# Have living standards improved in PNG over the last two decades? Evidence from Demographic and Health Surveys

#### **Manoj K. Pandey & Stephen Howes**

ANU Crawford School Development Policy Centre

&

**UPNG SBPP Division of Economics** 





## **Based on Chapter 6 of the forthcoming book**



Papua New Guinea: Government, Economy and Society

Edited by: Stephen Howes , Lekshmi N. Pillai

Coming soon

Notify me

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Description

Details

Papua New Guinea (PNG), a nation now of almost nine million people, continues to evolve and adapt. While there is no shortage of recent data and research on PNG, the two most recent social science volumes on the country were both written more than a decade ago. Since then, much has changed and much has been learnt. What has been missing is a volume that brings together the most recent research and reports on the most recent data. *Papua New Guinea: Government, Economy and Society* fills that gap.

Written by experts at the University of Papua New Guinea and The Australian National University among others, this book provides up-to-date surveys of critical policy issues for PNG across a range of fields, from elections and politics, decentralisation, and crime and corruption, to PNG's economic trajectory and household living standards, to uneven development, communication and the media. The volume's authors provide an overview of the data collected and research undertaken in these various fields in an engaging and accessible way.

Edited by Professor Stephen Howes and Professor Lekshmi N. Pillai, *Papua New Guinea: Government, Economy and Society* is a must-read for students, policymakers and anyone interested in understanding this complex and fascinating country.

#### Introduction

- > PNG is a resource rich country
- ➤ Since 1996, PNG economy has witnessed many ups and downs, but also the resource boom from 2003-04 until 2013
- Unanswered questions: Did living standards improve over the last two decades?
- More specifically, do households have more durables in 2016-18 than in 1996? Do they have better access to clean water? Are they in better health? Are their children more likely to be in school? Are the women of PNG having fewer children and are their births safer? Are they marrying later, and do they have better access to contraception?

## **Contribution and objective**

➤ The first study to examine whether living standards have improved in the last two decades using 1996, 2006 and 2016-18 Demographic and Health Surveys (DHS)

## Why DHS?

- ➤ PNG collects household level information through three main sources: Census, HIES, and DHS
- ➤ 2 Census (2000 and 2011): not comparable as 2011 Census is widely regarded as unreliable (Bourke and Allen 2020).
- ➤ 2 HIES (1996 and 2009/10): Not comparable as they used incomparable survey methods (Gibson, 2012) and not covering whole period of 1996-2016.

## Why DHS?

- ➤ 3 DHS (1996, 2006 and 2016-18): Internationally used surveys, conducted three times in PNG by NSO
- ➤ Provide comprehensive socio-economic and demographic information through household and individual questionnaires
- Large and nationally representative surveys
  - > 1996: 4,319 households and 4,917 women
  - > 2006: 9,017 households, 10,352 women and 10,077 men
  - > 2016-18: 16,021 households, 15,198 women and 7,333 men
  - These surveys cover entire period (latest)

## Why DHS?

- Two of the three surveys are either side of PNG's biggest boom ever (2003 to 2013).
- ➤ Provide comparable estimates despite some differences in sampling methods, coverages, definitions and reference periods of some indicators
- Estimates are drawn from report tables and raw data using appropriate sampling weights, correcting for above differences where possible.

## **Major indicators: Classifications**

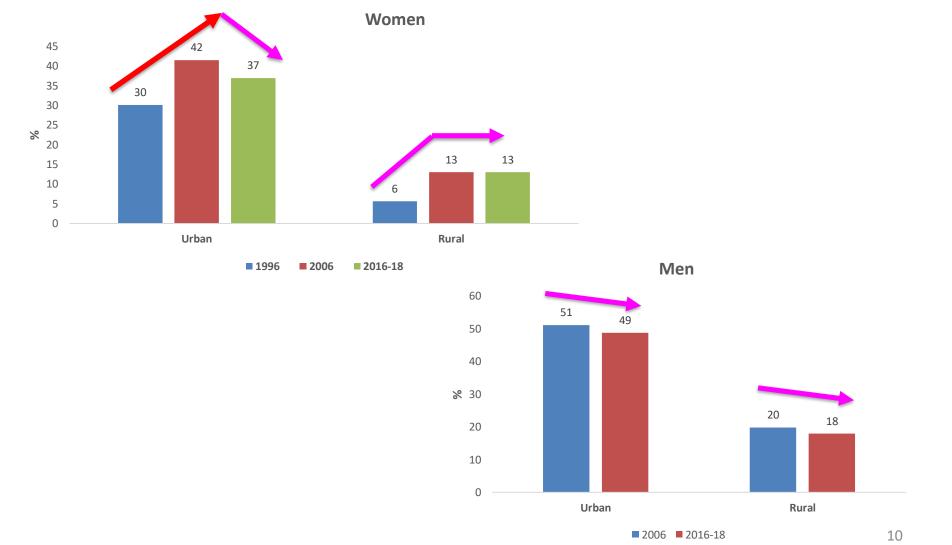
- 1. Employment: engagement in non-agricultural activities
- 2. Household durables, quality, and infrastructure
- 3. Education, and exposure to mass media
- 4. Mortality and health: mortality rates, fertility rates, vaccination, breastfeeding
- 5. Gender and the household composition: fertility rates, women's marriage, childbearing and reproductive healthcare

#### **Few clarifications**

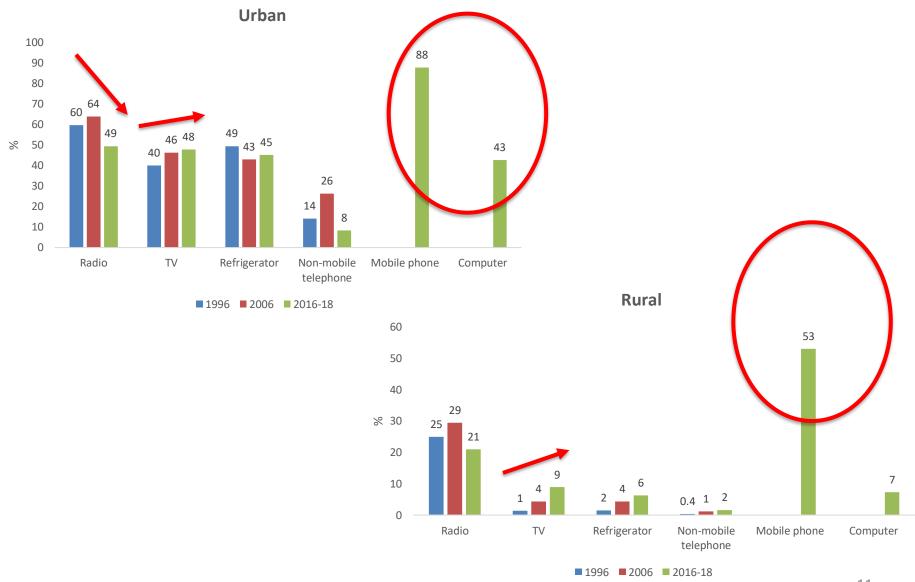
- 1. Simplified graphs are presented: The chapter uses complex tables, good for chapter but hard to present, selected data from tables are converted into graphs for presentation only
- Only Rural-Urban comparisons are presented: Because of sampling difference across 3 DHSs, these surveys show falling share of urban population (does not seem plausible), Normally national results follow rural estimates
- 3. Not all indicators used in the chapter are presented
- 4. Estimates are mostly truncated to nearest integer values

## **Employment**

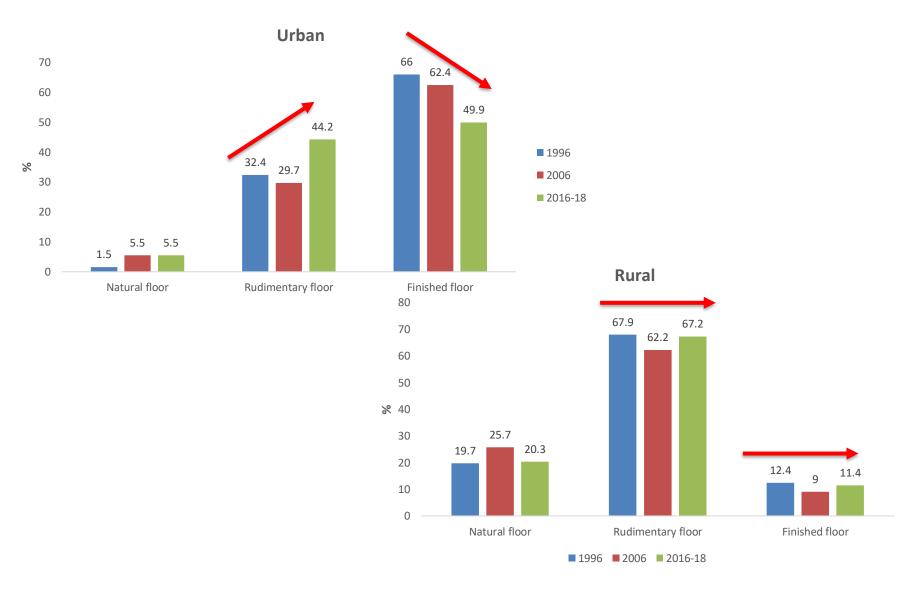
#### **Engagement in Non-agricultural economic activity (%)**



## Household durable goods

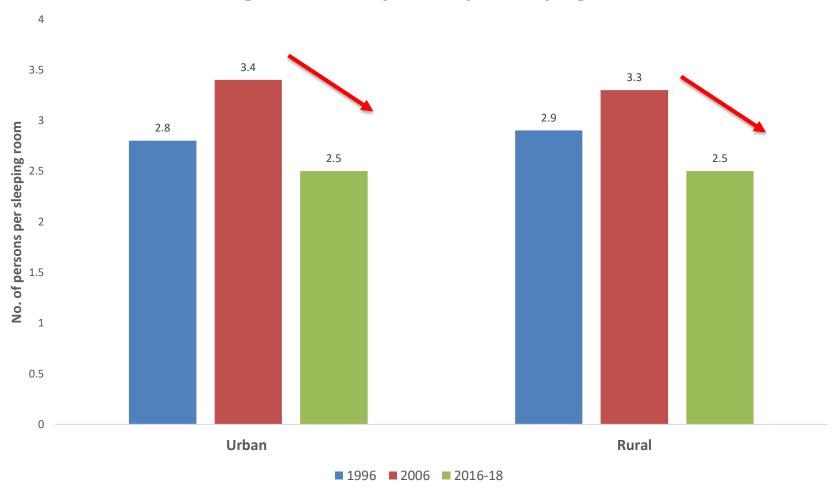


## **Household floor quality**



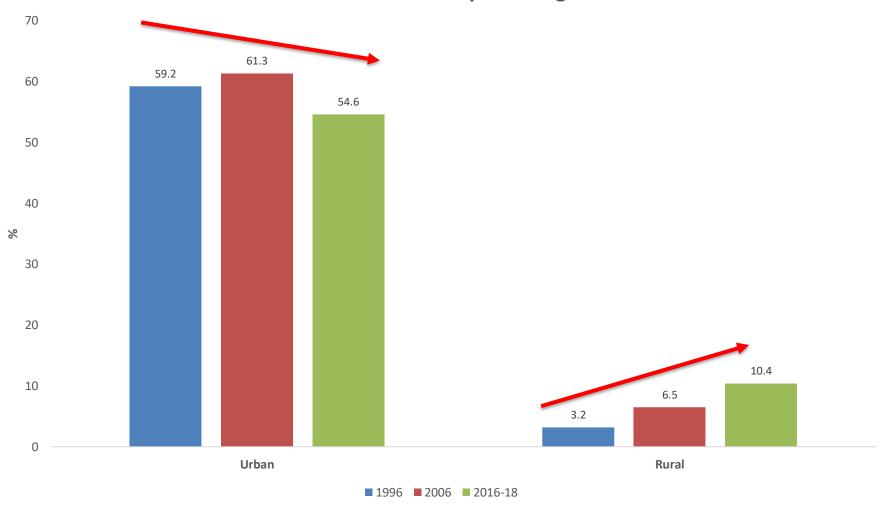
## **Household crowding**

#### Average number of persons per sleeping room

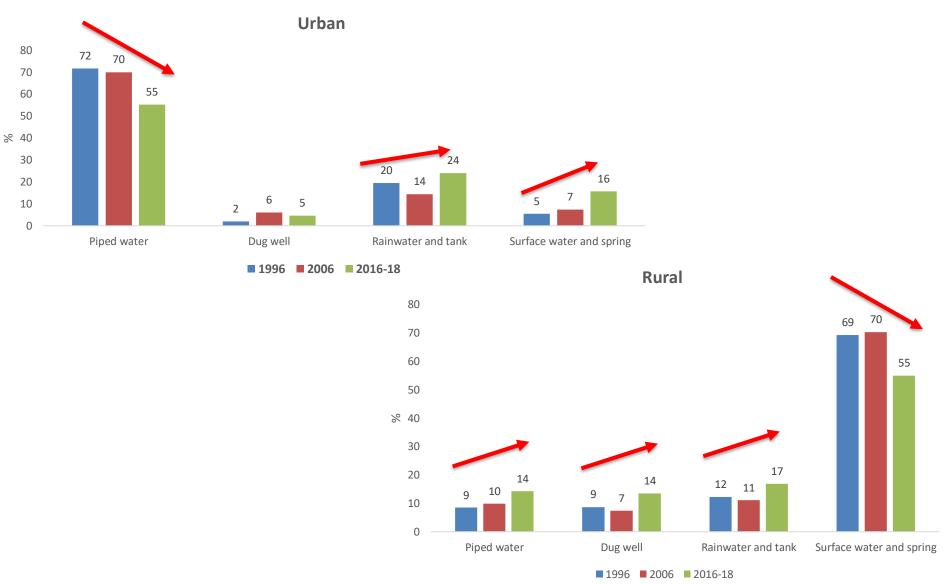


#### Household electrification

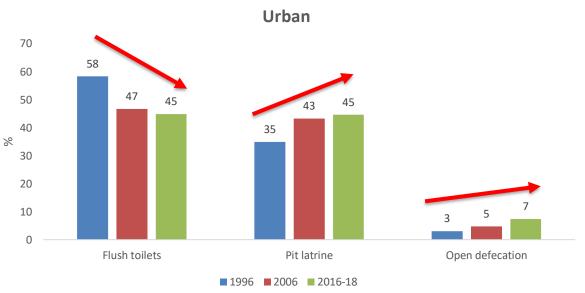


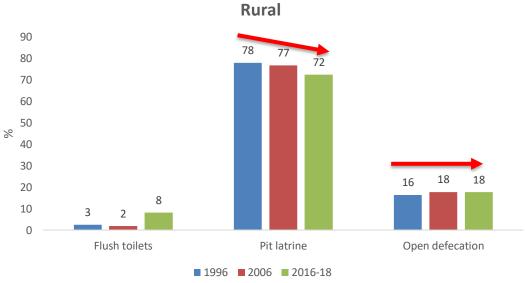


## **Sources of drinking water**

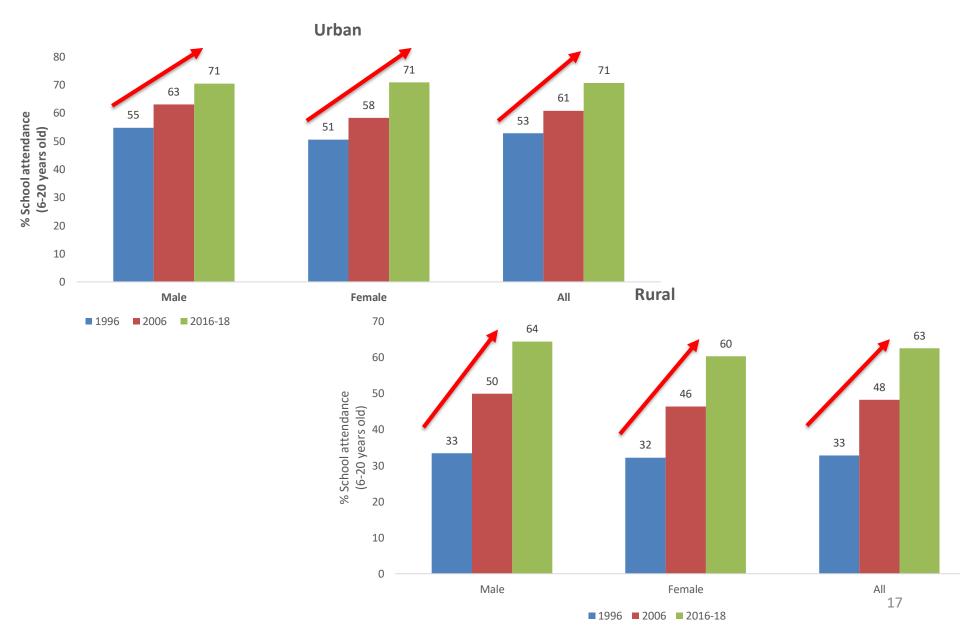


#### **Access to sanitation**



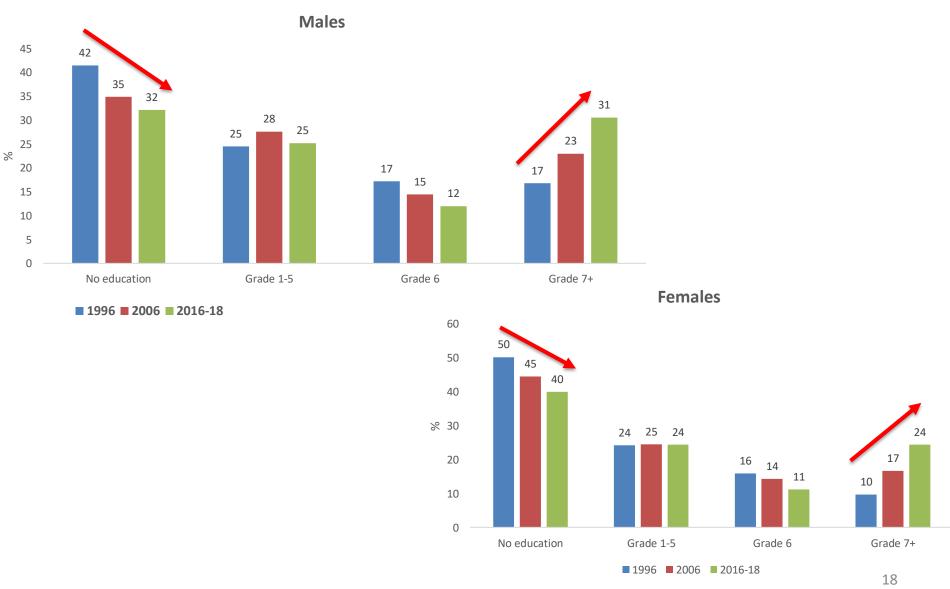


## **School Attendance (6-20 years old)**



#### **Education**

a. Highest educational attainment, by gender (1996-2018, %)

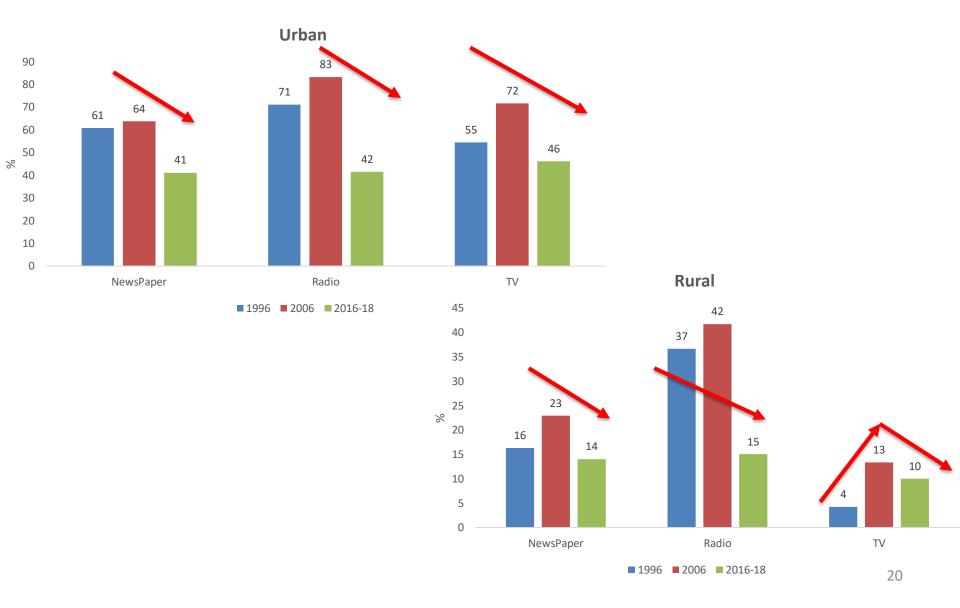


#### **Education**

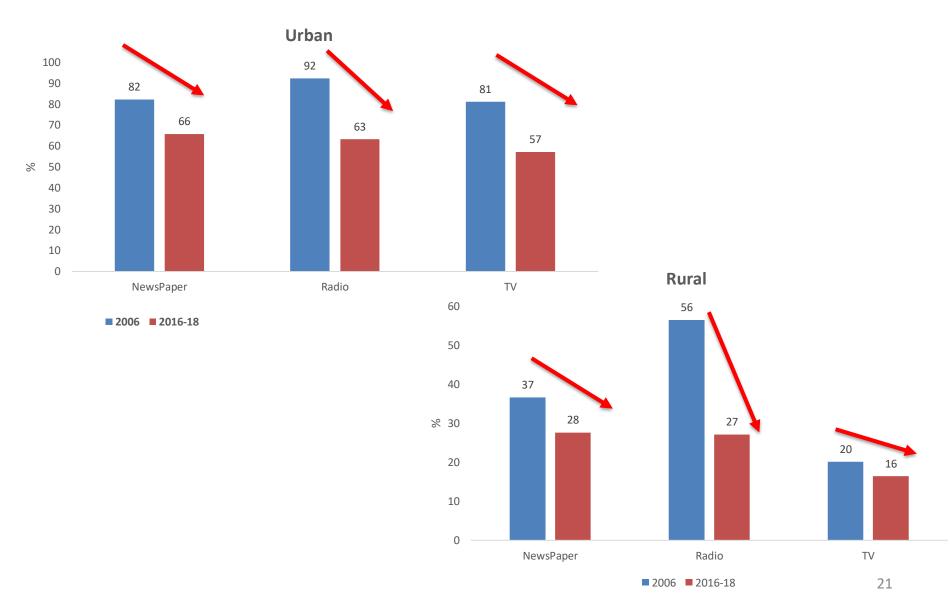
#### b. Highest educational attainment, by residence (1996-2018, %)



#### Access to mass media: Women

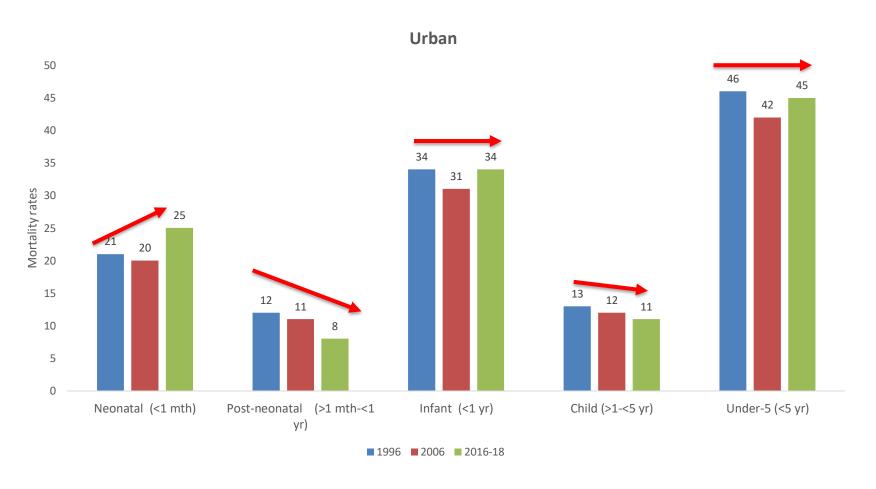


## Access to mass media: Men



## **Childhood Mortality Rates (per 1,000)**

a. Childhood mortality rates (1996--2018, per 1,000)

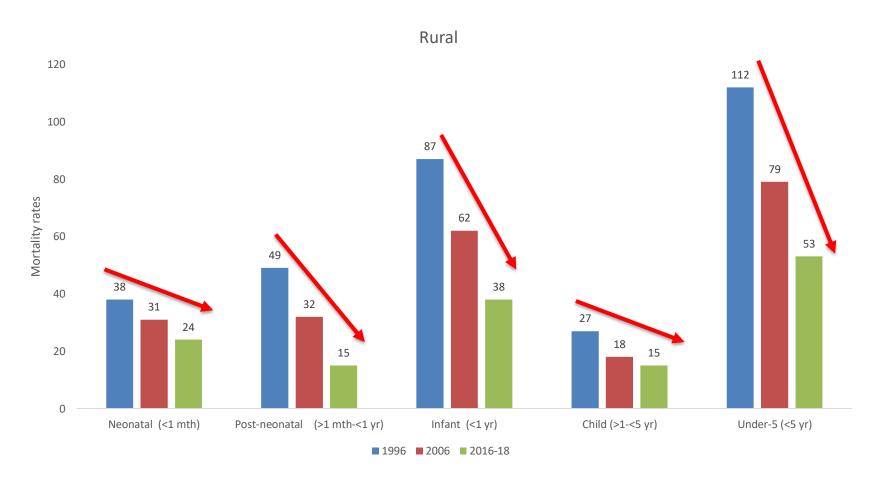


Notes: All mortality rates are expressed per 1,000 live births except for child mortality, which is expressed per 1,000 children surviving to age 12 months.

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## **Childhood Mortality Rates (per 1,000)**

a. Childhood mortality rates (1996--2018, per 1,000)

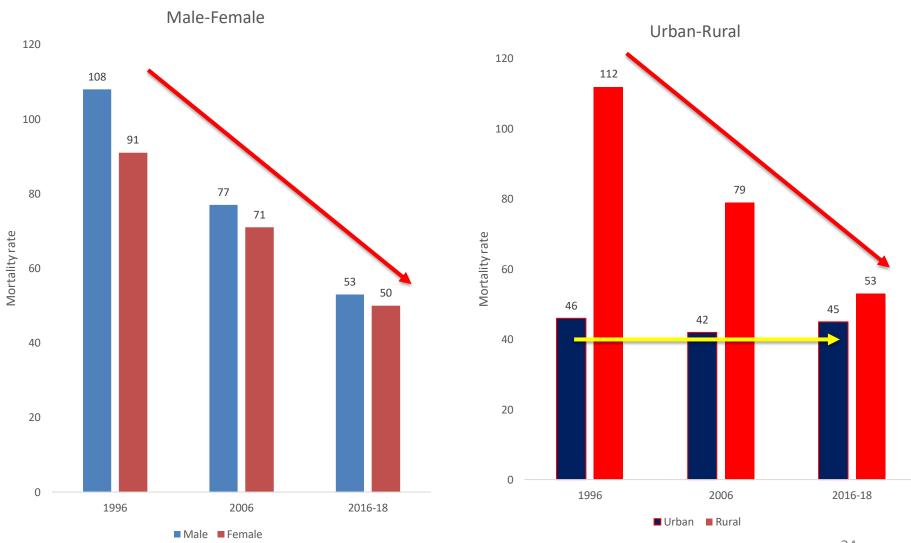


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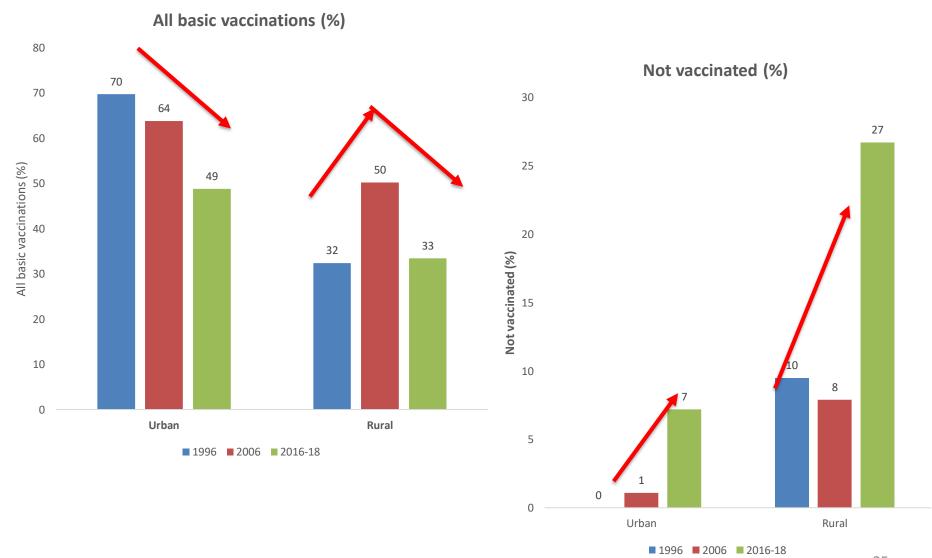
## **Under-5 Mortality Rates (per 1,000)**

b. Under-5 mortality rates (1996-2018, per 1,000)



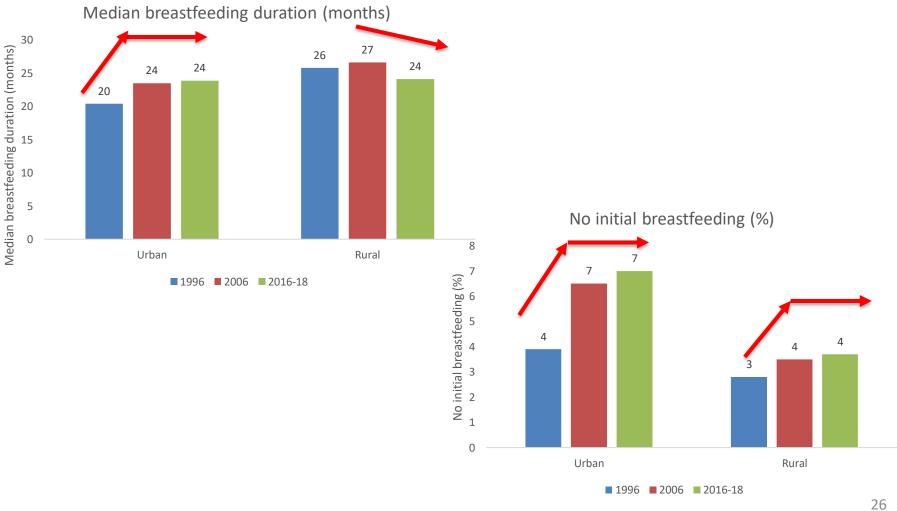
#### **Child Health**

a. Vaccinations (1996-2018, %)



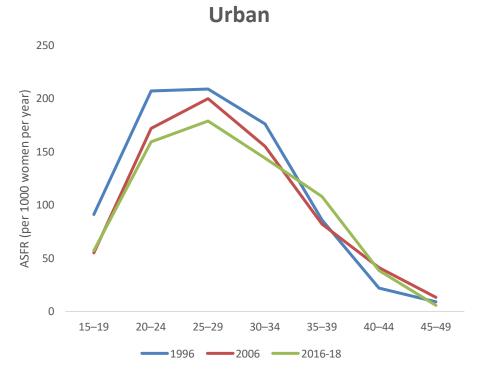
#### **Child Health**

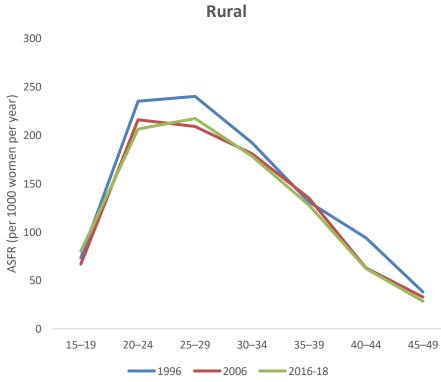
#### **b.** Breastfeeding (1996-2018)



## **Fertility Rates**

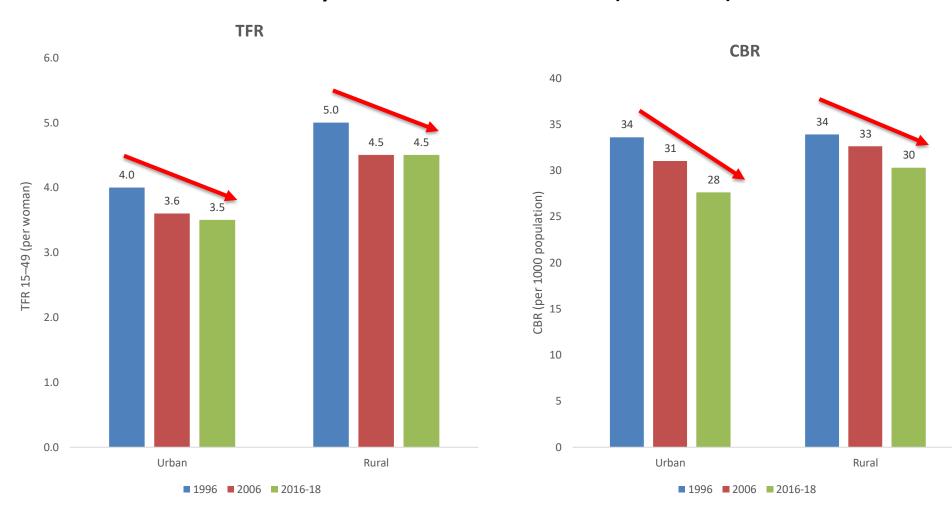
a. Age-group Specific Fertility Rates (1996-2018, per 1000 women per year)





## **Fertility Rates**

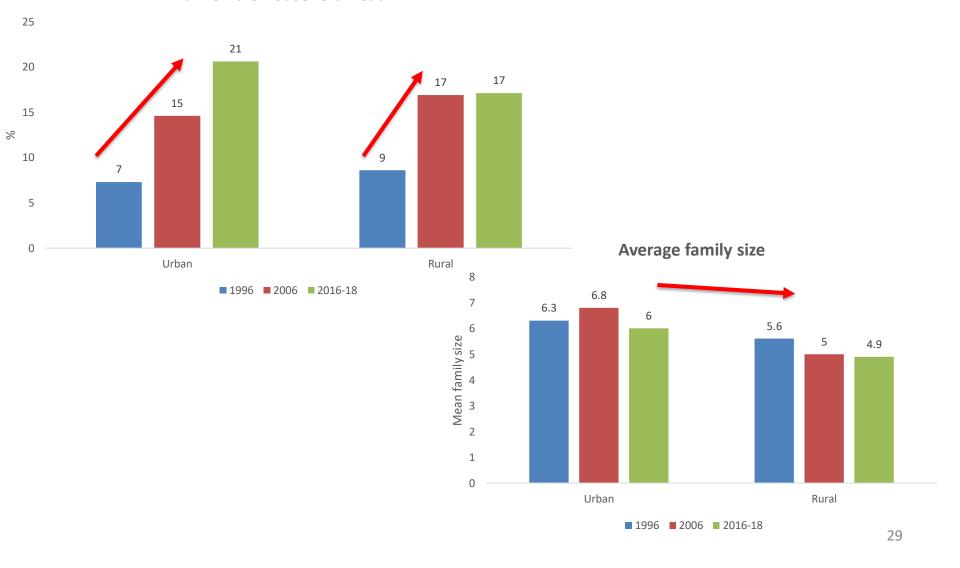
#### b. Total fertility rates and Crude birth Rates (1996-2018)



## **Household Composition**

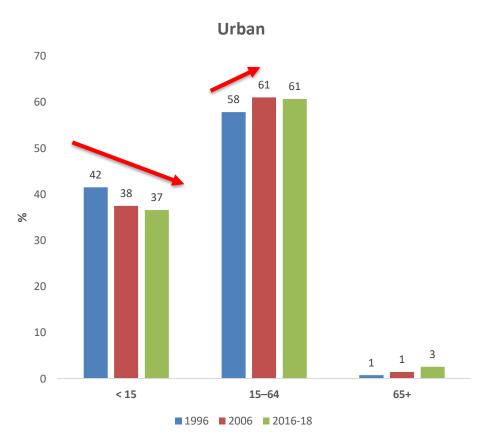
a. Household composition (1996-2016)

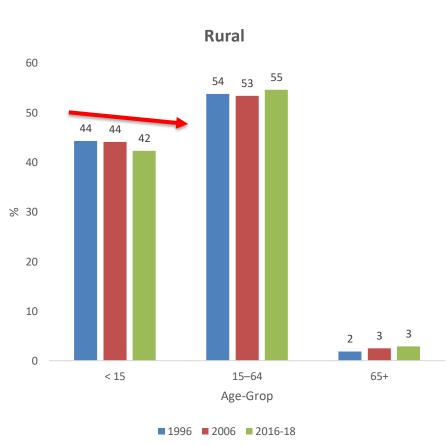




## **Household Composition**

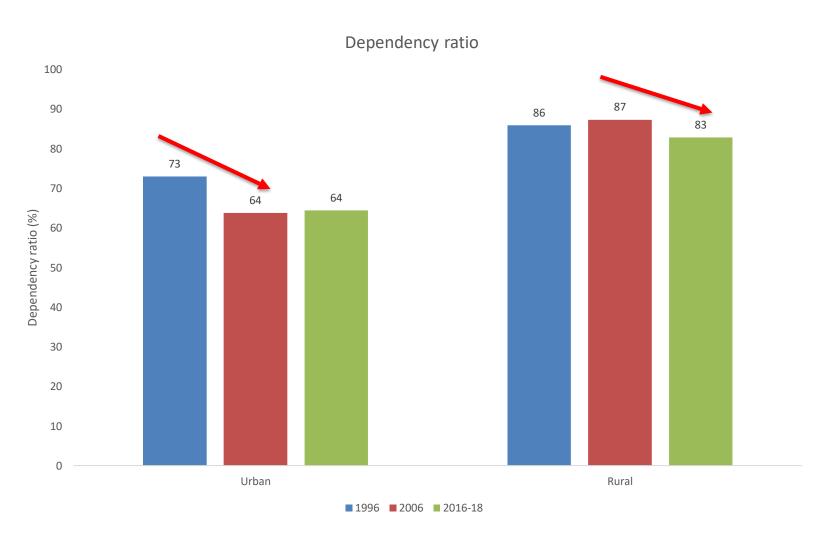
B. Age-Structure and Dependency ratio (1996-2016)





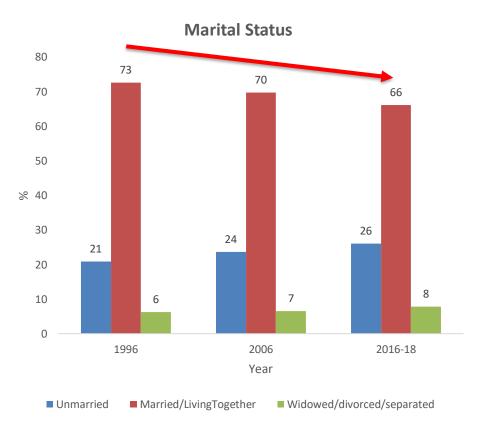
## **Household Composition**

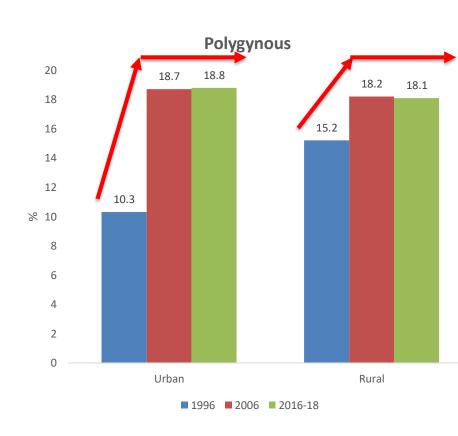
#### **B.** Dependency ratio (1996-2016)



## **Marriage and Childbearing**

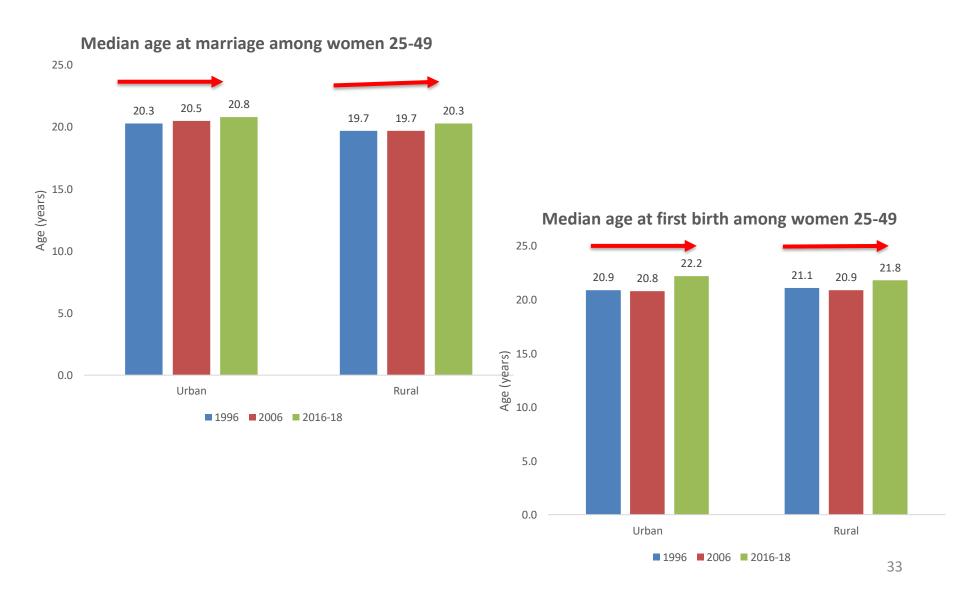
#### a. Women's marital status (1996-2018, %)





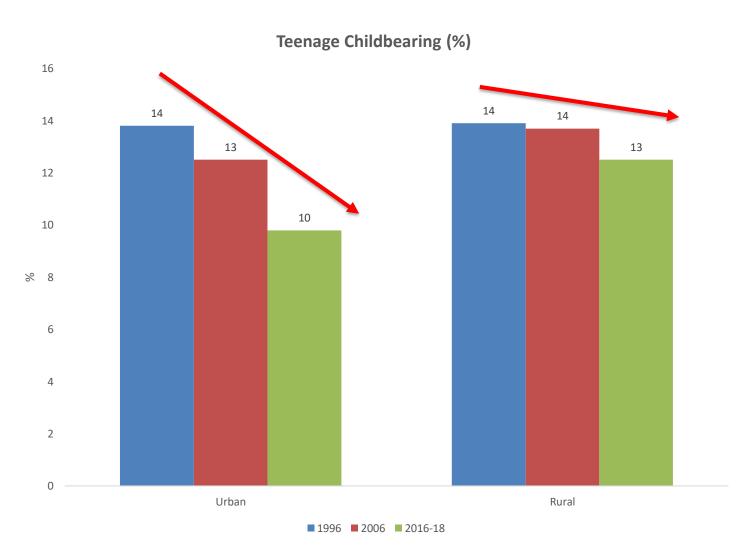
## Marriage and Childbearing

b. Women's age at first marriage and age at first birth (1996-2018)



## **Women's Childbearing**

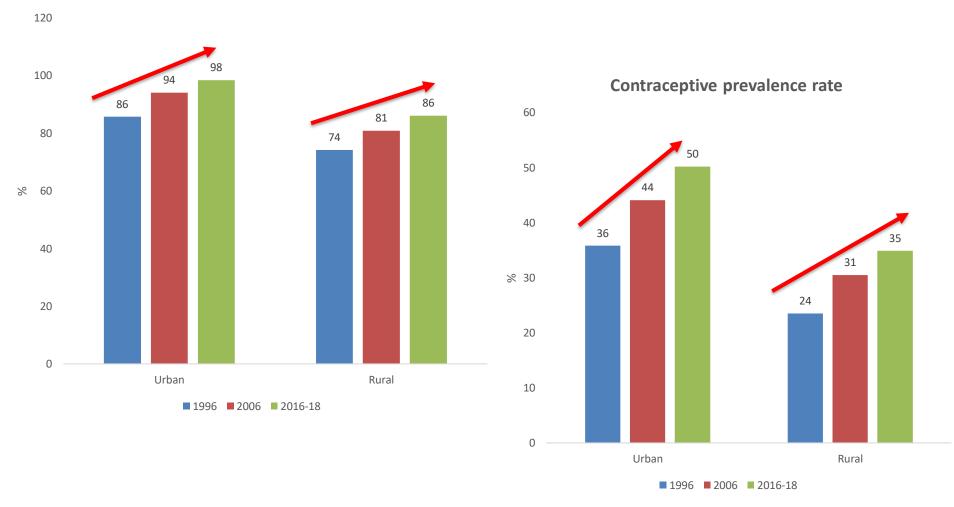
c. Teenage childbearing (1996-2018, %)



## Women's reproductive health and care

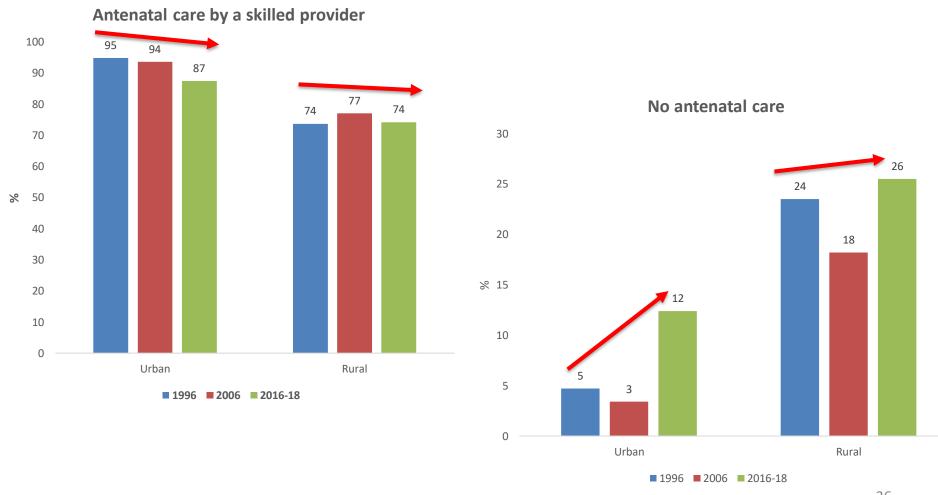
a. Women's contraceptive use (1996-2018, %)

Knowledge of any contraceptive method



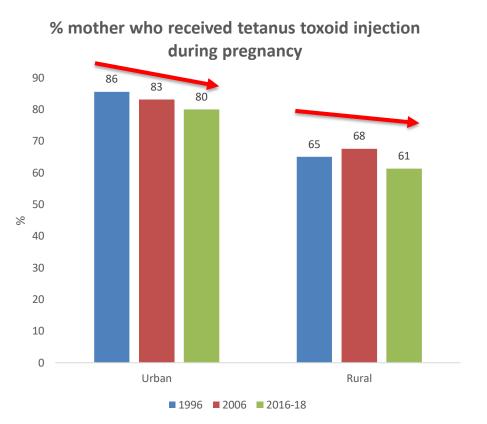
## Women's reproductive health and care

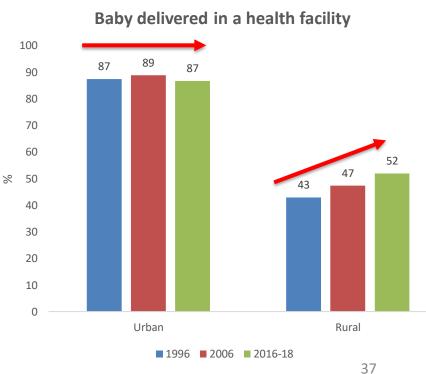
b. Women's antenatal care provision (1996-2018, %)



## Women's reproductive health and care

c. Women's vaccination and place of delivery (1996-2018, %)





- ➤ This paper has used the PNG 1996, 2006 and 2016–18 DHSs to examine whether living standards have improved in PNG over the last two decades
- The results obtained can be divided into three groups.

#### I. Areas of improvements

- a. more rainwater tanks,
- b. more children are at school
- c. lower childhood mortality rates
- These reflect direct positive impacts of economic growth on household income, and indirect impact via increased government revenue and spending in the case of education.
- ➤ The fact that childhood mortality rates have improved despite worsening vaccination services suggests that this is also due to the benefits of economic growth.

#### II. Areas of regress

- a. plummeting vaccination rates
- b. Reduced levels of media access
- ➤ Reflection of worsening governance leading to poorer service delivery (e.g., drug distribution or radio broadcasting capacity) despite economic growth

#### III. Areas of stagnation

a. no growth in the share of non-agricultural jobs post-2006: a key indicator of economic transformation

- b. little sign of improved status for and equity of women:
- ➤ although women are more likely to be HHs heads (but still less than 20%), no reduction in age at first marriage, or childbearing, and not having fewer children.
- despite improvement in access to contraception, it remained very low
- ante-natal care did not improve, and
- hardly more likely to give birth in a health facility

- ➤ Despite some short-term improvements from growth, there is little sign of the structural transformation needed for sustained and successful development.
- > Shifting employment away from agriculture is a critical part of the development process.
- ➤ The link from empowerment of women to economic development is also now widely accepted. For example, the World Bank argues that gender equality "not only guarantees basic rights but also plays a vital role in promoting the robust, shared growth needed to end extreme poverty" (World Bank 2014, p. xi).
- In addition, and finally, growth of urban settlements leads to a tendency towards convergence between urban and rural living standards.

## Thank you!