



Forwarding Armenian Statistics Through Twinning

AM09/ENP-PCA/TP/04

MISSION REPORT

on

AGRICULTURAL CENSUS

ACTIVITY D.4

Regional Aspects and Error Handling

Mission carried out by
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Final version

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List of Abbreviations

AC	Agricultural Census
AMD	Armenian dram
BC	Beneficiary Country (Armenia)
EU	European Union
FSS	Farm Structure Survey in the EU member states
MoA	Ministry of Agriculture of the Republic of Armenia
MS	Member State
NSSRA	National Statistical Service of the Republic of Armenia
PC	Population Census
USDA	United States Department of Agriculture

Executive Summary

During the mission the MS Experts had many useful discussions with the BC Experts regarding the planning of the Agricultural Census and on the AC questionnaire. In most of the discussions also the expert from USDA, Michael Steiner, participated.

This report continues the discussion from the previous mission (activity D.3) for example in the case where questions could be improved, simplified, or even removed - or whether other questions could be added. Input for the discussions is the experience from the field tests of the questionnaire and the further knowledge of the need of data from the main user, the ministry of Agriculture (MoA).

The MS Experts gave recommendations on how to clarify the questionnaire and stressed the need to work with the interviewer instructions and producing teaching materials for the interviewers together with the work on the questionnaire.

On the first day of the mission, a coordination meeting was organised with Michael Steiner from USDA. The main aim was to review the issues to be dealt with during the mission and to prepare the fourth meeting in a joint working group of MoA/NSSRA for Agricultural Census (AC).

The meeting in the joint working group of MoA/NSSRA for Agricultural Census (AC) dealt with two issues, the data needs and the so called strategy paper for the AC. The MoA clarified that detailed information about unused (idle) land was important. It was agreed that the strategy paper should be completed with budget alternatives.

A workshop with participants from the regional agencies of NSSRA was organised on 27 June. The title was Agricultural Census for the Republic of Armenia, Data Quality Issues. The participants received a presentation of the present situation in the planning of the AC; information on basic quality issues; and had the possibility to express their opinion on possible improvements in organising the AC.

In a meeting with the PC unit at NSSRA the MS Experts received information on the experience from the PC 2011 that could be relevant for the AC. It will be checked if some processing of agricultural data from the PC will be possible earlier than the present plan in order to receive a picture of the agricultural situation. That would be of great importance for the further planning of the AC (sampling issues, budget calculations etc.).

1. General comments

This report was prepared as a result of the MS Expert mission to the National Statistical Service of the Republic of Armenia (NSSRA) within the Component D of the Twinning Project, “Forwarding Armenian Statistics Through Twinning”. The mission was devoted to regional aspects and error handling in the Agricultural Census of Armenia.

The purpose of the activity (D4) was to begin the process of finalizing the component work with a clear reference to the mandatory result.

The objectives for the mission are specified in Annex 2.

The MS Experts would like to express their thanks to all officials and individuals met for the kind support and valuable information which they received during the stay in Armenia, and which highly facilitated their work. The views and observations stated in this report are those of the MS Experts and do not necessarily correspond to the views of Statistics Denmark or Statistics Sweden.

2. Findings and conclusions

2.1 Questionnaire and instructions

Particularly after new input from the field testing of the AC questionnaire 27-28 March 2012 and from a workshop with regional agencies of NSSRA (also including representatives from USDA), the MS Experts have further recommendations to modify the questionnaire. Especially there are some national requirements which have to be considered when creating the questionnaire.

This, in particular, concerns the question on the area of unused land (idle land) which is an important issue for the Ministry of Agriculture (MoA). Other topics to take into account are secondary crops, adjacent plots and identification of land belonging to a farm/household.

In connection to the land there has to be a decision about land which is not owned by anyone or nobody knows who the owner is, but it is used for agricultural purposes. The MS Experts recommend that the farmer who uses the land always should report it. Some of the questions, especially about working time, are very difficult to design/draw up, because it is very difficult for the farmer to give a proper answer. Therefore it is of extreme importance to develop good interviewer instructions.

The MS Experts recommend that standard training material is developed centrally, by the Agricultural Statistics Division. This material, including for example Power Point presentations (print outs) should be used as a base for all training at the regional agencies so that all information as a starting point is the same.

It is recommended to hold more workshops with regional agencies of NSSRA, both to utilize the experience from the PC and to learn about and share more specific knowledge about agriculture in the different parts of the country and what challenges to expect when collecting the relevant data.

Generally, in order to have homogeneous high quality data it is essential to ensure among all parties involved, especially the interviewers and the interviewer instructors, a common understanding of the questionnaire and share experiences about the particularly difficult parts.

The MS Experts cannot emphasize enough the importance of clear definitions of all variables and unambiguous headlines regarding the reference time or period of the questionnaire. Nevertheless, doubt could emerge about one or more questions during the data collection period so contact between the interviewers – or the leaders – and NSSRA should be established in order to address shortcomings of the questionnaire.

The MS experts underlined what was said on the previous mission, that the development of the questionnaire should be done together with the preparation of instructions/manual for the enumerators. The following three parts of this section is copied from the previous report (Activity D3, November 2011).

1 The information is to be collected by interviewers, which implies that the farmers do not necessarily see the questionnaire itself, and as such the challenge is that the questionnaire should be completely understood by the interviewers so that they can perform meaningful interviews and make the farmers answer the questions without misunderstandings. It also means that the interviewers should be prepared to “interpret” the questionnaire words into everyday language if needed.

2 Interviewer instructions with particular focus on the difficult questions are highly recommended by the MS Experts, and the instructions should include examples of potential problems as well as solutions. It is therefore recommended by the MS Experts to, already now, start collecting examples; some of these could be used in the instructions, but they could also be used when training the interviewers.

3 The MS Experts recommend the BC Experts to look at other countries’ manuals/instructions for AC as inspiration to interviewer instructions. The MS Experts suggest the two manuals from Republic of Serbia and Moldova as useful inspiration as they both contain some examples which maybe can be used as inspiration in Armenia.

To the MS Experts knowledge this work has just recently been initiated, and it is the MS Experts opinion that time is clearly running out if proper interviewer instructions are to be developed within the Twinning project implementation period. It is not recommendable to postpone the development of the instructions until a close-to-final questionnaire is developed. Rather, it is recommended that interviewer instructions are given the highest priority. Moreover, it is recommended that the Moldovan experience, as a starting point, is copied to the degree it is at all possible. The interviewer instructions from the Agricultural Census in Moldova exist in both Russian and English versions.

Detailed comments to the present draft questionnaire are given in Annex 6.

2.2 Other issues related to the Agricultural Census

2.2.1 Coordination with the USDA support

During the first day a coordination meeting was arranged between the MS Experts from the Twinning project and the consultant from USDA, Michael Steiner. It was decided that most of the planned activities for the consultants preferable would be conducted together with Michael Steiner.

The most important issues for cooperation were the development of the questionnaire/instructions taken into account the experience from the field tests in March and the potential improvement of the strategy paper elaborated by NSSRA, “The need for conducting Agricultural Census in the Republic of Armenia”.

The potential changes in the questionnaire are already mentioned in section 2.1 of this report and detailed suggestions are found in Annex 6. For the strategy paper it would be necessary to add a time plan and budget alternatives for different approaches. Parts of the work done in the Twinning project, document “Agricultural Census for Armenia- input to concept paper” (Annex 8), could be useful for this.

2.2.2 The field tests of the questionnaire

In March 2012, the first draft questionnaire for agricultural households was tested in two villages in different marzes. Probably separate questionnaires for urban households and summer house owners will be elaborated later and also a separate questionnaire for enterprises.

The experience from the field test is not formally documented but most of it is taken into account when elaborating a new draft questionnaire. It gave some difficulties to make the respondents understand that all land operated by the household should be reported, including land rented out. Also land not used for agricultural purposes is to be reported.

A new field test with a similar approach as in March is planned for August/September 2012 with a new draft questionnaire that will be finalized late July. Specific changes in the new draft questionnaire are foreseen concerning

- clarification of plots to report,
- idle land,
- adjacent plots,
- secondary crops and
- the layout of the labor force section.
- realization of agricultural products.

2.2.3 Experience from the Population Census

The PC was conducted in October 2011. Data entry is going on until the end of July 2012, after which editing and verifying results take around three months. Some basic results at marz level are planned to be published in October 2012. Results from the agricultural section of the questionnaire are not included in this first publication. The present plan is that data for the agricultural part will be available in a data base in the second half of 2013. Output tables from the agricultural part are planned together with the agricultural unit at NSSRA.

The experience/results from the PC are very relevant for the planning of the AC in two ways. First, it should be studied if and how the infrastructure in the PC might be copied for the corresponding PC infrastructure. Many steps in the two surveys are expected to be very similar, data collection organization, PR activities, training, data entry etc. The PC experience should also be valuable for budget calculations for the AC. The MS Experts encourage and recommend close cooperation between the PC unit and the Agricultural Statistics Division of NSSRA concerning all these issues.

Second the results from the PC will be a good base to receive a broad picture of the agricultural structure and a base for analysis of potential sampling approaches in the AC. Different budget alternatives could to some degree to include partly sampling from “small units”.

A problem is that processing the agricultural section of the PC is not first priority. To make use of the agricultural data during the Twinning project period it is necessary to have access to results in at least October this year. The BC component leader will bring up this issue with the president of the NSSRA.

Tables with PC results of interest for the AC planning are found in Annex 5. In the time plan of Annex 4 it is specified that the mentioned results preferably should be ready by the 31st of August 2012.

2.2.4 Work shop for regional staff

A workshop with representatives for the marzes on “Data quality issues” in the AC was organised the 27th June. First was given information on the current status of the planning of the AC, then stressing the important role of the AC and the need for information campaign about it. After that was brought up the requirements for receiving high quality data related to design of questionnaire, instructions, interview organisation and possible checking methods of data. See Annex D4.9.

The participants were invited to give general comments and comments related to the experience from the PC that could be of relevance also for the AC.

The participants stressed the importance of dimensioning the staff according to the different conditions in the different marzes and also the need to have financing secured in good time before the start of the practical work planning. This time was too short in the PC.

Opinions were also given about the best month during the year for conducting the AC. There was no common agreement but the majority of the participants seemed to prefer October.

The BC component leader promised that NSSRA will come back bilaterally to the regional agencies of NSSRA to look at resources and the preferable month for the AC. The regional agencies were encouraged to send to the central office of NSSRA their feedback before September 2012. The MS Experts recommend that the central office develops a standard feedback form for the regional agencies to use in order to get systematized feedback.

The present draft questionnaire was distributed to the participants. Only a few comments were given directly at the work shop. One was that asking for areas in hectares does not work well for small units.

The participants also expressed their interest in further workshops of this kind in order to be well informed and to have the possibility to influence the planning work.

2.2.5 Meeting in the joint working group of MoA/NSSRA on the Agricultural Census

A 4th meeting in the joint working group of MoA/NSSRA for Agricultural Census (AC) was held the 29th June. The issues were the Strategy paper on the AC and the data/ the AC questionnaire.

For the Strategy paper that was elaborated by NSSRA was agreed that it should be completed with budget alternatives. NSSRA and the MoA agreed that the AC could not be conducted until earliest in 2014, both for political reasons (president election in January 2013) and practical reasons. A support of up to 400 000 USD from the World Bank for an AC pilot survey will hopefully be decided in August 2012 and the money would then be available in June/July 2013.

From NSSRA it was mentioned that more field tests are planned to further improve the questionnaire and the instructions. The MoA expressed that detailed knowledge about un-used land is of high importance.

2.2.6 Pilot Agricultural Census

As mentioned in the previous section a pilot agricultural census might be financed from the World Bank. The idea of this pilot survey is to test all steps in an AC. The planning and budget allocation will start already in autumn 2012 and all possible assistance from the Twinning project would be welcomed by NSSRA. The quality of the planning of this pilot would be improved if an extra Twinning mission could possibly be organized, for example 19-25 October as assumed in the time and work plan in Annex 4.

3. Recommendations

A number of recommendations have been provided about the questionnaire design and interviewer instructions in chapter 2 and in Annex 6. These are expected to be taken into account when the further field tests are planned. Below, some of the most important recommendations are summarized:

- The MS Experts strongly recommend that the coming field test includes the need for information on idle land, adjacent plots, secondary crops and location of plots on the farm. Also that some sections are improved in line with the suggestions in Annex 6.
- Interviewer instructions should as much as possible be elaborated together with the questionnaire and include examples of potential problems as well as solutions. The collection of such examples should start as soon as possible to be used in the instructions, and for training the interviewers.
- The BC Experts should look at other countries' manuals/instructions for AC as inspiration. Relevant examples are the manuals from Moldova, Republic of Serbia, and Albania. In the light of the short project time remaining it might be preferable to use the example of Moldova.
- The use of side tables (or help tables) could in some cases improve or simplify the data collection. An example is the distribution of working hours throughout the year.
- Close cooperation is needed with the PC division at NSSRA in order to find out what experience can be used in the AC about organisation of data collection, data entry etc. and which statistical results can be useful for the AC planning concerning budget, sampling etc.
- An extra mission is recommended in October for further field tests and improvement of questionnaire/instructions.

4. Actions before next activity

A time and work plan for the remainder of the project is found in Annex 4. A coming field test is planned for late August/ beginning September, and the MS experts are prepared to comment on the outcome soon after the results have been presented. If an extra MS Expert mission in October 2012 is realised it would include one more field test in second half of October. The test should be planned by NSSRA in advance.

Possible efforts have to be taken by NSSRA to secure access of PC results in the Twinning project until late August/ beginning of September.

Annex 1. Terms of Reference

Activity D.4 Regional Aspects and Error Handling

Mandatory result of the component

Agricultural Census rolled out, meaning that the Agricultural Census is brought into the field as planned, and is started. This means that all relevant decisions regarding the sampling frame have been made and that the questionnaire has been finalized, including material for the instruction of survey staff has been prepared.

1. Purpose of activity

The purpose of the activity is to begin the process of finalizing the component work with a clear reference to the mandatory result.

2. Expected output of the activity

The expected output of the activity is:

- A meeting in the joint Working Group on Agricultural Census (NSS and MoA);
- Evaluation of the questionnaire for the Agricultural Census in the light of field test results;
- Agreement on the future steps concerning a strategy paper on the Agricultural Census to be presented to the Government of Armenia by the end of August;
- A workshop on data collection and data quality control conducted with participation of regional statistical agencies;
- A detailed and structured plan for a first (small) pilot and a second (big) pilot;
- Co-ordination with the US Department of Agriculture with respect to the planning of both the pilot(s) and the Agricultural Census itself;
- Preparations for field tests - questionnaire and interviewer instructions;
- An outline of the Terms of Reference and decision of the timing for the final activity, D.6.

3. Project Participants

Mr Gagik Anayan, Member of State Council on Statistics (*BC Component Leader*);

Mr Arsen Avagyan, Head of Agriculture Statistics Division;

Ms Ruzanna Vardanyan, Agriculture Statistics division, leading specialist;

Mr Rolf Selander, Senior Expert, Agriculture Statistics, Statistics Sweden

Ms Mona Larsen, Head of Section, Agriculture Statistics Division, Statistics Denmark.

External stakeholders taking part in the activity

Ministry of Agriculture of RA

US Department of Agriculture

Annex 2. Programme

Meeting Programme for MS Experts:

Time	Place	Event	Purpose / detail
Monday, 25 June Morning	Congress Hotel	Meeting with RTA	To discuss the programme of the week
	NSSRA	Meeting with BC Component Leader	Current status. BC Component Leader on recent developments on preparing the Agricultural Census (AC)
Afternoon	NSSRA	Meeting with US Dept. Agr.	Co-ordination of the provided expert assistance for the AC
Tuesday 26 June	NSSRA	Meeting with Agricultural Statistics Division	Discussion of the questionnaire after the recent tests. Next steps – what needs to be further developed, and what about interviewer instructions?
Wednesday 27 June Morning	NSSRA (Meeting Hall)	Workshop with regional agencies of NSSRA	To inform about the current plans with focus on the role of the regional agencies, and to get input to and views on organisational aspects related to data collection and data quality control
Afternoon	NSSRA	Meeting with BC Component Leader	The AC budget – drafting a plan for how to ensure the most efficient, in a Government perspective, financing of the AC
Thursday, 28 June Morning	NSSRA	Meeting with Population Census Dept.	To have an actual status on the Population Census (PC) results, and to discuss the perspectives and time plan for using PC data and infrastructure
Afternoon	NSSRA	Meeting with BC Component Leader	Laying out a plan for the remainder of the Twinning project. Timing of pilot(s) and the AC itself
Friday, 29 June Morning	NSSRA	Meeting in joint WG on AC	To continue the planning of the AC with particular focus on the joint strategy paper
Afternoon	NSSRA	Ad hoc meetings	Further work on the mission report, and preparations for debriefing.
	NSSRA	Debriefing with BC Component Leader	Conclusions and recommendations. Consequences for the next mission and implied work programme for BC Experts

Annex 3. Persons met

Mr. Stepan Mnatsakanyan, President of NSSRA (*BC Project Leader*)
Mr. Gagik Anayan, Member of State Council on Statistics (*BC Component Leader*);
Ms. Anahit Safyan, Head of International Statistics Cooperation Division;
Mr. Arsen Avagyan, Head of Agriculture Statistics Division;
Ms. Ruzanna Vardanyan, Agriculture Statistics Division, leading specialist;
Ms. Laura Grigoryan, Agriculture Statistics Division, leading specialist;
Mr. Vardan Arevshatyan, Agriculture Statistics Division, leading specialist.
Mr. Vahe Zhagharyan, Agriculture Statistics Division, first class specialist
Hakob Badalyan, Gegharkunik Marz Agency, Head
Karapet Deghoyan, Gegharkunik Marz Agency
Vrezh Avetisyan, Yerevan City Agency, Head
Levik Movsisyan, Aragatsotn Marz Agency, Head
Ishkhan Sargsyan, Armavir Marz Agency, Head
Levon Davtyan, Ararat Marz Agency, Head
Vahagn Davtyan, Kotayk Marz Agency, Head
Vrezh Manukyan, Lori Marz Agency, Head
Arushan Ghazaryan, Vayots Dzor Marz Agency, Head
Aida Achinyan, Tavush Marz Agency, Head

Annex 4. Time and work plan for the remainder of the project period

20-24 Aug. 2012	Study visit to Statistics Denmark
1 Sept. 2012	a) Next version of questionnaire (“QUEST_2012SEP”) ready for test and for MS Experts’ comments b) First draft of interviewer instructions (“INST_2012SEP”) ready for test and for translation c) Filled out overview table, cf. the suggested template in Annex 5, from Population Census available for MS Experts’ comments and planning purposes
11-12 Sept. 2012	Field tests implemented in valley region and documented in short report
24 Sept. 2012	Written feedback from MS Experts on results from field tests and on the filled-in overview table from the Population Census, cf. Annex 5
28 Sept. 2012	Main parts of first version of interviewer instructions (“INST_2012SEP”) translated for MS Experts’ written comments
8 Oct. 2012	Written feedback from MS Experts on interviewer instructions (“INST_2012SEP”) and Questionnaire (“QUEST_2012SEP”)
15 Oct. 2012	a) Next version of questionnaire (“QUEST_2012OCT”) ready for test b) Next version of interviewer instructions (“INST_2012OCT”) ready for test and for translation
19-25 Oct. 2012	Extra Twinning mission: D3.2 Implementation Assistance II (not approved) a) Field testing in two marzes b) Further recommendations on questionnaire and instructions c) Drafting a plan for the pilot Agricultural Census
9 Nov. 2012	a) Next version (“INST_2012NOV”) of interviewer instructions b) Next version (“QUEST_2012NOV”) of questionnaire
26-30 Nov. 2012	Review mission a) Final recommendations b) Final report
Dec.	Possible follow-up actions according to final report.

Annex 5. Overview tables from Population Census (template)

The following three overview tables will facilitate the further planning and budgeting of the Agricultural Census.

Note: each of the tables should be made in two versions – one for rural areas, and one for urban areas. That is, the total population from the whole of Armenia should be divided in two parts, rural areas and urban areas. And for each of these two parts of the population, the following three tables should be filled in.

Table 1 Agricultural activity										
	Total number of households in PC	Active in agriculture	Not active in agriculture	Active in aquaculture						
	A (=B+C)	B	C	D						
Marz 1										
Marz 2										
...										
...										
Marz 10										
Yerevan										
Table 2 Livestock										
	Total number of households in PC	<u>Hereof:</u> Number of households with cattle	<u>Hereof:</u> Number with <= 5 cattle (i.e. of B)	<u>Hereof:</u> Number with > 5 cattle (i.e. of B)	Total number of cattle	Total number of pigs	Total number of goat	Total number of poultry		
	A	B (=C+D)	C	D	E	F	H	G		
Marz 1										
Marz 2										
...										
...										
Marz 10										
Yerevan										
Table 3 Land use										
	Total number of households in PC	<u>Hereof:</u> Number with agr. land (not specified)	<u>Hereof:</u> Number of households with area <= 0.5 ha	<u>Hereof:</u> Number with area between 0.5 and 1.0	<u>Hereof:</u> Number of households with area >=1.0 ha	Total <u>area</u> for households <= 0.5 ha (i.e. of C)	Total <u>area</u> between 0.5 and 1.0 ha (i.e. of D)	Total <u>area</u> for households > 1.0 ha (i.e. of E)	Total arable land (ha)	Perennial plants (ha)
	A	B (=C+D+E)	C	D	E	F	G	H	I	J
Marz 1										
Marz 2										
...										
...										
Marz 10										
Yerevan										

Annex 6. Recommendations regarding questionnaire

(Reference is made to the questionnaire of 25 June 2012, cf. Annex 7.)

On the questionnaire, the BC Experts have put a reference time (or period) before every section of the questionnaire and it is essential that the interviewers understand it, e.g. the reference time for crops is the crop year and for livestock is it a specific date. The choice of reference time (or period) should be considered carefully by the BC Experts.

Concerning first part of the questionnaire:

Recommendation: Take the question 5.1, 5.2 and 5.3 out of this section as they seem un-logically placed here. Ask instead questions in section XII on “Labor Force”.

The information on the telephone no. is missing in the new questionnaire! It could either be asked in connection with Q.4 (on address) or together with the signing of the holding’s head.

Concerning sections II to V Agricultural lands:

The MS Experts suggest that all items about land/area should be answered either in hectares with two decimals or in m². The questionnaire could either be designed with two answering columns concerning lands and crops, one column for hectares and one for m², or with an initial question on the choice of unit.

The MS Experts stress that it is very import with good instructions to these parts of the questionnaire. The questionnaire test indicates that there are problems to collect the correct figures, because as it is both the interviewers and farmers have problems of understanding what is actually asked about. Besides, there is a national demand for information about idle land (un-used land). Therefore it is suggested to work out some changes of this part of the questionnaire so it can live up to the demands – and also so it will be simpler for the interviewer to ask and collect the correct data.

One option could be that the BC Experts work out some “help-tables/help questionnaires” to the interviewer about the land. It could be one “help-table/help-questionnaire” for each plot of land and a sketch for location of the different plots of land.

Especially in connection with the agricultural land it is important to get a clear definition.

There has also to be a decision about lands that are used for agricultural purposes, which are either not owned by anyone, or the owner is unknown. The MS Experts recommend that the farmer who uses the land has to report it, even with owner unknown. This is in line with the common definition of a farm – all lands that are operated by the farm/household should be included.

Concerning section II, Agricultural lands:

The MS Experts suggested adding a new variable “Idle/not used land” to the section. There has to be a clear definition of “Idle/not used land” so that the interviewer knows what it is and can explain it to the farmer.

A clear definition of leased land is also needed. The field test in March 2012 showed that the land can be leased or borrowed and it can be with or without payment or a contract. As a help to farmers and interviewers, an additional column could be added in the end: “Total area”.

Table II contains the holdings area of land if the EU’s FSS legislation (on Agricultural Census) is followed. This means that if the same area of arable land is used in the reference period for various crops (simultaneously or successively), the area should be indicated only once, under the main crop (the crop with the highest value of production). If the value of production does not determine the main crop, then the main crop is taken as the one that occupies the soil for the longest time in the reference period. The area of

interplanted, associated and successive crops is already included in the area of the main crop or the reported utilised area of arable land.

Interplanted crops are crops planted between the rows of the main crop. These could be, for instance, field beans, pumpkins, maize for fodder etc. Associated crops (e.g. clover, lucerne, mixed grass etc.) are planted within the main crop that serves as its protection. Planting and harvesting of such crops is carried out separately.

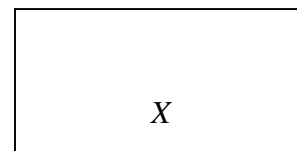
Successive crops (second crops) are crops that are planted after the harvesting of stubble cereals, and ripen during autumn. These are, e.g. cabbage, gherkins, spinach, etc.

An additional question about common land (used as pasture) would be preferable. It could also be considered if information is needed on how many livestock and how many days during a year the livestock are gone away from the farm (e.g. up in the mountains).

It could be a possibility to have “help tables/ questionnaires”, which can be used for every single plot of land. Then the interviewers and farmer could take field by field and find out how big the field is, which kind of crops and perennial plants are/has been growing on the fields and the area used for every crop. When all the fields have been examined a plan is drawn for all the holdings plots. Afterwards the interviewer could maybe together with the farmer fill in the total in table II to V.

In connection with the “help tables/questionnaires” it is recommended to insert a sketch for location of different plots in the questionnaire

A blank square with the household put in the middle in order for the farmer to mark the plots in his and thereby remembering about all different land areas belonging to the farm.



Concerning section IV and V:

In sections IV and V is a list of crops and perennial plants which have grown on the cultivated area during the year. In the EU FSS regulation requirements the cultivated area has to be equal with the sum of all the sections IV and V even there are some fields with are used twice or more during a year.

So if Armenia wants a specification of production of crop and perennial plants the area will not in all cases be equal to the total area since more than one crop can be cultivated during one year on the fields.

Therefore since Armenia probably has a national need to know all crops and perennial plants and the area used for this production the MS Experts suggest to redesign section IV and section V. A solution could be to let section IV contain the area from the first crop. Areas used for successive crops (secondary crops) can then be collected in a new separate table “**Successive agricultural crops**”.

Remember that the sections IV and V refer to all land the holder has at his disposal, also land in other regions (marzes).

Concerning section VI, Use of fertilizers and pesticides:

The questions on fertilizers and pesticides can be complicated. Therefore, the MS Experts recommended yes/no questions as for example:

<i>Are chemical/mineral fertilisers used in the last year?</i>	<i>or</i>
<i>Are chemical/mineral fertilisers used in the last 2 years?</i>	
<i>Are organic fertilisers (manure, urine, slurry...) used in the last year?</i>	<i>or last 2 years?</i>
<i>Are pesticides used in the last year?</i>	<i>or last 2 years?</i>

If more information on the chemical fertilisers is needed a sample survey among the units that have answered yes to these questions could be conducted after the AC.

Concerning section VIII, Available livestock and poultry:

It should be underlined that the number of livestock must be surveyed on a specific date. The MS Experts recommended that the reference date is as close to the day of the interview as possible. If not, it is likely that the farmer would have difficulties in reporting accurately about the number of livestock.

The field test of the questions shows that the interviewer has difficulties when starting with the total, therefore it is suggested changing the structure of the section ending with total.

The table from last mission covers EU legislations but the national requirements indicate more variables about livestock. The following is suggested:

Section VIII. Livestock, poultry, bees and other animals

Horses

Mares 3 year and above

Stallions

Foals

Horses, total (=Total number of horses)

Donkeys, total

Hinnies, total

Mules, total

Bovine animals

Female and male calves 1 year old

Heifers 1 - 2 years old

Heifers over 2 years old

Bulls 1 - 2 years old

Bulls over 2 years old

Heifers in calf

Dairy cows

Other cows (suckling cows)

Bulls for service

Other cattle (Bovine animals in fattening)

Oxen (draught ox)

Cattle, total

Buffalos, total

Pigs

Boars (used for service)

Sows

Young female heads for breeding (4-12 months)

Piglets having a live weight under 20 kilograms

Pigs 20-49 kg

Fattening pigs 50 kg and over

Pigs, total

Sheep

Lambs under 1 year
Lambs
Ewes (breeding females)
Rams (used for service)
Other sheep
Sheep, total

Goats
Kids (goats up to 1 year)
Dam goats (breeding females)
Rams (used for service)
Other goats
Goats, total

Poultry
Laying hens
Broilers
Turkeys, total
Geese, total
Ducks, total
Other birds raised on the holding
Poultry, total

Rabbits, total
Of which, female (the total number of breeding females)

Fur animals, total
Of which, female (the total number of breeding females)

Bees (the total number of bee colonies)

Other livestock
It should be considered whether the list of livestock is exhaustive. If not, the item “Other” could be added.

The EU standard only requires for 3 groups of pigs.

Piglets having a live weight under 20 kilograms
Breeding sows weighing 50 kilograms and more
Other pigs (this is all other pigs, males....

With these simplified questions it is expected that the quality of the answers will be higher.

Concerning section XII. Available buildings and construction of agricultural importance:
Observation on current table (Agricultural structures for animals): The unit is number of heads (the capacity of the buildings), but notice that one cattle requires much more room than a broiler or a sheep. And furthermore the building can be used to different kinds of livestock so it is not only to one kind of livestock. Consider again these questions: which kind of information is wanted? Is it possible to get the answers? It is maybe more realistic to ask about if there are any buildings for livestock - a definition of a building is needed. If the answer is “Yes”, then ask about kind of livestock and size of building - the capacity area (m²)

Concerning section XIII, Labour force:

These tables are the most difficult in the questionnaire and therefore the instructions have to be very exhaustive. The MS Experts recommended to devote more work to these tables. Maybe “help tables/questionnaires” could be considered.

It is recommended that labour force is recorded in days as the test shows that hour per year is very difficult to report. The test showed that in order to get the information needed the interviewer most often has to go through each season in order to get answers. Then number of working day can only be determined approximately. The test showed that the table about Members of holding causes confusion, especially the age intervals. As an example the present table could be replaced by (also including the questions concerning the head of the holding).

No.	Member	Age	Sex	Education	Sphere of Work		
					Holding only	Partial	Full
1	Example – head						
2	Example – spouse						
3	Example – son 1						
4	Example – daughter 1						
5	Etc.						

A “help table/questionnaire” to working time could be the following suggestion for the members of the holding. From this table, the original can still be produced, and with a higher degree of precision.

Member no.	January – March		April – June		July - September		October -December	
	Average hours per day	Type of work(1)	Average hours per day	Type of work(1)	Average hours per day	Type of work(1)	Average hours per day	Type of work(1)
1								
2								
...								

1) cryptogram

In the new version of the questionnaire the tables about hired employees are simplified to a yes/ no question, but according to EU legislation information on work time in 5 intervals has to be reported. It is a difficult subject and therefore the instructions should contain examples on what is to be included in hiring of labour. E.g. hiring of tractor services and other agricultural services should not be seen as hired labour.

At the test arose a question: The cost of hiring a shepherd is normally shared among many holdings (often the whole village) – this should as part of the methodology be handled in order to avoid double counting. Therefore the MS experts suggested a new table for work spent by hired workers at the holding. But there has to be a clear definition of type of work, and probably also for education.

Sex of hired worker	January – March		April – June		July - September		October -December	
	Average hours per day	Type of work(1)	Average hours per day	Type of work(1)	Average hours per day	Type of work(1)	Average hours per day	Type of work(1)
...								

1) see cryptogram

Concerning section XV

Observation on the current table: it is not possible to really use this information because it is unknown how big a share of the production is used for own purposes.

For the National Accounts of RA it would be highly desirable to include the self-consumption in the questionnaire in order to shed more light on this very important part of the informal economy of Armenia.

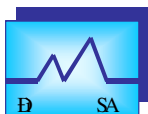
Recommendations:

- 1 New title: Use of the holding's of produced volumes
- 2 New design

Section XV Use of the holding's produced volumes (percent)

No		Total	Consumed or used by holding	Used in barter for other goods	Sold from holding	Sold on market	Sold to organization dealing with processing
	Cereals and grain crops	100					
	Potato	100					
	Vegetables	100					
	Melon and water melon	100					
	Fruit and berry	100					
	Grape	100					
	Meat	100					
	Meat products	100					
	Milk	100					
	Diary products	100					
	Eggs	100					
	Honey	100					
	Wool	100					

Annex 7. Agricultural Census questionnaire (draft 25JUN2012)



NSS of RA

Agricultural Census in RA 20__

DRAFT

Confirmed

By the Resolution N dated 200 -
Of the State Council of Statistics of RA

Unit

aire

Survey Stations

1.1 Registration St.

1.2 Instr. St.

Polling St.

2. Marz _____
name

code

3. Community _____
name

4. Address _____

5. Head of holding (name) _____
Name, surname

5.1 Gender of head of holding male ☐

female ☐

5.2 Age

5.3 Education

6. Manager of the holding

6.1 Head of holding ☐

6.2 Other members of holding ☐

6.3 Other ☐

Enumerator's name _____
Signature

Date

Controller's name, date _____
Signature

Date

II. Agricultural lands, excl. adjacent plots (as of date: _____)

ha (0,0)

		Owned by holding		Leased *	Managed by holding
		Total	Of which leased out		
N	A	B	C	D	E
	Total agricultural land				
	Arable land				
	Fruit gardens and berry fields				
	Vine yards				
	Natural haying land				
	Pastures				
	Other lands				

*) If the leased land is located out of the administrative territory of the community then please fill in the related information in section XVI (page 7):

III. Adjacent plot used for agricultural purposes (as of date: _____)

m² (0,0)

	Adjacent plots, total	
	<i>Of which perennial plants</i>	

IV. Areas under cultivated agricultural crops (excl. adjacent plots) (as of date: _____)

ha (0,0)

		Total	Of which irrigated	Actually irrigated
N	A	B	C	D
	Total area			
	Cereals and grain crops, total			
	<i>Including</i>			
	winter cereals , total			
	<i>Of which winter wheat</i>			
	Winter barley			
	Spring cereals, total			
	<i>Of which spring wheat</i>			
	Spring barley			
	Spelt			
	<i>Grain crops, total</i>			
	Potato			
	Vegetables, total			
	<i>Of which</i> Cabbage			
	Cucumber			
	Tomato			
	Egg-plant			
	Pepper			
	Onion			
	Garlic			
	Other			
	Orchard crops			
	Industrial crops , total			
	<i>Of which</i> Tobacco			
	Oleacea			
	Mushrooms		x	x

	Fodder crops, total			
	<i>Of which annual plants</i>			
	<i>Perennial plants</i>			
	Other			
	All types of plough -land			

V. Available area under perennial plants, excl. adjacent plots (as of date) _____ ha (0,0)

		Total	<i>Of which fertile age</i>	Total irrigated	<i>Of which fertile age</i>
N	A	B	C	D	E
	Fruits and berries, total <i>including</i>				
	Seed bearing fruits, total <i>Including Apple – tree</i>				
	Pear – tree				
	Quince – tree				
	Other				
	Stone –fruits, <i>total</i> <i>Including Apricot –tree</i>				
	Peach – tree				
	Sweet cherry –tree				
	Plum – tree				
	Cherry- tree				
	Cornel				
	Other				
	Nuts, total <i>Including Nut-tree</i>				
	Nut – tree				
	Hazelnut- tree				
	Other				
	Oilseeds, total <i>Including Olive</i>				
	Other				
	Subtropical, total <i>Including Fig – tree</i>				
	Pomegranate				
	Blood orange				
	Other				
	Berries (mulberry, wild strawberry, currant and others, including berries planted between the rows of fertile saplings) total				
	Of which mulberry				
	Grape, Total				
	<i>Of which Industrial</i>				

VI. Use of fertilizers and pesticides

		YES	NO
	Mineral fertilizers		
	Organic fertilizers		
	Pesticides		

VII. Hothouse / greenhouse availability (as of date: _____)

		Sq. m.
	Total area	
	<i>Of which for vegetable growing</i>	

VIII. Available livestock and poultry (as of date: _____)

			Heads <i>Of which owned by holding</i>
N	A	Total B	C
	Cattle, total		
	<i>Of which cows</i>		
	<i>Of which dairy herd cows</i>		
	Bulls		
	Draught ox		
	Female and male calves under 1		
	Heifers between 1 and 2 years		
	Bull calves between 1 and 2 years		
	Heifers above 2 years		
	Bull calves above 2 years		
	Inseminated female young cattle 2 years and above		
	Cattle of other sex and age groups		
	Buffalos		
	<i>of which, foals</i>		
	Cow bulls		
	Other sex- age groups		
	Pigs, total		
	<i>Of which dam pigs of the main drove</i>		
	<i>Female pigs for breeding 4-12 months</i>		
	Out of total number of pigs (excluding the lines 126 and 127)	Up to 20 kg	
		21-50 kg	
		More than 51 kg	
	Sheep, total		
	<i>of which, ewes</i>		
	Rams		
	Lambs under 1		
	Lambs		
	Goats, total		
	<i>Of which dam goats</i>		
	He-goats		
	Goats up to 1		
	Horses, total		
	<i>Of which, mares 3 years and above</i>		
	Stallions		
	Foals		
	Rabbits, total		

	<i>Of which doe rabbits</i>		
	Poultry total		
	<i>Of which, layers</i>		
	Other chicken		
	Broilers		
	Turkeys		
	Geese		
	Ducks		
	Other poultry		
	Fur animals		
	<i>Of which, female</i>		
	Bee hives		
	Donkeys		
	Mules		

IX. Do you deal with fishery and fish-breeding in you holding (as per interview date)

YES

NO

X. Available agricultural machinery (as of date: _____)

		Number	Pieces/ Of which working
N	A	B	C
	Tractors		
	<i>Of which ' caterpillar</i>		
	Wheel		
	Lorries		
	Harvester-threshers		
	Forage harvesters		
	Mowers		
	Row sowing machines		
	Cultivators		
	Milk processing equipment		
	Other (please specify)		

XI. Did you use cattle for agricultural works

YES

NO

XII. Available buildings and constructions of agricultural importance

Agricultural structures for animals

For cattle (heads)		
Pigs slaughter (heads)		Poultry slaughter (heads)
Sheep slaughter (heads)		Other (specify): _____(heads)

Constructions meant for long time preservation of agricultural products

Stores (tons)		Refrigerators (tons)	
---------------	--	----------------------	--

	YES	NO
Buildings and constructions for preservation of agricultural machinery		
Buildings and constructions for preservation of agricultural equipment		
Facilities for renovation of agricultural machinery		

Other agricultural buildings and constructions (specify) : _____

XIII. Labor force

	Members of holding by age and gender	Total	Of which	
			male	female
	Total			
	0-14			
	15-19			
	20-44			
	45-64			
	65 and older			

Work hours spent by the members of the holding (15 years and older)

	Gender Male =1 Female =2	Education (see cryptogram)	Time spent by members of holding (persons/hours)						
			In agricultural sphere					In other sphere** (see cryptogram)	
			1-499	500-899	900-1349	1350-1799	1800 and more	partial	full-time

*) 0 – Post graduate

1 – Higher

2 – Incomplete higher

3 – Secondary vocational

4 – Primary vocational

5 – General secondary (completed)

6 – General basic

7 – General elementary

8 – Without elementary

9 – Difficult to answer

**)

1- Industry

2- Construction

3- Education

4- Trade and services

5 – State municipal and other institutions

6- Public health service

7- Agriculture

8- Other

Does the holding use the services of hired employees

YES

☐

NO

☐

XIV. Food security

Do you use agricultural products produced within the holding only for your own consumption?

YES

NO

Do you deal with processing of agricultural products in you holding?

YES

☐

NO

☐

XV. Realization of agricultural products produced in the holding (sales)

/per cent/

		Realization (sold)	Of which		
			From holding	At a market	To processing organization
N	A	B	C	D	E
	Cereals and Grain crops	100			
	Potato	100			
	Vegetables	100			
	Melon and water melon	100			
	Fruit and berry	100			
	Grape	100			
	Meat	100			
	Meat products	100			
	Milk	100			
	Milk products	100			
	Eggs	100			
	Honey	100			
	Wool	100			
	Other (specify):	100			

XVI. Agricultural lands belonging to the holding (organization) located in other marzes

Name of community _____
code

Name of community _____
code

Name of marz _____
code

Name of marz _____
code

ha (0,0)

	Total
Total agricultural lands	
Arable land	
Fruits and berries	
Wine yards	
Natural haying land	
Pastures	
Other lands	

ha(0,0)

	Total
Total agricultural lands	
Arable land	
Fruits and berries	
Wine yards	
Natural haying land	
Pastures	
Other lands	

Thank you for your collaboration

Annex 8. Agricultural Census for Armenia – input to strategy paper

This input to a concept paper (strategy paper) was developed in co-operation between the RTA and the US Dept. of Agriculture with input from the MS component leader, December 2011 and immediately translated.

Agricultural Census for Armenia – input to concept paper

The Law on Agricultural Census was approved by the National Assembly of the Republic of Armenia in 2008. The Law states that an Agricultural Census should be taken every 10 years, in accordance with United Nations minimum requirements.

This paper describes the concept and nature of an Agricultural Census. The paper also describes different scenarios of an Agricultural Census in Armenia, including their budgetary implications. First, however, the paper provides five reasons why the Agricultural Census should be taken, sooner rather than later.

1. Five reasons for Armenia to have an Agricultural Census

1. The food prices that the Armenian citizens pay today are too high

The real size of the Armenian agricultural sector and agricultural production may easily be off by 20-30 per cent or more, as compared to the official statistics. Only through an Agricultural Census will the true levels be known, and only with this as a starting point will it be possible for Armenia to implement an effective agricultural policy, including the formation of an incentive structure to establishing more efficient agricultural holdings and to improve the use of all agricultural lands which, in both cases, will tend to reduce food prices.

2. Investment in the agricultural sector of Armenia is too low

Today, very little is known about the detailed structure of the agricultural sector. In order to attract more investors, in machinery, buildings, land, livestock etc., more detailed information on specific geographical zones (regions), specific crops or livestock will be an absolute necessity. Without this information investors will be reluctant to invest in the Armenian agricultural sector.

3. Use of fertilizers and pesticides is inefficient

The subsidizing of and taxation on fertilizers and pesticides has a direct impact on their use. An Agricultural Census will provide information on both the general characteristics of the farmers that use these substances on their lands, and where in Armenia it takes place. Furthermore, an efficient environmental protection policy with respect to protection of ground water and of rivers and lakes relies heavily on the detailed information on use of fertilizers and pesticides that will be available following an Agricultural Census.

4. The rural population probably will decrease dramatically in the coming years

The agricultural sector of Armenia employs 30-40 per cent of the Republic's labor force. In recent years, this share has been reduced. As this development most probably will continue the Agricultural Census' information on the composition of the labor force - for example the age structure and education level - will be of immense value for policy makers and planners.

5. The preparedness for infectious diseases among livestock should be improved

Out breaks of salmonella, mad cow disease, swine flu, or other infectious diseases often create panic among farmers as their very basic foundation of life is threatened. Therefore, at the national level an appropriate preparedness should be planned for. Veterinarians must have immediate access to vaccines and proper medication. This system can most effectively be developed on the basis of the information from an Agricultural Census.

2. What is an Agricultural Census?

This section of the paper is not finished.

According to the FAO World Programme for the Census of Agriculture 2010.....

A census of agriculture is a statistical operation for collecting, processing and disseminating data on the structure of agriculture, covering the whole or a significant part of the country. Typical structural data collected in a census of agriculture are size of holding, land tenure, land use, crop area harvested, irrigation, livestock numbers, labour and other agricultural inputs. In an agricultural census, data are collected directly from agricultural holdings, but some community-level data may also be collected. A census of agriculture normally involves collecting key structural data by complete enumeration of all agricultural holdings, in combination with more detailed structural data using sampling methods.

3. Different scenarios for an Agricultural Census in Armenia

At present, there is thought to be around 340,000 agricultural households (farms) in Armenia. Besides, there are among 60,000 summer houses and 100,000 urban households with agricultural production.

These data will be updated when the results from the Population and Housing Census (PHC) are ready, expectedly July 2012. For now, these are the data that describes the statistical population for the Agricultural Census, and the different scenarios and budgets will have to rely on them until July 2012.

There are two main decisions that affect both the expected quality of the Agricultural Census and the total costs of the census – the first is the question of timing, the second is the extent of sampling.

3.1 Sampling options – four different scenarios

In the examples below, of the 340,000 farms, 40,000 are considered to be big, and 300,000 are considered small. These shares are chosen on limited information,¹ and probably only the results from the PHC will provide better estimates which will at the same time enable more precise budgeting.

Without budget restrictions, the preferred option is the *scenario 1* of table 1. In scenario 1, all 500,000 households that have reported to be involved in agricultural production to the PHC will be interviewed in depth for the Agricultural Census.

Table 1. Examples of different scenarios and cost consequences for the Agricultural Census

	Interviews		Total cost		Big farms		Small farms		Urban households		Summer houses	
	1,000's	Per cent	1,000's	pct. of all	1,000's	pct. of all	1,000's	pct. of all	1,000's	pct. of all	1,000's	pct. of all
Scenario 1	500	100			40	100	300	100	100	100	60	100
Scenario 2	380	85			40	100	300	100	25	25	15	25
Scenario 3	230	55			40	100	150	50	25	25	15	25

Scenario 2 introduces sampling among the urban households and the summerhouses. This reduces the number of interviews by 120,000. Because some of the costs related to the Agricultural Census are fixed, the cost reduction is only estimated to 15 per cent.

¹ “Thus, one “conventional” farm on average is engaged in the production of 4-8 agricultural products, manages 1.4 ha of plot (of which 1.1 ha of arable land), 1.6 head of cattle (of which 0.8 head of cow), 1.7 head of sheep and goats, 0.2 head of pigs. In accordance with it, farms are characterized with small sizes, no accounting within farm and low level of marketability. However, on the whole, 90% of gross agricultural product belongs to those farms” (from the report “On Agriculture Sample Survey” (2008, National Statistical Survey of RA and Swedish International Development Agency)).

Scenario 3 introduces further some serious sampling among the small farms, while sampling among the urban households and the summer houses at the same time. This reduces the number of interviews by 270,000 as compared to scenario 1, and costs are roughly estimated to be 55 per cent.

It must be stressed that other options than scenario 1 are only considered because of budgetary limitations, and because one may have to realize that the challenge might be to get the best possible results given a fixed budget. Other scenarios and/or other sample sizes of course can be modeled. The main point is that by making use of the data on agriculture from the PHC and by using appropriate statistical methods it is still believed to be possible to obtain very reliable results for the Agricultural Census.

It should be noted that the budget for a full survey, i.e. approximately 500,000 interviews currently is budgeted at between 6 and 7 million USD, depending on the extent to which the infrastructure of the PHC can be re-used.

3.2 Timing – before or after December 2013

The PHC was taken Armenia in October 2011, following a final Government decision by the end of July 2011 to finance the census. The final planning, including the information campaign, printing of questionnaires and interviewer instructions, hiring of interviewers and so forth had to be done in about three months, which even included the main part of the vacation period.

To have high quality results, more time is needed for planning and preparing the Agricultural Census. Ideally, one year would be considered a minimum amount of time, but *at the very least a period of 7-8 months* is needed. This would time-wise facilitate a minor pilot census, where all aspects of the census would be tested, and a proper information campaign which, together with good education of interviewers, is considered all-important for a successful Agricultural Census.

The PHC plays a vital role in two ways.

Firstly, the results from the PHC can be used to define the statistical population which again, if needed for budgetary reasons, can be used for doing stratified sampling as described in section 3.1. However, this is naturally only possible if the results can still be considered valid, and the international experts from USDA and EU recommend that the Agricultural Census should be taken before 2014 if the results from the PHC are to be utilized.

Secondly, the experience and the infrastructure from the PHC can be used, again, provided that too much time has not passed since the PHC. This will both be of value as regards the quality of the survey and with respect to reducing the costs. The use of computer hardware and, to some extent, modifications of developed software for the PHC, will realistically be of use to the Agricultural Census if it is taken before 2014.

Of the scenarios 1-3 described in section 3.1, the less costly option for the Agricultural Census, scenario 3, cannot be recommended if the data collection is not done in 2012 or 2013. The earlier the data collection takes place, the better – as long as enough time is reserved for the information campaign and other aspects of the planning phase.

3.3 Other budget issues

The existing budget for the Agricultural Census is based on a short, intensive data collection period. All international experts recommend an *extension of the data collection period*. By extending the data collection period, for example from 10 to 30 days, the total costs will be reduced somewhat, as the number of interviewers (and interview leaders) will be reduced to 25-30 per cent. Naturally, each of these interviewers will be paid more when working more, so the reductions in total costs should rather be expected because:

1. The chosen interviewers will only be the best and the ones most suited for the job.
2. Each interviewer will during the data collection period become more efficient, i.e. do more interviews per day.
3. The quality of the interviewing will gradually improve during the data collection period, which will reduce the necessary follow-up activities (re-contacting with farmers), and thus the costs.
4. Fewer interviewers will have to be trained.

It is estimated by EU and USDA experts that for the above mentioned scenario 1, the cost reduction could be around 0.5 million USD by extending the data collection period.

The most of the budget is taken up by salaries and social insurance costs to the interviewers and other staff. So obviously, this part of the budget needs in general to be analyzed very carefully, and not only in the light of a reduced data collection period.

Furthermore, in the existing budget, some of the budget lines need to be detailed and explained. This in particular is relevant for the following budget lines:

1. Economic, advertisement, and office expenses
2. Business trips
3. Purchase of fixed assets
4. Purchase of other services

In the existing budget, these four budget lines constitute around 30 percent of the total budget. It should, in particular, be mentioned, that “Purchase of fixed assets” – close to 8 percent of the total budget - mainly has to do with computers, and if the Agricultural Census can be taken before 2014 this budget item may be reduced significantly.

4. Conclusion

Armenia is currently one of the few countries in the World that has not yet taken an Agricultural Census. However, Armenia should not take an Agricultural Census just because other countries have done so. Rather, Armenia should implement the Agricultural Census, as stated in the Law of 2008, because the extremely important information on the structures of the agricultural sector of Armenia can only be obtained through an Agricultural Census.

The severe budget constraints that the Government of the Republic of Armenia faces, especially after the financial and economic crisis that hit Armenia in 2008, make it extra preferable to look for relatively inexpensive solutions.

Therefore, but also for reasons of quality of the final statistical results, EU and USDA recommend the Government of the Republic of Armenia to take the vital decision to take the Agricultural Census at the latest in 2013 in order to make use of the infrastructure and data from the PHC.

The sooner the Agricultural Census is taken, the less expensive it will be, and the Republic of Armenia and the Armenians will start benefiting from the results earlier.