Ghana - Afrint Household Level Data
2002 and 2008, Round I & II

Lund University - Swedish Government
Report generated on: September 12, 2014

Overview

Identification

ID NUMBER
GHA-C-DAMAA-AFRINT-2014-v1.0

Version

VERSION DESCRIPTION
Version1.0 (September, 2014)

PRODUCTION DATE
2010-09-30

Overview

ABSTRACT
Afrint intensification of food crops agriculture in sub-Saharan Africa Swedish-African Research Network Agricultural development and its relation to food security and poverty alleviation Primary research in nine sub-Saharan African countries. 
Afrint - three phases 2001-2016.


KIND OF DATA
Aggregate data [agg]

UNITS OF ANALYSIS
Household

Scope

NOTES
Scope of Survey Round I (2001-2005)

Household demographic and socio-economic characteristics

Farm and crop management

Maize

Cassava

Cassava, marketing conditions

Sorghum

Rice

Other food crops and vegetables

Non-food cash crops

Land resources
Livestock
Labour resources
Institutional conditions
Incomes and expenditures
Scope of Survey Round II (2007-2010).

Household Demographic and Socio-Economic Characteristics

Farm and Crop Management

Crops
Maize
Cassava
Sorghum
Rice
Rural - Urban and Rural - Rural Linkages (staple crops)
Other food crops and vegetables (for local markets)
Non-food cash crops (wholly or partly for export)

Agricultural Techniques

Land resources
Livestock & Fish

Livestock

<table>
<thead>
<tr>
<th>TOPICS</th>
<th>Vocabulary</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food (production, crisis)</td>
<td>World Bank</td>
<td></td>
</tr>
</tbody>
</table>

Coverage

GEOGRAPHIC COVERAGE (1)
Sub-Saharan Africa, (Ethiopia, Ghana, Keny, Malawi, Nigeria, Tanzania, Uganda, Zambia)

GEOGRAPHIC COVERAGE (2)
Regions within selected countries

GEOGRAPHIC UNIT
Regions within selected countries

UNIVERSE
Farming Household

Producers and Sponsors
PRIMARY INVESTIGATOR(S)

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lund University</td>
<td>Swedish Government</td>
</tr>
</tbody>
</table>

OTHER PRODUCER(S)

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goran Djurefeldt</td>
<td>Lund University</td>
<td>Project leader</td>
</tr>
<tr>
<td>Mikael Hammarkjold</td>
<td>Lund University</td>
<td>Team member</td>
</tr>
<tr>
<td>Hans Holmen</td>
<td>Lund University</td>
<td>Team member</td>
</tr>
<tr>
<td>Magnus Jirstrom</td>
<td>Lund University</td>
<td>Team member</td>
</tr>
<tr>
<td>Rolf Larsson</td>
<td>Lund University</td>
<td>Team member</td>
</tr>
<tr>
<td>Agnes Anderson Djurefeldt</td>
<td>Lund University</td>
<td>Team Leader</td>
</tr>
</tbody>
</table>

FUNDING

<table>
<thead>
<tr>
<th>Name</th>
<th>Abbreviation</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swedish International Development Authority</td>
<td>Sida</td>
<td>Funder</td>
</tr>
<tr>
<td>Bank of Sweden Tercentenary Foundation</td>
<td>BoSTF</td>
<td>Funder</td>
</tr>
</tbody>
</table>

Metadata Production

METADATA PRODUCED BY

<table>
<thead>
<tr>
<th>Name</th>
<th>Abbreviation</th>
<th>Affiliation</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centre for Data Archiving, Management, Analysis and Advocacy</td>
<td>C-DAMAA</td>
<td>University of Cape Coast</td>
<td>Documentation of the Study</td>
</tr>
</tbody>
</table>

DATE OF METADATA PRODUCTION
2014-09-12

DDI DOCUMENT VERSION
Version 1.0 (September, 2014)

DDI DOCUMENT ID
DDI-GHA-C-DAMAA-AFRINT-2002-2008-v1.0
Sampling

Sampling Procedure

Data collection for the first round of the Afrint project was made in 2002. The data collected as part of the second round are referred to as 2008 data, although in some cases collected in late 2007. From the outset the research team selected five case study countries: Ghana, Kenya, Malawi, Nigeria and Tanzania. Outside francophone Africa, these five countries were ideally suited, in the researchers' view, to charting progress in intensification, induced from below by farmers themselves, or state induced, as in the Asian Green Revolution. At the insistence of Sida, to the original five countries, four more were added: Ethiopia, Mozambique, Uganda and Zambia. Unlike the original five, the three last mentioned countries were deemed less constrained with respect to productive resources in agriculture. Ethiopia on the other hand is peculiar in an African context, with its long history of plough agriculture, and feudal-like social formation. In this project, the heterogeneous sample of countries has proved less cumbersome to work with than one might have expected.

Formally, the Afrint sample was drawn in four stages, of which the country selection described above was the first one. The next stage was regions within countries, followed by selection of villages within regions, and with selection of farm households as the last stage. All stages except the final one have been based on purposive sampling. Data collection was sought to be made at all four levels. The households sampled within these countries were selected with respect to the agricultural potential of the areas in which they reside. The intention was to capture the dynamism in the areas that are 'above average' in terms of ecological and market (infrastructure) endowments but excluding the most extreme cases in this regard. For logistical reasons we could not aim for a sample which is representative in a statistical sense. Instead we aimed at a sample which is illustrative of conditions in the maize-cassava belt, excluding both lowpotential dry and remote areas and extreme outliers at the other end of the scale.

Thus we used a four-stage sample design, with purposive sampling at all stages, except the last one, where households were sampled after having made up household lists. When we compare point estimates from the sample with those from other sources, for examples yields for the various crops with FAO statistics, no apparent sample bias has been detected.

In addition to household questionnaires we also used village questionnaires. Respondents to village interviews were key persons, like village leaders and extension agents. Investigators were also instructed to conduct focus group interviews with representatives for various segments of the village population, including women farmers. When going for a second round and a panel in 2008, we went for a balanced panel design, i.e. constructing the 2008 sample so that in itself it would be representative of village populations in 2008. This also involved sampling descendants when a household had been partitioned since 2002. In case of sizeable in-migration to a village, we also provided for sampling from the newly arrived households. The 2002-2008 panel thus is a subset of the two cross sectional samples. In itself this subset is not statistically representative of the village population in any of the two years.

Deviations from Sample Design

20.6 Percent

Response Rate

79.4 Percent

Weighting

The weight for the data was not provided
**Questionnaires**

**Overview**

Scope of Survey Round I (2001-2005)

Household demographic and socio-economic characteristics
Farm and crop management
Maize
Cassava
Cassava, marketing conditions
Sorghum
Rice
Other food crops and vegetables
Non-food cash crops
Land resources
Livestock
Labour resources
Institutional conditions
Incomes and expenditures

Scope of survey II
Household Demographic and Socio-Economic Characteristics
Farm and Crop Management
Crops
Maize
Cassava
Sorghum
Rice
Rural - Urban and Rural - Rural Linkages (staple crops)
Other food crops and vegetables (for local markets)
Non-food cash crops (wholly or partly for export)
Agricultural Techniques
Land resources
Livestock & Fish
Livestock
Data Collection

Data Collection Dates

<table>
<thead>
<tr>
<th>Start</th>
<th>End</th>
<th>Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>2002</td>
<td>1 yrs</td>
</tr>
<tr>
<td>2007</td>
<td>2008</td>
<td>1 yrs</td>
</tr>
</tbody>
</table>

Time Periods

<table>
<thead>
<tr>
<th>Start</th>
<th>End</th>
<th>Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>2010</td>
<td>5 yrs</td>
</tr>
<tr>
<td>2001</td>
<td></td>
<td>5 yrs</td>
</tr>
</tbody>
</table>

Data Collection Mode

Face-to-face [f2f]

DATA COLLECTION NOTES

The research team worked with a two-pronged strategy for collecting data, building simultaneously on qualitative and quantitative methods. The core of the latter is a survey, which gives the quantitative backbone of the study. The study relied on two strategies: First by drawing as much as possible diachronic and historic data in the collection of qualitative material and other secondary data.

This was done in the macro studies, conducted by the partners in each country and subjected to comparative analysis by the Swedish team. Second, the research built a temporal dimension into the survey by asking the recall method, asking farmers to compare the present situation to earlier times.

Data Collectors

<table>
<thead>
<tr>
<th>Name</th>
<th>Abbreviation</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gran Djurfeldt</td>
<td>G.D.</td>
<td>Dept of Sociology, Lund University</td>
</tr>
<tr>
<td>Hans Holmén</td>
<td>H.H.</td>
<td>Institution for Thematic research, Linkping University</td>
</tr>
<tr>
<td>Magnus Jirström</td>
<td>M.J.</td>
<td>Dept of Social and Economic Geography, Lund University</td>
</tr>
<tr>
<td>Agnes Andersson</td>
<td>A.A</td>
<td>Dept of Social and Economic Geography, Lund University</td>
</tr>
<tr>
<td>Johanna Bergman-Lodin</td>
<td>J.B</td>
<td>Dept of Social and Economic Geography, Lund University</td>
</tr>
<tr>
<td>Cheryl Sjström</td>
<td>C.S.</td>
<td>Dept of Social and Economic Geography, Lund University</td>
</tr>
<tr>
<td>Dr. Wolday Amha</td>
<td>W.A</td>
<td>Ethiopian Economic Association</td>
</tr>
<tr>
<td>Dr. Teketel Abebe</td>
<td>T.A</td>
<td>Addis Ababa University</td>
</tr>
<tr>
<td>Dr. Mulat Demeke</td>
<td>M.D</td>
<td>Addis Ababa University</td>
</tr>
<tr>
<td>Professor Willis Oluoch-Kosura</td>
<td>W.O</td>
<td>African Economic Research Consortium (AERC)</td>
</tr>
<tr>
<td>Dr. Stephen K. Wambugu</td>
<td>S.K.W</td>
<td>Department of Geography, Kenyatta University</td>
</tr>
</tbody>
</table>

SUPERVISION

The enumerators and supervisors were trained at the same time, though supervisors received extra coaching on supervision. Enumerators stayed in the villages during the survey period. Two enumerators were involved in administering the household questionnaires at a time. While one was probing, the other was writing down the answer. Through this, errors in both probing and recording were minimized. Participatory Rural Appraisal techniques were used to administer the village level questionnaire in the selected villages.
Data Processing

Data Editing

No editing specification given

Other Processing

Not reported
Data Appraisal

Estimates of Sampling Error
No sampling error estimates given

Other forms of Data Appraisal
No other forms of appraisal given.
Related Materials

Questionnaires

Afrint Project Questinnare 2002 and 2008

Title Afrint Project Questinnare 2002 and 2008
subtitle AFRINT 2002 and 2008
Author(s) Swedish team Göran Djurfeldt (team leader), Dept of Sociology, Lund University Hans Holmén, Institution for Thematic research, Linköping University Magnus Jirström, Dept of Social and Economic Geography, Lund University Agnes Andersson, Dept of Social a
Date 2014-09-12
Country Ghana
Language English
Contributor(s) Centre for Data Archiving, Management, Analysis and Advocacy (C-DAMAA)
Publisher(s) Centre for Data Archiving, Management, Analysis and Advocacy (C-DAMAA)
Description This is the questionnaire for Afrint household survey I.
Scope of survey I
Household demographic and socio-economic characteristics
Farm and crop management
Maize
Cassava
Cassava, marketing conditions
Sorghum
Rice
Other food crops and vegetables
Non-food cash crops
Table of contents
Land resources
Livestock
Labour resources
Institutional conditions
Incomes and expenditures
Rural - Urban and Rural - Rural Linkages (staple crops)
Other food crops and vegetables (for local markets)
Non-food cash crops (wholly or partly for export)
Agricultural Techniques
Land resources
Filename Afrint_I_household_questionnaire.pdf

Afrint Project Questinnare II

Title Afrint Project Questinnare II
subtitle Household information
Author(s) Swedish team Göran Djurfeldt (team leader), Dept of Sociology, Lund University Hans Holmén, Institution for Thematic research, Linköping University Magnus Jirström, Dept of Social and Economic Geography, Lund University Agnes Andersson, Dept of Social a
Date 2014-09-12
Country Ghana
Language English
Contributor(s) Centre for Data Archiving, Management, Analysis and Advocacy (C-DAMAA)
Publisher(s) Centre for Data Archiving, Management, Analysis and Advocacy (C-DAMAA)
Description This is the questionnaire for Afrint household survey I
Reports

The Millennium Development Goals and the African Food Crisis-2011

Title: The Millennium Development Goals and the African Food Crisis-2011
Subtitle: Afrint II REPORT-2011
Author(s): Göran Djurfeldt, Agnes Andersson, Hans Holmén, Magnus Jirström
Date: 2014-09-12T03:00
Country: Ghana
Language: English
Contributor(s): Centre for Data Archiving, Management, Analysis and Advocacy (C-DAMAA)
Publisher(s): Centre for Data Archiving, Management, Analysis and Advocacy (C-DAMAA)
Description:
This report summarises research carried out during three years (2007–2010) in the Sida-financed Afrint II project. The most salient, policy-relevant conclusions deal with maize, which is the biggest food crop in sub-Saharan Africa (SSA), and with seed-fertilizer technology, commercialisation and impacts of government policies.
Table of contents:
Background and methodology
Comparing cross-sections 2002 and 2008
Agricultural policy options
Concluding reflections on policy relevance
Looking ahead
References
Filename: Report.pdf

Other materials

Afrint Project

Title: Afrint Project
Subtitle: African food crisis - the Nigerian case study
Author(s): Kormawa, P., Okike, I., Okechukwu, R., Akande, S. O.
Date: 2014-09-12
Country: Nigeria
Language: English
Contributor(s): Centre for Data Archiving, Management, Analysis and Advocacy (C-DAMAA)
Publisher(s): Centre for Data Archiving, Management, Analysis and Advocacy (C-DAMAA)
Description: This document is an additional information on Afrint household level data under Nigeria survey.
BACKGROUND
Survey Methodology and data
Sampling of survey villages and households
Survey Implementation
Recruitment and Training of Enumerators
Field Supervision
Data Entry, Cleaning and Analysis
Proof reading to assure data quality
Village level determinants of agricultural intensification
Physical endowment of villages
Infrastructure and markets in selected villages
Public support to villages
Farmer organizations
Land Acquisition
Indicators of intensification at the village level

Descriptive and econometric analysis of household data
Econometric analysis
Analytical framework
Quantitative variables used in econometric models
Household socio-economic characteristics
Cassava and Maize Production Functions
Constraints to household food production
Productivity trends and adoption of new technologies
Trends in productivity of cassava and maize over time
Cassava productivity during pre-SAP, SAP and post-SAP periods
Maize productivity during pre-SAP, SAP and post-SAP periods
Determinants for cassava and maize technologies adoption
Maize production technology adoption
Cassava production technology adoption
Yield differences and commercialization of cassava and maize
Cassava yield difference
Maize yield difference
Crop Productivity and commercialization
Maize commercialization
Cassava commercialization
Summary and conclusions
Production gains and trends
Productivity

Extent in differences in technology adoption
Differences in marketing

Table of contents
Filename Notes.pdf