

# 2016 PNG UPDATE

The  
University of  
Papua  
New  
Guinea



Australian  
National  
University

## PROGRAM AND ABSTRACTS

“SUSTAINING DEVELOPMENT (IN PNG) BEYOND THE  
RESOURCES BOOM”

*Jointly organised by the School of Business and Public Policy of the  
University of Papua New Guinea and the Development Policy Centre,  
Crawford School of Public Policy at The Australian National University*

3<sup>rd</sup> and 4<sup>th</sup> November, 2016

Main Lecture Theatre (MLT), The University of Papua New  
Guinea

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This publication contains abstracts of research papers presented during 2016 PNG Update conference on “Sustaining Development (in PNG) beyond the Resources Boom”, held on Thursday and Friday, 3-4 November, 2016 at the University of Papua New Guinea, Waigani Campus.

The PNG Update is a multi-disciplinary conference that covers contemporary economic, political and social issues in Papua New Guinea (PNG). In this year’s conference, developments related to the general theme of “**Sustaining Development (in PNG) beyond the Resources Boom**” will be discussed, including:

- PNG’s economic outlook
- Strategies to convert the resources boom into development
- Macro and fiscal management
- Human development challenges and reforms
- Facilitating broad economic development – agriculture, fisheries, tourism etc.
- Infrastructure, SMEs and economic competitiveness
- Governance and political economy of development
- Service delivery – health, education, drought policy, etc.
- Social and gender issues in a growing economy.

In order to facilitate debate on issues of national interest, all sessions are open to policy-makers, bureaucrats, professionals from the public sector, private-sector, non-governmental sector, students and all other members of the general public. **Attendance is free and registration is not required.**

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# **PROGRAM 2016 PNG Update: *Sustaining Development (in PNG) beyond the Resources Boom***

**Thursday 3 and Friday 4 November, 2016. The University of Papua New Guinea, Waigani Campus, Port Moresby**

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Hosted by the School of Business and Public Policy, University of Papua New Guinea and the Development Policy Centre, Crawford School of Public Policy, The Australian National University

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## **Day one – Thursday 3 November 2016**

**Venue: Main Lecture Theatre (MLT), UPNG**

8.30am *Registration and arrival tea and coffee*

9.00am **Opening Session** *Master of Ceremony: Prof. Stephen Howes*

### **Welcome address**

*Prof. Albert Mellam, Vice Chancellor, University of Papua New Guinea*

### **Inaugural address**

*His Excellency Bruce Davis, Australian High Commissioner to Papua New Guinea*

### **Opening address**

*The Hon Charles Abel, Minister for National Planning*

10.30am *Morning tea*

11.05am **Keynote addresses** *Master of Ceremony: Prof. Lekshmi N. Pillai*

### **Keynote address 1 – Women in leadership**

*Prof. Betty Lovai*

### **Keynote address 2 - Superannuation fund in PNG: past, present and future**

*Garry Tunstall, CEO Numbawan Super Fund*

### **Keynote address 3 – Public sector financial management reforms in PNG**

*Dr Ken Ngangan, Secretary of the Department of Finance*

12.30pm *Lunch*

1.30pm **Parallel Session 1a – Macroeconomic issues**

*Main Lecture Theatre (MLT)*

Yurendra Basnett (ADB Country Economist)  
Nathan Wingti (Kina Bank)  
Rohan Fox and Marcel Schröder (ANU)  
Stephen Howes (ANU)

**Parallel Session 1b – Education**

*Arts Lecture Theatre (ALT)*

Kilala Devette-Chee (NRI)  
Anthony Swan and Grant Walton (ANU)  
H. Narayana, A. Prabhakar, S. Venumadhav (UPNG)  
Paul Kaita (Bank of PNG)

**Parallel Session 1c – Sustainability and development**

*Science Lecture Theatre (SLT)*

Misty Baloiloi (Env. Science and Geography, UPNG)  
Chalapan Kaluwin (ESG, UPNG)

David Mowbray (ESG, UPNG)

Pochon Lili, Stephen Oli, Olive Vakaloloma Baloiloi  
and Richard McKellar, (ESG, UPNG)  
Mr Walhos Palisa (ESG, UPNG)

3.00pm *Afternoon tea*

3.30pm **Parallel Session 2a – Urban spaces**

*Main Lecture Theatre (MLT)*

Hennah Steven (PAU)  
  
Michelle Rooney (ANU)  
Johnson Ahupa (University of Goroka)  
Busa Wenogo (CIMCPNG)

*Chair: Dr Manoj Pandey*

PNG's macroeconomic outlook  
Financial markets and macroeconomic drivers of the PNG economy  
After Papua New Guinea's resource boom: Is the Kina overvalued?  
PNG's resource boom: a fiscal retrospective

*Chair: Mr Ponnusamy Manohar*

Attitudes towards the use of *Tok Pisin* and vernacular languages in bilingual education programs in Papua New Guinea  
Improving quality education in a world obsessed with student numbers: evidence from Papua New Guinea  
Distance education and human resource development in Papua New Guinea  
Economics of development: a case study of education of the Pilitu people of Goilala

*Chair: Prof Peter Petsul*

StaRs – Papua New Guinea's National Strategy for Responsible Sustainable development  
Unfolding PNG sustainable development through 164 ILGs in forestry area, April Salumei in East Sepik Province – case study  
The history of sustainable development in Papua New Guinea: changes, challenges and lessons learned from 1975 to 2016 and beyond  
The role of conflict management skills in sustainable development in PNG  
  
Relating the concepts of sustainable development to the extraction of non-renewable resources for development purposes in Papua New Guinea

*Chair: Mr Allan Bird*

Urban life, internal migration and development: The need to readdress internal migration as a positive nexus for growth and development in PNG  
Forms of family housing strategies in the city: considerations for public policy  
Child labour, a hallmark of urban poverty: labouring children living in Goroka  
“Voice Mechanism” concepts for the informal economy participants

**Parallel Session 2b – Public-private partnership in health**  
*Arts Lecture Theatre (ALT)*

*Chair: Prof. Nakapi Tefuarani*

Emma Field, Runk, Louis Samiak, Dominica Abo, Mafu Vila,  
Sally Nathan, Alex Rosewell and Georgina Dove (Abt)  
Graeme Hill, Veitania Lepani and Georgina Dove (Abt)  
Ingrid Glastonbury (Oilsearch Foundation)

A model for improving health service delivery in Papua New Guinea: the experience from the CMCA Middle and South Fly Health Program  
District hospital strengthening through a public-private partnership in North Fly District, Western Province  
Hela Provincial Hospital: an innovative model of a public private partnership

**Parallel Session 2c – Development strategies**  
*Science Lecture Theatre (SLT)*

*Chair: Dr Lawrence Sause*

Kia-Henry Nema (National Planning and Monitoring)  
Subba Rao, Albert Mellam, P. Manohar, Ani Rova (UPNG)  
Christopher Edmonds (ADB)  
Colin Wiltshire (ANU)

PNG's MDG experience: lessons learnt for Sustainable Development Goals (SDGs)  
Paradox of 'Resource Boom' in PNG: strategies for development based on the experiences of other countries  
Trust funds in the Pacific: update on operations and performance  
Political economy drivers of decentralisation in PNG: comparative case studies from three DDAs

5.00pm *Close*

## Day two – Friday 4 November 2016

8.30am *Registration and arrival tea and coffee*

9.00am **Plenary Session: ANU-UPNG Research Showcase**  
*Main Lecture Theatre (MLT)*

*Chair: Dr Albert Prabhakar*

**PNG Economic Survey 2015-16**

Manoj Pandey, Nelson Nema, Rohan Fox, Stephen Howes (ANU-UPNG)

**Unintended consequences of PNG's tuition-free education policy**

Grant Walton, Peter Kanaparo, Tara Davda (ANU-UPNG)

10.30am *Morning tea*

11.00am **Plenary Session: Impact of 2015-16 drought and frosts**

*Main Lecture Theatre (MLT)*

*Chair: Ms Megan Taureka-Andrew*

Mike Bourke (ANU)  
James Komengi (Uniting Church) and Brendan Jinks (ANU)  
Blossum Gilmore (CARE PNG)  
Gerard Ng (UNDP)  
Matthew Kanua (Independent Consultant)

Impacts of the 2015-16 drought and frosts: an overview  
The impact of the 2015-16 El Niño on high altitude places in Hela and Enga provinces  
Changing Gender Norms in Emergencies: A Livelihoods Case Study  
The International System in Papua New Guinea's El Niño Response  
Lessons from the 2015-16 drought to improve future disaster management

12.30pm *Lunch*

1.30pm **Parallel Session 3a – Gender**

*Main Lecture Theatre (MLT)*

*Chair: Prof. Betty Lovai*

Pes Wilson (DWU)  
  
Lalen Simeon, Hennah Steven (PAU)  
Imelda Ambelye (Unitech/JCU)

Significance of addressing violence against girls in schools and its impacts on the implementation of Universal Basic Education Policy in PNG  
Are gender based violence victims afraid or ashamed to get assistance?  
PNG formal education system disempowers young women and promotes inequality in villages

**Parallel Session 3b – Private sector development (1)**

*Arts Lecture Theatre (ALT)*

*Chair: Prof. D Harinarayana*

Christopher Edmonds (ADB)  
Phil Caldwell (Oil Search Power Holdings)  
Michael Kabuni (SBPP, UPNG)  
Reeves Papaol (PAU)

Evolving trade and other economic linkages between the Pacific and Asia - focus on implications for the PNG economy  
Oil Search strategy to support PNG Govt domestic power sector objectives  
The Limitations of the PNG-EU interim Economic Partnership  
Peering and content delivery to reduce internet transport cost drivers for PNG

**Parallel Session 3c – Roads and infrastructure**

*Science Lecture Theatre (SLT)*

*Dr. Solomon Awili*

Matthew Dornan (ANU); Ronald Sofo, Chris Banga and  
Carmen Voigt-Graf (NRI)  
MP Pradhan (ADB)  
Albert Tobe (DWU)

Provincial road management in Papua New Guinea  
  
Impact of road upgrading and maintenance on household welfare in PNG  
Poor project performance impedes development in PNG: a comparative analysis of 3 case studies

3.00pm *Afternoon tea*

3:30pm **Parallel Session 4a – Local impact**

*Main Lecture Theatre (MLT)*

*Chair: Prof. Chalapan Kaluwin*

Phillipa Jenkins (ANU)

Sustaining community through the FIFO transition at Ok Tedi mine: development, maintenance, and staged closure in the North Fly

Charles Roche (Murdoch University)

Poverty, wealth and mining: development on the Watut River

Elai Soutai (student, UPNG)

Oil palm and the politics of rural development in East Sepik Province

Vanessa Uiari (DWU/ECU)

Understanding the lives of the local people along the Kokoda trail: preliminary observations of livelihood and development activity

**Parallel Session 4b –Health and education**

*Arts Lecture Theatre (ALT)*

*Chair: Dr Grant Walton*

Ellen Kulumbu (ANU)

Women and health in Papua New Guinea: determinants influencing demand and delivery of health care services

Anna Joskin (SBPP, UPNG)

Examining the role of holistic education as a tool for human resource development for Papua New Guinea

Thomas Wangi (NRI)

Social Protection Index 2012 - PNG

**Parallel Session 4c – Private sector development (2)**

*Science Lecture Theatre (SLT)*

*Chair: Mr Sam Kaipu*

Carmen Voigt-Graf (ANU-NRI)

The impact of the LNG project on employment and skills development

Grace Guaigu and Imelda Atu (SBPP UPNG)

Eco-tourism as a tool for environmental, cultural and economic sustainability for PNG

Clement Malau (DWU)

Valuing biodiversity – a strategy for social equity in Papua New Guinea

Joyce Jazmin Rayel, P. Manohar, Imelda Atu, Ronald Raka (SBPP UPNG)

Gambling tourism in PNG - a grace or a curse? Implications of the proposed casino hotel as perceived by the community

4.50pm **Closing Session**

*Main Lecture Theatre (MLT)*

*MC: Dr Michael Cookson*

**Concluding remarks**

*Prof. Lekshmi Pillai, Dean SBPP, UPNG*

*Prof. Stephen Howes, Director, Development Policy Centre, ANU*

7.00pm **Conference Dinner: Drill Hall, UPNG**

(For presenters and organising committee/staff only – by invitation only)



# 2016 PNG Update – Abstracts in Order of Presentation

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**Thursday 3 November 2016**

## **Parallel Session 1a – Macroeconomic issues**

### **PNG's macroeconomic outlook**

*Yurendra Basnett, Country Economist, Asian Development Bank. E: [ybasnett@adb.org](mailto:ybasnett@adb.org)*

This presentation reviews the performance of key economic indicators (real, fiscal and external), discusses constraints to sustained and inclusive growth, and concludes with suggestions on necessary policy measures and reforms, with particular reference to moving beyond the current boom and bust cycle of the PNG economy.

### **Financial markets and macroeconomic drivers of the PNG economy**

*Nathan Wingti, Head of Treasury, Kina Bank of Papua New Guinea. E: [nathan.wingti@kina.com.pg](mailto:nathan.wingti@kina.com.pg)*

This presentation gives a 'market practitioner' perspective on the financial markets and the broader macro drivers of the local foreign exchange rates market.

### **After Papua New Guinea's resource boom: Is the Kina overvalued?**

*Marcel Schröder and Rohan Fox, ANU-UPNG partnership, Development Policy Centre, The Australian National University. E: [marcel.schroder@anu.edu.au](mailto:marcel.schroder@anu.edu.au); [rohan.fox@anu.edu.au](mailto:rohan.fox@anu.edu.au)*

Papua New Guinea's (PNG) resource boom has recently come to an end. Theory suggests that the real exchange rate (RER) should subsequently depreciate in order to restore internal and external balance. In practice, however, the imposition of foreign exchange controls has led to a large backlog in foreign currency orders suggesting that the RER is significantly overvalued. The purpose of this paper is to inform the ongoing policy debate surrounding this issue by estimating the extent to which PNG's RER is currently misaligned. Our results suggest that the kina should depreciate by about 20% to close the gap between the actual and equilibrium value of the RER. Otherwise PNG's population is likely to pay high economic costs as real overvaluation sustained through foreign exchange restrictions has led to resource misallocation, lower economic growth, black markets, and ultimately a balance of payments crisis in many other developing countries in the past.

### **PNG's resource boom: A fiscal retrospective**

*Prof. Stephen Howes, Director, Development Policy Centre (DPC), ANU and Mr Rohan Fox, ANU-UPNG partnership, DPC, ANU. E: [stephen.howes@anu.edu.au](mailto:stephen.howes@anu.edu.au); [rohan.fox@anu.edu.au](mailto:rohan.fox@anu.edu.au)*

PNG's resource boom lasted for about a decade from 2004 to 2014. This presentation probes the fiscal impact of the boom, and the aftermath, with analysis of revenue, spending and borrowing.

## Parallel Session 1b – Education

### **Attitudes towards the use of Tok Pisin and vernacular languages in bilingual education programs in Papua New Guinea and reasons why these languages have been phased out**

*Kilala Devette-Chee, National Research Institute (NRI). E: [kdevette-chee@nri.org.pg](mailto:kdevette-chee@nri.org.pg)*

Papua New Guinea (PNG) has undergone a multitude of changes in its education system within the last three decades. According to Guthrie (2014), a total of eight different systems have been introduced but short lived. This paper focuses on one of these systems known as the “education reform” which saw the introduction of Tok Pisin and vernacular languages that was in line with the Matane (1986) report which promoted a culturally based curriculum for Papua New Guineans. Although the paper discusses the conflicting views of curriculum officers, teachers, parents and students towards the introduction of PNG languages in the classrooms, it also provides answers to why there is a continuing nationwide debate on this language issue. The research design was a descriptive survey selected because surveys gather information from relatively large areas by employing sampling procedures hence cutting down on costs. The instrument used for data collection was questionnaires. The data were analysed using descriptive and inferential statistics. Results revealed that there was a general feeling of appreciation and support for the use of Tok Pisin more than for vernacular languages like Tolai in the education system. Children in particular embraced Tok Pisin far more than teachers and parents as it helps them enhance their understanding of English. This confirms Siegel’s (1997) finding on Tok Pisin namely that it is a help and not a hindrance to students’ learning.

Matane, P. (1986). A Philosophy of Education for Papua New Guinea. Ministerial Committee Report. NDOE: Waigani, PNG.

Siegel, J. (1996). Vernacular education in the South Pacific. AusAid Canberra: Australian Agency for International Development. Commonwealth of Australia.

### **Improving quality education in a world obsessed with student numbers: Evidence from Papua New Guinea**

*Anthony Swan and Grant Walton, Development Policy Centre, ANU*

*E: [anthony.swan@anu.edu.au](mailto:anthony.swan@anu.edu.au); [grant.walton@anu.edu.au](mailto:grant.walton@anu.edu.au)*

The inclusion of education quality related targets in the Sustainable Development Goals recognises the importance of improving learning outcomes for children in school rather than just getting children into school. However, we argue that raising education quality is not only inherently difficult but exacerbated by legacy policies in many developing countries aimed at improving access to education, such as the Millennium Development Goal for universal primary education. Using PNG as a case study, we find that the public cost of increasing student numbers in primary and secondary schooling is substantial. We argue that there are strong political incentives to prioritise public spending on improving access to education at the expense of education quality. We recommend that the international community should help developing countries plan for, monitor and report on education quality in a transparent manner, in addition to directly providing resources for improving school quality. They also have a role to promote quality schooling and explain the potential trade-offs between improving education access and quality.

## **Distance Education and Human Resource Development in PNG**

*D.Harinarayana, Albert Prabhakar, G and S. Venumadhav, UPNG.*

*E: [hari@upng.ac.pg](mailto:hari@upng.ac.pg); [prabhakar@upng.ac.pg](mailto:prabhakar@upng.ac.pg)*

The present paper aims at examining the relevance of distance higher education to achieve consistent growth of the PNG economy. It is amply testified that higher education contributes to acquisition of relevant skills for gainful employment, empowers women, leads to upward social mobility and develops holistic personality thereby enabling the recipient lead quality life. Higher education is also expected to impact economic growth of a country. This requires 30 percent Gross Enrolment Ratio (GER) to sustain higher levels of economic growth. PNG as one of the countries averaging consistently high growth in the Pacific Region in the last few years requires its GER to go up from the present 2 percent. In view of the constraints on expanding the conventional system, the alternative is open distance learning. At present, five institutions offer distance-learning programs in PNG, mostly working as dual mode institutions with the attendant constraints of conventional system. Presently, the academic programs offered in the Universities are also offered in the distance mode replicating the same procedures inhibiting openness and flexibility without the philosophy that distance education offered should be independent of pace, place and time. New programs relevant to job market and industry/societal needs have to be designed and offered to reap the full potential of distance learning. PNG requires open flexible systems to increase access, ensure quality with cost effectiveness in higher education so as to achieve sustainable levels of economic growth with quality human resource base.

## **Economics of development: A case study of education of the Pilitu people of Goilala**

*Paul Kaita, Internal Auditor, Bank of Papua New Guinea. E: [pkaita@bankpng.gov.pg](mailto:pkaita@bankpng.gov.pg)*

The 2015 Education Department sanctioned National Literacy Survey saw Goilala district of Central Province being among the lowest literate population of 24.7 percent. For the Pilitu people of Goilala district after 40 years of growth, they have seen less change in their lives and the environment hence opt to remain primitive villagers who hunt, gather and garden, and remain bonded with Nature. This study explored the causality of why and how the Pilitu make rational decisions without better education to live their way of life. Data were sought from interviews, review of existing statistic on the area and observations. The study found that the primary reasons for such low education statistic for Pilitu people, is (1) the lack of accurate data for this people in their development and (2) the uninformed attitude of Pilitu people towards change. This calls for urgent policies into awareness and exposure of these people to the outside world to expand their mental capacity into accepting change to livelihoods using communication technology infrastructure. Investment towards accurate and continuous updating of demographic and socio-economic data of the Pilitu people is vital for policy development and implementation.

## **Parallel Session 1c – Sustainability and development**

### **StaRS – Papua New Guinea's National Strategy for Responsible Sustainable Development**

*Prof. Misty Baloiloi, former adviser to Minister for National Planning and Monitoring on Sustainable Development, Department of Environmental Science and Geography, UPNG. E: [misty.baloiloi1@gmail.com](mailto:misty.baloiloi1@gmail.com)*

From StaRS, “PNG is in a unique position to choose a future that is responsible and sustainable”. PNG can lead the way in a development revolution toward sustainability revolution towards an ecologically or responsible sustainable future.

Papua New Guinea has its own Agenda 21. PNG has its own national strategy for responsible sustainable development (RSD). It is called **StaRS**. It is the process of transformation from a brown economy to a green economy. StaRS provides a totally new paradigm for development in PNG. It does not replace our development plans but elevates within them the principles of responsible sustainable development and strategic planning. It redefines the development road map by prescribing a growth strategy built on the principles of green growth, green economics, ecological economics and sustainable livelihoods and sustainable development. *Em mi yah!*

In 2009 PNG adopted its Vision 2050 – an aspirational statement and set of beliefs and principles on the sort of PNG we want by 2050. In 2014 the PNG Government endorsed a new national strategy for responsible sustainable development called "The Strategy". One year later this was superseded by StaRS.

*"We believe that the people of PNG, both of today and tomorrow, should be continually aware that in striving to improve their lot they should not make the mistake of blindly destroying their rich natural environment."*

*"StaRS has been developed at a time when there is a recognisable growth in the economic fortunes of the nation, but also a growing global consciousness that environmental threats are being realised. The increased frequency and severity of climate change impacts have alerted us to something that we already knew but tried to ignore – that the world is finite and cannot sustain endless growth."*

Prime Minister Hon Peter O'Neill states in the forward to StaRS, "A responsible Government must ensure we are walking the correct path towards a successful future for our people". The NEC Decision 347/2013 approved and endorsed the Principles of Sustainable Development Paradigm through the Strategy RSD and for incorporation into the new bridging MTDP II and sector plans. The Strategy RSD was launched in April 2014.

StaRS has 21 principles based on the three pillars of ecological, economic and social sustainability together with good governance and personal sustainability. These are elaborated on.

StaRS can only be successful if it has the support and ownership of all Papua New Guineans. Sustainability is about connecting with the hearts and minds of all Papua New Guineans and starting a movement that demands responsibilities in daily decision-making at home, in the community, the province and at both a national and international level and in decision-making at all these levels by our leaders.

In this paper the author explains what StaRS is all about and gives a timely critical review of it. He gives some early lessons learned from our early experience. The author advocates a new responsible economy built on the unique strengths of strategic assets that are expected to grow in value in the future and on sustainability concepts and principle all in line *with PNG ways*.

### **Unfolding PNG Sustainable Development through 164 ILGs in Forestry Area, April Salumei in East Sepik Province: A Case Study**

*Prof. Chalapan Kaluwin, Discipline Leader, Department of Environmental Science and Geography, UPNG.*

*E: [ckaluwin@upng.ac.pg](mailto:ckaluwin@upng.ac.pg)*

One of the greatest challenges facing PNG and the world today is integrating economic activity, environmental integrity, livelihoods concerns, and effective governance systems. The goal of that integration can be embraced as 'sustainable development'.

The long term development strategy that the higher Institutions including The University of PNG, The PNG Government and its partners are currently attempting to embrace through a sustainable development process and pathway, should ask these questions how did we get here so we can better influence our development

strategy through our people and its natural resources supported by excellent science, technology and innovations helping our scientists collaborate and share ideas across the world? – **The PNG Way!**

The PNG *Constitution* embraces Sustainable development through the wise use of its natural resources, however, there are now more challenges in managing and planning of its wealth for its prosperity and especially benefits sharing PNG landowners. This paper discusses a case study by piloting a forestry project and in which it is designed and planned with the vision to unfold the Sustainable development shift-“The PNG way”.

The April Salumei is a forest pilot project which lies in Wasera Gawi and Ambunti Drekiher Districts in the April River and Salumei River basins, both tributaries of the Sepik River in East Sepik Province of Papua New Guinea (PNG). The total area of the project is 603,713 hectare (ha), including 528,604 ha under the April Salumei Forestry Management Agreement (FMA) and 75,108 ha under the April River FMA. This pilot project has been developed based on the framework of the PNG Sustainable Development and especially targeting the governance as a priority this pilot project.

Deforestation poses a major threat to the forest ecosystems of PNG. Therefore, as part of the national Reduced Emission for Deforestation and Degradation (REDD) strategy the PNG Forest Authority identified the April Salumei project area as one of the five REDD pilot project areas in the country. The land and forest in the project area is under customary ownership, which has been formalized via 164 Incorporated Land Groups (ILGs). These ILGs are recognized under PNG’s Land Group Incorporation Act (1974).

The project aims to reduce emissions from deforestation and forest degradation that would occur if the area were allocated to a developer to commercially harvest the timber. The project has worked hard to ensure sustainability of the project by integrating the rights and responsibilities from within the project to the traditional owners and local communities as long term.

The April Salumei project also recognises and values the traditional knowledge and cultural relationship the communities have with these forests. The project is designed with the goal of enhancing and building trust in areas of governance, livelihood, environment and economic development for the communities through engagement at all levels.

### **The History of Sustainable Development in Papua New Guinea: Changes, challenges and lessons learned from 1975 to 2016 and beyond.**

*David Mowbray, Adjunct Professor in Environmental Sciences and Sustainable Development, UPNG.*  
E: [davidlindsay.mowbray@gmail.com](mailto:davidlindsay.mowbray@gmail.com)

This paper describes the path PNG has travelled on the way to our new future, the aspirations of a modified **Vision 2050** and our new government strategy for responsible sustainable development in PNG, known as “The StaRS”. It discusses the evolution or history of sustainable development in Papua New Guinea; and the lessons we can learn from that history. Our understanding of the terms sustainable development and sustainability have changed much since “*Our Common Future*” and Rio in 1992. History educates us to rethink, reevaluate and redo.

At independence, PNG’s founding fathers had the foresight to enshrine environmental and sustainability concerns into the constitution. The five National Goals and Directive Principles of PNG’s *Constitution* reflect a commitment to sustainable development and PNG ways.

Following the 1992 World Summit on Environment and Development (at Rio) PNG developed its own National Sustainable Development Strategy in two documents called *Stretim Nau Bilong Tumora* and *Yumi Wankain*. It

was PNG's 'Agenda 21' and a reaffirmation of our national constitution. It was our commitment to ecologically sustainable development (ESD), termed by Charles Abel as responsible sustainable development.

Over the next decade much of this seemed to be largely forgotten. However, key publications included the PNG Human Development Report, the PNG Population Policy and our PNG Millennium Development Goals.

Vision 2050 was published setting out the road map for what was termed a visionary development strategy to guide our sustainable development '**We will be a Smart, Wise, Fair, Healthy and Happy Society by 2050.**' It was an aspirational statement and a vision for our future. But it too needs updating and suggested improvements are given. StaRS provide a totally new paradigm for development in PNG. It does not replace our development plans but elevates within them the principles of responsible sustainable development and strategic planning. The shift is to a new road map built on strong sustainable development principles, sustainable livelihoods and green growth and the change to a green economy in Papua New Guinea.

In studying the history of sustainable development, we learn to understand that sustainable development and sustainability mean very different things to different people across different disciplines, different backgrounds and totally different World Views. From the lessons of history, this paper stresses the need to change both our mindset and world views and our current economic system, reject denial and to transform PNG into a green economy.

Hence we can learn from our history and more confidentially achieve our aspirations as stated in a modified Vision 2050, and to implement the Sustainable Development Goals in PNG, to move beyond our failure to achieve any of the Millennium Development Goals. This is the 'Development Revolution' that our National Strategy for Responsible Sustainable Development requires and we can do it the "PNG way".

What we need is an economic system based on strong sustainability, green economic principles and those of ecological economics, green accounting, strategic planning and political economy. One where we put a full value on environmental variables, social justice and ecological justice. Externalities are all internalised. Addiction to growth is 'no-more'. Discount rates are realistic. Economic instruments support government regulations and community attitudes. We aim for the integration of ecological, social, environmental, institutional and personal sustainability. We reject denial and easy solutions. We aim toward peace and a non-violent social and participatory democracy. We reject wealth and "too-muchness" as an objective but aim for "enoughness". We aim for an ecological footprint that is sustainable

**And we can do it the PNG way. "StaRS" is our strategy and a revised Vision 2050 is our aspirational statement.**

### **The role of conflict management skills in sustainable development in PNG**

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Conflict is inherent in life, and performs roles ranging from driving evolution to highlighting the costs and benefits of development. Interpersonal, interclan, intercommunity and interregional conflict has been a part of PNG culture since original settlement. These conflicts have become more widespread with increasing population and more complex since large scale resource developments were initiated in the 1960s and especially since the resource development boom that started in the current century.

Conflict can ensure that resource developments serve the local, regional and national sustainability objectives by highlighting local views, beliefs and needs that might otherwise be overlooked. However, conflict can also



hinder developments that could deliver benefits, unless the conflict is effectively managed and resolution of some type is achieved. In short, conflict can play a positive role in achieving sustainable development or a negative role in reducing the benefits that PNG could receive from its natural endowment. Governance is the critical factor that enables conflict to become a positive element in society.

The BSD program explicitly addresses the potential positive and problematic roles that conflict can play in achieving sustainable development through a new mandatory course on conflict resolution that aims to increase students' understanding of governance and the role it can play in moving from conflict to consensus. This intent of the course is to enable students to understand potential or actual conflict situations and practice the skills necessary to minimize the destructive effects of conflict and use the beneficial aspects of conflict to support sustainability.

The conflict management course focuses on six key factors: (1) understanding resource development processes and the perspectives of each actor concerned with resource development: proponent, national and state government, landowner and potential employees; (2) recognizing the sources and nature of conflict likely to be generated by different resource development types or between different resource development types; (3) identifying types of information useful for exploring and understanding conflicts, including environmental, economic and social impact assessments; (4) the role and utility of legislative and mediation conflict management processes leading to agreed governance principles; (5) the challenge of effective communication between interested parties to the conflict and the role of a conflict management facilitator; and (6) the need for ongoing effective governance and management of agreements to ensure that the conflict does not arise during the development period.

Over all of these factors, the PNG Way, as stipulated in the *Constitution* and StaRS, provides a framework for harmonising conflict situations and promoting sustainable development in PNG.

### **Relating the Concepts of Sustainable Development to the Extraction of Non-Renewable Resources for Development Purposes in Papua New Guinea**

*Walhos Palisa, Department of Environmental Science and Geography, UPNG. E: [palisaw@upng.ac.pg](mailto:palisaw@upng.ac.pg)*

At the time of independence 40 years ago, PNG's development aspirations were expected to be based on agriculture and/ or be supported by agricultural commodities like coffee, cocoa, copra and oil palm. These aspirations were incorporated into the National Goals and Directive Principles in the *Constitution*.

Twenty years later, in the 1990s, the country's economy and hence its development aspirations were underpinned by proceeds from natural resources extraction. Much of the country's income by then was derived from the export of non-renewable resources like copper, gold, silver and oil (since 1992).

Forty years later, the country's economy is still based on the extraction and export of natural resources, predominantly non-renewable resources in the mining and petroleum sector. This is followed by agricultural commodities like oil palm, coffee, cocoa and copra, and other renewable natural resources like timber and tuna.

In 2009, PNG adopted Vision 2050 as its aspirational statement. The economy of the country started expanding in 2002 and has continued to do so up to now. Since late 2014, the country has started exporting LNG, another non-renewable petroleum commodity that was or is expected to bring further windfall export earnings for the country.

On the back of this, 2015 was the year when the UN-sanctioned Millennium Development Goals (MDGs) were appraised by all member countries (including PNG) after 15 years of implementation. Even though the economy had expanded greatly in the last 15 years, PNG failed to achieve any of the MDGs. We now must achieve by 2030 the 17 Sustainable Development Goals.

Our HDI rankings have also been dropping since independence and we are among the bottom 30 countries of least developed nations in terms of this vital Human Development indicator in 2015. We have thus floundered terribly in our development aspirations in the last 40 years.

In the next 20 years, we anticipate further windfall export revenues from the export of LNG from the PNG LNG project starting late 2014 and from the Papua LNG project starting 2024-2025.

In light of this continuing anticipated windfall in revenue from the export of LNG over the next 20 – 30 years, it is expected that as a nation, we do not repeat the same mistakes we made in the use of proceeds from natural resources exports but achieve our development aspirations in a more sustainable way.

This paper attempts to highlight the concepts, practices and issues of Sustainable Development that need to be applied when using proceeds from the LNG and other non-renewable resource exports in the next 20 years so that the benefits of such resources can be enjoyed by the many generations of Papua New Guineans yet to come after all these non-renewable resources are long gone. This paper highlights some of these.

It also suggests how we can utilise the proceeds from the export of these non-renewable resources to achieve the 17 SDGs and our HDI aspirations. In line with StaRS - the National Strategy for Responsible Development, it also attempts to suggest how we might be transformed from a brown economy to a green economy. As Honourable Charles Abel and StaRS suggest we must do so, so that all Papua New Guineans can become happy, healthy and wise, and we can fulfil the aspirations of an expanded Vision 2050, achieve the SDGs and hence enable PNG to attain Sustainable Development.

## Parallel Session 2a – Urban spaces

### **Urban life, internal migration and development: The need to readdress internal migration as a positive nexus for growth and development in PNG**

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Addressing the holistic growth and development of internal migration has not been properly understood in Papua New Guinea in the last four decades. Studies regarding migration and its link to socio-economic development to address urban poverty are scarce in this setting. Support regarding the positive aspects of internal migration mainly emerges from academics and practitioners - researchers, multilateral and non-government organizations. This means that addressing the holistic growth and development of migration is still lacking. Therefore, eviction and demolition of migrant settlements has been on the rise and chaotic, leaving many families and school children homeless in towns and cities of PNG, including Port Moresby in the last few years.

This paper presents the findings of a household study that was carried out in 2013 in five peri-urban settlements in Port Moresby to understand how internal migration contributes to development. The study identified sustainable livelihood strategies that migrants employ when they settle into peri-urban locations. These findings have pointed toward the appreciation of the changes and contributions made at the micro level, making internal migration a relevant aspect of sustainable growth and development. Furthermore, the study has contributed to the growing body of knowledge on migration as a livelihood adaptation and diversification



strategy in PNG. It was also noted from the study that settlements significantly mitigated the rising costs of accommodation as well as housed female migrants disowned by polygamous marriages. Thus, recommendations and implications for proper housing plans, settlement upgrades and effective, realistic relocation plans resulted from this study. Future research to determine if urban poverty is alleviated through migrants' sustainable livelihoods is proposed.

### **Forms of family housing strategies in the city: Considerations for public policy**

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Port Moresby, the capital of Papua New Guinea, is growing rapidly. Population estimates for the city range between formal estimates of 360,000 and anecdotal estimates towards 1 million people. Half of Moresby's residents live in urban informal settlements. A prolonged economic boom underpinned by developments in the extractive industry sector has fuelled the city's growth, not least in the property market. However, the rising costs of living mean that the majority of the city's residents do not share the benefits of the economic boom. The cost of housing is particularly steep, forcing many into informal housing arrangements in the city's 'settlements'. As PNG's economy slows down economic hardship will be felt by many of the city's poorer families. For some families rather than seen only as marginal spaces of poverty and crime settlements offer an alternative path for urban life, one which privileges social relations rather than formal property markets. My research explores, through the lens of urban housing, land and livelihoods, the settlement as a place where people redress the imbalances in housing that they encounter in the urban centre. This paper presents emergent findings about family housing strategies from fieldwork in a Moresby settlement and considers some public policy implications for land and housing in urban areas.

### **Child labour, a Hallmark of Urban Poverty: A Case Study of Labouring Children Living in Goroka**

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Child Labour is a contentious issue in the country, and clearly poses a development challenge in this period of growth. While Child labour in rural area is customary, it is a phenomenon closely tied to poverty and disparity in urban margin areas. Child labour apparently limits opportunities that may be available to the child, thus constraining the child to the dictates of labouring conditions.

Like Developing Third World cities, Goroka is no different; children in urban settlements in Goroka quite often are coerced by the adult, particularly those that are close to them into labouring. In a more despicable and somewhat unethical instance parents forced their children to labour and provide for the family needs. While children may reluctantly engage in it, it is clear, the enormity of poverty they are confronted with and need to have food on the table cuts across moral and ethical considerations.

The purpose of this working paper is to critically examine and analyse prevailing cultural; social; and economic circumstances; and or condition that nurture and aid child labour in Goroka. Practical approaches and mechanisms in curtailing and addressing the issue will also be considered by drawing from best practices, hence with a hope of generating more scholarly research on the subject.

## **“Voice Mechanism” concepts for the informal economy**

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In a survey commissioned by the CIMC Informal Economy Sectoral Committee<sup>i</sup> it was found that the informal economy or informal sector has been neglected. 95% of the participants in the survey claimed to have received no form of assistance at all. Not one of the survey respondents was a member of any informal economy organization (e.g vendor association, second dealer association) though they are members of church, women’s groups, etc.

Giving voice to the informal economy participants is very important in PNG. With an estimated 85% of the population engaged in the informal economy, giving voice to the informal economy can be linked to achieving the country’s development goals. For instance the *Constitution* calls for “*development to take place primarily through the use of Papua New Guinean forms of social and political organization’ and to work according to their talents in socially useful employment, and if necessary to create for themselves legitimate opportunities for such employment.*

The idea of creating a “voice” for the informal economy would be to enhance representation of interest groups involved in, or affected by, the informal economy in the decision making processes of government at all levels so that harmonious relationships are created in order for informal economy to be recognized and provided a space to thrive alongside the formal sector. For example, women, together with informal economy helpers and workers, are important groups in this category with significant occupational health and safety concerns in working in the informal economy. Also the “voice” mechanism could ensure that issues such as consumer protection, especially in the area of food handling, are taken into account. Further, formal enterprises, to which informal economic activities pose a threat, could identify a focal point for negotiation, mediation, or other forms of resolution. Another example is the need for the informal economy to have input to policy development processes regarding the provision of public goods and services of value to people such as market vendors or service providers. In this paper, I will discuss the findings of the survey and the idea of creating a “voice” mechanism for the informal economy.

## **Parallel Session 2b – Public-private partnerships in health**

### **CMCA Middle and South Fly Health Program**

*Emma Field<sup>1,2</sup>, Laina Runk<sup>1</sup>, Louis Samiak<sup>3,4</sup>, Dominica Abo<sup>4</sup>, Mafu Vila<sup>4</sup>, Sally Nathan<sup>2</sup>, Alex Rosewell<sup>2</sup> and Georgina Dove<sup>1</sup> E: [georgina.dove@abtassoc.com.au](mailto:georgina.dove@abtassoc.com.au)*

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2. University of New South Wales, School of Public Health and Community Medicine, Faculty of Medicine
3. University of Papua New Guinea, Division of Public Health, School of Medicine and Health Sciences
4. Abt Associates, Papua New Guinea.

The Community Mine Continuation Agreement (CMCA) Middle and South Fly Health Program is a five-year health program funded through the CMCA Portion of the Western Province People’s Dividend Trust Fund and is managed by the Ok Tedi Development Foundation and implemented by Abt Associates. The Program is delivered through a partnership with existing health service providers and aims to improve service delivery through outreach clinics to communities; providing medical equipment; support for medical supplies ordering and management; health facility infrastructure improvements; coordination of health worker training; and implementation of the Village Health Volunteer Program.

The Program commenced in 2013 and a mixed-methods midline evaluation was carried out to assess progress. Qualitative information sought participants' experience of the program. Key informant interviews were conducted with health service providers, health workers and Village Health Volunteers. Focus group discussions were carried at a representative selection of villages in the Program catchment area. An analysis of the National Health Information System data for the health centres/health sub-centres for key indicators was performed, comparing trends from the pre-program period (2010-2012) to the program period (2013-2015).

Health service providers, health workers, communities and Village Health Volunteers generally perceived the Program as beneficial. Between 2012 and 2015, key indicators improved in the Program catchment area including outreach clinics per 1000 children less than 5 years of age increased from 4 to 27; first dose pentavalent vaccination increased from 34% to 71%, third dose pentavalent vaccination coverage increased from 7% to 30% and antenatal first visit coverage increased from 29% to 43%. The indicator improvements were attributed to not only the direct outputs of the Program team but also improvements in service delivery at health facilities. This model of delivery could be considered for improving service delivery in other parts of Papua New Guinea.

### **District hospital strengthening through a public-private partnership in North Fly District, Western Province**

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1. *Abt Associates*
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Kiunga Hospital is a 70-bed, government-run district hospital in North Fly, Western Province that services 30,000 people. The hospital receives external funding through the Tabubil-Kiunga health agreement between the Fly River Provincial Government and Ok Tedi Mining Limited. The funds are administered through the North Fly Health Services Development Program (NFHSDP). The Kiunga Hospital component of the NFHSDP aims to strengthen services through supporting the District Chief Executive Officer and the District Health Manager and their teams to oversee daily operations. Through this partnership, in three years a number of improvements in service delivery have occurred. A Hospital Administrator has been employed, as well as a Surgeon, Emergency Management Physician, Tuberculosis/HIV certified doctor and an Anaesthetist. There have also been infrastructure improvements, including the construction of new surgical and tuberculosis wards, and funding has contributed to the purchasing and installation of essential equipment.

With the appointment of permanent medical staff the hospital has been able to accommodate both Papua New Guinean and international medical students on their rural placements, particularly from The University of Papua New Guinea and Griffith University, Australia. A further partnership has also been formed with Castlemaine Rotary Club, Australia, which donates valuable medical equipment.

A specialised gynaecology service for outpatients began in 2014, with the Health Extension Officer now practising regular Pap smears for patients. In addition, the number of deliveries conducted at the hospital has seen an increase from 622 to over 870 in 2014. This indicates that the hospital provides a trusted service to mothers in Kiunga and the surrounding communities.

With these improvements in staffing, infrastructure and medical equipment, the hospital has substantially increased the range of services provided, resulting in the community accessing services in Kiunga rather than being referred to facilities elsewhere.

## **Hela Provincial Hospital: An innovative model of Public Private Partnership**

*Ingrid Glastonbury, Oil Search Foundation. E: [ingrid.glastonbury@oilsearch.com](mailto:ingrid.glastonbury@oilsearch.com)*

Hela Provincial Hospital, based in Tari, serves a population of over 300,000 people. The Hospital was only formally established as a provincial hospital in November 2015 with the gazetting of the Hospital Board chaired by Managing Director of Oil Search, Peter Botten.

In recognition of its new provincial status the hospital received a budget increase of K13.4 million. At the same time, Médecins Sans Frontières (MSF) announced that it would end its long-standing support to Tari Hospital with a full exit by 31 March 2016.

While MSF did a wonderful job providing much needed surgical care over an eight-year period, it was not in the organisation's mandate to build the systems or organisational capacity of the Hospital. With its exit there was a significant risk of a gap in many services from surgical capacity, to pharmaceutical and medical supplies to support for survivors of family and sexual violence. MSF also provided security, hygiene and kitchen services and triage. All of these potential gaps had to be filled in a short space of time within a volatile security environment and within a hospital structure that had no permanent staff and few corporate systems.

Over the course of the past several months a number of Public and Private partners, under the leadership of the new Hela Provincial Hospital Board of which Peter Botten is chair, have come together to support the Hospital to quickly put in place what is required to ensure continued and improved hospital services. These partners include the National and Provincial governments that have facilitated funding, essential recruitment of 183 staff, and prioritised a financial audit of the hospital's accounts. External partners including Oil Search, the Oil Search Foundation, Exxon, the International Organisation for Migration, the Tribal Foundation and the Australian government have collectively provided valuable technical and material support. This includes assisting the hospital to secure clinical specialists through the Volunteer Service Overseas (VSO), build financial and HR systems, provide essential infrastructure and undertake urgent recruitment of 183 staff. Oil Search alone has provided over USD\$ 3 million and substantial technical assistance to support the hospital.

Although there is a very long way to go and many challenges ahead, what has been achieved to date and what is being accomplished over the 2016 calendar year provides an excellent example of a collaborative approach to service delivery in a remote setting between the public and private sectors.

## **Parallel Session 2c – Development strategies**

### **PNG's MDG Experience: Lessons learnt for Sustainable Development Goals**

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Papua New Guinea (PNG) fell short from achieving any of the Millennium Development Goals (MDGs) at the conclusion of the 15-Year development agenda, signed and ratified in 2000 (DNPM 2016). Nevertheless, notable improvements were made in certain areas such as health and education, especially over the past five years. Prevalence of diseases such as HIV/AIDS and malaria have been dramatically reduced and enrolments, especially for primary schools have increased due to the government's increased investments. However, overall progress towards MDG targets within both health and education, as well as other areas were mixed. The most concerning indicator was the rate of poverty. Poverty rate increased to 40 percent (NSO 2010) from 37.5 percent in 1996 (NSO 2010). This is despite PNG experiencing unprecedented economic growth over the past 15 years (UNDP 2014). A lot of government investments were made in building enabling infrastructure,

such as roads, airports and wharf facilities but skewed towards few urban centres (UNDP 2014). However, significant public funds are disbursed to the sub-national levels through the government development and fiscal reforms such as the DSIP/PSIP (NEFC 2007). But the composition of both urban and rural poor remains unchanged, some worse off in delivery of public goods and services.

Nonetheless, the government remained committed towards human development. It adopted and integrated the MDGs into its various national development strategies and plans, including localising the MDGs targets. MDGs targets formed the central plank of the series of Government's 5-Year Medium-Term Development Plans (MTDPs), the National Strategic Plan 2010-2030 and the Vision 2050. Based on the above strategies, sector plans are developed thus aligned and harmonised. While those strategies provide the enabling platform for human development, certain challenges, including systemic issues learnt from the past 15 years of MDG experience needs to be overcome for any progress into the sustainable development goals (SDGs). This paper is an attempt to reflect on PNG's efforts towards the MDGs and how the experiences and lessons learnt can serve as the baseline for progress towards the next 15 years of SDGs.

### **Paradox of the 'Resource Boom' in PNG: Strategies for development based on the experiences of other countries**

*Albert Mellam, Vice-Chancellor UPNG; Pulapa Subba Rao, Pro Vice-Chancellor (Academic & Student Affairs) UPNG; P. Manohar, Deputy Executive Dean (Academic) UPNG and Ani Rova, Lecturer in Economics, School of Business & Public Policy, UPNG. E: [al.mellamc@upng.ac.pg](mailto:al.mellamc@upng.ac.pg)*

The resource boom in Papua New Guinea of late is in a paradoxical state as the quantities and prices of resources have been on a declining trend except LNG production/ export volumes. However, the country needs to craft and execute strategies for development. Experiences of other countries at this juncture would be considered in crafting and executing strategies.

This paper analyses the strategies adapted by selected resource boom countries including the effectiveness and outcome of such strategies. Selected countries for this study include both successful and failed countries in crafting and implementing strategies viz., Algeria, Angola, Nigeria, Yemen, and Qatar. Strategies for various social and economic sectors including education, health, infrastructure, business climate, and wealth creation and distribution, In addition, strategies relating to role of international agencies, and non-government organisations in national development was also analysed.

Findings indicate that strategies aiming at supporting domestic business combined with heavy investment in human resource development through education and health coupled with investing resources to hedge against uncertainty and to build a legacy for future generations' education and health resulted in high efficiency of strategic actions leading to country's socio-economic development. Missing of any aspect of this combination strategy failed to produce the desired result of national development.

This paper offers suggestions to Papua New Guinea based on the experiences of resource boom countries and social, ecological and economic conditions of the country. The significant strategy in addition to develop relevant human resources is establishment of integrated institution to provide one-stop facility for the development of Small and Medium Enterprises to produce import substitute products and export oriented products on cost effective basis.

## **Political economy drivers of decentralisation in PNG: Comparative case studies from three District Development Authorities.**

*Colin Wiltshire, Research Fellow, State, Society and Governance in Melanesia Program (SSGM), ANU.*

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Papua New Guinea has begun implementing major reforms to its decentralised governance arrangements. In 2015, District Development Authorities (DDAs) were rolled out across the country, which gives more power and control to Open Electorate Members of Parliament to directly deliver to their constituents. DDAs aim to strengthen the capacity of districts to improve service delivery with large increases in constituency development funds through the District Service Improvement Program (DSIP). Despite the O'Neill – Dion led PNG Government placing DDAs at the centre of decentralisation reform efforts, there are few examples of practical research that capture how institutional change is happening and implications for service delivery on the ground.

The State, Society and Governance in Melanesia Program at the ANU conducted structured political analysis and district assessments of three DDAs in 2015. We mapped the pattern of Incumbent MP's voter base and that of rival politicians using ballot box data from the 2012 national elections and the distribution DSIP funded projects. A political economy analysis was used to assess the capacity of districts to carry out their mandated responsibilities under the DDA. This involved in-depth interviews, surveys, workshops and community focus group discussions with more than 200 participants across the three districts.

This research found that DDAs are progressively changing governance and service delivery institutions. The DDA will decide on the sectors that are prioritised and the communities that benefit, but are constrained by weak implementation capacity to deliver. Communities that support the Incumbent MP have high expectations that they are due to receive DSIP projects, whereas other communities that did not support the MP conceded that they fared little chance. External actors working in this rapidly evolving DDA context will need to think and work politically, which presents both opportunities and challenges to progress.

## Friday 4 November 2016

### Plenary Session: ANU-UPNG research showcase

#### **PNG Economic Survey 2015-16**

*Manoj Pandey, Nelson Nema, Rohan Fox, Stephen Howes (ANU-UPNG)*

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Jointly authored by researchers at the UPNG Division of Economics, and the ANU Development Policy Centre, the key focus of this 2015-16 update is PNG's growth slowdown and macroeconomic and structural policy development.

#### **Unintended consequences of PNG's tuition-free education policy**

*Grant Walton, Peter Kanaparo, Tara Davda (ANU-UPNG)*

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This presentation examines some of the unintended consequences of the tuition fee free (TFF) policy. Drawing on fieldwork carried out in Gulf and East New Britain, it focuses on what policy changes mean for the key institutions – the state, churches and communities – involved in delivering the TFF policy. It highlights the political, social and economic challenges facing these stakeholders and what these means for ensuring quality education.

### Plenary Session: The Impact of 2015-2016 drought and frosts

#### **Impacts of the 2015-2016 drought and frosts: An overview**

*R.M. (Mike) Bourke, Honorary Associate Professor, College of Asia and the Pacific, ANU.*

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In 2015, much of PNG was impacted by a major drought and, at some very high altitude locations, a series of destructive frosts and the impacts have continued until late-2016. An overview of the impacts on rural villagers and others is given. These include: widespread shortages of drinking water; shortages of subsistence food in many places; negative effect on villagers' health; partial or complete closure of schools; the Fly River being not suitable for shipping for some months; and inadequate water levels in Surinumu Dam. The impact on food supply was greatest in four sub-regions: very high altitude places in parts of Enga, Hela and Western Highlands; much of inland lowland Western Province; a number of locations on the edge of the central highlands in several provinces; and some island and mainland locations in Milne Bay Province.

Bio: Mike Bourke has been continuously engaged in research, development and training in PNG agriculture and rural development since 1970. He is a specialist in PNG food crops and village agriculture. He was closely involved in assisting with assessments and food aid during the 1997-98 and 2015-16 food shortages and worked with a number of PNG government, church, NGO and international agencies.



## **The impact of the 2015-2016 El Niño on high altitude places in Hela and Enga provinces**

*James Komengi, United Church, Hela Region and Brendan Jinks (ANU)*

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A series of severe frosts hit high altitude areas of Hela and Enga Provinces in July 2015. These frosts destroyed large areas of food crops in a region that had already been feeling the effects of the El Niño drought since April 2015. Approximately 140,000 people were affected by the subsequent food shortages in these areas, which did not ease in many parts of the region until the end of 2015. We present the findings of assessments conducted by the Church Partnership Program (CPP) in March 2016 in Hela and Enga Provinces, which followed an assessment by the United Church in September 2015. It details the social impacts of frost and drought, which include severe food shortages, malnutrition, closures or partial closures of schools and hospitals, out-migration and family violence. It will pay particular attention to the experience of children, many of whom were left to fend for themselves when their parents left in search of work or food.

James coordinates numerous programs for the United Church in Tari and Hela region, and participated in several field assessments in Hela and Enga provinces during the 2015-2016 drought. He subsequently worked for CARE supporting their food distribution program in Hela and Enga provinces.

Brendan served as a consultant to the DFAT-funded Church Partnership Program El Niño Drought Response Program in 2015-2016. He participated in field assessments in Hela and Enga provinces and Milne Bay in March and May 2016 and is currently undertaking doctoral research at the Australian National University.

## **Changing Gender Norms in Emergencies: A Livelihoods Case Study**

*Blossum Gilmour, Assistant Country Director – Programs, CARE International in PNG, Goroka, Eastern Highlands Province. E: [blossum.gilmour@careint.org](mailto:blossum.gilmour@careint.org)*

The gender divide in agriculture work in PNG is well-documented – with women often spending more time in gardens, both subsistence and cash crop, but having little access to information and services that could improve agriculture outputs. CARE PNG has, through its long-term development work, developed tools and approaches to build acceptance of women accessing agriculture extension services and training. During the El Niño drought response, CARE piloted drought adaptive agriculture training that incorporated those gender-inclusive approaches. The follow up visits found that even a one-off training delivered during an emergency response can have a lasting impact on perceptions of both women and men, specifically: changed perception to supported women having access to agriculture knowledge and skills building opportunities as well as improved sharing of household labour and decision-making. These household level outcomes combine to improve household resilience to future shocks – like drought or flood.

## **The International System in Papua New Guinea's El Niño Response**

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During the El Niño response, the United Nations system in PNG played a multi-faceted role in supporting the PNG Government to respond to the disaster. This ranged from coordinating an integrated and complementary humanitarian response to advocating for funding support, drawing attention to less prominent sectors as well as implementing actual humanitarian interventions. It is from this unique position through close collaboration with government counterparts and the humanitarian community that insights are drawn on the unique



challenges of humanitarian action experienced during the El Niño response in PNG. Beyond that, the imperative of addressing humanitarian emergencies not in isolation but within the context of climate-sensitive disaster risk management is critical to ensure that disasters do not undermine development gains in PNG.

### **Lessons from the 2015-2016 drought to improve future disaster management**

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In the 2015-2016 drought and frost crisis, it was clear the lessons of the 1997-1998 drought and frosts had been lost and that national coordination of a response effort was left wanting. Villagers in remote very high altitude areas, highland fringe locations, inland lowland Western Province and small islands in Milne Bay continue to remain most vulnerable and these communities suffered the most in 2015. Impact assessments in 2015 by government agencies lacked technical guidance and coordination, resulting in exaggerating the impact early in the drought. Consequently, the Government's relief efforts were politicized to the point where an estimated K200 million was spent, but its expenditure was not visible. Government agricultural research and development Institutions had done little to address agricultural problems identified in the 1997 event. The universal presence and coverage of churches in the country means that the state and its international development partners ought to partner with them to coordinate any disaster response work. The lack of policy directions by the O'Neil Government effectively disengaged the international donor community to the extent that offers of financial help from international and national private sector donors were curtailed. The important multilateral and bilateral development partners were not given any direction from the PNG government. Despite the lack of policy directions from the national government, the international partners, including many NGOs, persevered through the National Disaster Centre and Disaster Management Team to mobilize significant amounts of funds, technical help and relief assistance to those in greatest need.

### **Parallel Session 3a - Gender**

#### **Significance of addressing violence against girls in schools and its impacts on the implementation of Universal Basic Education Policy in PNG.**

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The goal of Universal Basic Education (UBE), as agreed to in the formulation of the Education-For-All Goals in 1990 and later the development of the Millennium Development Goals (MDGs) by the United Nations (UN) in 2000, is achieving universal primary and secondary education by 2015. However, one of the impediments to the successful attainment of the UBE in Papua New Guinea (PNG) is the issue of violence against girls and women (VAG/W) in schools. Addressing violence and gender issues has a significant impact on the ultimate progress and outcome on the goal of UBE because, in practice, PNG is not free from violence and its related issues of gender inequality. Therefore, this study sought to understand the, 'Significance of addressing violence against girls/women in schools and its impacts on the implementation of Universal Basic Education Policy in PNG'. Its prime focus was to assess the effectiveness of school leadership in handling VAG/W in PNG schools. Some schools and their leaders in PNG have been recognised as working effectively in tackling VAG/W in schools. A secondary intention of this study was to investigate those effective practices and recommend them to other schools and for further improvements. Using interviews with adult school leaders (4) and surveys with student leaders and students (101) the research was carried out in two contextually very different schools in PNG, located in the NCD and Central provinces. Descriptive statistics, thematic analysis and content analysis was used to analyse the data. The study concluded that school leaders at the two schools were attending to issues of VAG/W in their schools and, to some extent, were effective within their specific context. Yet there

were still many challenges identified that need ongoing attention for achieving universal primary and secondary education and addressing VAG/W.

### **Are gender/based violence victims afraid or ashamed to get assistance?**

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Gender/based violence (GBV) comes in different forms and is experienced by men and women at all levels in any society in the world. Most of the GBV victims cannot easily disclose their experiences, problems and suffering to people who can help them, such as their best friends, employers or the counselling service providers. Most countries in the world have laws in place to protect GBV victims. These laws are upheld and enforced well in developed countries, while developing countries lack human and professional resources to support and help the victims. Culture also plays a huge role in hindering GBV victims to come forward and report their problems. Sometimes, the processes and services put in place to support GBV victims are insufficient, not user friendly and lack resources so victims do their best to find solutions on their own.

A study conducted in Port Moresby, Papua New Guinea revealed that employees at the workplace are willing to share their GBV problems with people they trust, employees and GBV service providers. Participants involved in the study (men and women) were all employed in formal jobs and they spoke openly about the issues they were experiencing in their personal lives either at work or at home. Businesses, government departments and private organisations within PNG need to seriously consider putting in place processes and services that are user friendly at the workplace to support GBV victims.

### **PNG's formal education system disempowers young women and promotes inequality in villages**

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This paper explores the changing roles of young ladies aged 13- 28 in two villages in PNG. One is Kugmumb in Western Highlands Province and the other is Lealea in Central Province.

A comparison of girls and young women living in a village affected by extractive industry (LNG) and that which is not affected by the extractive industry (Kugmumb). It is important to evaluate how empowered these young women are able to contribute to community development with the basic education they have.

Despite the PNG government and parents being keen for girls to be educated, this rarely materialises. Even when girls do manage to complete their schooling, the prospects of this leading to paid employment are very low, especially in both rural and urban communities.

Failure to complete schooling, or to find employment having done so, means the girls often carry a heavy burden of guilt, since their parents have expended much time and effort in acquiring money for school fees. Parents resent having had to work so hard for something that has not seen any benefits flow back to themselves. Many young girls question the point of being educated if nothing comes at the end of it. Naturally, this results in very high levels of anger and frustration. Hence, they turn to marrying men with money, early marriage or run away to towns and cities to stay with relatives, often with worsening outcomes, including abuse and child slavery. Findings indicate that disenfranchisement is not unique to male youth in PNG, and there is a growing problem with 'pushed out' or 'dropped out' young girls.

There is need to come up with ways to help these confused young women in the villages so they apply what they learnt in schools and at the same time don't find themselves displaced.

## Parallel Session 3b – Private sector development (1)

### **Evolving Trade and Other Economic Linkages between the Pacific and Asia – Focus on implications for the PNG Economy**

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How have Pacific island economies, particularly the region's largest economy of Papua New Guinea, tapped into Asia's growth? How has the economic and financial integration with economies in Asia affected the Pacific economies? The ADB research project *Evolving Linkages of Pacific Economies* examines the experience and structural potential of selected Pacific developing member countries to engage and integrate in key areas of external economic activity. The forthcoming book (working title) will review the broad trends in six areas of external linkage (finance, labour and remittances, overseas development assistance, tourism, import trade, and export trade), examining detailed case studies to explore processes that drive the changes in these external linkages. This work extends earlier work by ADB and the ADB Institute in Tokyo that was summarized in the 2015 publication *Pacific Opportunities: Leveraging Asia's Growth*. This presentation focuses selected trends in exports in the Pacific, the determinants of bilateral trade, and Pacific countries' revealed comparative advantage in natural resources and niche agricultural and aquaculture products.

### **Oil Search strategy to support PNG Govt domestic power sector objectives**

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An update on Oil Search's partnership with PNG Power which aims to bring electricity to 70% of the population of Papua New Guinea.

### **Limitations of PNG-EU Interim Economic Partnership**

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The pro-liberalizers argument that liberalization of tariffs alone will allow 'fair' access to international markets fails to acknowledge other barriers to developing country market access, one of which is non-tariff barriers applied by EU nations and the buying power and private standards of branded firms and big retailers. As tariffs (and thus tariff preferences) fall in EU, non-tariff measures, particularly sustainability and food safety standards become main barriers to market access for fish products. Liberalization of fisheries markets increases the chances of unsustainable resource extraction where management is ineffective and in areas, such as the high seas, where open access is prevalent. And these may result in fisheries products from developing countries like PNG being rejected entry in EU markets. The PNG-EU iEPA signed in 2009 has a chapter on Technical Barriers to Trade as well as Sanitary and Phyto-sanitary (SPS) measures. Though these measures are intended to help Pacific exporters meet EU import standards, the question remains whether the PNG government has the necessary facilities, capital and expertise to meet these standards.

In 2014 the EU warned the PNG government of failing to meet these standards, resulting in several reforms in the PNG fisheries sector. As of 2016 a South Korean firm (Dongwon Industries) with corrupt dealings in Western Africa (Liberia) and a historical record of using unsustainable fishing methods has been given permission to

operate in PNG. It passed through the three/tier screening processes in the regional and national level, which questions whether the reforms of 2014 are sufficient. The 3.1 million squares kilometres EEZ of PNG remain a challenge for effective surveillance. Furthermore, the cost of doing business in PNG is one of the highest in the Asia Pacific Region, making quality assurance questionable.

This study investigates whether the PNG Government has the capacity to meet the necessary standards of EU and the main retailers of EU. The method used in the study involves document analysis, and interviews with PNG National Fisheries Agency and the EU officials.

### **Peering and content delivery to reduce Internet transport cost drivers for Papua New Guinea**

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Papua New Guinea's Internet cost is amongst the highest in the Pacific region and the world as well. This investigation demonstrates that when our internet traffic is peered in Australia and then content shared locally through a carrier-neutral Internet Exchange Point (IXP) instead of just transiting to the United States of America as its final destination then this will greatly reduce its transport cost drivers.

A case study of the Puerto Rico Bridge Initiative, shows a multi-stakeholder approach in plans and execution to provide fast, affordable broadband connectivity for last-mile Internet service providers and underserved areas of Puerto Rico, including the islands of Culebra and Vieques, by establishing a broadband "bridge" to the United States mainland and deploying a high-capacity middle-mile network on the islands. The project purchased a 10 Gbps undersea fiber-optic cable directly connecting to Miami and deploys more than 180 miles of terrestrial middle-mile microwave network using 11 towers. The network offered speeds from 100 Mbps to 1 Gbps to anchor institutions and last-mile providers. More than 1,700 community anchor institutions were directly connected, including more than 1,500 K-12 schools.

As a result of this, a 25 percent broadband discount is now available to all K-12 schools to improve education and distance learning, a reduction in the cost of transporting Internet traffic to the mainland United States which has spurred more affordable broadband Internet service for as many as 1.2 million households, 47,000 businesses, and nearly 2,200 anchor institutions on the islands. It also supported job creation and job opportunities, and enhanced government services, by delivering high-speed broadband capabilities to anchor institutions. Ultimately, the establishment of a local peering point to keep Puerto Rico-bound Internet traffic on the islands, thus reducing associated transit costs and lowering broadband costs generally. This demonstrates an achievable prospect also for our country.

## **Parallel Session 3c – Roads and infrastructure**

### **Provincial road management in Papua New Guinea**

*Matthew Dornan, Development Policy Centre, ANU; Ronald Sofo and Chris Banga, National Research Institute; Carmen Voigt-Graf, National Research Institute and DPC, ANU.*

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This paper presents the preliminary results of research on provincial road management in PNG that is being conducted under the Australian National University (ANU) – National Research Institute (NRI) partnership. The research explores management and funding of provincial roads (i.e., roads not gazetted as national roads by the PNG Government), which comprise approximately two-thirds of PNG's 30,000 km road network. Five provinces from across PNG are used as case studies as part of the research. Our findings are relevant not just

to road management, but to broader issues of decentralisation and service delivery at the sub-national level in PNG.

### **Impact of road upgrading and maintenance on household welfare in PNG**

*Menno Pradhan, Professor in Project and Program Evaluation for International Development, Free University of Amsterdam, The Netherlands. E: [m.p.pradhan@vu.nl](mailto:m.p.pradhan@vu.nl)*

We estimate the impact of road maintenance and upgrading in Papua New Guinea using 1996 and 2009/2010 household survey data in combination with spatial road inventory data from 2000 and 2010, and road upgrading executed up until 2014 in the highlands area. We employ two designs to take account of the fact that road works may be targeted towards particular areas. For the analysis using the two rounds of the household survey data and road inventory data we use the Mundlak approach to estimate a village fixed effects model. We also employ a Regression Discontinuity estimator comparing villages where road upgrading took place just before, to villages where road upgrading took place just after the 2009/2010 household survey. We assess the impact of road quality on poverty, agricultural production, and access to services.

### **Poor Project Performance Impedes Development in Papua New Guinea: A Comparative Analysis of three case studies in PNG**

*Albert Kaupa Tobe, Lecturer, Department of Governance & Leadership, Faculty of Arts and Social Sciences, Divine Word University. E: [atobe@dwu.ac.pg](mailto:atobe@dwu.ac.pg)*

Like other developing nations, Papua New Guinea depends on projects to achieve our development goals and aspirations. Therefore, this discussion is aimed at identifying reasons why projects fail and its impact on development in Papua New Guinea.

Three Government/funded projects from three different provinces will be assessed to identify causes of project failure. The Five Mile to Erima road rehabilitation project in Port Moresby, National Capital District, the Momase Regional Treasury Office Building in Madang Town, Madang Province and the District Office Building Project in Okapa District, Eastern Highlands Province. These projects grossly failed to meet the traditionally accepted criteria for project success.

It is widely accepted that a project is successfully managed, when the project is completed on time, within budget allocation and according to scope requirements that meet or exceed stakeholders' satisfaction (Muller and Jugdev, 2012). The seminal work by Pinto, Slevin and Prescott (1984) outlines two important variables in measuring project success and or failure, which are project success criteria and project success factors. Success factors are independent variables in a project such as management decision-making, economic policy or environmental factors that influences project performance and increase the likelihood of project success or failure. Project success criteria are dependent variables such as project management competency, risk management and equipment use that influence project performance.

These three projects will be assessed and compared to determine the common causes of project failure. It is anticipated that this discussion will pave the way for a more in-depth study on government funded projects in Papua New Guinea and clearly identify reasons for poor project performance. Hence this discussion argues that poor project performance impedes development in Papua New Guinea.

## Parallel Session 4a – Local impact

### **Sustaining community through the FIFO transition at Ok Tedi mine: Development, maintenance, and staged closure in the North Fly**

*Phillipa Jenkins, PhD Candidate, Crawford School of Public Policy, ANU. E: [phillipa.carr@anu.edu.au](mailto:phillipa.carr@anu.edu.au)*

In August 2015, Ok Tedi mine suspended operations due to the El Nino drought conditions as the mine relies on the Fly River being navigable in order to export copper concentrate and import diesel and other supplies to the North Fly District. This shutdown became a pretext to change the nature of employment and service provision for Ok Tedi Mining Limited. With the vast majority of OTML employees subject to a dry weather stand down, the company was able to implement a transition to the Fly-In Fly-Out (FIFO) model. Tabubil has been, for the past 30 years, a proper town with community services, not just a mining camp. The presence of family accommodation in Tabubil was a result of industrial action in the 1980s, so this is a significant and important transition for OTML, away from a “family friendly” mine operation. There is also a reduction of key services (particularly education and other social services) commensurate with the reduction in Tabubil’s non-mine worker population.

Despite the Mine Life Extension project establishing that accessible ore reserves would last to at least 2025, the reality is that in the post-resources boom era, mining operations have to be leaner and more flexible in order to remain competitive and profitable. This paper discusses how OTML may be approaching the transition to FIFO and scaling down Tabubil town services as part of a broader staged mine closure planning process. This includes the broader social and economic effects on the migrant and local community of the North Ok Tedi area (Ningerum and Star Mountains Rural LLGAs).

### **Extractive industries, poverty and community outcomes: What can we expect from Wafi/Golpu?**

*Charles Roche, PhD Candidate, Centre for Responsible Citizenship and Sustainability, Murdoch University and Executive Director, Mineral Policy Institute. E: [Charles.roche@murdoch.edu.au](mailto:Charles.roche@murdoch.edu.au)*

Since independence, Papua New Guinea (PNG) has pursued an economic development strategy based on the expansion of extractive industries (EI). Heightened by PNG’s current financial crisis, a strong critique of extractive led development outcomes has emerged; from civil society groups questioning the sharing of benefits and from communities waiting for development. Seeking to understand the likely outcomes of EI at a local community scale in PNG, this paper begins by examining and contrasting international and PNG perspectives and case studies. This provides a foundation to assess sub-provincial outcomes using a multidimensional assessment of poverty and financial flows from the Hidden Valley mine. The review contributes findings on a number of scales. It demonstrates how research that privileges the measurability of monetary and/or material benefit downplays and disregards the potential impact of immanent development on natural and social capital. Identifying commonalities between international and PNG EI development, suggesting entrenched industry drivers of outcomes. Along the Watut River it finds that despite significant monetary benefits derived from the mine by communities, multidimensional poverty is severe or extreme for many Watut River communities, with marked inequality for women and non-landowning communities. In sum the review is a multiscalar examination of what the outcomes from EI have been, which, while not representative, is enough to question the confident predictions of positive outcomes from the EI, both internationally and in PNG.



## **Oil palm and the politics of rural development in East Sepik province**

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Oil palm entered the discourse of rural development in a major way with the push by Trade, Commerce & Industry Minister Richard Maru to establish oil palm plantations in the Sepik Plains as part of the Sepik Corridor Special Economic Zone. While Mr. Maru's oil palm project is yet to get off the ground, Limawo Holdings Limited and its Malaysian partner have already established oil palm plantations in inland Turubu and Sausso Rural Local Level Government area. This has given rise to arguments over political and economic legitimacy on both sides.

Attempts to bring about rural development in East Sepik Province are being clogged at various political levels with various political actors and different political interests and intentions. This paper examines the politics of oil palm and rural development in inland Turubu and Sausso RLLG. It is based on six weeks research in inland Turubu and Sausso RLLG in early 2015. The question it attempts to answer is whether rural development can be achieved in these areas with the various political actors and interests clashing over political legitimacy.

## **Understanding the lives of the local people along the Kokoda trail: Preliminary observations of livelihood and development activity**

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The Kokoda trail is arguably Papua New Guinea's single largest tourist attraction. At the northern end of the trail, approximately 12,000 Beage speaking people live atop the gorges in villages etched into the steep mountainsides and in the "flatland", where the infamous Kokoda trail cuts a precarious path. Using an emic and ethnographic approach, the researcher has observed that the everyday life of the Beage people is pervaded by a unique form of tourism that they refer to as "trekking".

Preliminary observations show the life of all occupants, of each household in the most remote villages along the main track, and its deviations, in the Oro province, are touched in some form, either directly by trekking activity, or indirectly by aid funded service delivery and employment opportunities. Although there are incredible demands on their time, many in the villages value the, income from trekking, and associated development projects. Consequently communities invest extraordinary effort in maintaining the Kokoda trail as a valuable resource. This paper presents the preliminary findings of the researcher's PhD fieldwork. It highlights unique insights of the life of the people along the Kokoda trail. The paper focuses on presenting observations of livelihood and development activity in the villages.

## **Parallel Session 4b – Health and education**

### **Women and Health in Papua New Guinea: determinants influencing demand and delivery of health care services**

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My research focuses on women and health in PNG and investigates factors contributing to poor health status of women. There are various factors that influence and determine people's behaviour and attitude towards accessing and utilising health services for treatment from illnesses, particularly women. Although some of these factors are common across developing countries, some are unique to certain populations within a

country in the context of where they live. Initial findings from fieldwork conducted in three geographically, linguistically, culturally, and religiously diverse population in rural coastal, rural highlands and urban areas of PNG will be presented. Fieldwork was conducted in: Tubulamo group in Rigo district, Central Province; Moka Gomo group in Imbonggu district, Southern Highlands; and Port Moresby North-West electorate suburbs. A comparison of factors influencing (i) women's health beliefs, and health care-seeking preferences and pathways for healing and treatment; and (ii) attitude and behavior of workers delivering health care, and constraints encountered in different socio-cultural environments will be presented.

Several studies on health service delivery in Papua New Guinea have been conducted in recent years. Findings of these studies have showed mixed performance of the health sector in PNG. Poor performance has been attributed to many factors, which relate to structure, institution, resource allocation and capacity. The decentralization process and structure of health system have been observed to contribute to poor performance of health service delivery. PNG's geographical conditions, lack of infrastructure and facilities in most rural areas, including roads, bridges, transportation, water, electricity, and communication, have also been widely acknowledged as major contributing factors to poor service delivery. Most studies on service delivery in PNG are supply side-focused with very few or no studies on demand side which consider perspective of the users of services. Too often the consumer of public good is not at the center of the services provided. My research provides another dimension to investigating issues at a different level of enquiry and involves two sides of service delivery: provider and user of health services. Studies to improve service delivery may be successful if perceptions from users of services are understood. Furthermore, any investment in health should be based on right understanding of what is to be utilised.

### **Examining the role of holistic education as a tool for human resource development for Papua New Guinea**

*Anna Joskin, Lecturer, School of Social Sciences & Humanities, UPNG. E: [gjoskin@upng.ac.pg](mailto:gjoskin@upng.ac.pg)*

Holistic education is a theoretical idea that tries to explain how teaching and learning can take place in formal situations. The theory aims to prepare students to develop their full potential beyond confinements of classrooms, and to meet the purpose and find meanings of realistic life experiences of learning through interactions of students with others in the wider communities. Seemingly, in Papua New Guinea (PNG), holistic education has links to the 1990s reform. Hence, this paper attempts to present a discussion on *how* factors of the theory could be applied within formal educational contexts of PNG, so that there are links to some areas outside of the classroom situation. Evidence for supporting the arguments in this article is drawn from my recent PhD thesis (Joskin, 2013), and from 29 years of personal experiences of being an educator in PNG. Hence, a qualitative paradigm was used to interpret meanings by applying both the content and thematic analyses. Findings revealed that those involved in the teaching and training of human resource development for PNG needed to have not only the qualifications to teach their content subjects, but also would need to have knowledge of educational teaching theories to support delivery of content knowledge to students. Thus, this has implications to curriculum design, development, and implementation. Ultimately, having done that would mean achieving some of the aims of Pillar One of – 'Human Capital Development' as contained in the Vision 2050 policy document for PNG. Thus, holistic education is being articulated as a tool for teaching and learning.



## **Social Protection Index 2012 - PNG**

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The Social Protection Index 2012 project is a Pacific wide project undertaken to update the 2009 results. For Papua New Guinea, the expenditure on social protection programs increased to K207.4 million from about K28 million in 2009. This was about 0.6 percent of Gross Domestic Product compared to 0.1 percent in 2009.

The overall Social Protection Index for PNG declined from 0.5 percent in 2009 to 0.2 percent in 2012. This implies that the average per capita social protection expenditures of the Government is about 0.2 percent of the poverty line expenditures.

The Government through the Social Development and Community Welfare Department is currently drafting the Social Protection Policy. This policy will become the main legal policy framework for Papua New Guinea and expect to have general classifications on social protection programs. The policy was approved in 2009, and expected to be completed and launched in 2015.

The implementation of social protection policy, increase funding on social protection programs, and introduction of more social protection programs will improve the overall Social Protection Index for Papua New Guinea in the future.

## **Parallel Session 4c – Private sector development (2)**

### **The impact of the LNG project on employment and skills development**

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PNG's strong economic growth over the last decade has largely been driven by the extractives sector and in particular the LNG project. During the LNG construction phase (2007-2013), the labour market experienced an unprecedented growth in employment, creating many opportunities for local and foreign workers alike. The Department of Labour and Industrial Relations (DLIR) set up a desk specifically for foreign workers on the LNG project and lifted some work permit requirements in order to expedite work permit applications and secure sufficient numbers of foreign workers. The number of foreign workers grew rapidly. At the same time, there have been concerns that Papua New Guineans may have been able to perform some of the roles taken by foreign work permit holders and that insufficient skills development of the local workforce has occurred. These issues will be explored in light of the enormous task undertaken by the Department of Labour and Industrial Relations during these years and with a view to learning lessons for the future.

### **Eco-Tourism as a Tool for Environmental, Cultural and Economic Sustainability for Papua New Guinea**

*Grace Guaigu, Lecturer in Tourism & Hospitality, School of Business and Public Policy, UPNG and Imelda Atu, Tutor in Tourism & Hospitality, SBPP UPNG. E: [gguaiqu@upng.ac.pg](mailto:gguaiqu@upng.ac.pg); [iatu@upng.ac.pg](mailto:iatu@upng.ac.pg)*

This paper examines the role of ecotourism in the sustainability of culture and ecology in Papua New Guinea (PNG), using Ulumani Treetops Rainforest Lodge in Milne Bay Province as a case study. Ecotourism is a concept in which both the ecological and cultural aspects of an environment are combined together to form a tourist paradise. Ecotourism is travel to destinations where both cultural and natural attributes are the major

attractions and thereby considered to be a potential strategy to support conservation of natural habitats along with economic sustainability particularly to indigenous communities. Rural communities in PNG see ecotourism development as a supplement to their subsistence lifestyle and a transition to a cash economy utilizing their natural and cultural resources. Interviews were conducted amongst key stakeholders to gauge their views on the role of ecotourism in sustaining cultural practices and biodiversity conservation for economic gain. The results showed that ecotourism have some significance in the sustainability of the culture and the biodiversity of the area studied. However, the results also revealed that there were governance issues that need to be addressed to strengthen ecotourism's role in the sustainability of culture and ecology for economic gain. The findings have implications for tourism policy and also add to existing knowledge that ecotourism does play a significant role in the conservation and sustainability of cultures and biodiversity for tourism in PNG.

### **Gambling tourism in PNG - a grace or a curse? Implications of the proposed casino hotel as perceived by the community**

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Casino gaming is a legalized form of gambling that is directly associated with tourism. Many country destinations have resorted to gambling tourism to achieve tourism objectives and fuel economic growth. Like any other countries, casino gambling is seen as an effective growth strategy and catalyst by Papua New Guinean legislators when they passed the controversial Gaming Control Bill of 2007. The bill was seen to create direct and indirect employment opportunities, generate income revenues and support business activities in the country's capital, Port Moresby. The idea of introducing the first casino hotel in the country sparked arguments and controversies amongst local residents and concerned stakeholders. In the midst of the project implementation, opposing views about the operations of casino gambling were verbalized. Some are positive and view gambling tourism as a grace whilst other perceived it as a curse. It is therefore imperative to conduct an investigation to determine overall readiness of the local residents about this new tourism product and growth strategy through their perceptions on the possible socio-cultural and socio-economic implications of the operations of casino gambling. The views of the local residents as the important stakeholder are critical in the future decision and plans of the government on either providing green light or full stoppage in this huge tourism investment in the country. This research will also reveal residents' general feeling towards tourism as an industry and casino gambling as leisure activity related to tourism. Using a positivist approach in research, an investigation was carried out to the residents and tourism practitioners in Port Moresby. Appropriate statistical tools were employed to analyse and interpret data gathered.