The Fifth Scientific Advisory Committee (SAC) Meeting of the Global Strategy to Improve Agricultural and Rural Statistics

Meeting Minutes

28-29th January 2016,
Mexico Room, FAO Headquarters
MEMBERS PRESENT
Michael Steiner (Chair)
Cristiano Ferraz (Vice-chair)

MEMBERS NOT PRESENT
Bakary Sacko

INVITED PARTICIPANTS
Naman Keita, Javier Gallego (JRC), Piero Conforti, Carlo Cafiero, Neli Georgieva, Mary Aude Even

DAY 1

Meeting opened with remarks by Global Office Coordinator, Christophe Duhamel

Mr. Duhamel expressed appreciation to all of the SAC members for their contribution to the Global Strategy (GS) by providing peer review on the research outputs. He also thanked the SAC members for their attendance of the meeting, and looked forward to their continued contributions in the research topics to be undertaken in 2016. Finally, Mr. Duhamel reported that the previous funding gap in the Research Component of the Global Strategy had been filled by the Department for International Development (DFID) which means that all research topics will be undertaken and the workload of the SAC is bound to increase.

- It was highlighted that there is a new SAC member, Dr. Dalisay “Dax” Maligalig who is the former Principal Statistician of the Asian Development Bank, and currently an Associate Professor at the University of the Phillipines at Los Bagnos.

F. Bolliger, Research Coordinator of the GO gave a brief presentation on the Status of the Implementation of the Research Program

Mr. Bolliger described the standard steps undertaken in the research program and noted that the entry point for SAC involvement is usually with the first draft of the Field Test Protocol, and before the final publication of the Guidelines. He went on to describe the status of each research program and the timeline of expected outputs. Notably, 12 Guidelines/Handbooks, 8 Technical Reports, and 5 Working papers have already been published. Eleven of these documents have been published since the last SAC.

Mr. Bolliger introduced the new lines of research to be started in 2016 including SUST: Data collection methods on sustainable agriculture, and FORE3: Extractive Agriculture (Food and non-food/non-timber forest products).

CONCLUSIONS AND RECOMMENDATIONS FROM DISCUSSIONS
- The SAC congratulated the Global Office (GO) for the strong research outputs, and providing Guidelines for different domains of agricultural statistics which did not exist before.
- Dissemination of the research products should be a high priority, and the GO’s efforts to provide translations to countries is well appreciated. The idea of translations of executive summaries into many languages was reiterated from the previous SAC.
- There is a need to demonstrate how the different lines of research connect to one another. It was suggested that the Action Plan could perhaps be updated to reflect the developments in the research program, and illustrate the linkages between the research topics.
**Guidelines on Food Balance Sheets (FBS)**

*Presentation was given by J. Schmidhuber, Deputy Director of Statistics Division, FAO*

Mr. Schmidhuber’s presentation included the background of the new methods contained in the Guidelines, addressed specific SAC comments, and noted the next steps in the development of the Handbook. The revision of the Handbook was motivated mainly by outdated methods and conversion factors, the lack of a formal balancing mechanism, and the need reapefficiency in data processing. Regarding the SAC comments, Mr. Schmidhuber commented on them one-by-one and agreed to provide further reference documents. The next steps for the Guidelines are to revise them based on SAC comments, roll out the new methodology, and complete the capacity development products. In addition, a methodology for a simplified version of the FBS should be developed, including “AMIS-like balances for market analysis”.

**CONCLUSIONS AND RECOMMENDATIONS FROM DISCUSSIONS**

- Despite the publication not being directly about primary data collection, the work is within the scope of the GS because of high demand from countries.
- The FBS are an analytical data product, which are based on, but not necessarily always following official data. Data imputation and publication of these statistics may have political implications, and some countries may not appreciate an outside organization like FAO making these computations. However, this is a concern that applies to all analytical datasets and all international organizations (IOs) and the FBS are no different in this regard from similar datasets produced by other IOs.
- The research on estimating food loss for the FBS should be linked to the research program of the GS on post-harvest losses. The GS research program must also take into account losses along the entire food chain.
- The maximum likelihood approach to the balancing equation marks a strong improvement in the methodology.
- The robustness of the model to the varying in conditions in countries needs to be explored.
- Despite the fact that in some countries there may be relatively few really important food items, the FBS must include all the products entire country to compute the dietary energy supply (DES). The DES is the central ingredient for FAO’s estimates of Undernourishment.

**Field Test Protocol (FTP) for Master Sampling Frames**

*Presentation was given by J. Delincé, Senior Consultant, GO*

Mr. Delincé presented the FTP by providing the list of research questions which the field test will attempt to address. The research questions fall into four main categories: frame construction, sampling strategies, estimation methods, and cost and benefits of using multiple frame options. There is a total of 19 research questions, and it was emphasized that these 19 questions cannot cover every single question anyone could have about building and using a master sampling frame. It was noted that these 19 questions will be addressed through field tests as well as desk work and that the countries Brazil, Rwanda, and Nepal have been selected to participate in the test.

**CONCLUSIONS AND RECOMMENDATIONS FROM DISCUSSIONS**

- The plan may be overly ambitious to meet the deadline of the end of 2015. Notably, a smaller similar set of questions were tested in the US, and it took 3-5 years.
- Colleagues at Sentinel will play an important role in providing and interpreting imagery. This will speed up the results and conclusively show the limits of using remote sensing.
- The use of unclustered points may work in developed countries, but in developing countries it will depend on the costs of getting from one point to another. It can be included in the desk study.
- It would be interesting to see the results of using EAs as PSUs for area frame. This could inform the dialogue between list frame and area frames.
- The Philippines is the only country known to have a master sample. The sample was developed in 2003 based on census data.
Agricultural and Rural Integrated Survey (AGRIS) – Concept Note

Presentation was given by François Fonteneau, Project Coordinator, Agricultural Market Information Systems (AMIS)

Mr. Fonteneau presented the rationale, methodology, status, next steps, and reacted to the comments received so far on the AGRIS Concept Note. The comments from SAC members were overall positive. The linkages with the census of agriculture need to be stated more clearly, and there were some suggestions on data items to be covered. The rationale behind the AGRIS program is primarily that data collection on agricultural is very weak in International Development Association (IDA) countries. Eight-five percent of IDA countries haven’t conducted an agricultural census in the last 5 years, and about 88% haven’t conducted any agricultural production surveys during the same period. Accordingly, there is a strong need for better agricultural data. The methodology includes the rotation of a core module and 4 other modules over a period of 10 years. The core module collects data on the holding, crop and livestock production, while the 4 rotating modules cover: economy, labor force, machinery, and production methods and the environment. The program also includes the development of a toolkit containing electronic CAPI surveys, software for data cleaning, analysis, and dissemination. The next step is finalizing the questionnaires and implementation in one country.

CONCLUSIONS AND RECOMMENDATIONS FROM DISCUSSIONS

- The need for AGRIS was reinforced by the SAC, but it was suggested to increase the target frequency of the survey from once per year to semi-annually. The primary advantage of increasing the frequency of data collection is to provide more timely data, which is critical for market and policy analysis. It was acknowledged that this would be a large step for a country with no data collection to take all at once, and funding might be problematic. However, with a data collection strategy and tools developed, funding might be easier to mobilize.
- One cost-effective way of increasing the frequency of data collection may be to reduce the sample size of different waves. For example, in some waves, there could be a smaller size that gives national level estimates, and in other waves, a larger sample size that provides regional level estimates.
- AGRIS should include questionnaires for enumerating agricultural enterprises outside of the household sector. Notably, maintaining the sampling frame for these enterprises is always challenging.
- Anonymization tool should be included in the toolkit for data dissemination.
- The sampling aspects of AGRIS need to be fleshed out in 3 main ways:
  - 1. How to manage the questionnaire and sample assignment over 10 years.
  - 2. How to maintain the sampling frame over 10 years.
  - 3. How to build the sampling frame from existing resources within the country.
- A rotating sampling strategy in which all PSUs are covered over a defined period of 10 years may be useful.

Agricultural and Rural Integrated Survey (AGRIS) – Labour Module

Presentation was given by Chiara Brunelli, Statistician, Statistics Division, FAO

Ms. Brunelli provided an overview of the strategy used to develop, coverage, implementation, objectives, structure, key features, and innovations of the labour module questionnaire. Ms. Brunelli emphasized the involvement of experts to fill the capacity gap inside ESS by collaborating with the ILO, and the World Bank. Furthermore, the questionnaire should follow international standards, be comprehensive, build on current practices, and increase data on women’s contribution to agricultural. The questionnaire consists of 6 modules: an overview of household members’ work activities, hours worked during last year, absence from work during last week, characteristics of the current job, desire to work, and search for paid job. The next steps include peer review, amendments and simplifications, finalizing the non-household sector questionnaire and methodological note, field tests, and assessment of survey questionnaires.
CONCLUSIONS AND RECOMMENDATIONS FROM DISCUSSIONS

- This module was developed to emphasize agriculture which is why a normal labour force survey wasn’t just adopted.
- Informal employment in the agricultural sector was not included as there had to be some cut-off in the scope of the survey. However, data on informal employment could be important to understand the vulnerability in different social groups.
- The data from this survey should be comparable with data captured by international labor force surveys.
- The survey will allow the computation of statistics on the employed, unemployed, and not in the labor force. However, seasonality may be a concern if the survey program isn’t continuous.
- The separate modules for households and non-households may be confusing, and may not cover situations in which there are hybrids.
- The use of log books may be problematic in countries with low literacy rates. An alternative method should be proposed such as phone calls.
- Research from the ILO on capturing hours worked should be consulted as well as documents on the Asian Development Bank (ADB) website on measuring informal work.

DAY 2

Metadata on Minimum Set of Core Data

Presentation was given by Angela Piersante, Statistician, Consultant, GO

Ms. Piersante presented the first draft of the metadata for the Minimum Set of Core Data (MSCD). She began by providing an overview and background of the MSCD and outlined the objectives of the metadata. The objectives include providing a better definition of the sub-set of core items, have a common understanding on cross data elements, and respond to international standards of quality. To meet these objectives, the presentation showed the proposal of metadata elements based on a common vocabulary harmonised among international organizations and agencies and the concepts and definitions taken from the international best practices. A final analysis of the data sources that could collect the MSCD was provided to point out that most of core data can be gathered by agricultural surveys and administrative data. Finally, the next steps include the revision of the MSCD and integration of SAC comments and other experts.

CONCLUSIONS AND RECOMMENDATIONS FROM DISCUSSIONS

- The importance of this document and useful at country level was reinforced by the SAC.
- This document should be validated at a higher level because of its importance to the MSCD. Maybe it should be presented to the UNSC.
- There should be included the administrative reporting systems as a relevant source of data collection.
- As many countries already have data collection, this document should have some flexibility to be adapted to different statistical systems.
- The use of “national accounts” as a data source should be reconsidered.

Draft Guidelines for the Collection of Food Data in Household Consumption and Expenditure Surveys

Presentation was given by Alberto Zezza, Senior Economist, World Bank

Mr. Zezza gave an overview of the rationale and recommendations contained in the draft Guidelines. Currently, there is a lack of reference guidelines on measuring food consumption which results in poor statistics. Accordingly, the World Bank and the GS have engaged in a research program to explore methodological issues related to food away from home, length of food list, length of recall (and diary), acquisition vs. consumption, and household vs. individual. The preliminary results of these research programs have been integrated into the draft guidelines. Some of the findings may not be supported by enough evidence, and additional research may be required. The next steps will be to revise the recommendations as
the final results from the research programs are complete and start a consultation process around the draft guidelines.

CONCLUSIONS AND RECOMMENDATIONS FROM DISCUSSIONS
- The statistical unit of household or individual should be clarified.
- A short document may have advantages for practitioners. Many times survey managers at NSOs are looking for a short reference document which will direct to them sources of more in-depth information if needed.
- Food away from home is a particularly important that has been neglected but is of increasing importance. Some questions still need to be examined like what household member can provide the most accurate information.
- The guidelines miss a few important topics such as data quality checks for food consumption data, units of measure, length of interview, sequencing of modules, etc.
- Classification of Individual Consumption According to Purpose (COICOP) should be included the guidelines.
- The guidelines are useful for improving household consumption surveys, but should be adaptable to household income and expenditure surveys as well.

Field Test Protocol for Estimating Horticultural Crop Production
**Presentation was given by Eloi Ouedraogo, Regional Statistician, RAF-FAO, via Skype**
Mr. Ouedraogo presented the objectives, survey method, difficulties in data collection, variables for area and yield, and organization of the field work for the field test. Notably, the objective of the research is to develop a standard methodology for estimating area and production of vegetable crops. The coverage of the test will be decided by FAO, and the sampling frame will be built depending on the resources available within the countries. The sample size will be decided based on the budget constraint and desired level of precision. The sampling strategy will likely be a two-phase sample where EAs or villages are the PSUs selected with PPS, and the second stage will be small vegetable holdings. Large holdings should be completely enumerated. Variables for area estimation will be farmer inquiry, GPS, area between rows, and maybe rope and compass. Where fields are divided by border-strips, an average border-strip size will be measured. Methods and variables for yield estimation will vary by crop and cultivation type.

CONCLUSIONS AND RECOMMENDATIONS FROM DISCUSSIONS
- The allocation of area to specific items of production may be extremely difficult on the ground. It may be easier to go directly for a production estimate rather than estimating both yield and area.
- Estimating yield based on the weight of plants will be very difficult since the weight largely depends on the development stage of the plant.
- The use of the average area of boarder strips will be very difficult since the plant density must also be considered.
- Developed countries estimate horticultural production using market data, expert assessment, etc., but these sources do not exist in Africa. Also, farmer recall provides very low quality data. Accordingly, there is a need for a statistical methodology which estimates both area and yield.
- For sampling, it’s probably best to choose EAs PPS to the number of vegetable holdings, and then do a full listing exercise in each selected EA to build the frame.
- A benchmark is needed to compare with the results from the study. A Randomized Control Trial (RCT) integrated into the two-stage sample design may be an option.

Agricultural Typology: Statement of need and Issues to Consider in Development
**Presentation was given by Mary Ahearn, Senior Consultant, Former ERS/USDA, via Skype**
Ms. Ahearn gave a very detailed background of the research program and team on farm typology and provided an overview of the relevance for SDG2. She went on to provide a list of concepts which had been agreed and the issues that still require solutions. Finally, Ms. Ahearn concluded with a list of questions for
the SAC including the policy need for a typology, is there a particular conceptual framework other than more generic ones of the GS and the Wye Group Handbook, and the role the SAC can play in selecting a typology.

CONCLUSIONS AND RECOMMENDATIONS FROM DISCUSSIONS

- Family farms are an important concept in the development of a typology, however the definition of family will vary by different cultures. Nonetheless, it is important to understand intergenerational changes, employment and equity issues and therefore it must be included.

- Anchorage of the typology in the SDG framework is highly relevant and shall also take into account other SDG than goal 2. Economic size is very important but typology development needs to also take into account social and environmental aspects. Comparing “economic size” indicators with specific “viability” or “decent employment” thresholds have shown highly relevant in some countries and could be interesting to combine social and economic dimensions.

- It is impossible to find one specific typology that’s applicable in all countries. Accordingly, a set of large set of typologies should be accessible. After the typologies have been available for a certain period, a ranking exercise can be conducted to see which are adapted the most.

- The typology should be accompanied a software which can be applied to restructure a dataset based on the typology.

- The policy makers will be the end user of the typology. Their involvement in the development of the typology is crucial to maximize policy relevance. Also discussions suggested the need to involve a wider set of stakeholders involved in policy making, including civil society, farmers’ organizations

- There should be a prioritization of policy needs, and a consideration of what can be done now based on available data.

Overview of Global Office Workplan 2016

Presentation was given by Christophe Duhamel, Program Coordinator of the Global Office

Mr. Duhamel noted that the workplan of the Global Office has already been drafted and presented to the Global Executive Board in January. The SAC is the second group to evaluate the plan before the final endorsement of the Global Steering Committee in February. Mr. Duhamel also noted that the budget has increased by 50% for 2016 thanks to DFID filling the funding gap in the research component. This results in increasing the number of activities in the research component, training materials, and implementation of AGRIS. Mr. Duhamel concluded by suggesting a few areas in which SAC members could contribute to the GS outside of the SAC. These included in the GS Phase 2 task force, outreach events in the margins of the next ICAS, and regional workshops on cost-effective methods.

Next Steps in the Research Program and Future Activities

Presentation was given by Flavio Bolliger, Research Coordinator of the Global Office

Mr. Bolliger provided a detailed presentation on the changing research program for 2016, new challenges, and suggestions for next SAC meeting. The main change in that the topics of the research program have evolved from methods applied to basic data (2013-2014) to multiple domains and specific measurement techniques (2015-2016) to new data and neglected and political/conceptual topics (2016-2017). Also, Mr. Bolliger introduced the research program called SUST Data collection methods on Sustainable Agriculture which will include 5 topics: 1. Indicators and collection methods for gender-related data, 2. Measuring Youth employment, 3. Indicators and collection methods on agri-environment, 4. Measuring agricultural productivity and efficiency, 5. Framework and methods for measuring and monitoring Agricultural Sustainability. He noted that the launch of these new topics, as well as, a lot of field tests would be the major challenges facing the research component in 2016.
Main requests for comments, and the responses of the SAC:

- **Comments for research activities in 2016**
  - The new topics are important, but the successful completion of topics which have already been started should not be undermined.
  - SAC greatly appreciates the efforts of the Global Office and consultants to quickly accomplish research activities, but expresses concern about having unrealistic deadlines.

- **Next SAC meeting**
  - Next SAC meeting would be organized on the margins of ICAS in October.

At the end of the meeting, after consultation of members, it was decided that the remaining comments are to be provided by February 15, 2016.