

RESEARCH – CHAN NGAI WENG

LIST OF COMPLETED AND CURRENT RESEARCH PROJECTS WITH DATES:

Completed Projects:

- (1) Chan NW (PI) **A Quantitative Analysis of Rainfall Patterns and Drought Occurrences in Northwest Peninsular Malaysia.** M.A. Dissertation Research, Funded by the University of Malaya via Tutorship Scheme worth RM36,000.00 over 3 years (June 1977-January 1981).
- (2) Chan NW (PI) **The Climate of Penang Hill : A General View of Existing Climatic Conditions as Compared to its Surrounding Lowlands.** Funded by Universiti Sains Malaysia's Short-term Research Grant Project titled `Kajian Tentang Ciri-Ciri Persekitaran dan Diversiti Flora dan Fauna Bukit Bendera Pulau Pinang'. A total of RM13,736.00 was approved (February 1991 - August 1991).
- (3) Chan NW (PI) **Amalan-Amalan Penanaman Padi Di Sawah Sempadan dan Sungai Burong, Mukim Tanjong Karang dan Pengaruhnya Terhadap Perubahan Kualiti Air Permukaan,** Funded by Universiti Sains Malaysia's R & D Social Science Research Grant Project titled `Satu Kajian Tentang Perubahan Kualiti Air Permukaan Akibat Aktiviti-Aktiviti Dalam Kitaran Penanaman Padi di Mukim Tanjong Karang, Daerah Kuala Selangor' (August 1988 -August 1991). A total of RM89,390.00 was approved (Translation: Padi Farming Practices in Sawah Sempadan and Sungai Burong, Mukim Tanjong Karang and its influences on Surface Water Quality Changes')
- (4) Chan NW (PI) **A Contextual Analysis of Flood Hazard Management in Peninsular Malaysia,** PhD Research Project jointly funded by Universiti Sains Malaysia and Middlesex University. Total funding inclusive of scholarship amounts to RM168,000.00 (September 1991 - September 1995)
- (5) Chan NW (PI) **The Influence of Climate, especially Floods, on Agriculture, Tourism and Other Economic Activities in the East Coast of Peninsular Malaysia,** Short term Research Grant, Universiti Sains Malaysia totaling RM18,940.00 (August 1995 - August 1997).
- (6) Chan N W (PI & Hydrologist); Dr Wan Ruslan Ismail (Geomorphologist); Dr Ab Latif Ibrahim (Climatologist/Water Resource Expert); and Associate Professor Dr Morshidi Sirat (Urban/Industrial Geographer and Planner). **"Urban Sustainability and the Effects of Rapid Socio-Economic, Industrial and Infrastructure Development in Penang Island on the Environment, with special reference to Soil Erosion, Landslides, Water Pollution and Flooding"** (Sep 1996 - April 1998). RM44,840.00 was approved by the Institute of Strategic and International Studies (ISIS) Malaysia.
- (7) Chan NW (PI) **Hill Land Development and Effects on The Environment: Some Case Studies In Bukit Bendera (Penang), Bukit Larut (Perak) and Cameron Highlands (Pahang).** IRPA Short Term Research Grant, Universiti Sains Malaysia worth RM14,380.00 (1 Aug 1998 - 31 Jul 1999).
- (8) Chan NW (PI) **Current and Future Situation of Freshwater Water Resources in Penang: Some Projections And Recommendations on The Long Term Water Security of Penang State.** Short Term Research Grant, Water Watch Penang (WWP), 10 Persiaran Bt Jambul (International College), 11900 Bayan Lepas, Penang. (1 September 1998 - 31 August 1999).
- (9) Chan N W **Managing Water Resources in The 21st Century In Malaysia.** A Research Grant to produce a book. Funded by the Alliance for a responsible and United World (Paris). A Total of RM10,000.00 was approved for this project (1 September 1998 - 31 December 1999).

(10) Chan N W **Awareness and Educational Programme for Water Conservation in Penang.** A Water Watch Penang (WWP) Project funded by the Penang Water Corporation (Perbadanan Bekalan Air Pulau Pinang). Total funding is RM50,000.00 (1 June 1999 - 31 May 2000).

(11) Chan L K (PI), Che Salmah, Chan N and Ho SH *Climate and Hydrology of Pantai Aceh Forest Reserve, Penang.* Malaysian Nature Society (Penang Branch) Project on **Climate, Hydrology, Flora and Fauna Diversity and the Role of the Pantai Aceh Forest Reserve as a National Park in Pulau Pinang.** RM14,000.00 was approved for this project (1 December 1999 - 31 -December 2000).

(12) Lee SM (PI), Khor H T, Foon, S Y, Yeoh, O B, Chan N W and Teh, K H **Youth Action For Water – Active Watershed Education (AWE) Programme.** Ford Motor Company Conservation & Environmental Grants 1999. Grant awarded to Water Watch Penang (WWP). A Total of RM15,000.00 was awarded for this project (1 March 1999 – 28 February 2000).

(13) Chan, NW (PI), Hajar Abdul Rahim, Khor H T and Baharulnizam Baharum **Publication of “Learning About Water – A Training Manual”.** Ford Motor Company Conservation & Environmental Grants 2000. Grant awarded to Water Watch Penang (WWP). A total of RM10,000.00 was awarded under this project (1 March 2000 – 28 February 2002).

(14) Chan NW (PI) and Kung H T **Fulbright Scholar Programme – Management of Flood Hazards in the Memphis Area, Tennessee, USA and Management of Flood Hazards in Penang, Malaysia: A Comparative Study.** A joint research programme worth \$15,050.00 approved under the Malaysian-American Center for Educational Exchange (MACEE). The other researcher is Professor Hsiang-te Kung of the Department of Geography, University of Memphis, Tennessee, USA. The period of the research is from 17 August 2000 to 30 June 2001.

(15) Chan NW (PI) **Assessment of Available Water Resources, Water Supply and Demand, Issues, Threats and Recommendations for Sustainable Development of Water Resources in Penang in the 21st Century.** Funding applied for under the Short-term Intensification of Research in Priority Areas (IRPA) of the Ministry of Science, Technology and the Environment (MOSTE) of Malaysia. I am the sole researcher. Total funding approved is RM8,698.20. (August 2000 to July 2002).

(16) Chan NW (PI) **An Assessment of Climate Change in Cameron Highlands.** IRPA Short-term Research under the 8th Malaysia Plan totaling RM17,014.00 (Research Period is 1.4.2002-31.3.2003).

(17) Chan NW (PI), Barrow C J and Clifton J **Land Use, Land Development and Control of Environmental Degradation in Highland areas of Peninsular Malaysia: Supporting Sustainable Livelihoods.** DFID, The British Council Higher Education Links. Joined project together with (Dr) C.J. Barrow [UNIV. WALES SWANSEA] and (Dr) J. Clifton [PORTSMOUTH UNIV.]. Total Funding sought is RM12,000.00 (Research period is 01 APRIL 2002 - 31 MARCH 2005).

(18) Chan NW (PI), Barrow C J and Clifton J **Sustainable Development of Cameron Highlands: Issues & Challenges.** DFID. The British Council Higher Education Links. Joined book project with (Dr) C.J. Barrow [UNIV. WALES SWANSEA] and (Dr) J. Clifton [PORTSMOUTH UNIV.]. Funding of RM4,500.00 approved (Research Period is 1 May 2005 - 31 July 2005).

(19) Chan NW (PI) **Developing a Model of Flood Hazards on Urban Floodplains in Malaysia.** Universiti Sains Malaysia Fundamental Research Grant (FRGS) Year 2003. Total funding approved is RM66,530.00. Prof Koh H L and Assoc. Prof. Aminuddin Ab Ghani were later incorporated into the research (Research Period is from 1 October 2003 - 30 September 2005).

(20) Chan, NW (PI), Hajar Abdul Rahim, Khor H T and Teng, D. **Production of a VCD on River Conservation Using Sungai Pinang as The Model**. Ford Motor Company Conservation & Environmental Grants 2000. Grant awarded to Water Watch Penang (WWP). A total of RM12,000.00 was awarded under this project (Research Period is 12 December 2003 – 11 December 2004).

(21) Chan NW (PI), Norizan Md Nor and Suriati Ghazali **Environmental Change and Sustainable Tourism: A Study of Impacts, Benefits and Involvement of Orang Asli Communities Along the Perak-Pahang-Kelantan Borders**. IRPA Short-term Research under the 8th Malaysia Plan. This is a joint project with Associate Professor Dr Norizan Md Nor and Dr Suriati Ghazali. Total funding sought is RM19,974.00 (Research Period is 1 April 2004 - 31 March 2005).

(22) Chan, NW (PI), Abu Hassan, Che Salmah Rawi, Jabil Mapjabil, Edlic Sathiamurthy, Hajar Abdul Rahim, Khor H T and Teng, D. **Water Conservation Projects 2005 in Penang**. Penang Water Corporation Grant 2005. Grant awarded to Water Watch Penang (WWP). A total of RM50,000.00 approved under the project (Research Period is 1 January 2005 – 31 December 2005).

(23) Chan, NW (PI), Abu Hassan, Che Salmah Rawi, Jabil Mapjabil, Khor H T, Teng, D and Chang, W F **Water Conservation Projects 2006 in Penang**. Penang Water Corporation Grant 2005. Grant awarded to Water Watch Penang (WWP). A total of RM50,000.00 was awarded under this project (Research Period is 1 January 2006 – 31 December 2006).

(24) Chan NW (PI) **A Comparative Study of Community Water Resources Management in Thailand and Malaysia with Emphasis on the Role of Women**. Asian Institute of Technology, Southeast Asia Urban Environmental Management Applications (SEA-UEM) Project. Post-Doctoral Fellowship Research Sponsored by CIDA-AIT. A total of 150,000.00 Baht (RM15,000.00) was awarded under this project (Research Period is 1 May 2006 – 30 April 2007).

(25) Chan, NW (PI), Che Salmah Rawi, Jabil Mapjabil, Khor H T, Teng, D and Chang, W F **Water Conservation Projects 2007 in Penang**. Penang Water Corporation Grant 2007. Grant awarded to Water Watch Penang (WWP). A total of RM40,000.00 was awarded under this project (Research Period is 1 January 2007 – 31 December 2007).

(26) Barrow C J (PI) and Chan N W **Highlands Under Threat in Malaysia: Assessing The Key Problems And Identifying Sustainable Development**. The British Academy, 10 Carlton House Terrace, London SW1Y 5AH. Joint project together with (Dr) C.J. Barrow as Head [UNIV. WALES SWANSEA]. Total Approved Funding is £18,073 (Approximately RM126,500.00 (Research Period is 1 October 2006 – 1 October 2008).

(27) Chan, NW (PI) **MNS-ABN AMRO Conservation Fund Projected titled “River and Water Awareness and Education Programme for Schools in Penang”**. Grant awarded to Water Watch Penang (WWP). A total of RM20,000.00 was awarded under this project (Research Period is 1 October 2007 – 30 September 2008).

(28) Chan N W (PI) **Ecotourism and Environmental Conservation in Small Islands in the East Coast of Peninsular Malaysia**. Universiti Sains Malaysia Short Term Research Grant (A/C No. 304/PHUMANITI/637069). Amount approved is RM15,930.00 (Period of research 15 October 2006 – 14 October 2008).

(29) Chan N W (PI), Che Salmah Md Rawi and Tarmiji Masron **Modelling Environmental Awareness, Perception, Education and Lifestyle Changes in Environmental Conservation in**

Major Cities in Malaysia. FRGS Grant 203/PHUMANITI/671011 (Research Period is 1 November 2006 - 31 October 2009 & Amount Approved is RM60 000.00).

(30) Jabil Mapjabil (PI), Chan N W, Norizan Md Nor and Suriati Ghazali **Developing A Comprehensive Model on Ecotourism Incorporating Local Communities, tour Operators, Hoteliers and Tourists Towards Sustainable Development in Highlands Areas in Malaysia. FRGS Grant 203/PHUMANITI/671014.** (Research Period is 1 November 2006 - 31 October 2009 & Amount Approved is RM60 000.00).

(31) Anisah Lee Abdullah (PI), Chan NW and Suriati Ghazali **Traditional Coastal Fishing Communities in North Malaysia: Towards A New Model For Sustainability. Fundamental Research Grant Scheme (FRGS)** (Research Period is 1 September 2007 - 31 August 2010 & Amount Approved is RM60 000.00).

(32) Chan NW (PI), Jabil Mapjabil and Tarmiji Masron **Tourist Perception, Needs and Willingness to Pay for Tourism Products and Facilities in Kinabalu Park, Sabah.** Universiti Sains Malaysia “Short Term Research Grant”304/PHUMANITI/638149 (Research Period is 1 July 2008 – 30 June 2010 & Amount Approved is RM19,983.00).

(33) Saidatulakmal Mohd (PI), Chan N W and Jacqueline Liza Fernandez **The Forgotten Heritages of Penang – Contingent Valuation Study.** Universiti Sains Malaysia “Research University Grant” 1001/PSOSIAL/816075. (Research Period is 2 Years: 15 November 2008 – 14 November 2010 & Amount Approved is RM152,108.68).

(34) Asha Suresh Chand (PI), Soo, L.C. and Chan N W **The Tasik Harapan Clean-up Project Using Effective Microbes (EM).** Cimb Bank Berhad funded Project worth RM105000.00 (Research Period is 1 August 2010 – 31 March 2011. This project is to be extended for another 6 months with additional funding from Cimb Bank Berhad).

(35) Chan NW (PI), Cheok Kian Sheong, Mandy Koay, Edina Crnkic, Tan O.K., Mohamad Abdullah **Responsible Water Consumption Study in USM Saujana Café: A Dishwashing Study Pitting Dishwasher Against Manual Washing by Hand.** Grant sponsored by Reckitt Benckiser (M) Sdn Bhd totalling RM28,200.00. Period of Study is March 2010 to January 2011.

(36) Abu Talib Ahmad (PI), Chan N W (Team Leader on Natural Heritage and Man-Environment Reklationships), Sohaimi Abdul Aziz (Team Leader on Cultural Heritage), Ooi K G (Team Leader on Historical Heritage), Jelani Harun, Hajar Rahim and Ruslan Rainis (Team Leader on GIS) **Natural and Cultural Heritage Focussing on the Northern Region of Peninsular Malaysia (Perlis, Kedah, Penang and North Perak).** Universiti Sains Malaysia “Research University (RU) Grant” 1001/PHUMANITI/816037 (Research Period is 1 October 2007 – 30 September 2010. Approved Amount is RM985,600.00).

(37) Chan N W (PI), Asyirah Abdul Rahim and Narimah Samat **A Comparative Evaluation of The Potentials, Needs And Sustainability of Taman Negara National Park, Kinabalu National Park and Langkawi Geopark As Ecotourism Sites.** Universiti Sains Malaysia “Research University (RU) Grant” 1001/PHUMANITI/816097 (Research Period is 15 May 2009 – 14 May 2011 & Amount Approved is RM93,969.12).

(38) Chan N W (Supervisor) and Hong Chern Wern (PI) **Sustainable National Park Management Modelling by Using the Driving Force-Pressure-State-Impact-Response (DPSIR) Framework: The Case of Penang National Park.** Universiti Sains Malaysia “Incentive Grant (Postgraduate

Student)” 1001/PHUMANITI/821103 (Research Period is 6 Jan 2009 – 31 Dec 2012 & Amount approved is RM15,000.00).

(39) Chan NW (PI) and Tarmiji Masron **The Significance of Human Factors in Effective Disaster Management in Malaysia: A Case Study of Flood Disasters**. Universiti Sains Malaysia “Research University (RU) Grant” 1001/PHUMANITI/816106 (Research Period is 1 June 2009 – 30 May 2011 & Amount approved is RM99,990.00).

(40) Chan NW (Supervisor) and Azreen Rozainee Binti Abdullah (PI) **Sustainable Natural Heritage Management of Royal Belum**. Universiti Sains Malaysia “Incentive Grant (Postgraduate Student)” 1001/PHUMANITI/821103 (Research Period is 1 Sep 2009 – 31 Oct 2012; Amount RM15,000.00).

(41) Chan N W (PI) “**Universiti Sains Malaysia Water Savings Project 2012-2017**”. Universiti Sains Malaysia Special Project Approved By Vice-Chancellor” (Duration is 7 years from August 2010 to July 2017. Approved Funding came in July 2012 based on PBA Tariff Reduction of Monthly Water Bill of Account Number 570505035917 (Asrama USM Lot 229, 230, 235, 238 and 8944). Account No. 311/PHUMANITI/4117420. Year 1 Budget awarded is RM115,000.00.

(42) Chan, N.W. (PI), Wan Ruslan Ismail, Abu Talib Ahmad and Ajindar Kaur “**Transforming School of Humanities Into An Example of A Best Management Practice (BMP) in Water Demand Management (WDM) In Terms Of Water Sustainability**”. Universiti Sains Malaysia “Delivering Excellence APEX Budget 2011” Grant. Account Number 1002/PHUMANITI/910301 (Project Duration is 25 March 2011 – 31 December 2011 & Total Grant awarded is RM327,000.00).

(43) Norizan Md Nor (PI), Chan N W, Lee L M, Salfarina et al. “**Delivering Excellence: APEX 2011: An Integrated Approach to Sustainable Rural-Urban Development for Rakyat Sejahtera**”. Universiti Sains Malaysia “Delivering Excellence APEX Budget 2011” Grant (Tempoh Projek ialah 25 Mac 2011 – 31 Disember 2011 & Jumlah Projek Yang diluluskan ialah RM600,000.00).

(44) Chan N W (PI), Mashhor Mansor, Lai Sai Hin and Narimah Samat. **A Study of River Models in Malaysia**. Account Number 203/PHUMANITI/6711198. Duration - 1 July 2011 to 30 June 2013. RM50,000.00 approved. Fundamental Research Grant Scheme (FRGS). 203/PHUMANITI/6711198

(45) Narimah Samat (PI), Chan N W et al. “**Modelling and Identifying Sustainable Urban Growth Boundary: A Study on Georgetown Conurbation and its Impact on Urban And Peri-Urban Ecosystems**”. Project Number 203/PHUMANITI/6711199. 1 August 2011-31 July 2013. RM50,000.00 approved. Fundamental Research Grant Scheme (FRGS).

(46) Nor Azazi Zakaria (PI), Chan N W. (Team Leader 1), Mohd Nor Desa (Team Leader 2), et al. **Urban Water Cycle Processes, Management & Societal Interactions: Crossing from Crisis to Sustainability**. Kementerian Pendidikan Tinggi Long Term Fundamental Grant Scheme (LRGS) 2011-2016. RM10 million approved.

(47) Chan N.W. (PI), Mazlin Mokhtar, Salmijah Surif, Chamhuri Siwar, Lee Yook Heng, Jamaluddin Md Jahi, Maimon Abdullah, Maketab Mohamed, Suriati Ghazali, Narimah Samat, Asyirah Abdul Rahim, Lok Chong Hoe, Noor Shakirah Mat Akhir **Human Aspects of Water Security Focussing on Governance, Water Demand Management and Non-Revenue Water Management in Urban Areas in Malaysia**. Kementerian Pendidikan Tinggi Long Term Fundamental Grant Scheme (LRGS) 2011-2013. Account Number 203/PKT/6724003. RM1,013,400.00 approved. 203/PKT/6724003. Jun 2011-Jun 2014.

(48) Chuah Chiew Yen (PI) and Chan N W (Supervisor) **Assessing the Effectiveness of Environmental Education System in Secondary Schools in Penang, Malaysia.** Universiti Sains Malaysia "Postgraduate Research Grant Scheme (PRGS) 1001/PHUMANITI/837071 (Research Period is 15 Sep 2011 – 14 Sep 2013 & Amount approved is RM3,335.00).

(49) Jamaluddin Md Jahi (PI) and Chan N. W. **Dampak Pembangunan terhadap Alam Sekitar dan Kepentingan Pengurusan Alam Sekitar Bersepadu di Provinsi Riau, Indonesia.** Government of Riau Province, June 2012 to August 2013. RM1,000,000.00 approved.

(50) Yasuyuki Sawada (PI), Fukunari Kimura, Sothea Oum, Sommarat Chantarat, Sujata Satapathy, Brent Layton, Mitsuyo Ando, Le Dang Trung, Sann Vathana, Danilo Israel, Jonathan A Lassa, Ngai Weng Chan, Allen Lai Yu Hung, Nipon Poapongsakorn and Pitsom Meethom and Ikumo Isono. **ERIA Research Project 2011 Working Group on "Economic and Welfare Impacts of Disasters in East Asia and Policy Responses"**. Awarded by Economic Research Institute for ASEAN and East Asia (ERIA) from 12 Mar 2011-5 Mar 2012. Sub-Project by Chan NW is titled "Impacts of disasters and disaster risk management in Malaysia: the case of floods". Total Grant Approved RM22,000.00.

(51) Chan N W (PI) Participatory approaches in urban water management in Asia, for the city of Georgetown, Penang. **Lee Kuan Yew School of Policy, National University of Singapore International Grant** of SGD4500.00 (RM11,584.71). Duration of project 2013-2014.

Ongoing Projects:

(52) Badaruddin Mohamed (PI), Chan N. W., Alias Abdullah, Vikneswaran Nair, Nimatul Adha Nordin, Awangku Hassanal Pengiran Bagul, A'zizan Hussain **Physical & Environmental Rural Tourism Capacity Framework.** Kementerian Pendidikan Tinggi Long Term Fundamental Grant Scheme (LRGS) 2011-2016. Account No. 304/PPBGN/650570/T121. RM1,944,888.00 approved.

(53) Narimah Samat (PI), Morshidi Sirat, Chan Ngai Weng, Ruslan Rainis, Wan Ruslan ismail, Abdul Fatah Che Hamat, Anisah Lee Abdullah, Norizan Md Nor, Suriati Ghazali, Aishah Knight Abdul Sattar, Asyirah Abdul rahim, Azlinda Azman, Jabil Mapjabil, Khoo Suet Leng, Nooriah Yusof, Saidatulakmal Mohd, Sharifah Rohaya Sheikh Dawood, Wan Mohd Muhyihuddin Wan Ibrahim, Zakaria Bahari, Zikri Mohamad, Zulyadini A Rahaman, Aziz Abdul Majid. **Spatial Inequalities: Framing Phenomena, Formulating Policies. Research University Team Grant.** Duration from 15 July 2013 to 14 July 2017. Grant amount is RM500,000.00.

(54) Chan Ngai Weng (PI) and Seow Ta Wee. **Effects of Floods on Human Society and the Role of Social Capital in Recovery in Malaysia.** Fundamental Research Grant (FRGS) from Ministry of Education. Duration from 1st July 2014 to 30 June 2016. Grant amount is RM87,000.00. Account Number 203/PHUMANITI/6711393.

(55) Chan Ngai Weng (PI) **Environmental Education Via Environmental Quiz for Poor Students in Lower Secondary Schools di Penang State Towards Producing Environmentally Sensitised Citizens.** University-Industry-Community Engagement Grant from Division of Industry & Community Network USM. Duration (1st August 2014 to 31st July 2015); Amount RM12,000.00.

(56) Syed Zainal Ariff bin Syed Jamaluddin (PI), Chan Ngai Weng and Norizan Md Nor. **Program Kelestarian Bahasa, Tenaga dan Alam Sekitar antara USM dan Sekolah Menengah di Pulau Pinang.** University-Industry-Community Engagement Grant from Division of Industry & Community Network USM. Duration is from 15 August 2014 to 14 August 2015. Grant Amount is RM6,000.00.

(57) Seow Ta Wee (PI), Chan Ngai Weng (Mentor), David Martin, Goh Kai Chen & Goh Hui Hwang. **Developing Optimization Model for Solid Waste Management in Johor Bahru City, Johor. Research Acculturation Collaborative Effort (RACE) Fasa 2/2013.** Grant is from Ministry of Higher Education Malaysia. Duration from 9th July 2014 to 31st December 2014. Grant amount is RM20,000.00 for Mentor. Account Number 1001/PHUMANITI/AUPRM0058.

(58) Chan Ngai Weng (PI), Ku Ruhana (UUM), Mohamad Zaini Karim (UUM), Abdul Razak Chik (UUM), Sallahuddin Hassan (UUM) and Fader Abdullah (UiTM, Perlis). **Long Term Research Project (LRGS) under UUM titled “Economic Model for Flood Disaster Impact Analysis”,** RM20,000.00, 01 August 2012 – 31 July 2016. Account Number 304/PHUMANITI/650710/U143.

(59) Chan Ngai Weng (PI), Main Rindam, Radiah Yusof and Nabsiah Abdul Wahid. **Engaging and educating orphans and primary school children in water and wastewater quality awareness and monitoring in Penang.** University-Industry-Community Engagement Grant from Division of Industry & Community Network USM, 1 July 2012 to 31 December 2015, Amount RM28,427.00.

(60) Chan Ngai Weng (PI), Narimah Samat and Suriati Ghazali. **Socio-economic Wellbeing: Assessing Total Flood Impacts via Direct or Indirect and Tangible or Intangible Impacts of Flood Disasters in the Sg Kelantan Basin.** Ministry of Education Fundamental Research Grant Scheme (FRGS) Flood Management Grant 2015. Duration is from 1 April 2015 to 31 December 2015. Grant Amount is RM70,000.00. Account Number 203/PHUMANITI/6711476.

(61) Chan Ngai Weng (PI), Lee Lai Kuan, Narimah Samat, Aminuddin Ab Ghani and Suriati Ghazali. **Governance for Disaster Risk Reduction: Enhancement of Standard Operating Procedures (SOP) on Flood Disaster Awareness, Preparedness, Warning System, Evacuation Plan & Institutional Arrangements for Flood Risk management in the Sungai Pahang River Basin.** Ministry of Education Transdisciplinary Research Grant Scheme (TRGS) on Flood Management 2015 under the TRGS Programme titled “Flood and Flood Disaster: Integrated Assessment of Extreme Rainfall and Microbial Variability, and Enhancement of Standard Operating Procedures (SOP) for Flood Disaster Awareness: Case Study of Sungai Pahang River Basin. Duration (1 April 2015 - 31 December 2015), Amount (RM105,710.00) & Account No 203/PHUMANITI/6767005.

(62) Sulzakimin Hj Mohamed (PI) and Chan Ngai Weng (Mentor). **Enhancing Performance in Malaysia Local Governments Towards Sustainable Development Focussing on Knowledge Transfer Practices Framework. Research Acculturation Collaborative Effort (RACE) Fasa 3/2015.** Grant is from Ministry of Education Malaysia. Duration from 14th May 2015 to 15th May 2016. Total grant is RM10,000.00 for Mentor. Account Number 1001/PHUMANITI/AUPRM00531.

(63) Chan Ngai Weng (PI) and Masazumi Ao. **Collaborative Learning of Integrated River Basin Management: A Comparative Study of the Tsurumi River Management Model and Pinang River Management Model.** The sumitomo Foundation Fiscal 2014 Grant for Japan-related Research Projects. Duration 31 April 2015 – 31 March 2016. Grant Amount is US\$6500.00 (RM23,354.50).

(64) Chan Ngai Weng (PI), Masazumi Ao and Hidefumi Imura. **Research, Development and Publication of a Textbook titled "Textbook for Sustainable Urban Development Program Volume 1".** Yokohama City University Global Cooperation Institute for Sustainable Cities (GCI) Grant of RM21,840.00.

(65) Hanifah Binti Mahat (PI), Nasir Bin Nayan, Mohmadisa Bin Hashim, Yazid Bin Saleh, Chan Ngai Weng, Kadir Bin Arifin, Kadaruddin Aiyub and Shaharudin Idrus. **Pembinaan indikator kesedaran pendidikan pembangunan lestari peringkat sekolah menengah.** Grant Duration

02/11/2015 - 01/11/2017 (Grant was announced/awarded by Ministry of Education on January 26, 2016. Total Grant RM 77,667.