by providing alternative narrative of the same story, with no single version being privileged over another. *Beloved Exiles* can thus be seen as a remarkably successful, retrospective attempt at presenting the ethically complex "truth" of life in colonial era Borneo. In doing so, we suggest that the novel prompts a timely reassessment of colonial writing itself.

43

The Application of Spatial Statistics Analysis in Property Valuation Process for Service Improvement in Local Authority

Oliver Valentine Eboy^a & Narimah Samat^b

^aFaculty of Humanities, Arts and Heritage, Universiti Malaysia Sabah, Sabah, Malaysia ^bSchool of Humanities, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: oliver@ums.edu.my

Property valuation is conducted to determine the value of a property. In retrospect, this activity has been carried out using traditional methods such as comparable, cost and investment method respectively. The local authorities conduct this activity to determine the property tax in its area as a way to generate funds for community service expenses. This is not only tedious but costly as well as it involves uncountable properties in a large area. Thus, problems occur as most of the revenue collected from the property tax would be used to cover the valuation activities expenditure. This would lead to interrupted services to the community because of limited budget. However, due to the evolution of technologies, a more advanced valuation method has been introduced through spatial analysis method. The inclusion of this method in Geographic Information System (GIS) tools has transformed the property valuation process into a much more efficient and accurate property value estimation. This ability is necessary because the incidences of property values are locationally distributed. Furthermore, many complex phenomena that change spatially and temporally are best understood by analyzing them in a visualized manner. In this paper, the author demonstrates the use of spatial statistics analysis with Ordinary Least Squared (OLS) in assisting the valuers in estimating the best value for the property. The property area under the jurisdiction of a local authority namely Kota Kinabalu City Hall (DBKK), was used in this study. Ultimately, this paper had proved the effectiveness of spatial statistics analysis in producing the property rating valuation model that can show the variations in property value and subsequently, improve the process of property valuation for local authority. It is capable in estimating property values of large quantities in a short time with little manpower needed and low in cost. Consequently, the revenue from the property tax can be fully utilized; hence the local authorities could provide adequate services to the community.

Keywords: property valuation, spatial statistics analysis, GIS, Ordinary Least Squared (OLS)

Conservation and Environmental Impacts of Tourism in Kinabalu Park, Sabah

Normah Abdul Latip, Azizan Marzuki, Mohd Umzarulazijo Umar & Nadiatul Sarah Muhammad Rais School of Housing, Building and Planning, Universiti Sains Malaysia, 11800, Minden, Penang, Malaysia Email of corresponding author: norma_abdlatip@usm.my

Since Kinabalu Park being declared as Malaysia's first World Heritage Site in 2000, the tourism industry is getting busier. People from over the world come to appreciate the nature and some of them conquer the Mount Kinabalu. Indirectly increasing the use of its natural and cultural environment for tourism, resulting in environmental resources are being adversely impacted. This paper aims to identify the impacts on the environment and the conservation effort that being done to overcome the problems. If there is more tourism demand due to the expansion of physical facilities, it will damage the nature if there is no proper management. In order to sustain the tourism industry for a long period in this kind of protected areas, proper planning and solution are needed. Thus, Mount Kinabalu can be manage more organized, efficient and more sustainable. Beside, improving the conservation effort and also sustainable tourism of Mount Kinabalu.

Keywords: conservation, environmental impact, Kinabalu Park.

Community Perceptions on Cultural Ecosystem Services of River Corridors Recreational Areas in Sungai Pinang Catchment Area, Malaysia

Mohammad Izzamil, M.N. & Asyirah Abdul Rahim

Geography Section, School of Humanities, Universiti Sains Malaysia, 11800 Pulau Pinang, Malaysia Email of corresponding author: asyirah@usm.my

In response to the needs for recreational spaces or areas to counter rapid urbanization, natural elements that coexist within urban areas serve as the much-needed space and function. River corridors that are used as recreational areas in cities create balance and promote social-ecological well-being. Based on the Urban Gradient Model, river corridors are observed to have changed with land-use from the upstream (natural landcover) to downstream and river mouth (anthropogenic land-cover). Social-ecological systems framework describes how an anthropogenic land counters environmental deterioration and human activities increase it. Thus, each affects the ecosystem services of the urban communities in opposite ways. Therefore, this article aims to investigate urban communities' perceptions of the cultural ecosystem services obtained from the river corridor's recreational areas. Three river corridors in the Sungai Pinang catchment area, namely Sungai Air Terjun (upstream), Sungai Air Itam (midstream) and Sungai Pinang (downstream) were selected and questionnaires were distributed based on ethnic groups, to a total of 105 respondents. An 18 items Likert scale was used to measure the level of ecosystem services obtained by the respondents. The overall results indicated that all of the respondents scored high levels for the benefits that they obtained. However, it is worth noting that even though the quality of the river water deteriorated significantly from the upstream to downstream, the level of benefits obtained by the respondents declined only slightly from the upstream to the downstream. The results showed only a slight decline in the percentage of the highest scores between the three locations. Respondents at Sungai Air Terjun who said they obtained a high level of benefits scored 100%, and those at Sungai Air Itam and Sungai Pinang scored 82.9% and 74.3% respectively. Based on further analysis of the items, the recreational, and health benefits' components ranked at the top for all three rivers. The results showed that the urban river corridors were regarded as recreational areas compared to their aesthetical, spiritual, educational, social interaction and identity functions. These findings indicate that the respondents placed a low value on the river showing little place-based relationships. In a nutshell, the lack of value on the place-based corridors, thus relationships should drive the management of the river corridors' recreational areas to focus more on how to increase the other cultural ecosystem services of Sungai Pinang.

Keywords: river corridor, ecosystem services, Sungai Pinang

Bali Conference

ABSTRACTS 1st International Conference on Liveable Built Environment (ICLBE)

Effectiveness of Cross-Sectional Ratio to SSTT-Confined High-Strength Concrete

Hoong-Pin Lee^{a,b}, Jie-Sheng Lee^a, Perng-Shen Tai^a, Abdullah Zawawi Awang^b & Wahid Omar^b

^aDepartment of Civil Engineering, Faculty of Engineering and QS (FEQS), INTI International University, 71800, Nilai, Negeri Sembilan, Malaysia.

^bFaculty of Civil Engineering, Universiti Teknologi Malaysia, 81310 UTM Skudai, Johor, Malaysia. Email of corresponding author: leehoongpin@hotmail.com / hoongpin.lee@newinti.edu.my

In recent years, high strength concrete (HSC) has gained its hierarchy in construction industry. HSC is deemed to be more economical, as it is able to preserve space and is stronger at the same time. However, problems associated with HSC like low ductility and brittleness hinders its continuous growth and development. As compare to normal strength concrete, HSC has a lower end on physical properties. There are an abundance of researches done to enhance its physical properties. Steel Straps Tensioning Techniques (SSTT) comes into the picture by acting as an external wrapping method to investigate the compressive strength and ductility of HSC columns between cylindrical and square specimens. A total of nine HSC square columns with dimension 88.6mm x 88.6mm x 200mm were cast and strengthened with steel straps at a spacing of 10mm in order to undergo axial load test. Consequently, six HSC cylindrical columns are casted and used as a controlling factor relative to the 9 HSC square columns. The results will be represented by stress strain curves and evaluation on longitudinal deflection, transverse strain and shape factor can be executed. It is expected that SSTT method will further increase the compressive strength and the ductility of HSC. It is also expected that cylindrical specimens will turn out to dominate the effectiveness as compared to square specimens.

SteFib Column as New Invention to the Liveable Built Environment

Nurharniza Abdul Rahman^a, Amirullah Maat^b, Najiah Adam Tong^c & Deepak Tirumishi Jada^a ^aDepartment of Civil Engineering, Faculty of Engineering and Quantity Surveying (FEQS), INTI International University, 71800, Nilai Negeri Sembilan, Malaysia ^bMudajaya Group Berhad, Level 11, Menara Mudajaya, No.12A, Jalan PJU 7/3 Mutiara Damansara, 47810

Petaling Jaya, Selangor Darul Ehsan, Malaysia

°NIKKA Construction Sdn. Bhd., A-12-20, The Scott Garden, 289 Jalan Kelang Lama, 58000 Kuala Lumpur,

Malaysia

Email of corresponding author:nurharniza.rahman@newinti.edu.my

Construction industries nowadays are implementing new concept known as liveable built environment. A proper plan, build, integrate and sustain built environment are needed in a way that meets current and future needs. It helps to increase affordability and livability that meets diverse social, cultural and economic needs requirement. This research project focuses on creating a new design approach without effecting the strength of the structure. The hooked end steel fibre is used as scattered reinforcement by fully replacing to the reinforcement bar in concrete column. 1.5% (by weight) replacement of steel fibre is used as total replacement to the reinforcement in concrete column. Based on the experiment result is evident that 70% increment in term of strength for the steel fibre (SteFib) column was determined compared to the control sample. It is evident that SteFib column can be applied as one of IBS component since these column are used in single storey IBS prototype house in this case here the whole building uses SteFib as replacement for reinforcement.

Stormwater Management of Green Highway Assessment for Tropical Climate

Asmalia Che Ahmad^a, Nur Illiana Husin^b, Abdul Muhaimin Ab Wahid^a & Syahrul Nizam Kamaruzzaman^c ^aDepartment of Quantity Surveyor, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA (Perak), Malaysia ^bDepartment of Built Environment, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA (Shah Alam), Malaysia ^cDepartment of Building Surveying, Faculty of Built Environment, Universiti Malaya, Malaysia

Email of corresponding author: nurillianahusin@gmail.com

Development of highway involve a lot of logging activity and rapid development created more impervious area. The increasing of impervious area will reduce the green area that minimise the catchment area. These activity caused flash flood and landslide happen especially during heavy rain. This issues lead to the need of sustainable stormwater management. Stormwater management is a process of reducing the runoff water from the highway, treating the runoff water, diverting the runoff water to the place where the water can be infiltrated into the ground water table. Stormwater management is one of the important elements to develop the green highway. Therefore, this study aims to identify the criteria of stormwater towards improvement of development for green highway. Questionnaire survey has been develop to determine the significance of stormwater management for green highway. 142 respondents from highway concession companies and local authorities has contribute their expertise in answering these questionnaire survey. The analysis using correlation. The findings of this study shows all thecriteria of stormwater is significance with p=0.000 and have correlation high and moderate among each of them. It shows all the criteria are important to be include in green highway assessment. The criteria and sub-criteria of stormwater management will contribute to green highway assessment in future research.

Enhancing Architects' Quality of Work in Building Project Delivery Process

Amy Marisa^a & Nor'Aini Yusof^b

^aArchitecture Department, University of Sumatera Utara, Medan, Indonesia ^bArchitecture Department, Effat University, Jeddah, Saudi Arabia; School of Housing, Building and Planning, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: amy@usu.ac.id

Obtaining rewards believed to be a motivator for the employees to work harder and deliver better quality in their work. Deliver a high quality of work is one of the ways to ensure architects will remain competitive and survive in the construction industry. Thus, this study aims to analyze the impact of rewards on architect's quality of work in building project delivery process. The assessment of architect's quality of work was carried out using the self evaluation through a questionnaire survey of registered architects in Indonesia. There were 222 completed and usable questionnaires received and used for data analysis. Data analysis includes factor analysis, reliability analysis, and regression analysis. The results revealed that rewards can determine 12.9% of architects' quality of work in building project delivery process. The results can be used as a valuable feedback for the architects, clients and people on the top management of consultant firms to identify the extent of architects' work quality in building project delivery process. This study also provides useful feedback for the employers and the clients to enhance the quality of work of their key design contributor by providing the appropriate rewards to achieve higher performance in building project delivery process.

The Communal Dwelling of The Rungus Longhouse, Sabah, Malaysian Borneo

Azizi Bahauddin^a & Aldrin Abdullah^b

 ^aSchool of Housing, Building & Planning, and Creative Design House, Universiti Sains Malaysia, 11800 Penang,Malaysia
^bSchool of Housing, Building & Planning, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: azizigt@gmail.com

The longhouses are always associated with the indigenous tribes of Malaysian Borneo mainly the tribes of Sarawak. Less is known about the Rungus longhouse located in Sabah, a state neighbouring Sarawak. This house type is known as a communal dwelling. However, the traditional Rungus longhouse is dwindling to less than ten in number. Found in the northeast corner of Sabah, Malaysian Borneo, the Rungus tribal group can be found farming the land mostly of agricultural products on small plantations. Their longhouses are dual-purpose dwellings, for family and community use, constructed entirely of small split timbers lashed with rattan for the frame, palm fronds for the thatched roof, split bamboo for the floor and tree bark of hewn wood for the compartment walls. Each family has its own separate quarters off a common hall for socialising and community work enhanced by the materiality of the architecture. Strongly related to the spirit of the place, the 'rice spirit', in particular, figures prominently in the people's beliefs and practices in controlling the spirits and the people's daily affairs; controlled by bobohizan, the highest priestess. Unfortunately, all these unique beliefs are disappearing with time, requiring proper documentation of the longhouses. The objectives gear towards analysing the architectural values and investigating cultural understanding associated with the longhouses. Most importantly, the issue of how the Rungus people relate to the environment is studied through the tangible and intangible cultural aspects of the people. The research utilises the qualitative method based on content analysis, ethnography and case studies of three longhouses. The paper instigates an investigation into the dwelling of the Rungus people of their place in the environment and their interrelatedness, a relationship that feature the dwellers and their nature related dwelling materiality. It is a communal dwelling that is full of characters distinctive to Sabah.

Keywords: environment, longhouse, materiality, Rungus, spirit

Influencing Factors of Construction and Demolition (C&D) Wastes Generation in Malaysia

Mohd Reza Esa^{a,b}, Anthony Halog^a & Lucia Rigamonti^c

^aSchool of Geography, Planning and Environmental Management, the University of Queensland, Australia ^bFaculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, Shah Alam, Selangor, Malaysia ^cDepartment of Civil and Environmental Engineering – Environmental Section, Politecnico di Milano, Italy

The incremental level of awareness in protecting the environment in Malaysia has forced the stakeholders to change the construction industry practices significantly. A proper management of construction and demolition (C&D) wastes is vital to achieve this agenda. This paper aims to investigate the influencing factors of C&D waste generation. 480 questionnaires were distributed to four set of stakeholders (government agencies, developers, consultants and contractors) and 167 were returned. The data were analysed using Statistical Package for Social Sciences (SPSS) by employing a descriptive analysis to define the mean values and non-parametric tests (Kruskal-Wallis H and Mann-Whitney U). From the identified 33 factors, 5 factors were listed critical as the lack of on-site materials and waste management plan is a key influencing factor for waste generation. It is anticipated that the findings in this study could be crucial for future strategies in developing an effective C&D waste management in Malaysia.

Clay-PFA Eco-Bricks for Low-Impact Construction

Norsalisma Ismail & Mohamad Nidzam Rahmat

Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia Email of corresponding author: drnidzam04@yahoo.com

Today, there is an increasing need to develop building materials that are fit for purpose based on sustainability values in terms of the economy and environmental concern. This has arisen due to the increasing awareness of the public for sustainable building construction. The most efficient way for the construction industry to approach sustainability is to reuse waste materials and by-products from other industrial activities. In this research Clay Soil was combined with Pulverised Fly Ash (PFA) as target materials were stabilised with Lime, Portland Cement (PC) and blended binders comprising of Lime and PC blended with Ground Granulated Blast-furnace Slag (GGBS). There are technological, economic as well as environmental advantages and potential of utilising PFA, an industrial by-product from the coal industry, and GGBS a by-product from the steel industry, in the development of sustainable clay-PFA building materials. Results based on the pilot industrial commercial trials from this research illustrated that all the key parameters of compressive strength, durability and thermal properties were within the acceptable engineering standards for masonry units. From the environmental and sustainability analysis results, the unfired Clay-PFA brick has shown energy-efficiency and suggests a remarkable economical alternative to firing building materials.

Strength Properties of Stabilised Marginal Clay-Industrial Waste with Traditional Binder

Ani Maslina Saleh & Mohamad Nidzam Rahmat

Centre of Studies for Construction, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, Shah Alam, Malaysia

Email of corresponding author: animas244@gmail.com

Extensive laboratory investigations were carried out to establish the potential utilisation of Solid waste Fly ash (SwFA) in the stabilization of marginal laterite clay soil. SwFa is a waste material from the incineration plant in Cameron Highland, Malaysia. Currently, the disposal of this ash from a burning process been piled up in landfill is a problem to waste managers and become an environmental stinging. SwFA on its own and in combination with laterite clay soil, SwFA:LC (50:50) was stabilised using the traditional stabilizers of lime or PC as controls. Ground Granulated Blastfurnace Slag (GGBS), a waste from iron industry we used to incorporate with Lime and PC at varies ratio. Compacted cylinder test specimens of 50mm diameter x 100mm height were made at typical stabilizer contents and moist cured for up to 60 days prior to testing for compressive and water absorption tests. The results obtained showed that SwFa combined with laterite clay (50:50) stabilized with Hydrated Lime recorded the highest values of compressive strength compared to the other compositions of stabilizers and soils. The results suggest technological, economic, as well as environmental advantages of using SwFa and similar industrial by-products to achieve sustainable clay soil stabilization for infrastructure development.

Energy Efficiency of Green Highway Assessment for Tropical Climate

Asmalia Che Ahmad^a, Nur Illiana Husin^b, Abdul Muhaimin Ab Wahid^a & Syahrul Nizam Kamaruzzaman^c ^aDepartment of Quantity Surveyor, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA (Perak), Malaysia ^bDepartment of Built Environment, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA (Shah Alam), Malaysia

^cDepartment of Building Surveying, Faculty of Built Environment, Universiti Malaya, Malaysia Email of corresponding author: nurillianahusin@gmail.com

Highway is the uppermost infrastructure in the country which involves massive activities. Highway provides accessibility and connecting from one place to others. However, the rapid development and construction of highway caused negative impacts to the surrounding environment. Green highway was introduces in Europe to increase the sustainability. Construction of highway consumes more greenhouse gas emission from activities logging, cut and fill, excavation and road premix laying. Greenhouse gas emission produce from a lot of machineries usage for the activity involve in the construction of highway. Literature study shows several existing rating system for energy efficiency. Energy efficiency constitute important criteria in the development of green highway. Energy efficiency consist of reduce usage of energy as well as energy saving; renewable energy, and policy involve in the implementation of energy saving and renewable energy. This paper aims to identify the criteria of energy efficiency for green highway development in tropical climate. These criteria are obtain from available rating system and previous study. Data collection by using questionnaire survey as a research instrument was distributed to highway concession companies and local authorities. These criteria was analysed using factor analysis and come out with factor score. This study reported 5 criteria of energy efficiency which are technology and design, utilising solar energy, policy and plan, renewable energy, and reduce usage. The criteria and sub-criteria of energy efficiency will contribute to green highway assessment.

Bullying Behaviour: An Overview of Environmental Design With School Bullying and Future Crime

Azna Abdul Wahab^a & Siti Rasidah Md Sakip^b

^aUniversiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia ^bUniversiti Teknologi MARA, Seri Iskandar Campus, 32610 Seri Iskandar, Perak, Malaysia Email of corresponding author: azna.abdulwahab@yahoo.com

This article presents an overview of environmental design with school bullying and future crime. Through discussion of the findings from previous studies, the gaps in criminology knowledge on bully-design link and future crime will be highlighted. Bullying is a serious social problem that can strongly affect and impact students' future. The factors that can contribute to bullying behaviours are socio-demographic, psychological, social environmental factors and physical environmental factors. There are numerous effects from students bullying in terms of interpersonal and social adjustment issues. Previous studies had indicated there is a link between bullying behaviours and future crime for the bullies and the victim mostly. The most common location for bullying occurred at the playground, classroom, and school hallways. The bullies tend to choose a place that has narrow spaces and is invisible to other people. In conclusion, this article will emphasise the need for future research in environmental design and bullying behaviours.

Influence of Green Campus Application to Quality of Life

Hilma Tamiami Fachrudin^a & Khaira Amalia Fachrudin^b

^aUniversity of North Sumatera, Architecture Department, 20155 Medan City, Indonesia ^bUniversity of North Sumatera, Economic and Business Department, 20155 Medan City, Indonesia Email of corresponding author: hilma_tamiami@yahoo.com

The concept of green is an answer to global warming problems. The concept is looked at three aspects: environment, social and economy. The application of green campus concept affects the quality of life for its users. The aim of this study was to determine the application of green campus concept to and analyze the influence of the application green campus concept to the quality of life of its users. UI (University of Indonesia) issued a UI GreenMetric World Ranking for Universities to provide information on the green campus in the world. The research variables are based on UI GreenMetric, they are setting and infrastructure, energy and climate change, waste management, water usage, transportation and education. Then, the Quality of Life as dependent variables. The research location is University of North Sumatera (USU) which campus has a multi-building mass, has a lot of vegetation and open space. The study uses quantitative methods with data collection techniques by questionnaire. The population is students. The analysis used is multiple regression analysis. The results showed that the application of green campus concept may improve the quality of life of its users where they feel comfortable being there. Universities should be designed to follow the green concept to provide comfort to the users.

Keywords: green campus, environment, quality of life

The Impact of Road Geometry with Respect to The Roadside Trees on Energy Implications of Road Adjacent Residential Buildings in Iran

Nasibeh Faghih Mirzaei^a, Vida Taghvaei^b & Hossein Taghvaei^c

^aSchool of Housing, Building and Planning, Universiti Sains Malaysia, 11800 Penang, Malaysia
^b Shariaty Faculty, Technical & Vocational University, Tehran, Iran
^c School of Fine Arts, University of Tehran, Tehran, Iran
Email of corresponding author: nasibeh.faghih@gmail.com

This study investigated the energy savings reduction contribution of urban geometry with respect to the roadside trees for residential building nearby roads. Air and road surface temperature measurements were carried out in four different road orientations containing a total of 6 segments with different widths (from 10 to 20 m) in the city of Kerman, Iran. Road geometry with respect to the roadside trees have been proven to significantly decrease road surface temperature and ambient air temperature thereby mitigate energy consumption of adjacent residential building. NE-SW oriented narrow segment (H/W= 0.94) had the highest cooling effect surface temperatures (2.77 °C °C) resulting in high rate of energy saving of adjacent buildings (8.1%), whereas NW-SE oriented wide roads (H/W= 0.40) had the lowest on (-3.23 °C) with less energy saving rate (0.05 %). In terms of residential energy implications of residential building nearby roads, with using simplified assumptions demonstrated that reduction of road surface temperature may reduce summer time of air conditioning consumption.

USM Bali Conference 2016

Assessment of Public Procurement Guidelines Compliance Towards Achieving Construction Project Cost Performance in Nigeria: Mediation Approach Using Process Macro

Abdullahi Nafiu Zadawa^a, Abdul Aziz Hussina^{a,b}, Atasya Osmadi^a & Aminu Garba Waziri^a

^aSchool of Housing Building and Planning Universiti Sains Malaysia, 11800 Penang, Malaysia ^bQuantity Surveying Department, Faculty of Environmental Technology Abubakar Tafawa Balewa University PMB 0248 Bauchi Nigeria

Email of corresponding author: nafiuzadawa@gmail.com

Public procurement is the traditional means of delivering infrastructural facilities in Nigeria. To ensure delivery of sustainable infrastructure as a key element of every liveable built environment, Public Procurement Guidelines (PPGs) were issued within the contents of the procurement policy known as PPA2007. PPGs were meant to use as procurement procedural manual by procurement entities, purposely to restructure the procurement sector due to rampant irregularities that surrounds procurement practices especially in the construction industry. Compliance with the PPGs among construction procurement stakeholders has not been without challenges. The stakeholders are not familiar with the new guidelines due to misconception and ignorance caused by inadeguate training in the procurement entities. These resulted in PPGs selective implementation that is affecting cost performance of construction projects. In an attempt to suggest a remedy to the ample unfamiliarity among the procurement stakeholders, awareness as a mediator was introduced and tested between unfamiliarity and construction project cost performances. Data was collected using 379 questionnaire survey administered to procurement stakeholders in the selected procurement entities of federal universities in Nigeria. The mediation was tested using Process macro, the results show that, awareness has mediate the effects of unfamiliarity with PPGs on construction project cost performance, and has proved the occurrence of mediation between the compliance determinant factor and construction project cost performances from the result of the indirect effects obtained. The study recommends that, awareness on the PPGs application for construction procurement be enhance among project parties through training, workshops, seminar, and symposium in order to improve compliance level, project cost performance and effectual infrastructure delivery to ensure liveable built environment.

Keywords: procurement guidelines, compliance, construction, cost, Nigeria.

The Iconography Preferences for the Malay Garden Hardscape Identity

Ahmad Zamil Zakaria, Syazwani Ahmad & Mohd Sabrizaa Abd Rashid

Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Perak, Malaysia Email of corresponding author: zamil227@perak.uitm.edu.my

The concept of Malay Garden is a concept that highlights the traditional elements and the lifestyle of the Malay community as a whole. This study was conducted to determine the level of knowledge of students majoring in landscape architecture and the public, about the existence of Malay Garden hard landscape elements. The objective of this study was to evaluate the community concern regarding an issue that involves the culture of the nation. The Malay community nowadays loves the way of life practiced by others and marginalizes traditional culture that has been adopted by their ancestors. This study has used the technique of iconographic in obtaining primary data. Also, the researchers refer to the studies that have been done previously for secondary data. The results of a survey carried out found that many of the respondents recognize the hard landscaping elements and know about its existence. However, they are still confused by the use of the terms "the concept of Malay Garden" because of a lack of disclosure about it. With the utilization of the "iconography" preferences in this study, it has provided accurate data.

Performance Measurement Dimensions for Sri Lankan Hotel Industry: An Expert Review

Kaluthanthri P. C & Osmadi A

School of Housing, Building and Planning, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: prathap@sjp.ac.lk

Traditionally, Organization Performance (OP) is used as an indicator to monitor and control the processes of the organization to ensure the strategic attainment of the organization's goals. The evolution of OP system is based on industrial development and therefore, the conventional OP dimension was influenced by financial indicators like Earning per Share, Return on Investment etc. However, scholars and industry experts pointed out that even though the organization's management preferred on conventional OP dimensions, other stakeholders focused on non-financial OP dimension for decision making. This emphasizes the importance of a multi-dimensional view for successful evaluation on OP of any organization. The literature on OP dimension focuses on industrial or manufacturing sector and it is evident that service sector OP dimensions were developed based on banking, retail, and insurance sectors. Scholars neglected hospitality and travel sector, which inhibit the successful development of an OP system for the hotel industry. The lack of attention on hotel industry is due to the fact that difficulty in defining the nature of the product as a pure product to pure service where it has three facets swing from pure service to tangible good including a service product (Room), retail product (Beverages) and finished/processed product (Food at the restaurant). Therefore, the OP dimension for hotel industry has a mixed nature of industrial and service dimensions. Further, it is noted that OP dimensions of hotel industry vary from region to region and one culture to another. Thus, the aim of the paper is to review the experts' opinion on OP dimensions of the hotel industry in Sri Lanka. The panel of experts consists of academics specialized in the hotel industry, senior and middle-level management of hotel groups, representative of Sri Lanka Tourist Development Authority and Travel Advisory organization and opinion leaders in the hotel industry in Sri Lanka. The study used Analytic Hierarchy Process (AHP) to combine the criteria weights and the options scores of experts to determine an overall score for each determinant/indicator of OP dimensions for Sri Lankan hotel industry. The finding of the study contributed to the hotel industry literature in Sri Lanka and further the expert reviewed OP dimension opened an avenue for empirical validation in real world application.

Keywords: hotel industry, organization performance, performance measurement, expert review.

Materials and Experimental of Concrete Roof Tile Composite as Insulation Material

An Nisha Nur Welliana Abd Rased, Noor Faisal Abas & Abdul Malek Abdul Rahman

School of Housing, Building and Planning, Universiti Sains Malaysia, 11800, Penang, Malaysia. Corresponding author: nfaisal@usm.my

This paper introduces overview of research regarding the development and mechanical testing with regards to concrete roof tile composite using clay and rice straw on concrete mixture to generate practical and sustainable building materials in diminishing indoor temperature during hot and climate this is certainly dry. Production and preparation of concrete roof tiles includes the tests which were completed in the tiles are to test strength and compliance relating to ASTM C1492. Travers breaking strength > 956 N, compression strength > 17.2Mpa (7 days), water absorption < 10%, ASTM C91 and water retention > 75%. 0.45 water cement ratio were selected for three mixes and one control mix were prepared. Clay was added in three ratios; 10%, 20% and 30%. Three different lengths of rice straw were mix separately with ordinary Portland Cement with different ratios; 1%, 2% and 3% from composite density. All the samples were tested after 7, 28, 90, 180 days and 1 year.

Barriers and Drivers of Construction Green Supply Chain Management

Heng Yong Ming & Zul Zakiyuddin

School of Housing, Building and Planning, Universiti Sains Malaysia (USM), 11800 Penang, Malaysia Corresponding author: heng_hector@hotmail.com

The construction sector is a major contributor to global pollution and global warming. Its activities have caused ecological degradation and have had an adverse impact on the Earth and human beings, the environment and other living creatures. Devastating floods, annual dry spells, irregular weather patterns as well as unpredictable storms have become major concerns in Malaysia. The Green Supply Chain Management (GSCM) has started to gain attention from many parties as they are increasingly aware of the global pollution issues. GSCM is the integration of environmental thinking into the supply chain management. Unfortunately, in Malaysia, green initiatives, especially in construction, are new and in the embryonic period. Thus, this study aims to identify the level of adoption of GSCM in the Malaysian construction sector and analyse the barriers and drivers of GSCM adoption. This study also investigates the relationship between the adoption of GSCM, barriers and drivers of GSCM initiatives. The study consists of a survey questionnaire (by post and email) and a semi-structured interview. Fourteen (14) variables with sixty-one (61) measurement items in total have been identified based on the review of literature.

Keywords: green supply chain management (GSCM), level of adoption, barriers, drivers, construction sector

A Review of Criteria and Indicators for Heritage Trees Recognition

Khalilah Hassan^a, Wan Noor Anira Wan Ali^a & Siti Norlizaiha Harun^b ^aDepartment of Landscape Architechture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, Seri Iskandar Campus, Seri Iskandar, 32600 Perak, Malaysia ^bDepartment of Town and Regional Planning, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, Seri Iskandar Campus, Seri Iskandar, 32600 Perak, Malaysia Email of corresponding author: khali050@perak.uitm.edu.my

The term "heritage tree" has numerous meanings and has been defined in different jurisdictions or locales in many different ways. Some trees are instantly recognisable as heritages (e.g. those of massive scale and known antiquity) but many are less obvious. Heritage trees (HTs) can also be included as part of Malaysia's Natural Heritage elements. However, the act does not spell out any specific criteria on heritage trees. Therefore, it is important to note the criteria for recognition of a HT. This paper provides a review of literature attempting to investigate and explore the criteria and indicators (C&I) used to identify a heritage tree. Related articles appearing in the international articles and journals from 2000 to 2016 were gathered and analysed so that the following two questions could be answered. (i) What is meant by heritage trees? And (ii) what is a reliable set of criteria and indicators for identifying the heritage trees? An attempt to identify and characterise the most outstanding specimens of the urban tree population could hopefully provide the baseline for their proper preservation. On the other hand, the development of C&I has largely provided the basis for better methods of protection, care, and management of HTs for the future.

Keywords: criteria, conservation, heritage tree, indicators, protection

Human Capital Issues in Built Heritage Conservation: What's Happening in The Historic City of George Town, Penang?

Suet Leng Khoo^a & Yoke Mui Lim^b

^aDepartment of Development Planning and Management, School of Social Science, Universiti Sains Malaysia, 11800 Penang, Malaysia

^bDepartment of Quantity Surveying, School of Housing, Building and Planning, Universiti Sains Malaysia, 11800

Penang, Malaysia

Email of corresponding author: khoosuetleng@gmail.com

The inscription of the capital city of George Town, Penang as a World Heritage City in 2008 has resulted in many forms of social-economic transformation to the city. Most evident of all, the inevitable process of gentrification has set in. As a result, George Town has been revitalised and regenerated to assume its historic stature as a key commercial and urban hub. In turn, the city's renaissance has attracted investment, businesses and also Penang's rising middle class to invest and claim ownership of the historic city. Ever since, rows of shophouses in George Town have been purchased and restored for occupancy or business. Indeed, George Town's inscription was attributable to the city's ability to fulfil Criterion (iv) of the Outstanding Universal Value, where George Town is unique due to its built environment. George Town's 'unique' built heritage is portrayed through the city's exceptional array of shophouses and townhouses that have created a unparalleled architecture, culture and townscape that is not found anywhere in East and South Asia. Thus, to continue to fulfil and uphold this criterion, efforts should go towards conserving and preserving George Town's built heritage in a sustainable fashion. However, the concern that comes to the fore is the extent to which these shophouses are conserved and preserved in the correct manner. Unfortunately, the reality at the moment is far from desirable. This is because George Town is currently facing a human capital problem in terms of conserving the city's built heritage. Presently, there is an acute shortage of trained heritage professionals and also a dearth of skilled artisans to undertake proper and correct conservation works in George Town. Thus, this paper aims to reveal the human capital issues and challenges that the city is currently facing. Viable strategies and solutions will be proposed to address these vital human capital issues to ensure that George Town's status as a historic city would not be at stake. The findings and implications from this paper will contribute towards shaping pragmatic human capital and heritage policies in George Town.

Keywords: conservation, human capital, built heritage, George Town, shophouses

Color Idea in Therapeutic Garden Design for Pediatric Patient

Nor Izana Mohd Shobri

Department of Landscape Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA (Perak), Malaysia Email of corresponding author: izana980@perak.uitm.edu.my

The therapeutic garden is well noted as a healing environment in healthcare based on previous studies. Colors can play a role in the healing process as refer to the physiologist. Therefore, it is good to suggest the suitable color for the pediatric patient. However, the study on the color setting in the therapeutic garden for the pediatric patient is not much. By concerning to this issue, this paper focuses on selecting the suitable color to the children as healing process alternatives. This research uses the literature based methodology from several kinds of writing. The analysis is done to choose the best color for the healing garden for children based on physiology study. The result shows that there is six suitable color to be used in the therapeutic garden for the pediatric patients which are red, yellow, orange, blue, green, and pink. Together with that, it is hoped that this study can be the guidance for the landscape designer in designing the therapeutic garden for the pediatric patient.

The Necessities of Having Lighting Designers in Built Environment in Malaysia

Safial Aqbar Zakaria & Foong Fu Kai

Department of Interior Design, School of Housing, Building and Planning, Universiti Sains Malaysia, 11800,

Penang, Malaysia

Email of corresponding author: ssafial@usm.my

The profession of lighting designers is still developing in Malaysia and in its way in finding its path. Drastic development in architectural projects in Malaysia since ten years of late depict the changes and growth that are evident on the usage of lighting in and out of buildings. However, does it exist, that is the profession of lighting designers based on ethics and lighting design in this country in the same way practised by the Westerners? Positive changes upon architecture field nowadays have dragged the lighting designer profession into the latter role of designing and taking into account the values of human ethics and the safety of the end users. The objective of this research is to scrutinise the definition of the profession of lighting designers, in terms of ethics as well as their apparent role in the context of design. The results of this research are mainly qualitative in nature, supported by interviews, visual data and personal observation, which were used to scrutinize the problems and questions raised herein. It is followed by the views of architects in Malaysia about the ethical and humanity issues in lighting aspect. The researcher is able to explain how the roles of lighting designers in these times are to analyse, evaluate, and accomplish the work of architects, interior designers and fulfilling the needs of the clients and users. The "need" is not restricted to the merely esthetical context; it leads to the humanity aspect and the health of users that have been taken loosely these days. This shows the lack of concern for such matter. In order to obtain the certificate and recognition in this field in Malaysia, lighting design has been introduced at the academic level and it is mandatory among the colleges and universities in built environment field to have more professionals that grasp the real scope as lighting designers, and establishing code of conduct as such mannerism and professional and ethical habits that have been applied in other professional fields as well. In order to maintain the growth of profession of lighting designer and to carve the ways for official recognition in Malaysia, all of these dispositions mentioned must be established, maintained, and mended.

Keywords: ethics, lighting design, profession

Developing an Adaptive Reuse Model for Organization Management in Conservation of Heritage Building in Malaysia: A Conceptual Framework

Mohd. Hanizun Hanafi, Zul Zakiyudin A.Rashid, Arman Abdul Razak & Mohd Umzarulazijo Umar School of Housing, Building and Planning, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: hanizun@usm.com.my

An increasing complexity in term of factor influence for heritage building in Malaysia lead to poor organization decisions making to tackle all issue related with conservation of heritage building. The purpose of this paper is to explore and review the factors that have huge impact and influence on conservation of heritage building in Malaysia, with a focus on developing an adaptive reuse(AR) model as a strategic decision making tool to enhance the performance of organization for authority and private sector. The main objective of this research is to literately identified factor influence directly and indirectly in a decision making by organization in heritage building. Previous researcher and their finding will be the main core of this research to identified factors involved. The approaches to developing an adaptive reuse model for conservation of heritage building in Malaysia consist of 4 crucial and basic step, namely; literature review on factor influence, establishing factor influence base on international researcher, expand and modification of adaptive reuse model and implementation to an establishing of an adaptive reuse model (establishing). The preliminary finding from the literature review revealed 10 key factors that can be used to examine adaptive reuse decision making which are physical, social, economic, technology, law, function, environment, finance, infrastructure and politic. The key factor revealed may potentially influence the theory as well as the practice of heritage conservation in Malaysia, especially in terms of decision making process in heritage organization for local and federal authority.

Keywords: adaptive reuse model, heritage building,

57

Influence of Morphological Elements on Visual Privacy of House Facades

Hussien Salman & Ahmad Sanusi

School of Housing, Building and Planning, Universiti Sains Malaysia, 11800 Penang, Malaysia Email of corresponding author: archhussein77@gmail.com

The objectives of this paper are first, to examine the parameters that have a role in achieving visual privacy in using houses facades and to what extent these influences on the inhabitants; and second, to investigate the relationship between house facade morphology and the visual privacy of inhabitants. This paper has examined the morphological characteristics of houses facades in Erbil City during three different periods and for three different facade's width and detect the level of privacy in their configurations via an analytical comparative method. After a sample of house facades is analyzed morphologically, the house facade width and house pattern are affecting the level of visual privacy. Results show that early house facades offer best design solutions in terms of privacy compared with modern house facade because they carry a higher value with a higher tendency toward the visual isolation, through appropriate regulation of the formation of the facade elements. As for the facade width was the facade of at least width lack of visual privacy because of the reduced housing area has led to the morphological changes of these elements and thus to increase the penetration of inhabitants.

Keywords: visual privacy, house façade, morphological characteristics, Erbil City.

Cultural Diversity and Conflict in The Construction Industry of Malaysia

Teh Jun Ren & Amin Akhavan Tabassi

School of Housing, Building and Planning, Universiti Sains Malaysia, 11800 Penang, Malaysia

Purpose: The purpose of this paper is to determine the relationships between cultural diversity and conflict management in the construction industry in Malaysia.

Design/methodology/approach: identify the factors that influenced the conflict of cultural diversity and find for the solution to overcome the problem arises in the construction industry. The first step explains the types of conflict involved in cultural diversity which might help people to be aware of the root of the conflict. The second step illustrates the positive and negative outcome of cultural diversity. The second step will interpret a different kind of conflict handling style and conflict resolution.

Findings: This article shows the clear explanation of cultural diversity in the construction industry, emphasizing conflict handling style and conflict resolution on the positive outcome and negative outcome of cultural diversity in the construction industry.

Originality/value: This article tries to provide a complete analysis of the conflict of cultural diversity in the construction industry in Malaysia and recommend potential areas of future research.

Keywords: cultural diversity, conflict, construction industry

Integrating Sustainable Construction Approach in Post-Disaster Housing Reconstruction

Farrah Zuhaira Ismail^{a,b}, Anthony Halog^a & Carl Smith^c

^aSchool of Geography, Planning and Environmental Management, University of Queensland, Australia ^bFaculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, Shah Alam, Selangor, Malaysia ^cSchool of Agriculture and Food Sciences – University of Queensland, Australia Email of corresponding author: f.ismail@uq.edu.au

The occurrence and intensity of natural disasters such as earthquake, hurricane and flood has been prominent recently. The devastating impacts of such catastrophes cause excessive loss of life, livelihoods, houses and asset. Pressure imposed on the surroundings soon after a disaster event could further exacerbate disaster vulnerability of the surroundings. For instance, the urgent need for housing reconstruction soon after a disaster event took place, often leads to numerous or large-scale reconstruction programmes and huge demand for construction materials. Furthermore, the intervention of many different organizations during the post-disaster housing reconstructions could also influence the sustainability of the overall socio-ecology of the affected area. Different approaches in design, selection of building materials and construction technologies deployed in pursuit of disaster resiliency may cause unfavourable adverse circumstances to the surrounding, which escalates its susceptibility to future calamities. Therefore, this paper aims to identify relevant key indicators which interpret construction sustainability in a post-disaster housing reconstruction context, and to further investigate the dynamic interactions of these indicators on the socio-ecological system in order to achieve holistic sustainable post-disaster housing reconstructions. Content analysis was conducted and interview sessions were administered to achieve these aims. From our results, the nexus of sustainability and disaster resilience can be seen apparent. The adaptation of integrated sustainable construction approach in the housing reconstruction practice could environmental damage and strengthen the interrelated socio-ecological systems.

Keywords: sustainable reconstruction, post-disaster housing reconstruction, sustainability indicators, disaster resilient housing

An Overview of Snatch Theft Crime and Physical Environmental Attribute

Anith Nabilah Mustafa & Siti Rasidah Md Sakip

Universiti Teknologi MARA, Seri Iskandar Campus, 32610, Seri Iskandar, Perak, Malaysia Email of corresponding author: sitir704@perak.uitm.edu.my

The tactic of the snatch theft occurs in an instant. There will be no verbal communication occurs between the offender and the victim before the robbery. It is based on the opportunities that exist when the crime committed. These crime activities are complex phenomena that the chances of snatch theft occurring can be influenced by the physical environment features. Malaysia now is facing this crime problem, especially in the cities. Among four main cities in Malaysia, Kuala Lumpur is the highest city facing this problem for the past six years from 2010 till 2015. It is followed by cities in Selangor, Penang, and Johor. Moreover, 50% of snatch theft that occurred in Kuala Lumpur in 2009 has come from drug addicts. Unemployment, drug abuses was revealed as driving factors for the increase snatch theft crime rate. This paper is an overview of the snatch theft crime problem to discuss why snatch theft can occur. The article also discusses on to the factors that have relation to this crime and to emphasize the relationship of the

Keywords: snatch theft, crime, physical environment

Managing Scaffolding for Safe Working Practices on Site

Norhidayah Md Ulang, Ameera Mohd Nordin & Faizal Baharum

School of Housing, Building & Planning, Universiti Sains Malaysia, 11800 Penang, Malaysia

For the past few years ago, the safety record at construction sites are less satisfactory and had registered a record and reputation of bad image to the construction industry in Malaysia. In particular, accidents involving the collapse of scaffolding. Therefore, the purpose of this study is to evaluate and review the management scaffolding and how scaffolding can be used in a very safe and secure conditions, as well as being able to produce the effectiveness of methods through appropriate methods in the use of scaffolding. Seven safety experts were interviewed for this study and they have provided a lot of insights regarding this issue. They have given their views on many aspects as to ensure that employees are able to use the scaffolding correctly and safely throughout the duration of a construction project. The interviewees had also given their feedbacks on the causes of scaffolding collapse that endanger the lives of the on site workers. These issues will be presented in this paper.

Keywords: Construction Industry; accident; scaffolding; safety and health

The Windows of Security: Forming a Distinguished Architectural Style

Molood Seifi^a, Aldrin Abdullah^a, Mina Seifi^b

^aSchool of Building, Housing and Planning, Universiti Sains Malaysia, 11800 Penang, Malaysia ^bSchool of Languages, Universiti Sains Malaysia, 11800 Penang, Malaysia

The current statistics of crime means that security can no longer be an afterthought. As the demands for secured houses increases the architects have to face the dilemma of coming up with design solutions for security. Traditionally, window bars and shutters were designed to deny the access of intruders to residential houses. The finely crafted wrought iron grills became the striking feature for some of the traditional architectural styles. However, the birth of modern architecture stripped off the ornamentation and decoration and transferred the window design. Besides, the introduction of alarms, toughened glass and locks as security gadgets took away the responsibility of architects to design secured windows. Hence, the window bars which were installed mostly after construction were often perceived as not aesthetically pleasant to residents. Our discourse concerns ways of designing access control for windows. It is therefore the creative architectural solutions that is at stake here. Qualitative research method selected to conduct semi-structural online interview with five residents in five different countries namely India, Germany, Mexico, Yemen and Malaysia. The questions mostly revolved around the perception of households about the windows security-bars design. Moreover, the same interview procedure was repeated for five architects from the same regions to understand if architects consider security design of the windows in the early stage of their design and what alternatives they offer to deny access through windows. Besides, two traditional and one modern model of building security as suggested by the architects were explained in the content of the paper. The result of the study found that although security bars are the most dominantly used elements on windows in all the five countries, the residents dislike them except in the case of traditional, finely ornamented and the minimalistic designs. The architects believed that security criteria limits their imaginations to design buildings. The architects prefer if residents use other means of security than the security bars. However, traditional and modern design alternatives to security bars prove that the architects can come up with creative solutions. Residents expect architects to suggest them alternative design solutions as they also perceive technologies such as alarms and CCTV not entirely as reliable as physical security. Therefore, the study concludes that Custom-made windows are preferred by both residents and architects while architects think this makes design more interesting but in the other hand more time consuming. Moreover, although architects perceive security as a limitation to their design but it can be used as an out of box thinking mean to design entirely outstanding buildings like once design for sustainability or other restrictions reformed architecture.

Modern Building Services Vs. Heritage Shophouse Façade in Georgetown/ Penang

Omar Sabah & Muna Hanim Abdul Samad

School of Housing, Building, and Planning, University Sains Malaysia, Penang, Malaysia Email of corresponding author: omaradils79@gmail.com

This study aims to diagnose the impact of the new installments of modern building services on historical buildings façade of heritage shophouse in Georgetown/ Penang. A background of the area and its history will be needed, along with architectural information about the building type of the shophouse, its types, and the geometrical composition that gives the visual appearance to its façade. In additional to general information about building services (traditional and modern) used in this building. The method used in this paper is comparing two statements of heritage buildings. The first one is the original state of the building, as it has been built with all its architectural features. The other one is the current state after the new arrangements occur on it which related to the installments of the modern building services. The main difference between the two cases is that the original building is supposedly built with all its traditional methods of providing building services, as the techniques allow at the time of building, which is integrated with the architectural properties of the structure. On the other hand, modern appliances are made with different features, that most of the time are contracting the physical appearance of the building, besides other properties as façade function, building and finishing materials. The study selects shophouse façade as a case study, for the shophouse importance in forming most of the urban fabric in Georgetown/ Penang, and its façade as it represents the outside part that gives the visual appearance of the building, and therefore, the current streetscape of the area.

Keywords: building service, Georgetown, shophouse, façade

Pilot Study Questionnaire Analysis on Indoor Environmental Quality (IEQ) and Occupant's Self-Estimate Productivity in GBI Rated Office Building: Non Environmental Factors

Muna Hanim Abdul Samad^a, Asniza Hamimi Abdul Tharim^b & Mazran Ismail^a

^aArchitecture Programme, Universiti Sains Malaysia, Penang, Malaysia ^bFaculty of Architecture, Planning and Surveying, Universiti Teknologi MARA Perak, Malaysia Email of corresponding author: asnizahamimi@gmail.com

Buildings are essential for human to live, work and rest. Although it's significant contribution to human life, they are seldom tested, unlike other human creations and technology. It is often mistreated after its completion and occupancy, where there is a tendency to conduct maintenance for the building but repeatedly neglected in measuring its current performance after years of occupancy. It is believed by many that a building's best benchmark is its performance regardless its location, geographical, climate, social as well as its functions. Hence, one of the essential method in evaluating building performance through the eyes of its occupants is by using the Post Occupancy Evaluation (POE) survey. The POE is very beneficial in evaluates occupant's needs and collects feedback from building occupants in the post-occupancy stage in relation with the indoor environment of a building. The seven-point Likert scale questionnaire adapted from established POE database that consist of various aspects and criteria of a building that specifically on the indoor environmental quality (IEQ) elements. These Indoor Environmental Quality (IEQ) often comprises of thermal comfort, acoustic, visual, indoor air quality, and many others. However as for this pilot study, the Post Occupancy Evaluation (POE) of the Indoor Environmental Quality (IEQ) is focusing on the aspect of non-environmental factor such as the office layout, furnishing, personal space, maintenance and cleanliness and also building characteristic focusing on its facade. Results from analysis indicate a positive relationship between the Indoor Environmental Quality (IEQ) nonenvironmental factor and occupant's self-estimate productivity in the selected GBI Final Certification office buildings with its occupancy duration of two to five years.

Bali Conference

COMMITTEE MEMBERS

2016 Humanities, Social Sciences and Environment Conference

Advisors:

- Professor Dr. Azlinda Azman
- Professor Dr. Aldrin Abdullah
- Professor Dr. Narimah Samat

Chair:

Associate Professor Dr. Saidatulakmal Mohd

Proceedings:

- Dr. Loke Yiing Jia
- Dr. Sharifah Rohaya Sheikh Dawood

Programs / Promotions:

- Dr. Abdelhak Senadjki
- Dr. Aiza Maslan
- Dr. Paramjit Singh Jamir Singh

Venue / Accommodation / Traveling / Souvenirs:

- Dr. Francis Aba
- Mr. Muhammad Fikri Ali Yasah
- Mrs. Suraya Abdullah

Technical Assistants:

- Mrs. Siti Nur Faezah Ahmad
- Mr. Nazrul Fitri Ahmad

2nd International Conference on Contemporary Economic Issues

Advisor:

Professor Dr. Azlinda Azman

Chair:

Professor Dr. Lean Hooi Hooi

Proceedings:

- Dr. Lim Ee Shiang
- Dr. Law Chee Hong

Programs / Promotions:

- Dr. Nor Asmat Ismail
- Dr. Shariffah Suraya Syed Jamaludin
- Dr. Razlini Mohd Ramli

Venue / Accommodation / Traveling / Souvenirs:

- Mrs. Norazrina Md. Jabarullah
- Mrs. Roslina Mohamed Idros

1st International Conference on Society, Space and Environment

Advisor:

Professor Dr. Narimah Samat

Chair:

Professor Dr. Chan Ngai Weng

Proceedings:

- Dr. Khoo Suet Leng
- Dr. Asyirah Abdul Řahim
- Professor Dr. Suriati Ghazali

Programs / Promotions:

- Associate Professor Dr Jasni Sulong
- Associate Professor Dr Salasiah Che Lah

Venue / Accommodation / Traveling / Souvenirs:

- Dr. Mohamad Luthfi Abdul Rahman
- Dr. Idris Mansor

1st International Conference on Liveable Built Environment

Chairman	: Associate Professor Dr. Noor Faisal Abas
Vice-Chairman	: Dr. Zulzakiyuddin Ahmad Rashid
Secretary	: Dr. Ariza Sharikin Abu Bakar
Treasury	: Dr. Atasya Osmadi
Publication	: Dr. Amin Akhavan Tabassi
Indexing	: Dr. Faizal Baharom
Publicity	: Sr. Nuzaihan Aras Agus Salim
2	Dr. Mariyati Taib @ Mohd Taib
Logistic	: Dr. Norhidayah Md. Ulang

SCIENTIFIC COMMITTEES

Associate Professor Dr. Noor Faisal Abas Dr. Zulzakiyuddin Ahmad Rashid

- Dr. Ariza Sharikin Abu Bakar
- Dr. Atasya Osmadi
- Dr. Amin Akhavan Tabassi
- Dr. Faizal Baharom
- Sr. Nuzaihan Aras Agus Salim
- Dr. Mariyati Taib @ Mohd Taib
- Dr. Norhidayah Md. Ulang



A to Z Authors' Index

A Chafar Ahmad	14 04	Llomzoh Muzoini	15 00
A. Ghafar Ahmad	14, 26	Hamzah Muzaini	15, 28
Abdelhak Senadjki	13, 32	Heng Yong Ming	13, 55
Abdul Aziz Hussin	14 53	Hilma Tamiami Fachrudin	12, 52
Abdul Fatah Che Hamat	13, 32, 34	Hong Chern Wern	13, 41
Abdul Malek Abdul Rahman	15, 54	Hooi Hooi Lean	12, 13, 14, 31, 33, 39
Abdul Muhaimin Ab Wahid	13, 48, 51	Hoong-Pin Lee	12, 47
Abdul Rahim Ridzuan	13, 34	Hossein Taghvaei	14, 52
Abdullah Zawawi Awang	12, 47	Hussien Salman	15, 58
Abdullahi Nafiu Zadawa	14, 53	Intan Hashimah Mohd Hashim	13, 20, 21
Adulfo Revestir Arevalo	13, 38	Jacqueline Liza Fernandez	13, 34
Ahmad Sanusi	15, 58	Jacqueline Ting Zi Yee	13, 24
Ahmad Zamil Zakaria	14, 53	Jerome Kueh	12, 14, 31, 33, 39
Aldrin Abdullah	12, 15, 49, 60	Jie-Sheng Lee	12, 47
Ameera Mohd Nordin	14, 60	Jong Ho Lee	14, 36
Amin Akhavan Tabassi	12, 58	Jung Wan Lee	14, 36
Aminu Garba Waziri	14, 53	Kaluthanthri P. C	14, 54
Aminuddin Ab Ghani	12, 24	Ke Nunthasen	14, 39
Amirullah Maat	12, 47	Khaira Amalia Fachrudin	12, 52
Amy Marisa	12, 48	Khalilah Hassan	15, 55
An Nisha Nur Welliana Abd		Ku Ruhana Bt Ku Mahamud	13, 42
Rased	15, 54	Ku'Azam Tuan Lonik	14, 37
Ani Maslina Saleh	13, 50	Kumara Jati	12, 32
Anis Abdul Rahim	13, 43	Lady Aprilia	13, 38
Anith Nabilah binti Mustafa	12, 59	Lai Chee Hui	13, 41
Anthony Halog	12, 13, 49, 59	Le Pham Khanh Hoa	12, 22
Arman Abdul Razak	12, 13, 23, 57	Lee Siu Ming	14, 37
Asmalia Che Ahmad	13, 48, 51	Liew Khim Sen	14, 31
Asniza Hamimi Abdul Tharim	15, 61	Lim Han Khim	13, 41
Aswati Hamzah	13, 28	Lorelei D.C. de Viana	13, 41
Asyirah Abdul Rahim	13, 43, 45	Lucia Rigamonti	13, 49
Atasya Osmadi	14, 53, 54	M. A. I. M. Dharmadasa	14, 25
Azizan Marzuki	14, 26, 44	Mazran Ismail	15, 61
Azizi Bahauddin		Melfi M. Caranto	
	12, 49		13, 25
Azlinda Azman	12, 14, 21, 23	Mina Seifi Mahamad Muzammil Mahamad	15, 60
Azman Azwan Azmawati	13, 20, 21	Mohamad Muzammil Mohamad Noor	10 10
Azman Ramlie	13, 24		12, 18
Azna Abd Wahab	12, 51	Mohamad Nidzam Rahmat	30, 50
Carl Smith	12, 59	Mohamad Rashidi Pakri	13, 43
Cecep Alba	13, 20	Mohamad Shaharudin Samsurijan	12, 23
Chan Ngai Weng	12, 13, 24, 41 ,42	Mohammad Ghazi Bin Hj Ismail	12, 24
Chee-Hong Law	15, 33	Mohammad Izzamil M.N.	13, 45
Deepak Tirumishi Jada	12, 47	Mohd Hanizun Hanafi	13, 57
Dinh Van Oanh	12, 36	Mohd Reza Esa	13, 49
Dzul Hadzwan Husaini	12, 33	Mohd Sabrizaa Abd Rashid	14, 53
Ee Shiang Lim	12, 13, 34	Mohd Umzarulazijo Umar	13, 14, 26, 44, 57
Ejaz Ashraf	15, 27	Mohd Zaini Abd Karim	13, 42
Faizal Baharum	14, 60	Molood Seifi	15, 60
Farrah Zuhaira Ismail	12, 59	Muhammad Asraf Abdullah	14, 31
Fatma Betül Kurnaz	14, 22	Muna Hanim Abdul Samad	15, 61
FinahLiyah Hasan	12, 26	Mustafa Adibatmaz	14, 22
Foong Fu Kai	15, 57	Muzafar Shah Habibullah	12, 35
Gamini Premaratne	12, 32	Nadiatul Sarah Muhammad Rais	14, 26, 44
Geok Peng Yeap	13, 31	Najiah Adam Tong	12, 47
Ghee-Thean Lim	15, 33	Narimah Samat	13, 14, 42, 44
Hafiz Khurram Shurjeel	15, 27	Nasibeh Faghih Mirzaei	14, 52
Hafizul Adnen	12, 18	Nguyen Hoai Long	12, 22
Hamimah Adnan	12, 19	······································	·,
ammar / unun	· / · · /		

68

Noor Faisal Abas	15, 54	S. M. K. D. Arunatileka	14, 25
	15, 54 14, 27	S. W. A. D. M Samarasinghe	14, 25
Noorfathehah Abdullah Sani	14, 27 13, 34	Safial Aqbar Zakaria	15, 57
Nor Asmat Ismail Nor Diyana Mustapa	13, 34	Saidatulakmal Mohd	12, 14, 17, 23, 32
Nor Fadzila Aziz	13, 28	Sakkarin Nonthapot	12, 14, 17, 23, 32
Nor Hafizah Selamat	13, 20	Sansan Ziaul Hag	13, 20
Nor Izana Mohd Shobri	15, 56	Shariffah Suraya Syed Jamaludin	14, 23
Nor Zarifah Maliki	13, 28	Sigit S. Wibowo	14, 25
		Siti Masyitah	12, 29
Nor'Aini Yusof Noraida Endut	12, 48	Siti Norlizaiha Harun	12, 29
Noraida Endut	13, 20, 21	Siti Rahyla Rahmat	
Noraini Ahmad	12, 19	Siti Rasidah Md Sakip	12,14, 19, 23
Norazilawati Md Dahlal	12, 29	Sotheeswari Somasundram	12, 51, 59
Norhidayah Md Ulang	14, 60		12, 35
Normah Abdul Latip	14, 26, 44	Suet Leng Khoo	12, 56
Norsalisma Ismail	13, 50	Surayah Abd Aziz	13, 20
Norzarina Mohd Zaharim	13, 21	Suwattana Thadaniti	12, 19
Nosheen Fatima	15, 27	Suziana Mat Yasin	14, 19
Nur Azirah Zahida Mohamad	1 4 17	Syahrul Nizam Kamaruzzaman	13, 48, 51
Azhar	14, 17	Syazwani Ahmad	14, 53
Nur Illiana Husin	13, 48, 51	Sze Wei Yong	14, 31, 39
Nurharniza Abdul Rahman	12, 47	Tang Soke Kwan	13, 41
Nurul Fadzliana Abu Hassan	13, 43	Taufik Mohammad	14, 21
Nurul Shakila Khalid	15, 28	Teh Jun Ren	12, 58
Nurul Syifaa Mohd Shakil	14, 17	Tze-Haw Chan	13, 37
Oliver Valentine Eboy	14, 44	V. A. Isuru	14, 25
Omar Adil Sabah	15, 61	Vida Taghvaei	14, 52
Perng-Shen Tai	12, 47	Vu Tri Dung	12, 36
Pham Hong Hoa	12, 22	Wahid Omar	12, 47
Premalatha Karupiah	13, 21	Wan Noor Anira Wan Ali	15, 55
Prima Roza	13, 18	Wan Norhaniza Wan Hasan	12, 17, 29
Qoriah A. Siregar	13, 20	Waraporn Nunthasen	14, 39
R. K. S. Liyanage	14, 25	Yoke Mui Lim	12, 56
Radieah Mohd Nor	12, 17	Young-Ei Kim	14, 36
Radziah Adam	14, 37	Zaafri Ananto Husodo	13, 38
Rostam Yaman	12, 19	Zakaria Bahari	13, 32
Ruslan Rainis	13, 42	Zul Zakiyuddin Ahmad Rashid	13, 55, 57