



Monitoring and Evaluation of the country's progress towards achievement of MDGs in Papua New Guinea: the role of integrated Health and Demographic Surveillance System (iHDSS)

Resource Development and Human Well-being in Papua New Guinea

Issues In the Measurement of Progress

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Millennium Development Goals (MDGs)

- Ratified at the United Nations Millennium Declaration in 2000
- A form of blueprint agreed that by 2015:
 - (i) eradicate extreme poverty;
 - (ii) achieve universal primary education;
 - (iii) promote gender equality;
 - (iv) reduce child mortality;
 - (v) improve maternal health;
 - (vi) combat HIV, TB, Malaria;
 - (vii) ensure environmental sustainability; and
 - (viii) global partnership for development
- Progress towards the MDGs internationally assessed by 18 targets and 48 indicators
- Post-MDGs 2015 Development Agenda



Challenges to M&E of MDGs in LMICs

- Lack of reliable population-based data on health across many LMICs in Africa, Asia and Oceania.
- Lack of universal Vital Registration System of populations in LMICs.
- Lack of adequate human resource to make use of the data, even if they are available.
- Lack of essential evidence-base policies for health and development.



M&E of MDGs progress in PNG

- PNG Government included 15 tailored MDG targets and 67 indicators into the Medium Term Development Strategy 2005-2010 and fully integrated them into the Medium Term Development Plan 2011-2015
- Still a question of “What is the relative quality or validity of the datasets currently used to indicate PNG’s progress towards achievement of the Millennium Development Goals?”



Challenges to M&E of MDGs progress in PNG

- PNG lacks integrated and radical data collection systems for M&E of MDG progress
 - National Censuses of the NSO conducted every ten years -> large data gap between two censuses
 - Health Management Information System of the NDOH focuses on clinical aspects of health
- > iHDSS can compliment to the Censuses and the HMIS to close the gap in population health data and provide longitudinal data series for M&E of MDGs



The PNG IMR's iHDSS

- Papua New Guinea Institute of Medical Research has established and operated an ***integrated Health and Demographic Surveillance System*** (iHDSS) under the Partnership in Health Programme (PiHP) since 2011.
- The programme was financially supported by ExxonMobil PNG, with technical assistance from the University of Queensland, Australia.

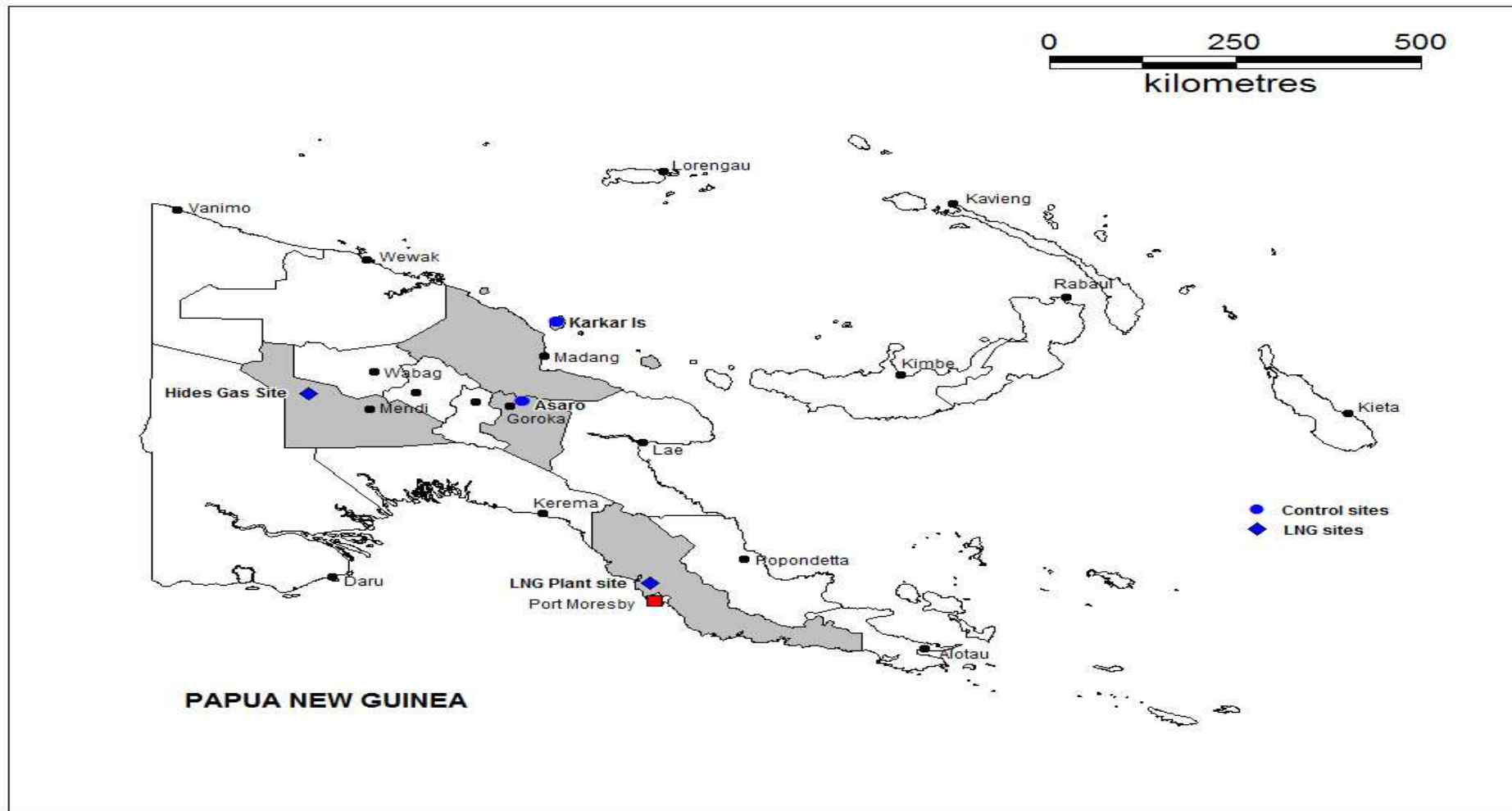


Main Purpose of the iHDSS

- To provide routine, update and longitudinal data series for health policy development and guide the country's responses to the changes in socio-economic and development in the transition from a low to middle income country

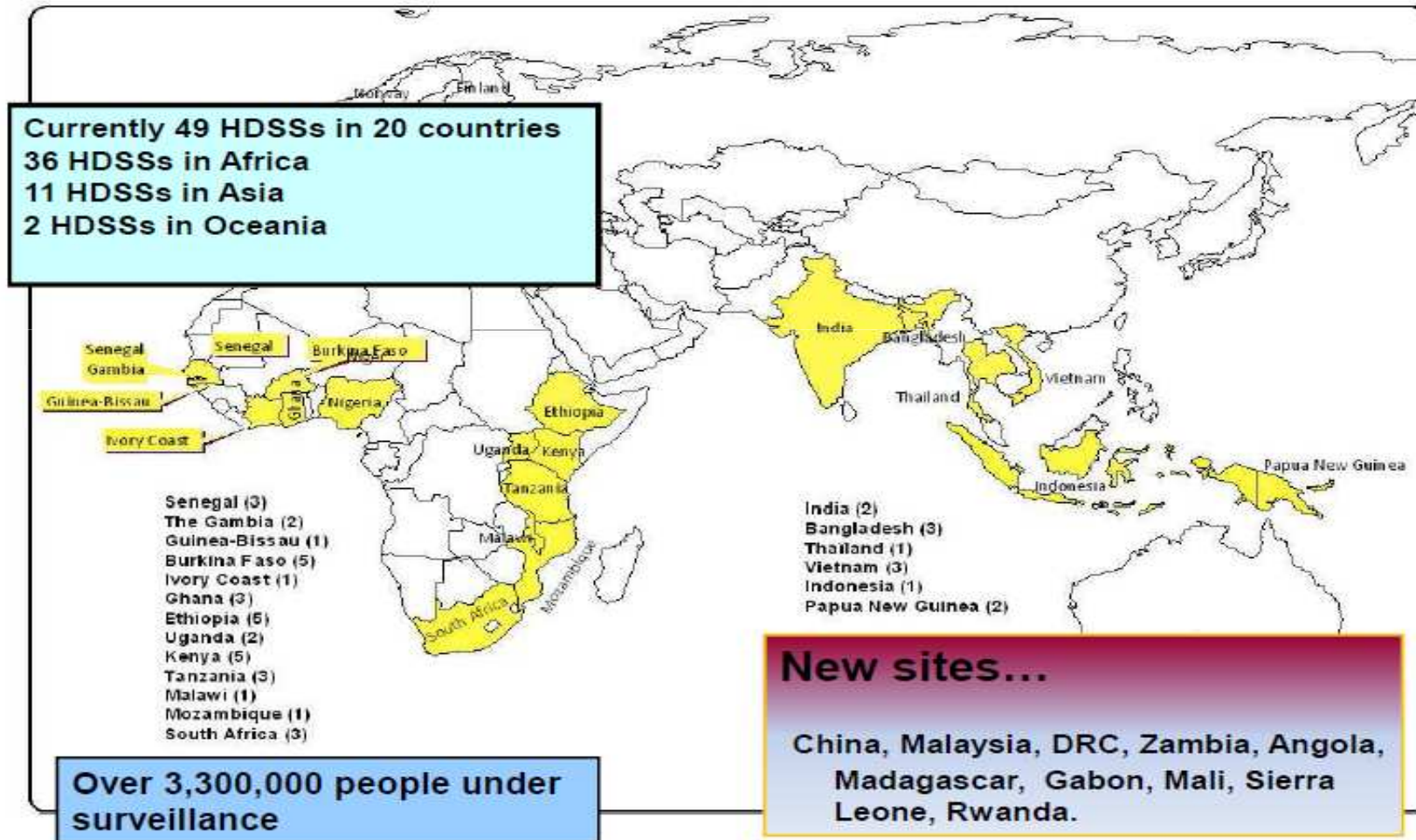


Four iHDSS sites: Hiri vs. Karkar (coastal areas) Hides vs. Asaro (highlands)



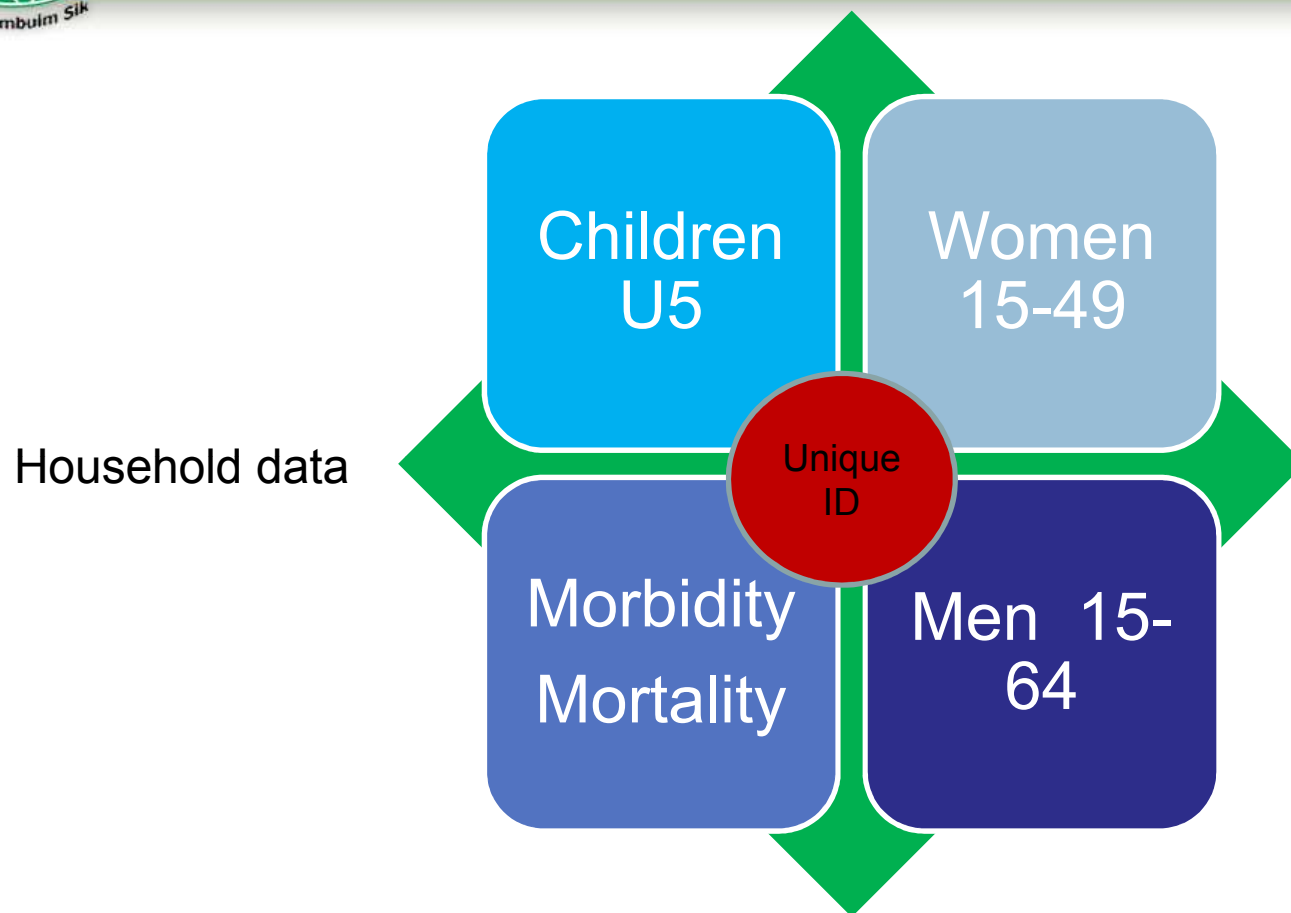


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Five data components of the iHDSS database



Unique ID	HH data	Men 15-64 data	M&M data	Women 15-49 data	Children U5 data
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MDG Indicators that the current PNGIMR's iHDSS can offers for M&E of the progress at the country and local levels



MDG 1: Poverty reduction

Indicator #	iHDSS data module
4: Prevalence of underweight children under 5	Anthropometry
5: Proportion of population below minimum level of dietary energy consumption	Additional module on food security



MDG 2: Universal education

Indicator #	iHDSS data module
6: Enrolment ratio at primary school	Education
7: Primary school completion rate	Education
8: Literacy rate of young people 15-24	Education



MGD3: Gender equality

Indicator #	iHDSS data module
9: Ratios of girls to boys in primary, secondary, and tertiary education	Education
10: Sex ratio of literacy rate among people 15-24	Education
11: Proportion of women in wage employment in the non-agricultural sector	Employment



MDG 4. Reduce child mortality

Indicator #	iHDSS data module
13: Children U5 mortality rate	HH Update VA of Neonatal and Children
14: Infant mortality rate	HH Update VA of Neonatal and Children
15: Proportion of 1-year-old children immunised against measles	Immunisation



MDG 5: Improve maternal health

Indicator #	iHDSS data module
16: Maternal mortality rate	HH update VA of adults
17: Skilled Birth Attendance proportion	Unmet need for SRH



MDG 6: Combat HIV, malaria and other diseases

Indicator

iHDSS data module

18: HIV prevalence among pregnant women aged 15-24

Additional data module on maternal health

19: Condon use rate and contraceptive prevalence rate

Sexual behaviour
Unmet need of SRH

20: Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14

Education

21: Prevalence and mortality rate associated with malaria

Illness

22: Proportion of population in malaria risk areas uses effective prevention and treatment measures

Bed-net
Treatment and

23: Prevalence and mortality rate associated with TB

VA general

24. Proportion of tuberculosis cases detected and cured under DOTS

Additional module on TB



MDG 7: Sustainable environment

Indicator #	iHDSS data module
25. Proportion of land area covered by forest	Additional module on GPS
26. Ratio of area protected to maintain biological diversity to surface area	Additional module on GPS
27. Energy use (kg oil equivalent) per US\$1,000 GDP	HH characteristics
29. Proportion of population using solid fuels	HH characteristics
30. Proportion of population with sustainable access to an improved water source	Water and sanitation
32. Proportion of households with access to secure tenure	HH characteristics



MDG 8: Public-Private Partnership

Indicator #	iHDSS data module
45. Unemployment rate of young people aged 15-24	Employment
46. Proportion of population with access to affordable essential drugs	Access and utilization of health services
47. Telephone lines and cellular subscribers per 100 population	HH characteristics
48. Personal computers in use per 100 population and Internet users per 100 population	HH characteristics



Part 4: Conclusion (1)

- Lessons learnt and international experiences have shown that iHDSS has great potential for collecting and reporting data for M&E of MDG's progress at the global and country levels, particularly in the LIMCs context where a national data collection system is not available
- The current PNG IMR's iHDSS can collect data for M&E of 30 out of 48 international indicators for tracking the country progress towards achievement of MDG and Post-MDG



Conclusion (2)

- PNG IMR's PiHP is an example of Private-Public Partnership to address global development issues at the country level.
- The piloting phase of iHDSS is approaching the completion, PNG IMR has now an unique opportunity to advocate stakeholders and mobilize resources to scale up of the system.
 - iHDSS needs to be included as a 'backbone' of the PNG IMR's medium-term strategic development plan for the period 2016-2020.
 - Budget line for iHDSS needs to be secured in the National Health Account of PNG.



Conclusion (3)

The iHDSS offers added values to the sustainable development of PNG in the transition from a low to middle income country:

- iHDSS benefits extend beyond the health sector and healthcare system, to Social Statistics (housing and censuses, labor forces, taxation, urban planning and investment)
- iHDSS can be open for linkage and harmonized with other data sources to serve the sustainable development of the country and Asian and the Pacific region:
 - Health Management Information System (HMIS)
 - National Censuses and population-based data
 - Vital Registration System
 - Other iHDSS sites in the INDEPTH network



Conclusion (4)

The PNG IMR's iHDSS can contribute to global public health:

- Provide research infrastructures and opportunities to conduct research with less costs, access to mega/multiple datasets, and links results to a range of demographic, health, economic variables.
- Provide routine, update, and longitudinal demographic and health data series at individual, household, community and country levels, enabling analysis of relationships between demographic, health, economic and social trends
- Provide data for BOD analyses to define public health priorities for more equitable health financing and budget allocation



Acknowledgment

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- PNG LNG Project and ExxonMobil

Thank you for your attention!

