WP4 has three objectives: 1) to produce detailed maps of household structures, using disaggregated census data from three Western African countries (Burkina-Faso, Mali, Senegal); 2) to generate new insights on emerging and debatable issues linked to household in these three countries; 3) to apply a critical methodological approach on the household concept.

**Description of work and role of partners**

**WP4 - Grasping the complexity of West African families through household statistics [Months: 1-48]**

**INED**

Task 4.1. Mapping households. Complexity, diversity and inequalities in family structures (Lead: A. Gakou, INSTAT Mali)

Task 1 is made of several streams of work:

1. The constitution of a corpus mobilizing the census data-bases of all 3 countries (Burkina Faso, Mali and Senegal), assessing the comparability of data, definition of harmonized criteria, indicators and analysis types suitable for comparison.

2. The mapping of family structures, based on indicators developed at the smallest geographical scale. These indicators will be defined from different inputs to capture not only the morphology of households but also their socio-economic profile, the occurrence of particular situations (eg female headed households, age or sex imbalances) or remote from dominant models. This component will paint the landscape of living arrangements; assess the persistence of regional patterns and continuity between countries as well as focus on the emergence of new family configurations.

3. Atlas of families and socio-economic indicators: do correlations make sense? The confrontation of maps on household structures and those on the local socio-economic and demographic conditions will serve as a basis to test possible influences and interactions between local development and household patterns.

**Task 4.2 - Family environment, gender and intergenerational relations (C. Sauvain Dugerdl,Unige)**

Task 2 covers two areas of work:

1. Care for dependents: The isolation of older persons and patterns of child care are recurrent issues in international debates, whether they are held by policy makers or researchers. Analyses of census data will address these questions, at the individual level, dealing with the relational environment within households, and at the collective level, assessing the spatial concentration of vulnerability.

2. Conjugal and gender relations. Various indicators at the national level point to changes in union forms and living arrangements of couples; for instance the increase in age at marriage, the decrease in polygamy and the rise in the proportion of female-headed households (Antoine, 2002; Calvès and Adjamagbo, 2014; Marcoux and Antoine, 2014; Vallin, 2009). To what extent are these trends and patterns commonplace or contrasted at the local level? Are there typical of urban or rural dynamics?

3. Family systems and quality of life, the advantages and disadvantages of large families. Large households are able to better diversify their subsistence strategies, but they are also known to be more fragile and unequal (Sauvain Dugerdl, 2014). This issue will be treated through an analysis of the links between the composition of the household and several measurements of the quality of life (children survival and education, level of comfort, situation of women).

**Task 4.3. Households and family environments. Quality and comparability of data. (V. Hertrich, INED)**

The concept of household holds a prominent position in national and international statistics on families as a unit enumeration in surveys and censuses (Pilon et al., 1997; van de Walle, 2006). However, its relevance and ability to reflect real social units in which people live is debatable, in part because there is no easy way to combine various dimensions of households (economic, residential, kinship relations, authority of a head of household, etc.). This task is dedicated to a critical analysis of household data. It builds upon a series of national surveys and censuses, as well as data from four rural areas in Senegal and Mali in which census data have been linked to high-quality longitudinal data. In Senegal, data from three HDSS Sites (HDSS) (Delaunay et al., 2013; Pison et al., 2013) have been linked to the last two national censuses, while in Mali data from one rural area have been linked to the four national censuses (Hertrich, 1996, 2009).

1. Variations in the definition of households in questionnaires and data collection protocols: Despite the existence of international recommendations (United Nations, 2008; Randall et al. 2015), there is a great deal of heterogeneity in data collected on households (Randall et al. 2011, 2013). This task questions the tension between international definitions...
and practical guidance notes on the one hand, and specific local features on the other hand in Senegal and Mali. It also explores changes over time within these countries.

2. Intersecting views of African households: To what extent does the « statistical household » (van de Walle, 2006) bear resemblance to familial units that members identify with (Gastellu, 1984; Hertrich, 1996)? To what extent the shapes and boundaries of households vary across types of data collection operations? These issues will be addressed by comparing statistics on households provided from different sources on a same population (HDSS and Census) and by further analysis on specific items, as the impact of seasonal migrants in shaping living arrangements, or the percentage of particular family patterns (female-headed households, single-parent households…).

3. Effects of specific definitions of households on demographic estimates and poverty measures: The more or less inclusive delineations of households may affect poverty measures in a population (Randall and Coast, 2015), for example through the proportions of isolated individuals. It can also interact with demographic estimates, for instance child mortality through the higher risk of omission of children not directly related to the household head and possibly more vulnerable (orphans). The effects of definitions of households on demographic and socio-economic o will be addressed (1) at the aggregate level, by computing the same indicator for the same populations using different sources and different definitions of household, and (2) at the individual level by identifying the "blind spots" and distortions associated with protocols for enumerating households.
## List of deliverables

<table>
<thead>
<tr>
<th>Deliverable Number</th>
<th>Deliverable Title</th>
<th>Lead beneficiary</th>
<th>Type</th>
<th>Dissemination level</th>
<th>Due Date (in months)</th>
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<tr>
<td>D4.4</td>
<td>Policy brief on &quot;Family systems and quality of life&quot;</td>
<td>3 - UNIGE</td>
<td>Report</td>
<td>Public</td>
<td>48</td>
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<tr>
<td>D4.5</td>
<td>Atlas on families and socio-economic indicators.</td>
<td>1 - INED</td>
<td>Report</td>
<td>Public</td>
<td>42</td>
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## Description of deliverables

Deliverables will be organized along the following features:

-- A working paper related to each task of the WP, based on the scientific production of the participants (articles, papers, communications...)

-- Several more policy-oriented document related to each task/to the whole WP, based on the round-tables, meetings, other contacts with stakeholders in the course of the project and/or translation of research findings into policy insights

-- A finalized product specific to the WP

D4.1 : Contributions on household structures in Burkina Faso, Mali and Senegal [42]
Working paper summarising the main findings of task 1 under WP4, on household structures in Burkina Faso, Mali and Senegal

D4.2 : Contributions on family environment, gender and intergenerational relations. [42]
Working paper summarizing the main findings of task 2 under WP4, on family environment, gender and intergenerational relations

D4.3 : Quality and comparability of data on household and family structures. Methodological Contributions. [42]
Working paper summarizing the main findings of task 3 under WP4, on methodological contributions to quality and comparability of data on household and family structures.

D4.4 : Policy brief on "Family systems and quality of life" [48]
Policy brief summarising the main findings of WP4 on « Family systems and quality of life » written on the basis of national workshops conclusions.

D4.5 : Atlas on families and socio-economic indicators. [42]
Electronic/web publication presenting families and socio-economic indicators in Burkina Faso, Mali et Senegal

## Schedule of relevant Milestones

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