

Agri-Gender Database

A statistical toolkit for the production
of sex-disaggregated agricultural data



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1. Introduction:

This brochure introduces the Agri-Gender Database, a statistical toolkit for the production of sex-disaggregated agricultural data. The toolkit provides examples of questions / questionnaire components and table formats for the collection and analysis of sex-disaggregated agricultural data. The availability of such data is critical for the planning of sustainable agricultural development in general, as well as the preparation of improved responses to specific development issues such as poverty reduction, rural development, food insecurity, HIV/AIDS prevention and mitigation, monitoring of Millennium Development Goals achievements and other internationally set development targets and efforts in support of gender equality and women's empowerment.

This toolkit was developed in response to a request from the African Commission on Agricultural Statistics (AFCAS) for clear technical guidance on the collection of sex-disaggregated data, sometimes called gender statistics. It forms part of FAO's general concern for strengthening the capacity of national statistics systems in the framework of the 2010 Round of the World Programme for the Census of Agriculture. The toolkit has been developed in a joint effort by the FAO Regional Office for Africa (FAORAF), Accra, Ghana and the FAO Statistics Division, Rome, Italy, based on contributions provided by numerous National Statistics Departments.

The Database targets the following users:

- **Agricultural statisticians;**
- **Development planners and policy makers, especially of Ministries of Agriculture, the Promotion of Women and of Economic Planning;**
- **Researchers; and**
- **Gender advocates.**

The toolkit is considered a "living" document, meaning that it will be revised on the basis of relevant suggestions and comments received from its users or significant new developments in the field of agricultural and / or gender statistics.

2. The Agri-Gender Database:

Governments, decision-makers, development agencies, researchers, planners and other development partners have increasingly become aware of the importance of integrating gender concerns into all aspects of the agricultural sector's development. This toolkit shows how gender-sensitive approaches can be incorporated into standard agricultural data collection exercises. It also illustrates the diversity of data on gender that can be collected to allow for a better understanding of the roles, activities and responsibilities of men and women in the agricultural sector, the opportunities and constraints that they face and the identification of areas requiring action for achieving greater equality between both groups. The toolkit enables individuals and organisations to determine what gender sensitive agricultural data they require and how to collect and analyse such data. The examples given are easily adapted to other activities -such as livestock production, fishing or forestry-, other countries or regions.

The 1st edition focuses on Africa because of the large number of relevant examples available from this region. It includes examples of gender relevant questions and table formats used in agricultural censuses from Benin, Botswana, Burkina Faso, Côte d'Ivoire, Ethiopia, The Gambia, Guinea, Mali, Mauritania, Niger, Senegal, Tanzania, Togo, Tunisia and Uganda between 1993 and 2006. These examples, which are presented in their original language, are easy to understand with the use of the English - French and French - English glossaries provided.

The Database is structured around nine data items.

The first four data items focus on data collection concerning the roles and responsibilities of men and women in the agricultural sector and the remaining five address development issues such as food security, poverty reduction, the advancement of gender equality and empowerment of women. The list of items is not exhaustive but highlights subjects that are considered essential for gender specific analysis of the agricultural sector.

Data items providing information on the roles of men and women farmers in the agricultural sector:

Items

1. Agricultural population and households
2. Access to productive resources
3. Production and productivity
5. Labour and time-use

Data items considered essential for planning efforts towards food security and poverty reduction and for advancing gender equality and the empowerment of women:

Items

4. Destination of agricultural produce
6. Income and expenditures
7. Membership of agricultural / farmer organisations
8. Food security
9. Poverty indicators

The toolkit consists of two sections.

STORAGE OF AGRICULTURAL PRODUCE

Example 4.6 Crop storage (Tanzania)

This example focuses on crop storage practices of agricultural households. It illustrates differences that may exist between male and female-headed households in terms of their abilities to store agricultural produce and their storage practices. Cross-tabulation of the outcomes with the sex of the head of household will provide sex-specific information on the type of crops stored (columns 1 and 2), quantities stored (column 3), storage methods used (column 4), the storage period (column 5), main purpose of storage (column 6) and estimated storage losses (column 7).

9.1 Did your household store any crops during the 2002/03 agricultural year? (Yes =1, No = 2)
 If the response is "No" go to section 10.0

9.2 For each of the listed crops, provide the following details on storage

S/N	Crop name	Stored Y=1, N=2	Current quantity stored (kg)	Method of storage	Normal duration of storage	Main Purpose	Estimate storage loss
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
9.2.1	Maize	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.2	Paddy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.3	Sorghum/ Millet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.4	Beans, peas, etc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.5	Wheat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.6	Coffee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.7	Cashew nut	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.8	Tobacco	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.9	Cotton	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.10	Groundnuts/bambara	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Main method of storage (col. 4)
 1 = In locally made traditional structure
 2 = In improved locally made structure
 3 = In modern store
 4 = In sacks/ open drum
 5 = In airtight drum
 6 = Unprotected pile
 8 = Other

Duration of storage (col. 5)
 1 = Less than 3 months
 2 = Between 3 and 6 months
 3 = Over 6 months

Main purpose of storage (col. 6)
 1 = Food for the household
 2 = To sell for higher price
 3 = Seed for planting
 4 = Other

Storage loss (col. 7)
 1 = Little or no loss
 2 = Up to ¼ loss
 3 = Between ¼ and ½ loss
 4 = Over ½ loss

Source: United Republic of Tanzania – Agricultural Sample Census 2002/2003 – Small holder/Small Scale Farmer Questionnaire: Section 9

NOTE – From a gender analysis perspective, it would also be interesting to collect data on the sex of the main decision-maker in relation to the use of stored crops. Such information gives greater insight into intra-household decision-making processes and is essential for the development of effective programmes and policies aiming to improve the storage capabilities of agricultural households.

SECTION 1

presents examples of gender-relevant questions and questionnaire components obtained from agricultural censuses.

Each example is assessed from a gender perspective and, where relevant, suggestions are made for improvements.

CROP STORAGE

Table 4.5 Main purpose of storage of selected crops by sex of holder at national and sub-national level

This table illustrates whether differences can be observed between male and female-headed households with regard to the main purpose of storage for selected crops.

Region/ Crops	Male holders				Female holders			
	N of male holders storing selected crop	Main reason for storage			N of female holders storing selected crop	Main reason for storage		
	Food for the house hold	Sell at better price	Seed for planting	Other	Food for the house hold	Sell at better price	Seed for planting	Other
Region: ...								
Maize								
Paddy								
Sorghum								
Etc.								
Region: ...								
National								

☞ Same for other agricultural products
Sources: Ethiopia (E 4.3) and Tanzania (E 4.6)

Table 4.8 Estimated storage loss by type of crop and sex of the head of household at national and sub-national level

This table illustrates whether differences can be observed between male and female headed households with regard to storage losses. Higher losses could be linked to the households' inability to invest in appropriate storage facilities.

Region / Crop	Male headed household				Female headed household			
	N of house holds produc ing crop	Storage losses			N of house holds produc ing crop	Storage losses		
	Little or no loss	Up to ¼ loss	Between ¼ and ½ loss	Over ½ loss	Little or no loss	Up to ¼ loss	Between ¼ and ½ loss	Over ½ loss
Region: ...								
Maize								
Paddy								
Sorghum								
Etc.								
Region: ...								
National								

☞ Same for other agricultural products such as fruit
Source: Tanzania (E 4.6)

SECTION 2

contains examples of tables, allowing for presentation and analysis of the data collected through the questions presented in the section 1. The tables build on the more classical presentation of agricultural census data, while allowing for the presentation of sex-specific information. It is recommended that data are presented at national and sub-national level as gender disparities usually show better at lower levels of data aggregation. The suggested tables allow for data presentation at different levels.

3. How to use the toolkit:

The toolkit can be used as a guideline / reference document by individuals and organisations who wish to collect and use gender-specific agricultural information for gender-sensitive project planning, design, implementation, monitoring and evaluation. The table below provides information on the type of sex-disaggregated data covered by each data item.

Data Item	Focus
Data Item 1: Agricultural Population and Households	<p>Data collected by agricultural censuses on the agricultural population and households can provide a wealth of gender specific information on the structure and socio-economic characteristics of the agricultural population and the composition of agricultural households. Such information is essential for accurate identification of target groups for agricultural programmes and poverty reduction efforts as well as for the development of appropriate agricultural and rural support programmes which take into account existing differences in the roles and responsibilities of men and women (adults, children and elders) in relation to agricultural production, the type of agricultural units managed by men and women.</p> <p>Analysis of the structure of the agricultural population and in specific the number of male and female farmers per age group at national and sub-national levels offers insight into the availability of agricultural labour and can reflect the gender specific impact of migration trends, civil conflicts and the HIV/AIDS pandemic on the farm labour force. These developments need to be taken into consideration by agricultural planners and policy makers as they may lead to shortages of male and / or female labour in rural areas and to an overall decline in agricultural production and productivity.</p> <p>The examples given in data item 1 allow for the collection and analysis of a wide range of age and sex-specific data related to the agricultural population, the households and its members.</p>

Data Item	Focus
<p>Data Item 2: Access to productive resources</p>	<p>Sex-disaggregated data on men and women’s access to and control over productive resources help explain gender differences in agricultural production and productivity and provide greater insight into measures that can be taken to support those who lack access to and control over productive resources. It enables planners to consider whether a proposed programme or project would adversely affect the access of specific groups to productive resources, could change socio-economic relations between men and women vis-à-vis their control over resources or whether it could promote equal access. Such information is essential for the development of effective and gender sensitive agricultural plans, policies, programmes and strategies to enhance food security, reduce poverty, promote gender equality and empower women (Millennium Development Goals 1 and 3).</p> <p>Information on access to and the use of agricultural inputs by male and female holders and sub-holders can be of particular interest to dealers or providers of agricultural inputs and other stakeholders aiming to enhance the production, productivity and incomes of agricultural households in general or vulnerable groups such as female farmers. Sex-disaggregated data on access to credit / loans can be of particular relevance to organisations implementing credit and saving programmes in agricultural areas.</p> <p>Data item 2 provides examples for the collection and analysis of sex-disaggregated data on men’s and women’s access to productive resources such as land and water, agricultural inputs, labour, equipment, credit, information, extension services and training programmes.</p>
<p>Data Item 3: Production and productivity</p>	<p>Sex-disaggregated data on agricultural production and productivity provide insight into who produces what and the amounts produced especially when presented at sub-holding level. This information is particularly relevant for monitoring the impact of agricultural policies and programmes on male and female farmers’ production and productivity levels and for addressing differences in their production factors.</p>

Data Item	Focus
	<p>Women's contribution to agricultural production is frequently underreported because the results of their labour are recorded as being produced by the formal head of holding, commonly a male holder, when data presentation is aggregated at household / holding level. Moreover, agricultural censuses have only recently started collecting more detailed information on agricultural activities which involve large numbers of women farmers such as kitchen gardening, gathering of (forest) products, rearing of small animals, poultry farming, horticulture and (peri-) urban agriculture.</p> <p>Data item 3 provides examples for the collection and analysis of sex-disaggregated data with regard to food and cash crop production, horticulture, animal production, aquaculture, agro-forestry, hunting and gathering activities and production constraints faced by agricultural producers.</p>
<p>Data Item 4: Destination of agricultural produce</p>	<p>Sex-disaggregated data relating to the consumption, storage, processing and marketing of agricultural products provide greater insight into the involvement of men and women in these activities. Although both men and women are involved in these activities, their level and kind of involvement may differ based on the crop or produce involved and the geographical areas covered. Such information is important for agricultural planners and policy makers as they may need to develop different programmes and policies for male and female farmers if they wish to enhance the country's storage, agro-processing and marketing capacities. This kind of data is also required to determine the impact of applied policies and strategies. Many governments have introduced measures during the past two decades that promote trade and market liberalization and favour large-scale commercial farming and export cash crop farming over household subsistence production. Small-scale farmers were adversely affected in particular by the opening of local markets to cheaper imported agricultural products and the removal of agricultural subsidies. This shift has had a greater impact on women farmers because they operate at lower production levels and have less options and smaller risk margins to adapt to new market situations.</p>

Data Item	Focus
	<p>The examples given in data item 4 can be used to determine whether significant differences exist between male and female (sub) holders with regard to the consumption, storage, processing and marketing of agricultural produce.</p>
<p>Data Item 5: Labour and time-use</p>	<p>Labour is an important production factor in agricultural production in most developing countries and much of the kind and scope of agricultural activities performed depends to a large degree on holders' access to –family- labour. Women provide a large share of unpaid family labour, which is seldom taken into account in agricultural planning and programme implementation. Having accurate information on the structure of the labour force, including the gender division of labour and time-use, is essential from a development perspective, as it contributes to a better overall understanding of labour relationships in the agricultural sector and the impact of, for example, poverty reduction programmes or the HIV/AIDS pandemic on the agricultural labour force.</p> <p>Data item 5 includes examples for the collection and analysis of sex-disaggregated data on farm labour used on own holdings, farm labour provided to other holdings, farm labour remunerations, the division of labour and responsibilities, and time use.</p>
<p>Data Item 6: Income and expenditures</p>	<p>Sex-disaggregated data on the income and expenditures of agricultural households is essential for policy and programme designers who wish to channel resources and services to the poorest households. Sex-disaggregated data on the decision making processes concerning households' income and expenditures provides useful information on intra-household management processes.</p> <p>The examples included in data item 6 mainly relate to the collection and analysis of sex-disaggregated data at holding or household levels, as agricultural censuses are less indicated for data collection on individual household members' income and expenditures. Such information is usually collected through agricultural or household surveys.</p>

Data Item	Focus
<p>Data Item 7: Membership of agricultural / farmer organizations</p>	<p>Sex-disaggregated data on the membership of agricultural / farmer organisations shows whether any gender differences exist. Membership of these organisations often strengthens the socio-economic position of farmers, increases their access to information and gives them easy access to services provided. Women’s membership is often hampered by their lower literacy levels, time constraints, inability to comply with membership conditions, gender biased selection procedures and the prevalence of traditional value systems that restrict women’s participation in public life. Such information is important for programmes and policies which aim to enhance the agricultural production and productivity of households through agricultural / farmer organisations.</p> <p>The examples presented in data item 7 relate to the membership of agricultural / farmer organisations (such as farmers’ groups, associations, cooperatives, unions or marketing organisations) by sex, age, position within the household, type of organisation, level of involvement and services provided.</p>
<p>Data Item 8: Food security</p>	<p>Sex-disaggregated data relating to food security can contribute to a better understanding of intra-household dynamics playing a role in the household’s food security situation and bring out women’s contribution to household food security. Such information is of particular importance for the elaboration of policies, programmes and activities aimed at improving the well-being and health status of agricultural populations and targeting of vulnerable households. Studies have shown that, depending on whether they receive substantial remittances or not, female-headed agricultural households are more vulnerable to food insecurity because of their constraints in accessing and controlling productive resources and time constraints they encounter due to a multitude of responsibilities.</p> <p>Data item 8 includes examples that can be used to collect and analyse sex-disaggregated household level data on food sources used, (changes in) food consumption patterns and reasons for food shortages.</p>

Data Item	Focus
<p>Data Item 9: Poverty indicators</p>	<p>The overall development goal of most governments is to achieve sustainable economic growth while reducing poverty. Agricultural censuses can play an important role in this regard, as they contribute to a better understanding of the underlying causes of poverty, provide baseline data for the planning of poverty alleviation programmes and offer the necessary references to monitor the impact of such policies.</p> <p>Sex-disaggregated agricultural data can provide greater insight into differences in poverty levels that may exist between men and women, female and male-headed agricultural households or other sub-groups of the agricultural sector..</p> <p>Examples provided in data item 9 focus on housing conditions, water and energy sources used, toilet facilities used, ownership of household assets as well as livelihood and financial constraints encountered.</p>

For more information on the Agri-Gender Database, or to download the toolkit, refer to:
<http://www.fao.org/gender/agrigender/en/>

For comments and suggestions or free CD copies of the toolkit, please contact:

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