Nouna Health and Demographic Surveillance System (NHDSS)

**Geographical location of the Nouna HDSS catchment area**

Figure 1: Map of the Nouna HDSS catchment area

**Brief Description of Nouna HDSS**

The Nouna Health Research Centre (CRSN) is one of the four research institutes of the Ministry of Health. It has been running an HDSS since 1992. The Nouna HDSS is located within the Nouna health district catchment area in northwest Burkina Faso, 300 km from the capital city, Ouagadougou. The HDSS area is characterized by a Sub-Saharan climate with a mean annual rainfall of 800mm with fairly constant average daily min. (20-28.1°C) and max temperature (29.5-37.2°C) throughout the year. Rainfall occurs from Mai-September. The region consists of “Plateaux” with gentle slopes and drained by several small semi-permanent streams. The HDSS catchment area is about 1775 Km² with the specificity of covering both rural and semi-urban areas. The population is about 90,000 residing in 11,750 households across 58 villages and Nouna town. Subsistence farming is the predominant occupation.

![Male and Female Population](image)

**Male and Female Population**

Nouna-HDSS, 2011

Source: BD-SSDS-CRSN, 2013

Figure 2: Nouna Population Pyramid, 2011
Demographic Characteristics for the year 2011

<table>
<thead>
<tr>
<th>Crude Birth Rate (CBR)</th>
<th>35,14‰</th>
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</thead>
<tbody>
<tr>
<td>Crude Death Rate (CDR)</td>
<td>8,5‰</td>
</tr>
<tr>
<td>Neonatal Mortality</td>
<td>8,8‰</td>
</tr>
<tr>
<td>Post-neonatal Mortality</td>
<td>29,9‰</td>
</tr>
<tr>
<td>Infant Mortality</td>
<td>35,8‰</td>
</tr>
<tr>
<td>Child Mortality (1-4 years)</td>
<td>16,9‰</td>
</tr>
<tr>
<td>Under Five Mortality</td>
<td>98,8‰</td>
</tr>
<tr>
<td>Rate of Natural Increase</td>
<td>26,6‰</td>
</tr>
<tr>
<td>In-Migration</td>
<td>80,7‰</td>
</tr>
<tr>
<td>Out-Migration</td>
<td>81,8‰</td>
</tr>
<tr>
<td>Growth</td>
<td>3,4‰(2000-2011)</td>
</tr>
</tbody>
</table>

Within a needs-oriented focus of four core areas that are:
- **Health System Research** (treatment seeking behaviour, malaria case management, quality of care, health financing, research to policy, reproductive health, health and equity, adult health, migration, assessment of poverty reduction strategies)
- **Biomedical Research** (parasitology, entomology, biochemistry in malaria and virology in HIV/AIDS, bacteriology in meningitis)
- **Clinical Research** (new and old drugs in malaria, treatment of meningitis, resistance in ARV drugs)
- **Global Climate change and environmental health**

The CRSN is assigned the following main objectives and missions:
- Conceptualize and lead multidisciplinary field-based health-research projects relevant to national health policy;
- Disseminate results of the research to promote health-sector reforms;
- Contribute to capacity-building in health research; and
- Provide the Ministry of Health with evidence-based data for health policy and planning.

**FUNDERS**
- Ministry of Science and Arts of the Land of Baden Württemberg/ Germany
- University of Heidelberg
- Ministry of Health, Burkina Faso
- Tropical Diseases Research/WHO
- European Union
- ICDR/Canada
- Pfizer
- Sanofi aventis
- Projet de Renforcement des Services de Santé/ African Development Bank
• European Union

COLLABORATORS

• Centre Muraz (Projet IMMPACT)
• Centre National de Recherche et de Formation sur le Paludisme (CNRFP)
• Institut de Recherche sur le Développement (IRD)- Burkina Faso
• Institut National de la Statistique et de la Démographie (INSD)
• Ministère de l’Enseignement de Base et de l’Alphabétisation (MEBA)
• Programme National de Lutte contre le Paludisme (PNLP)
• Institut Supérieur des Sciences de Population (ISSP)
• UFR-SDS /Université de Ouagadougou
• Direction Générale de la Météorologie
• International Network of field sites with continuous Demographic Evaluation of Populations and Their Health (INDEPTH Network)
• Institut National de Recherche en Santé Publique/ Mali
• Université of Heidelberg/ Germany
• IHCAR-Karolinska Institute / Sweden
• Muhimbili University College of Health Sciences- Dar es Salam / Tanzanie
• University of Montréal / Canada
• Institut Universitaire des Etudes pour le Développement de Genève (IUED)/ Swizerland
• Pfizer
• Sanofi aventis

KEY PUBLICATIONS


INESS Project sensitization team

Nouna HDSS population during a sensitization session