État civil et environnement familial de l’enfant :
Qui déclare-t-on ? Une étude de cas au Mali
*Birth registration and family structure. A case study in Mali.*

Véronique Hertrich *(INED, Paris, France)*
Catherine Rollet *(Université de Versailles St-Quentin en Yvelines, France)*

*Projet Slam – Suivi longitudinal au Mali
Projet ANR-DyPE – Dynamiques de la parentalité et de l’enfance en milieu rural africain - (ANR-12-BSH1-0005-01)*
Civil registration of births has 2 main objectives:

- statistical & demographic
- benefits for individuals in terms of legal status and human rights

Birth registration considered as one of the fundamental rights of children

(art. 7 on name and nationality in the Convention on the Rights of the Child, 1989)

→ UNICEF: The ‘rights’ start to life

→ Birth registration raises as an international issue
• BUT birth registration is far from exhaustivity:
  → 64 % births without birth certificate in South-Asia and Sub-Saharan Africa (UNICEF, 2009)
  → In Mali, coverage is estimated about
    – 15 % of births in 1984, 53% in 2005-6 (EDS)
    – According last national census (2009), 50% of the population has a birth certificate (rural : 40%, urban: 85%)

• Few data and knowledge on birth registration (levels, trends, determinants)
Lack of knowledge on birth registration (level, trends, determinants) + Need of indicators for international programs = Since the 2000s, a question on the availability of a birth certificate has been included in the questionnaires of censuses and surveys (DHS, MICS) → A large amount of data is now available
New data, new opportunities:
-- to analyse progression of civil registration, resistances, differences
-- using birth registration as a proxy to analyses changes in the status of children

- Is there a privatization of the relationships between family members?
- Is there a growing differenciation of behaviours towards children
  - Social differenciation
  - Differenciation within the family between children

- Approaching those who escape to the common pattern:
  - The children who are not registered in a context where registration is usually
  - The children who are registered in a context where registration is rare
Objectives

- Explore possibilities and feasibility of analysis with census data on birth registration
- Examine factors of birth registration, at the level of family structures
- Focus on a rural population in South-East Mali

Data:
- Individual micro data from the last national census (2009)
- Longitudinal panel survey since 25 years (Slam project, INED, Paris)
Context

- **Localisation:** Southeast Mali, 450 km from Bamako, Bwa population.
- 7 villages (4300 inhab. en 2009), follow up survey since 1987 (projet *Slam*)

- Farmers
- High fertility (TFR=8)
- Since the 1990s: democratisation (1991), decentralization, development of schooling
- Christians & animists
Data

• National census (2009) → Question on the availability of a birth certificate (or « jugement supplétif » -- substitute birth certificate)
  → 4413 individuals

• Follow-up survey (data on the domestic groups)
Are data reliable?

The long term trend is consistent
**But, trends by village are inconsistent**

% individual reported as having a birth certificate. Trends by village and birth cohorts

Distribution (%) of the population, according the number of birth certificates reported in the household: for everybody, for nobody or for part of the HH members. By village.
« Post-census survey »
and adjustment of the data base

• Survey in households with 100% birth certificates: control for each of the members + question on the document used during the census

• Interview with census enumerators

⇒ Overestimation of birth registration

• In comparison to the 100% rate of birth certificate (or « substitute birth certificate »)
  → Birth certificate : 37% of individuals
  → Substitute birth certificate : 4%
  → No birth certificate, no substitute birth certificate : 51%
  → Uncertain : 8 %

• In most of the case, the family card (used for the taxes) was presented and registered as « birth certificate » on the census questionnaire
  → Vill – 4 : 98% ; Vill-8 : 93%; Vill-58 : 40%

⇒ An adjusted database (6 villages)
Trends in birth registration

Trends according census and survey estimates

% avec AN-JS

Sexes réunis - 6 villages

D’après RGPH

Après réenquête

Trends by sex

% with birth certificate or substitute birth certificate

% who attended school

Boys

School

Girls

year of birth

year of birth + 8
Family environment and birth registration

Data:
- cohorts 2000-2009 (children recorded in the 2009 nat census, 6 vill., N=1326)
- characteristics of domestic group in 2009

3 hypotheses

1. Birth registration = investment in child (human capital), reference to « modernity »
   - school investment (young and old cohorts)
   - religion
   - birth registration among older cohorts

2. Birth registration = privatization of family, closer relations between spouses, parents & children
   - size and structure of the domestic group (nb of conjugal units, polygamy...)

3. The family network as a factor of diffusion of birth registration
   - size and structure of the domestic group
More birth certificates among domestic group investing in child (human capital) and distanciating with the local values

**Education**

![Bar chart](image.png)

- **by proportion of children (7-19) who are (or went) at school**
- **by number of adults who were at school (in the domestic group)**

% d'enfants 7-19 ans scolarisés

% Birth certificates

0 10 20 30 40 50 60 70 80 90 100

0 10 20 30 40 50 60 70 80 90 100

Aucun 1 2+
Birth certificate among adults

% Birth certificates

by number of adults (20 y & +) with a birth certificate in the domestic group

Religion

% Birth certificates

Main religion in the domestic group

Chrétienne  non chrétienne
Third hypothesis versus second hypothesis

The rate of birth certificates is higher among large and complex domestic groups.

Size of the domestic group (nb of residents):

- Moins de 7 Res
- 7 a 9 Res
- 10 a 14 Res
- 15 a 19 Res
- 20 & plus Res

Structure: mono/polynuclear (nb of married men in the domestic groups):

- 0-1
- 2
- 3 & +
According bivariates results,

2 types of factors influence birth declaration:

1. investment in human capital, reference to « modernity »
   (education, religion, previous practice of birth registration)
2. Density of family network

According multivariate results,

--> mainly investment in human capital, reference to « modernity »
Logistic regression
(existence of a birth certificate, birth cohorts 2000-2009)

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Girls</th>
<th>Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure of the domestic group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-- size</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>-- mono/polynuclear</td>
<td>*</td>
<td>ns</td>
<td>*</td>
</tr>
<tr>
<td>-- polygamy</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Scolarisation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-- among 7-19</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>-- among adults</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults with birth certificate</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>

*** p<1p1000, ** p<1% * p<5%
Conclusion

• Data on birth registration from censuses and surveys: *are they reliable?*

• Birth certificate = *a proxy to approach changes in the status of children, and possible differentiation between children and between families?*