Measuring the labour content in the agri-food sector: conceptual inputs

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Métaprogramme GloFoodS
General introduction

• Little is known about the quantity and quality of labour in agriculture and about the employment implications of different development options for the sector, depending on:
  • The types of farms - family farms, family farms with hired workers, and corporate farming
  • The types of techniques – between the Green revolution package and agro-ecology
  • The types of upstream and downstream linkages and their implications for rural diversification and job creation

• The limitation of existing databases (Desière et al. 2018)
  • Agricultural censuses (FAO): mostly targeted production, input use and farm characteristics
  • Labour Force Surveys (ILO): labour markets indicators, measuring informality in agriculture and rural activities is not one of their major objectives
  • Living Standards Measurement Studies (LSMS/LSMS-ISA)(WB): limitations exist about the accuracy and reliability of information collected on the workforce

• Some recent papers estimates the employment structure in the agri-food sector in SSA but they do not analyse it in relation with the agricultural model (Yeboah et al. 2018) (Allen et al. 2018)
Concepts: Sociological perspectives

• Labour/work (*travail*) concept:
  • A polysemic term that needs to be contextualized according to societies (its meaning depends on social and cultural context)
  • Definition: extensive (Supiot 1998) vs restrictive (Meda 2010)

• "The invention of employment": A work attached to a system of law and protection characteristic of welfare states

• Activity: the "universal" dimension of human action, which exists at all times and in all places (a basic and universal need in time and specific to the particular nature of human beings)

• Income-generating activity: Restricted approach to human activity that generates, direct or indirect, monetary or non-monetary, incomes for ensuring human livelihoods (material and social conditions)
Concepts: Statistical perspectives

- Employment, forms of work: ILO definitions

<table>
<thead>
<tr>
<th>Intended destination of production</th>
<th>for own final use</th>
<th>for use by others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own-use production work</td>
<td>Employment (work for pay or profit)</td>
<td>Unpaid trainee work</td>
</tr>
<tr>
<td>of services</td>
<td>of goods</td>
<td>Other work activities</td>
</tr>
</tbody>
</table>

Volunteer work

- **Persons in employment** are defined as all those of working age who, during a short reference period, were engaged in any activity to produce goods or provide services for pay or profit. → restrictive for regarding “subsistence” agriculture

Source: Resolution I, 19th ICLS (ILO 2013)
Concepts: Labour content definition

- Labour content definition
- Working TIME
- Working CONDITIONS
  - Labour return/compensation
  - Security in the workplace
  - Labour drudgery
  - Social protection for families
  - Workers rights

Labour intensity indicator(s)

Decent labour/quality indicator(s)
Agricultural Model = Major technical options + Socio-economic organization of the production in the agri-food-sector

Some variables over determine the agricultural model
Include all actors of the food system, not only the farmers
Not to be considered as model derived from a mathematical formalism

Environmental and social sustainability of the growth regime
At the territorial/national levels
Conceptual framework for measuring the labour content in the agri-food sector

UPSTREAM ACTIVITIES
Suppliers: Seeds, fertilizers, pesticides, water, animal feed, veterinary services, etc.

Rural Households engaged in agriculture
- Non farm
- On farm
- Off farm

Corporate farms
Type of products and techniques
Cropping and livestock systems

Agricultural contractors
Type of products and techniques
Cropping and livestock systems

VALUE CHAINS

DOWNSTREAM ACTIVITIES
Post-harvest processing, packaging and marketing
Example 1: An agricultural model based on agroecology production and integration to local value chain
Example 2: An agricultural model based on **conventional production** (motorized and input intensive) and integration to **global value chains**

Limit of the value chain for assessing the labour content
Labour content of rural households engaged in agriculture

UPSTREAM ACTIVITIES
Suppliers: Seeds, fertilizers, pesticides, water, animal feed, veterinary services, etc.

Rural Households engaged in agriculture
- Non farm
- On farm
- Off farm

Type of products and techniques
Cropping and livestock systems

Corporate farms

Agricultural contractors

DOWNSTREAM ACTIVITIES
Post-harvest processing, packaging and marketing

VALUE CHAINS
- UPSTREAM ACTIVITIES
- Rural Households engaged in agriculture
- Corporate farms
- DOWNSTREAM ACTIVITIES

Suppliers: Seeds, fertilizers, pesticides, water, animal feed, veterinary services, etc.
Labour content in rural households engaged in agriculture

RURAL HOUSEHOLDS INCOMES

DOMESTIC ACTIVITIES

ON-FARM ACTIVITIES
crop and livestock products, processing of products, hunting, fishing, gathering

NON-FARM ACTIVITIES

OFF-FARM ACTIVITIES

NON-HOUSEHOLD MEMBERS

Wage workers (temporary or permanent basis), unpaid trainee workers, volunteer workers

HOUSEHOLD MEMBERS

Contributing family workers

• Two options:
  - Looking at the full range of activities (including non-farm and domestic activities) for understanding households’ reproduction patterns
  - Looking at agricultural activities only (on-farm and off-farm)
Labour content: capital and labour determinants

UPSTREAM ACTIVITIES
Suppliers:
- Seeds, fertilizers, pesticides, water, animal feed, veterinary services, etc.

Rural Households engaged in agriculture
<table>
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<td>Type of products and techniques</td>
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Corporate farms
Type of products and techniques
- Cropping and livestock systems

Agricultural contractors

DOWNSTREAM ACTIVITIES
Post-harvest processing, packaging and marketing

VALUE CHAINS
Suppliers: Seeds, fertilizers, pesticides, water, animal feed, veterinary services, etc.
Labour content: capital and labour determinants

- First stage: The level of mechanization (capital)
- Second stage: The type of labour (degree of family labour in the production process)

<table>
<thead>
<tr>
<th>Low level of mechanization (manual)</th>
<th>Intermediate level of mechanization (animal traction)</th>
<th>High level of mechanization (motorized)</th>
</tr>
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<tbody>
<tr>
<td>essentially family labour</td>
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<tr>
<td>family and permanent hired labour</td>
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Implications in terms of data collection

CROPPING SEASON(S) / MONTHS

0

STRUCTURE
- HH labour force
- HH assets
- HH cropping and livestock systems
- HH Integration in value chains
- HH Other activities and sources of income

WORKING TIME AND WORKING CONDITIONS
For every person involved in agricultural and livestock activities as well as non-agricultural activities: HH members, hired workers, contractors

INPUT USE OUTPUTS AND INCOMES
Reporting of expenditures and outputs value (self-consumption and sales)
### Corporate farms surveys

#### STRUCTURE
- Cropping systems / Acreage
- Equipment
- Downstream operations
- Workforce: number, status

#### WORKING TIME AND WORKING CONDITIONS
- Working time of different type of workers
- Working conditions of different type of workers

#### FARM OUTPUT
- Farm outputs and sells

### Data collection

<table>
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<th>Data collection</th>
<th>Number of survey</th>
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<td>Interview with farm managers</td>
<td>2 to 4 interviews during the cropping season</td>
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<tr>
<td>- Indirect sources</td>
<td></td>
</tr>
<tr>
<td>Interview with farm managers AND employees</td>
<td>Selection process of employees to be defined (e.g. « at home »)</td>
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Implications in terms of data collection

**STRUCTURE**
- Economic unit labour force
- Economic unit assets
- Activities description

**WORKING TIME AND WORKING CONDITIONS**
Working time and working conditions of every person involved in the economic unit: HH members, hired workers, contractors

**INPUT USE OUTPUTS AND INCOMES**
Reporting of expenditures and outputs value
Conclusion

• Understanding the labour content in the agricultural sector (and in agroecological transition) :
  • Is related to the worldwide debate on « the future of work »
  • Has to be put in relation with structural change of national economies (macro-transition)

• Measuring the labour content requires specific and accurate methods and in-depth surveys for comparison and for feeding the debate
The different structures of labour module in LSMS, LSMS-ISA and LFS (source: Desiere and al. 2018)

**LSMS(-ISA) surveys**

Stylized questions on:
- Wage employment
- Household enterprises
- Farming activities

- 1st and 2nd wage employment
- Job search/availability
- Hours worked in wage employment
- Earnings

Optional questions: unpaid work, casual work, control over earnings, labor underutilization, unpaid care work, informality

**Some LSMS-type surveys**

List of wage activities

- Wage employment
- Job search/availability
- Hours worked by activity
- Earnings

**LFS**

Screening question, followed by stylized questions on:
- Wage employment

- 1st and 2nd wage employment
- Job search/availability
- Hours worked in wage employment
- Earnings

Optional questions: retrospective questions, labor underutilization, informality