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Beirut - Lebanon

Memorandum

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From: Dimitrios Sfikas, PMC Team Leader

Date: 2 July 2002

Subject: Progress Report on the short term mission to CAS.

Please find attached for your review and approval the Mission Report as revised by the Short term Statistics Expert Professor Sten Johansson from June 2 – June 14 2002.
(This copy replaces of the report that was submitted 19 June 2002).


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الجمهورية اللبنانية
مكتب وزير الدولة لشؤون التنمية الإدارية
مركز مشاريع ودراسات القطاع العام

Draft report on the Seventh Short-Term Mission 2 – 14 June 2002 in Beirut

by
Professor Sten Johansson

Summary:

The preparations for 2002 Census of Buildings, Dwellings and Establishment are largely finished. The recruitment of temporary staff started Thursday, June 13, with advertisements in four newspapers. Training will start on Monday, July 1 and fieldwork in the coastal cities some days later. An unresolved urgent issue is whether OMSAR can find finance for CAS to buy high-resolution satellite images that will substantially improve the quality of maps for the rest of the country. A second issue is when the equipment under the EU grant for CAS can be available to the CAS. If the equipment must be *internationally* tendered serious delays in the data processing of the Census will be the result.

The preparations for the 2003 Household Living Conditions Survey has largely been on hold since early April when the local expert, Dr. Zoha Khalil, had to stop work because the EU-funding was withdrawn. Her new contract with the Ministry of Social Affairs has not yet been finalized. Preparations for the survey need to restart a.s.a.p. in order to meet the time plan with a pilot in October and regular fieldwork operations by the end of the year. Also an important design issue needs further consultations with the partner institution – the Ministry of Social affairs – to be resolved on a scientific basis.

Also in this report the need for more staff for the CAS is emphasized, this time on the basis of a detailed analysis of the 1980 Decree that regulates its staff structure to see what can be done within the letter of the Decree to meet the most urgent needs of the CAS. The analysis reveals that the regulations in the Decree are not conducive with effective recruitment, training and management of staff. However, there is room for recruitment of urgently needed staff within the letter of the Decree and the additional specialists not foreseen in the Decree can be hired on project contracts using the mandate to CAS in Article 41. Details are in the memo in Annex 4.

Beirut, June 14, 2002

Document for discussion and not binding OMSAR/PMC or EC

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Background

The implementation of the November 2000 strategy plan started effectively at the end of January 2002, when all the obstacles during 2002 had been removed. The ARLA technical assistance team was finally fully operational with the local expert Dr. Zoha Khalil in place and three parallel and one partly overlapping mission by international experts in the period from January 25 to March 15. A lot of work was accomplished by the ARLA team for CAS during those 2,5 months. Dr. Khalil started the preparations for the household survey. Mr. Dabbagh helped draft the questionnaire for the census update and started the preparations for the first round of economic surveys. Dr. Dekker and Dr. Brown completed their work with reports that clarified a number of technical issues on database design and the GIS that were implemented by the staff of CAS. Everything seemed to be on track.

When Mr. Dabbagh and I came back in late March for my 2-week and his 1-month mission a number of problems had arisen. The Prime Minister had postponed his approval of the budget for the Census and the first round of economic surveys pending technical advice from the Minister of Economy and Trade. By the end of the first week of our missions we were advised by the PMC and OMSAR that the EU-Delegation had withdrawn all funding from the ARLA project for CAS and that all work by Dr. Khalil and Mr. Dabbagh must stop immediately. Mr. Dabbagh was given notice of contract termination by Arcadis BMB but with a notice period of one month that made it possible for him to complete his mission.

When my mission ended on April 7 the ARLA project for the CAS was jeopardized because of the controversy about the mandate of the CAS in the short term and in the long term that had been initiated by the Tranap report. Mr. Dabbagh's and my main tasks during those two weeks were to assist the CAS in responding to the critical queries on the strategy plan from the EU-Delegation, the Minister of Economy and Trade and a delegation from the International Monetary Fund (IMF) on a mission to assess the Lebanese statistical system. Even so, Mr. Dabbagh and the CAS staff continued in those weeks to prepare for the Census and the economic surveys and could report rather impressive progress to the Minister of Economy and Trade with draft questionnaires and manuals for both operations.

While in Stockholm good news on the internal preparations within CAS for the two operations assisted by Mr. Dabbagh continued to come throughout April. When his mission ended in early May, the CAS was internally prepared to set the dates for both operations. On the external fronts no encouraging news came until the delegation from Eurostat arrived towards the end of April. The matter of the mandate for the CAS on National Accounts was quickly sorted out with the full and constructive cooperation of the Minister of Economy and Trade, H.E. Dr. Bassil Fleihan. There would be a temporary expert group to compile National Accounts time series for 1997-2001, the CAS would start its series from year 2002 based on the first round of economic surveys, the 2002 Census was endorsed and the technical assistance program to CAS would be reinstated.

However, after the agreement there was another almost month-long wait for the authorization of the budget for the 2002 Census and for the agreement to be formally signed by the relevant parties. In the end, both these problems were solved after which the EU-Delegation released the funds for CAS and OMSAR could authorize the 2-week mission by me and the new one-month mission by Mr. Dabbagh to start in the beginning of June on short notice.

Terms of reference for the mission

The terms of Reference (in Annex 1) lists activities in Stockholm mainly to be available for discussions of up-coming issues with the business survey expert, CAS management and the PMC. The specific objectives for the 2-week mission to CAS are the same as for previous missions; to follow up on the implementation of the strategy plan together with the business survey expert, specifically the census and the household survey and to proceed with the implementation of the institutional development plan with priority for supporting CAS in developing a new staff structure, eventually to be implemented in a revised Government Decree for CAS. The following four activities are specifically listed:

1. Follow-up, together with the business survey expert, the preparations by CAS' staff for the Census of Buildings, Dwellings and Establishments;
2. Assist the CAS in the preparations of the household survey and provide input to the discussion on survey and questionnaire design with the Ministry of Social Affairs;
3. Assist the CAS further in developing a proposal for a new staff structure for the CAS, eventually to be regulated in a new government decree on CAS;
4. Assist the CAS in developing a strategy for staff capacity and capability building sufficient for a modern system of official statistics for Lebanon;

In this mission I intended to concentrate on activity 3 and 4 and I have mostly succeeded in that ambition. However, there is a need to say something about the effects of the uncertainties surrounding the whole ARLA project before detailing my activities in the CAS.

ARLA project uncertainties

On the first day of my mission, on Monday June 2, I was informed by the PMC on the exact details of the exchanges between the EU-Delegation, the Ministry of Economy and Trade, OMSAR and the PMC and the uncertainties about the future of the ARLA program after the current contract for Arcadis BMB and PMC expires at the end of September. I had a meeting with Mr. Piazza d'Olmo at the EU-Delegation on Wednesday, June 5, at which the uncertainties were clearly elaborated but not resolved, pending instructions from the HQ in Brussels. My notes from this meeting (in Annex 2) were shared with Dr. Maral and the PMC team leader Mr. Sfikas.

The ARLA program will continue to the end of 2005. However, at the time of writing this report, there is still no decision as to the organization of the project after September 2002 when the contract with Arcadis BMB expires. There is agreement between the EU and the Lebanese Government on technical assistance missions for the CAS until June 2003 but no decision as to whether BMB will continue as contracting agency or – if not – what will be the alternative arrangements, responsibilities and mandates for recruiting international experts after September. This uncertainty will increasingly cause problems in recruiting qualified experts for the planned missions.

The most serious uncertainty for the CAS in the short run is created by information that the release of the budget for purchases of equipment will be held up for at least six months, first waiting some weeks for approval by HQ in Brussels and then for an international (!) tender process that will take six months at least to complete. That an international tender is required for the standard servers and PCs (Dell, Compaq, IBM, Hitachi, etc) or for the standard software programs on the equipment list is not easy to understand. All of the equipments are

available on the local market by brand dealers in competition. A delay by more than six months before the equipment is installed is very serious for the CAS, causing frustration and unnecessary delay in the execution of the Census operation. It will also jeopardize the time plan for the pilot and the sampling for the household survey that depends on the results of the Census to be available before the end of November for fieldwork to start at the end of the year.

ToR activity 1. Status of work on the Census

Mr. Dabbagh will report more extensively on the technical preparations for the Census of buildings, dwellings and establishments in his mission report. Here I give only a brief status report. The CAS staff finalized the questionnaires and manuals after Mr. Dabbagh left in early May but keeping email and phone contacts with him in Sydney. They had prepared draft job descriptions for the various categories of staff that he reviewed upon arrival for his current mission. He assisted in the preparations for the training program of the 600 fieldworkers that will be deployed for the operation. The jobs were advertised in four newspapers on Thursday, June 13. The period for applications must be two weeks according to the regulations. The selection will be based on merits and experiences of the applicants and include a theoretical test. The training can start on Monday, July 1, and continue as in-the-job training in the first three days of fieldwork.

Training and fieldwork will start with the coastal big cities for which the high quality maps produced by the GIS-technology based on the maps purchased from the Lebanese Army are ready. The timing of the fieldwork before many households in the cities move to their secondary residences in the mountains is essential to avoid repeat visits later to primary residences with households not present. The fieldwork for the rest of the country can start only couple of weeks later when the maps for the rest of the country are ready. The quality of these maps will be much lower than the maps for the coastal cities if they must be based on the low-resolution satellite images supplied by the Ministry of Agriculture. There is a need to purchase higher resolution satellite images at the price of US \$ 25 000, which would substantially increase the quality of the maps. This has been conclusively proved by tests by the GIS specialists of CAS on demonstration samples. Dr. Maral has already informed OMSAR by phone of the urgent need to buy the higher-resolution satellite images to ensure best possible quality maps for the fieldworkers and for future updates of the Census. Mr. Dabbagh and I support her request hoping that a solution can be found with the short notice.

It should be realized that Dr. Maral and her staff have taken on a very challenging task for the next month. The task is nothing less than registering the characteristics of all buildings, dwellings and establishments in the whole country, requiring training, logistics and supervision of 600 fieldworkers spread over the whole territory. Emergencies will arise in the course of this large and difficult operation for which quick solutions must be found by the management of CAS. It will be very helpful if other government institutions can be mobilized to provide support to CAS if needed when such emergencies arise.

ToR activity 2. Status of work on the household survey

The progress of work with the preparations of the household survey has been slow since early April when Dr. Zoha Khalil had to finish her work because the funding was withdrawn by the EU-Delegation and was not renewed when the EU-funds were released. The Ministry of Social Affairs, the partner institution with CAS for the household survey project, will instead contract her. However, an administrative problem that will be solved in the next few weeks is

holding up her appointment. April, May and June of valuable preparation time have been rather unnecessarily lost. Questionnaires, diary forms, product classifications, data processing programs, and manuals for fieldworkers and coders must be ready in time for a large pilot to be done in October. There is still time enough but only barely.

Discussion in the meeting with the team from the Ministry of Social Affairs on Tuesday, June 11, revealed that important design issues have not been solved since April and some new were raised by the team from the Ministry (see notes in Annex). In my notes I try to clarify the technical issues involved in deciding the design of the survey. My preference is for CAS to stick with the original design as discussed in previous missions and adopted in the budget approved by the Government in January. However, further consultations are needed with the partner institution – also a very important user - to reach a stable agreement on a scientific basis.

ToR activity 3 and 4. Status of work on the staff structure

In this mission my main activity has been to return to the issues of staff structure of CAS as regulated in the 1980 Decree and staff capacity and capability building. After initial discussions of the lengthy and cumbersome process by the CAS and the Government to adopt a new decree and even to make small amendments, Dr. Maral asked me to analyse the regulations for the various categories of staff to see what recruitments can be made within the letter of the Decree and what the additional needs are that may be filled by staff on temporary contracts using the unique mandate given to her in Article 51 of the 1980 Decree.

My analysis as reported in a memo (in Annex 4) reveals that the regulation of staff structure with job descriptions, specifications of formal qualifications for recruitment and promotion are indeed excessive and partly outdated because of technological developments. However, it is possible to meet some of the urgent needs for staff within the letter of the 1980 Decree and the needs for some additional specialists provided that Dr. Maral can use the mandate in article 51 to hire staff on contract for specific projects. The vacant posts that can be filled and urgently needed are:

- 25 posts for surveyors in the Fieldwork department;
- 22 assistant statisticians;
- 10 data entry staffs, of which five with extra training as digitizers for the GIS;
- 2 programmers in the IT-Department;

The vacant posts that require updated job descriptions and/or require higher qualifications or new specializations are:

- 6 specialists in network technology able to do technical hardware and software support that may replace six posts: “three specialists in running computers” and three “workshop heads”;
- 2 new specialists in GIS technology with 5-year engineering degrees in geography;
- 8 new specialist economist of which five for the Economic statistics department for the study of various branches of industry and three for the National Accounts Department.

These three categories are urgently needed now as well as in the longer term but may have to be recruited on special contracts since these posts are not fully compatible with available posts or job descriptions in the 1980 Decree.

Other information

The work of the committee to compile National Accounts time series for 1997-2001 has started. The steering group with The Minister of Economy and Trade, H.E. Dr. Bassil Fleihan, and Dr. Maral as one of its members, is constituted. Mr. Kasparian is one of the experts working for the group. CAS will second one economist from the National Accounts Department to work for the committee. When the work of the committee is finished its files will be delivered to CAS for archiving.

Dr. Maral has corresponded with INSEE about the administrative details to arrange for the four staff that will be recruited and sent to ENSAI to study for three years to obtain the Diploma required for the statistician position in CAS.

List of issues and recommendations

1. CAS needs to buy high-resolution satellite images that will substantially improve the quality of maps for the rest of the country. A question to be answered urgently is whether OMSAR can find some way to finance the purchase from the Lebanese firm that has the exclusive rights to the high-resolution images from the Russian satellite.
2. I have been informed by Mr. Piazza d'Olmo that the EU grant for equipment to CAS probably cannot be delivered in time for the data processing of the Census. If the equipment must be *internationally* tendered serious delays in the data processing of the Census will be the result. An international tendering process will take at least six months according to his estimation.
3. A clarification of the arrangements for the recruitment and contracting of international experts for CAS after September is urgently needed.
4. Needless to say, the preparations for the Household Living Conditions Survey must be restarted as soon as possible so that the pilot can be done in October and the fieldwork operation can start at the end of this year. The survey is one of the pillars in the strategy plan for economic statistics sufficient for the compilation of National Accounts.
5. The results of the strategy plan will not be sustainable unless CAS is allowed to start capacity and capability building for the longer run. The recruitment of core staff for the fieldwork organization and specialists in economics and business administration for the Economic statistics and the National Accounts departments as well as network support technicians and specialist geographers needs to be done now. They will then be able to participate almost from the beginning to get on-the-job training and the experiences they need to be able to sustain the statistical operations for annual National Accounts.

Annexes

Annex 1. Terms of Reference for the Institutional Development Expert

Background Information

The functions of the institutional development expert is to assist the CAS management to reconstruct the system of official statistics and the statistical organization of Lebanon with priority in the short term for a system of economic statistics sufficient for the compilation of modern National Accounts. The expert has agreed to a series of short-term missions to assist the CAS in developing strategies and plans and to follow-up on their implementation. This includes in particular also the technical assistance plan.

The first mission of the expert in November 2000 assisted the Central Administration of Statistics (CAS) in developing the November 2000 strategy plan for building a system of economic statistics sufficient for the compilation of modern National Accounts according to international standards and recommendations. In the second mission to CAS in April 2001, the main institutional development issues were identified and a work plan detailed for the period July 2001 – June 2002. A second task of that mission was to make a first follow-up of the strategy plan for statistical system building in the years 2001-2003 and to propose a technical assistance plan for the CAS within the ARLA work plan for July 2001-June 2002.

The third and fourth missions, resp. July 27 – August 12 and October 8-16, 2001 did further follow-ups of the November strategy plan and the May technical assistance plan. The delays in the implementation of the plan were analyzed and consequences in terms of modifications of the strategy proposed. Five issues for Government consideration were identified in the short run to remove barriers for the CAS to implement the November strategy plan. The technical assistance plan was modified to take into account the resignation of the resident adviser for the National Accounts effective from August 21.

Of the five main domains for institutional development identified in the May mission report “Human resources development” was the priority task for the third mission but also “Organization Development” and “Legislative framework” was discussed. Main outputs were (1) a general analysis of staff capacity and capability needs of modern statistical agencies, (2) a detailed survey of staff capacity and capabilities at the CAS to establish baseline data, and (3) identification of the needs for technical staff to implement the November 2000 strategy plan.

In his fifth mission in January 2002 the expert followed-up on the implementation of the November strategy plan, particularly the issues listed for Government consideration, and continued the implementation of the work plan for institutional development. He helped organize the input of the technical assistance experts as a team. Preparatory work was done by the expert working in Stockholm communicating by phone and e-mail with the CAS management.

His sixth mission to CAS was preceded by a meeting at Eurostat in Luxembourg on March 18 to discuss the issues raised by the Tranap report as to the strategy plan and the mandate of the CAS. Most of the subsequent mission March/April was devoted to assist the CAS in clarifying the issues and inform the parties involved. The Government put the budget of CAS for the census and the economic surveys on hold and the EU-Delegation cancelled the budget for technical assistance to CAS under the ARLA program. These issues being solved, the implementation of the modified November 2000 strategy plan will now be restarted, the work

on institutional development issues will proceed with technical assistance provided according to the new agreement between the Lebanese Government and the European Union.

Proposed specific objectives

The main purposes of the next mission are to support the implementation of the strategy plan together with the business survey expert, specifically the planning and preparations for the Census of Buildings, Dwellings and Establishments and the 2003 Household Survey, and to proceed with the implementation of the institutional development plan with priority for supporting CAS in developing a new human resources structure to be implemented in a revised Government Decree on CAS.

Main activities to be undertaken

1. Preparations in Stockholm

- 1.1. Collaborate with the CAS management and the business survey expert to discuss the contents of the various mission reports of the international experts and liaise with the experts as needed;
- 1.2. Collaborate with the PMC and ARCADIS BMB and the business survey expert in planning the subsequent missions of the international experts to the CAS;
- 1.3. Be available for discussions by phone or e-mail with the CAS management and the business survey expert on other up-coming issues in the implementation of the strategy plan;

2. Activities during the mission to the CAS

- 2.1. Follow-up, together with the business survey expert, the preparations by CAS' staff for the Census of Buildings, Dwellings and Establishments;
- 2.2. Assist the CAS in the preparations of the household survey and provide input to the discussion on survey and questionnaire design with the Ministry of Social Affairs;
- 2.3. Assist the CAS further in developing a proposal for a new staff structure for the CAS, eventually to be regulated in a new government decree on CAS;
- 2.4. Assist the CAS in developing a strategy for staff capacity and capability building sufficient for a modern system of official statistics for Lebanon;

Location

Central Administration of Statistics in Beirut, with preparatory work in Stockholm.

Expected duration and start date

5 weeks, to be split into two 2-week missions to CAS and six days for work in Stockholm. The mission to Beirut to start on June 2 with June 19 as last day.

Expected outputs

Memos on various issues, progress reports and a final mission report on the tasks fulfilled.

Reporting arrangements

The report should follow the guidelines for mission reports of Short Terms Experts. Deviations are possible, provided that these are discussed with the PMC Team Leader.

Annex 2. Notes on meeting with Mr. Joseph Piazza d'Olmo at the EU-Delegation

1. The contract with Arcadis BMB expires end of September 2002 but the ARLA program will continue until the end of 2005, that is, for more than three years. Options are that HQ decides (a) to float an international tender for the ARLA program, which takes at least twelve months to complete and (b) that Arcadis BMB is getting a "rider contract" for a bridging period until the tender process is completed or (c) that Arcadis BMB is getting a "rider contract" for the duration of the ARLA program. Alternative (b) "does not make much sense" according to Mr. Piazza d'Olmo's own opinion. Alternative (a) means that some other arrangement must be found for the period of the tendering process during which the program will be run in a some limited fashion.

2. The subprogram for the CAS will be run by Arcadis BMB until end of September according to the agreement reached at the end-of-April meeting in Beirut. This includes contracting Mr. Lequiller for a 3-week mission for price indexes and the EU expert from INSEE for a 2-week mission to design the questionnaire for the household survey. It does not include the local expert for one man-month under component 1, who must be financed together with the grant for equipment now under consideration at the HQ. The ARLA budget line for local experts is exhausted. If HQ in Brussels approves the grant, possibly next week, the equipment can be purchased only after floating an international tender, which will take minimum 6 (!) months. There is no way around this requirement, according to Mr. Piazza d'Olmo.

3. The preparation of the tender for the equipment budget should start immediately so that no time is lost after the approval from the HQ. The tender will be floated by OMSAR according to EU regulations. Mr. Piazza d'Olmo was fully aware of the fact that a 6-month process will regrettably create severe problems for the CAS. The fact that the list of equipment includes only standard equipment would not make possible any short cut in the procedure.

4. Mr. Piazza d'Olmo has informally discussed with Eurostat and the HQ an idea that the subprogram for the CAS is taken out of the BMB-contract after September to be constituted as a separate project. If the HQ approves the idea, there will be a bridging period until a new contracting firm is found after an international tendering process to provide technical assistance to the CAS, most probably from July 1, 2003 until the end of 2005. If the tendering process is done faster the new firm can take over from January 1, 2003 or some later month in the spring. The continuity of present technical assistance will – in that case - be ensured by a bridging arrangement during the tendering process under which consultants will have framework contracts directly with the EU-Delegation. However, the continuity of technical assistance after that will not be ensured. I reported on the serious concern of Dr. Maral if she would have to start from scratch with a new set of consultants for the last 2,5 years of an ongoing program.

5. The preparation of the tender should not start until HQ has decided whether to approve the idea to constitute the support to CAS as a separate project. The project would probably be limited to whatever is needed for the establishment of National Accounts for Lebanon. It could probably not be widened to include any of the areas of social statistics, which are within the legal mandate of the CAS and normal for National Statistical Institute such as labor force, education, health, housing, and demography.

Annex 3. Notes on meeting with the Ministry of Social Affairs (MoSA)

Present: Dr. Maral Tutelian, Mr. Adib Nehme, Dr. Marwan Houry, Ms. Sawsan Kobeisi, Dr. Zoha Khalil and myself.

1. The preparations for the household survey came to practically a halt when Dr. Zoha was dismissed in early April in connection with the withdrawal of funding to the ARLA program for CAS by the EU-Delegation. Sociologist Lara Badr and Ibtissam El-Jouni in the Social statistics department has continued some preparations on the questionnaires. Technical assistance by Dr. Zoha is needed but – under the circumstances and with her experiences - she cannot resume work until she has a contract. In the late April agreement between the EU and the Lebanese Government, the planned EU-support to CAS includes a 2-week mission before end of September by an INSEE expert on questionnaire design to be contracted by Arcadis BMB. After September the EU will provide a 2-week mission for sampling and a one-month mission to analyze the pilot, from the INSEE. Also a 3-week SPSS on-the-job training of CAS staff by a local expert will be financed to take place in the beginning of 2003.

2. Dr. Zoha's contract will be with the MoSA. However, this cannot be signed until the Ministry passes an administrative hurdle so that the formal agreement between the MoSA and the CAS can be signed. The State Court of Auditors must be notified and give its approval when two institutions want to sign an agreement using their budgets. The CAS has notified the Court weeks ago but the MoSA will fulfil this requirement only now. However, it is thought the process will take only a week or two since the Government in February approved the budget for the survey.

3. The MoSA representatives reported that the PAPFAM – a statistical project sponsored by the Arab League - is again interested in cooperation. This would entail coordinating the questions that yield the usual socio-economic indicators on household living conditions included in the CAS-MoSA survey but also adding some special PAPFAM modules to the living conditions questionnaire. These modules would be added to the questionnaires to be filled by the 6 000 households that will answer the living conditions questions but not to the 8 000 households that will complete the household diaries. The number of modules and the number of questions in each module to be added as well as other technical and financial issues would be discussed when PAPFAM representatives would visit the MoSA in the next few weeks. Dr. Maral stressed the view that the basic priorities of the two partners – macro-data for the National Accounts to the CAS and data for poverty analysis to the MoSA – cannot be compromised or disturbed by any requests by third parties.

4. The survey design as originally discussed was for an integrated living conditions survey with a sample of 14 000 household of which 8 000 households would participate with their household budget data using the diary method to be visited three times in the 2-week diary period covering the whole calendar year. The integrated survey would be designed to yield social indicators on the following living conditions components:

1. Household and family;
2. Health and medical care;
3. Labor force participation and working conditions;

4. School enrolment and education;
5. Income, expenditure and consumption;
6. Housing conditions and amenities;
7. Victimization by crime or accidents;
8. Culture and leisure time pursuits.

In order to cover all the eight components the indicators under each component must be kept to a minimum core and follow international manuals and recommendations in order to avoid respondent fatigue that may effect the quality of all indicators.

The list of components to be included was reaffirmed in the meeting but there was no time to discuss the list of indicators under each component or the formulations of questions. Instead, there was a long discussion on the sample design, now further complicated by the PAPFAM requests.

5. The original design would meet all the needs of the CAS for macro-data for the National Accounts and data for all the major sectors of social concern in the CAS mandate as well as the major needs for MoSA for data on poverty. However, all along the MoSA has advocated a panel design for the sample so that the 8 000 households asked to fill the diary in the first six months of 2003 are then re-visited for a second 2-week diary period in the second half of the year. Dr. Zoha has thoroughly researched this issue and found some advantages of this design for the micro-data analysis of poverty, and also made a creative design of her own to better integrate the retrospective questions on purchases of durables and other seldom-bought consumption items. However, the panel design to be introduced at this stage also carries problems and also has methodological disadvantages.

- (a) the cost of the household budget survey will increase substantially, almost as much as if the sample for budget module was doubled, when the panel design is used;
- (b) a number of tricky administrative issues will arise since the panel design has not been foreseen in the budget for the survey approved by the Government in February;
- (c) the administrative complications will further increase if PAPFAM is added as a third partner in the cooperation with financial inputs to cover its costs;
- (d) a main methodological problem is that the second wave in a panel normally encounters added respondent resistance, resulting not only in a lower response rate but also in lower respondent morale in the second wave. These two effects will contaminate the "true" seasonal effect between the first and the second half of the year, which will be difficult to isolate both in the macro-data for the National Accounts and in micro-data analysis of poverty;
- (e) a second methodological complication for the micro-data analysis in particular is that a substantial number of households who are approached six months apart will have changed size and composition in the meantime by births, deaths, marriage and divorce, young adults leaving to live alone or to form own households, etc. Such new households formed (including also by divorces and immigrants) will not be in the sample for the second wave, which will contaminate both micro- and macro-data;
- (f) there is, as suggested by World Bank experts, statistical techniques to compensate for the disturbances in micro-analysis of poverty from seasonal peaks and troughs in the consumption level of households. Poverty as measured by the consumption level will be lower in the big holidays associated with gift-giving and higher in (rural) subsistence farming households before the harvest. These effects do not disturb macro-data much but can be important in micro-data analysis. One technique to assess these disturbances is to

apply a regression model with some division into seasons as independent variables. The coefficients, if found substantial, can be used to adjust the data for the seasonal effects before the micro-data analysis. Another technique to assess the effect is to ask the households at the end of each week in the diary period whether consumption during the week has been higher or lower than normal.

6. The panel design issue was not solved. All the arguments above from (a) to (f) were not systematically presented in the meeting. The MoSA representatives thought that additional financing for the panel design could be arranged even if US\$ 200 000 are needed but the administrative complications mentioned by Dr. Maral were not really discussed with appropriate respect for their potential complexity. However, there was agreement that the principal objectives of the two present partners must have priority in relation to any cooperation with the PAPFAM. The 14 000 sample for the living conditions questionnaire will be distributed over the whole calendar year. Of the 6 000 households that could potentially be made available for PAPFAM modules, only half or 3 000 can be done in the first half of 2003 without compromising the original design.

7. MoSA representatives wanted couple of days to think about the issues and promised to return with their proposals in writing. Dr. Maral does not want to take a decision on the design issue until after there has been a thorough scientific analysis and discussion of the pros and cons. She wants to hear not only the experts within the CAS and the MoSA but also Mr. Verger of INSEE. In his report after his mission to CAS in July last year he recommended the panel design for the survey if poverty is to be measured based on consumption data.

Annex 4. CAS' staff structure and recruitment within the 1980 Decree

Introduction and summary

In this memo I first describe the complex process to change the old Decree. Extensive preparations by the CAS are required and involvement of several institutions at the highest levels of the Lebanese Government. The Director-General, Dr. Maral Tutelian has asked me to go through the regulations for the various categories of staff to see what recruitments can be made within the letter of the Decree and what the additional needs are that may be filled by staff on temporary contracts using the unique mandate given to her in Article 51. A reader may find it useful to first study the table in the annex 4.2. to get an overview of the kinds of staff that is foreseen for the CAS in the Decree.

An analysis of the staff structure that is regulated in the 1980 Decree for the CAS reveals many restrictions for effective recruitment, training and management of staff. Many of the 256 posts allocated to the CAS are effectively closed for external recruitment for various reasons. Practically all the *senior* posts of various categories are vacant but must be filled by promotion from available junior incumbents who are still too junior to be promoted according to the regulations. Other reasons might be that the universities in Lebanon are not graduating any students with the required qualifications or that the graduates are too few each year to fill the vacancies of urgently needed staff other than over the next several years. A third type of reason is that the job descriptions and the formal qualifications specified in the Decree are related to the 1980 technology and must be updated. Also CAS needs some specializations that did not exist at the time.

There are, first of all, a number of vacancies for jobs that are urgently needed by the CAS as well as in the longer term, most specifically to rebuild a permanent core capacity for nationwide fieldwork by re-staffing the six regional offices. Below is a complete list of such vacancies. One should also note that some 26 vacancies for lower level service staffs need not be filled at the present or not at all. The vacant posts that can be filled and are needed are:

- 25 posts for surveyors in the Fieldwork department;
- 22 assistant statisticians, of which up to 15 are to be recruited;
- 10 data entry staffs, of which five with extra training as digitizers for the GIS;
- 2 programmers in the IT-Department;

The vacant post that require updated job descriptions and/or require higher qualifications or new specializations are:

- 6 specialists in network technology able to do technical hardware and software support that may replace six posts: 3 "specialists in running computers" and 3 "workshop heads";
- 2 new specialists in GIS technology with 5-year engineering degrees in geography;
- 8 new specialist economist of which five for the Economic statistics department for the study of various branches of industry and three for the National Accounts Department.

These three categories are urgently needed now as well as in the longer term but may have to be recruited on special contracts since these posts are not fully compatible with available posts or job descriptions in the 1980 Decree. Draft job descriptions and specification of formal educational requirements are provided in Annex 4.1.

The procedures to change the 1980 Decree

The staff structure of the CAS is regulated in Presidential Decree No 2728 issued on February 28, 1980 that was slightly amended in Presidential Decree No 7729 issued on December 13, 1995. The 1980 Decree is based on the 1979 draft Law enforced by Presidential Decree No 1793. The procedure before promulgation of the Decree is listed in the Decree as follows, after the usual references to the constitution and previous laws and decrees:

- After consultations with the State Council;
- After the approval of the organization of the Council of Civil Service in its decision No 704 dated 11/12/1979;
- By virtue of the proposals of the Prime Minister;
- And after the approval of the Council of Ministers on 29/12/1979.

The 1995 amendment in Decree No 7729 required the same procedure involving the President of the Republic, the Prime Minister, the Council of Ministers, the State Council and the Civil Service Council, not to mention extensive preparations by the CAS. It is thus an awesome and time consuming task to affect changes in the Decree – even marginal amendments of the type affected in the 1995 Decree No 7729. Dr. Maral has therefore decided to continue to work within the confines of the existing Decrees for the time being and to whatever can be done within the existing regulations in the Decree. To fill other urgently needed jobs she will need to employ the mandate given to her as Director-General of the CAS in Article 51 to hire staff on temporary contracts.

Flexibility clauses in the 1980 Decree

The Decree regulates not only the job descriptions and the qualifications for each category of staff but also the salaries according to grade and level. The totality of restrictions put on the recruitment, training and management of the staff of the CAS do severely encroach on the mandate of the Director-General to rebuild statistical capacity for Lebanon in the present situation. Indeed to operate a national statistical institute according to modern international standards when at full capacity and in a normal mode of operation is a demanding task. In recognition of this fact there is a number of clauses in the 1980 Decree that mandates the Director-General some very important flexibilities to operate the statistical production process. The most important of these flexibilities are:

- 1. Mandate to hire extra staff on temporary contract:** Whenever necessary, the CAS may get assistance of persons from outside its cadre for the performance of different statistical works in the field, or in the offices. The Director-General of the CAS determines, through a decision s/he issues the needed qualifications for those persons, and the indemnity to be paid against each performed and accepted work unit. (Article 51)
- 2. Mandate to amend office hours:** Office hours of departments charged with the implementation of important statistical surveys, can be amended before and after noon, with proportionate overtime pay to the affected employees up to 20 percent of their salary (Article 52).
- 3. Mandate to pay production rewards:** The Director-General can give employees in the IT-Department production rewards and to fieldworkers as to number of forms or other units of work completed as proposed by the respective department heads (articles 53 and 54).

The Decree defines 33 categories of staff with brief job descriptions and specifications of the formal qualifications required for jobs that are rather specific for CAS (see table in Annex). In

addition there are some categories not defined specifically for CAS like accountant, clerk or writer, typewriter, janitor, guard, driver, etc. specified only as to numbers.

The statisticians

There are seven categories, which would normally be called “statisticians” in National Statistical Institutes although with different specializations, each with two or three levels. The first category as defined in the Decree includes the *statisticians* as an exclusive denomination. To have this denomination they are required to have either

- (a) a diploma from a *high institute for statistics and economical studies* that cannot be obtained from any of the Lebanese universities at the present. After the 1995 amendments a “high institute” is defined as one that requires for admittance a university license, which has been awarded after minimum three years of study after the Lebanese baccalaureate, second stage;
- (b) or a licence in economics, in addition to a diploma of specialization in statistics, awarded after at least three years of study;
- (c) or a master’s degree at least, or its equivalent in economic or social sciences, in addition to a diploma of specialization in statistics, awarded after at least two years of study, or
- (d) the candidate has worked as specialist in economic, social, geographic, or demographic science, or business administration in the CAS for six years at least and succeeded in a training course on statistics for six months at least, organized by the Civil service council in cooperation with the CAS. A specialist who has a specialization diploma in statistics, awarded after one year of study at least, is exempted from this requirement.

None of the Lebanese universities at present provides any of the alternatives (b) or (c) and practically none of the present specialists can yet apply for alternative (d).

A *statistician* can be promoted to *senior statistician* after being promoted in several steps in the career for a *statistician*, a process that takes several years. In addition they must take a special training course organized by the Council of civil service in cooperation with the CAS and submit an acceptable thesis on a particular subject. The candidates for promotion are screened by the Civil service council and must be confirmed by the Government. Only senior statisticians can be promoted to department heads by special appointment by the Government. The exception is the head of the administrative depart – the Diwan – who does not need to be a statistician. The present incumbent has a degree in Law.

The Decree specifies for the CAS no less than 31 positions for the three levels of statisticians; six *department heads*, eight *senior statisticians* and 17 *statisticians*. At present there are only four with the required diploma from ENSAI, an institute affiliated with INSEE, the National Statistical Institute of France. Four candidates with a B.A. with high grades in mathematics and the French language will be selected this summer to go to ENSAI for the 3-year training required for the diploma. To fill the 31 positions will thus be a lengthy process.

The specialists

There are five categories of *specialists* defined by their original formal training as to academic discipline. The admitted disciplines are statistical mathematics, economics, business administration, social science/demography, geography, documentalism or (IT) analysis. Any of these specialists are required to have a university degree from a Lebanese university obtained after minimum three years of study after the Lebanese baccalaureate, second stage. They can be promoted to *senior specialist* through the same process and with the same requirements as were just described for the statisticians. The *senior specialists* can be promoted to the cate-

gory of *statistician* after minimum six years of service provided that they have one year of statistics in their university degree or succeed in a 6-months course in statistics.

At the present, there are 26 positions for specialists, of which 17 are filled. All the vacant positions are for *senior specialists*, which can only be filled by promotion from the ranks of presently filled positions for specialists. The eleven vacant positions for specialists are thus blocked for the time being. External recruitment to the specialist category will be possible only after promotion to the senior level by present incumbents.

The present two sections in the Economic statistics department (production statistics and foreign trade) may need to be increased to eight to start building specific competence in each of the industrial branches: manufacturing, construction, transport and communication, domestic trade, other services, foreign trade and prices and indexes. A minimum staffing of each of these sections would be one economist or business administration specialist and one assistant statistician. Over a number of years they would acquire detailed knowledge of the specifics of "their" branches from the data they collect and analyze but also by intense user-producer contacts with the various relevant Lebanese industrial branch associations. This would require external recruitment of at least five more specialists and five assistant statisticians taking present staffing of the Economic Statistics Department into account. The National Accounts department similarly needs three economists to specialize in the various sector accounts. A rule of thumb in the NA-profession says that it takes at least five years on the job to become fully qualified.

The Decree allocates one specialist geographer to the CAS, a number that needs to be increased by at least two more to manage the GIS technology and the remote sensing technique that the CAS is acquiring. This kind of expertise is available from Lebanese universities that are graduating geographers with a 5-year engineering degree with these modern competences.

In the somewhat longer term the CAS will need specialists to staff the future nine sections in the Social statistics department similarly to the sections in the Economic statistics department. When in the future the statistics programs on environment and natural resources are launched some similar staffing of relevant specialists will be required.

The assistant statisticians

The Decree allocates the category of *assistant statisticians* to the different departments but can be rather freely reallocated by the Director-General. The required formal qualifications for this category are either

- (a) that s/he has the Lebanese baccalaureate, second stage, succeeds in an examination to be selected as a candidate and successfully undergoes a preparatory course of two years organized by the Council of civil service in cooperation with the CAS, or
- (b) that s/he has an officially recognized diploma of technical qualified expert in statistics after theoretical and practical study of statistics for two years obtained after the Lebanese baccalaureate, second stage.

The Lebanese university is now awarding such a diploma specified in alternative (b) exactly tailored to the modern qualifications needed by the CAS that includes in particular computer literacy and experience.

The Decree specifies no less than 41 posts for assistant statistician. However, 14 of these posts are for *senior assistant statisticians*, which can only be promoted from the ranks of the

27 *assistant statisticians* after six years of service, of which five are filled at the present. This means that 22 positions are vacant and can be recruited externally. Dr. Maral corresponded with the Civil service council asking for the 22 posts to be filled in accordance with the agreement. The Central inspection that has a mandate to control all recruitments for state financial reasons has allowed up to 15 to be recruited. The CAS is now proceeding with those recruitments and will attempt to fill the 15 vacancies this year.

IT-staffs

The decree provides the IT-Department with two posts for *statisticians*, one as *department head* and one as *senior statistician* or *statistician*. One of the four statisticians is now managing the department. His diploma from ENSAI is in statistics combined with an advanced IT-specialization including GIS-competence that is very adequate for his job. The category of *analysts* has an outdated job description in the Decree, suitable for the mainframe computers of 1980. However, the formal qualifications required for the post fit well with the modern IT-training that is provided by several of the universities in Lebanon. The requirements after the Lebanese baccalaureate, second stage, are according to the 1995 amendments either

- (a) a master's decree or engineering diploma in computer science, or
- (b) the conditions stipulated for the function of a statistician combined with a at least six months of training in the methods of information processing organized by the Civil service council in cooperation with the CAS.

Only analysts in the (a) alternative can advance to the statistician category and be a candidate for the department head position. At present the two positions for *analysts* are filled. External recruitment to a position as analyst will be possible when one of the two is promoted to *senior*

The next category of IT-staff is the *programmers* who can be promoted to *analyst programmers* after six years of service as programmer. The formal qualifications required for the programmer position according to the 1995 amendments are either

- (a) a license in computer science, or
- (b) a diploma of technical expertise specialization in administrative computer science awarded after at least two years of study after the Lebanese technical baccalaureate, second part, or its equivalent, and work experience of three years at least.

Only the programmer with alternative (a) as formal qualification can be a candidate for promotion to *analyst programmer* with the required six years of service as programmer. S/he cannot be further promoted to *analyst* or *senior analyst* unless s/he increases the formal qualifications.

The decree provides for five positions as *programmers* of which three were recently filled. The two vacant positions can now be filled by external recruitment. Further external recruitment will be possible when the three *programmer analyst positions* can be filled after six years of service by any of the three present programmers.

The 1980 Decree also specifies the category of *specialist in running computers*, who can become *workshop heads* after ten years of running computers. The job description of this category is outdated, relevant only for the mainframe technology of the 1970.s and 1980.s. The corresponding job description today would be for network technicians and technical support staff manning the help desk that provides services to staff that has some problem with their PC or software. The formal qualifications required for this job may now be too low as stated in the decree. Required is a diploma of the technical baccalaureate, second part, in the

branch of computer programming, and a training course organized by the Civil service council in cooperation with the CAS. The modern job of network technician and technical hardware and software support requires at least two years of university study. Several of the Lebanese universities now graduate students with the required training.

The Decree allocates four positions for *specialists in running computers*, of which one is presently filled, and three positions as *workshop head*. The vacant positions as specialists in running computers can be filled by external recruitment if the higher qualifications required can be accepted without changing the Decree. Otherwise a solution with contracts might be found. This category of staff is absolutely essential to the whole operation of statistics production because the computer system is the infrastructure for most of the functions in the CAS. When the system is down many activities stop.

Finally, there is also the category of *data entry staff*, actually the largest category in the IT-Department. There are no formal qualifications specified in the Decree for this job, only a special aptitude test after completing a training course on computers, organized by Civil service council in cooperation with the CAS. Data entry staffs qualify for the position of supervisor after six years of data entry.

The decree allocates 20 positions for data entry and two positions for supervisors. Staffs that have been with CAS for a long time presently occupy 13 of the positions, two of which can be promoted to the supervisor position. Their average age is 57 years. Nine positions are thus vacant and can be recruited externally but several positions additionally will become vacant when present staffs retire in the next few years. Some data entry staff needs to be given additional training to function as *digitizers*, for which five are needed on a permanent basis.

The Fieldwork department

The Decree allocates six qualified *statisticians* to the Fieldwork department: one position as department head, one as senior statistician and four as statisticians, of which one is filled at the present. In addition, the Decree allocates six of the *assistant statistician* positions, of which two for *senior assistant statisticians*.

The largest category in CAS is the fieldworkers, called *surveyors* in the Decree, for which there are 51 positions in the various departments, 16 of which are for senior surveyors. 15 of the 51 positions are allocated to the Economic statistics department and 12 to the Social statistics department. 23 positions, or less than half, are in the Fieldwork department, seven of which are for *senior surveyors*. The job description of the surveyor is fairly qualified in that s/he does personal interviews and records the answers, which requires both considerable social skills as well as accuracy. S/he is also supposed to do the coding of answers and be able to do ordinary calculations and other statistical works that does not need high technical qualifications.

The position as surveyor requires two qualifications (1) the Lebanese baccalaureate, second part, and (2) a training course of at least three months, organized by the Civil service council in cooperation with the CAS. Ten years of service is needed to become a *senior surveyor*. At the present, ten of the 35 positions as surveyors are filled more or less permanently, six on so-called "journalier" contracts in the Economic statistics department. There is, at present, only one permanently employed surveyor in the Fieldwork department. However, the Fieldwork department has conducted several large-scale fieldwork operations in recent years with fieldworkers on temporary contracts. The temporary fieldworkers, who have performed

successfully, now constitute a pool of some 300 with fieldwork experience, who can be easily recruited for future operations.

There is an urgent need to re-staff the six regional offices and to re-establish a permanent core fieldwork force that is able to cover all of Lebanon. In the future the CAS will need such a permanent corps of surveyors to carry out some continuous operations nationwide, for instance when the living conditions survey will be carried out during 2003 and probably during one or two following years, when the CPI will be based on national price data collection, when there is a quarterly labor force survey, when the Census of Buildings, Dwellings and Establishments (CBDE) needs updating continuously, etc. The permanent fieldworkers may also function as supervisors and controllers in large intermittent operations with many temporary fieldworkers.

The decree seems to foresee that each regional office in the six Mouhafazats (Governorates) is staffed with one assistant statistician, one clerk or writer, one typist and one janitor. Such a composition may not be quite appropriate, considering the functions of the regional offices as logistics points for the fieldworkers in the region and centers for dissemination of statistics with publications for sale and Internet access. A more appropriate composition of the staff of regional offices might be an assistant statistician, at least 3-5 surveyors and one janitor/driver. There is room to recruit externally 25 permanent surveyors, which will enable each of the six regions to have at least three surveyors. The available 16 positions as senior surveys can only be filled from the junior category when they have accumulated ten years of service according to the letter of the Decree. In the meantime all fieldwork operations will need "acting" supervisors and coordinators, who must be designated ad hoc.

The Department of documentation, publishing and printing

The Decree allocates three qualified *statisticians* to the Dissemination department: one position as department head, one as senior statistician and one as statistician, of which none is filled at the present. In addition the Decree allocates one post as senior assistant statistician or assistant statistician. None of these posts is presently filled.

The primary professional category allocated to the department by the Decree is the *documenters*. According to the job description a senior documenter or a documenter collects the statistics and studies, and other documents concerning the economic and social life in Lebanon and other countries. S/he classifies them according to subject and catalogues all documents that are in the possession of the CAS. A modern job description would recognize that the job in a library or an archive now requires considerable computer skills to handle all the modern tools of a librarian to access all the internationally available catalogues, documents and databanks that are available on the Internet. The home pages of the international organizations and the sister statistical institutes regionally and worldwide are particularly relevant for the work in a National Statistical Institute like the CAS.

The 1980 Decree specifies as requirement for the position as documenter besides the Lebanese baccalaureate, second part, either

- (a) a diploma in documentation awarded after three years of university studies, or
- (b) a license in economic, social, political or administrative sciences with a specialization in documentation for one year at least.

As one of the specialist positions, the *documenter* can be promoted to *senior documenter* after some years of service with regular promotions and then also fulfilling the same conditions as statisticians or other specialists, that is, the special course at the Civil service council and the thesis. The *assistant documenters* are not in the specialist category. The requirement for that position is the Lebanese baccalaureate, second stage, with branch in documentation.

The Decree allocates two positions as documenter to the CAS, one of which is as senior documenter. The documenter position is filled. Only when she is promoted to the senior documenter position some time in the future will there be room for an external recruitment. There are three positions for *assistant documenters*. All three have been recently filled, one of which is allocated to the IT-Department.

A modern dissemination department nowadays needs at least one specialist to handle press and other media relations, preferably with a journalist background. Also translators and language editors may become necessary for the three languages of Arabic, English and French unless the subject matter staff can be required or trained to have the necessary language abilities.

Annex 4.1. Number of positions for categories of staff of the CAS, of which filled in italics, totals and by departments

Category	Total	ESD	NA	SSD	ITD	FWD	DPP	DIV
Director-General	1	1						
Department heads	7	1	1	1	0	1	0	1
Senior statisticians (after promotions + course + thesis)	8	0	2	0	2	0	1	0
Statisticians	17	4	2	1	4	0	1	1
Senior specialist in mathematical statistics (after 2 years + course + thesis)	3	0	1	1	0	0	0	0
Specialist in mathematical statistics	4	4	1	1	2	2	1	0
Senior specialist in economics (after promotions + course + thesis)	3	0	1	0	0	0	0	0
Specialist in economics	4	4	1	1	2	2	1	0
Specialist in business administration	2	2	1	1	0	0	0	0
Senior specialist in demography/social sciences (promotions+course+thesis)	2	0	0	0	2	0	0	0
Specialist in demography or social sciences	2	2	0	0	2	2	0	0
Senior assistant statisticians (after 6 years)	14	0	5	0	3	0	4	0
Assistant statisticians	27	5	9	1	5	2	8	0
Senior analyst (after promotions + course + thesis)	1	0	0	0	0	0	1	0
Analyst	2	2	0	0	0	2	2	0
Programmer analyst (after 6 years as programmer)	3	0	0	0	0	0	3	0
Programmer	5	3	0	0	0	0	5	0
Specialist in running computers	4	1	0	0	0	0	4	0
Workshop head (after 10 years at running computers)	3	0	0	0	0	0	3	0
Supervisor (after 6 years as data entry staff)	2	0	0	0	0	0	2	0
Data entry staff	20	13	0	0	0	0	20	0
Senior surveyor (after 10 years as surveyor)	16	0	5	0	0	4	0	0
Surveyor	35	10	6	0	0	8	2	0
Senior documenter (after promotions + course + thesis)	1	0	0	0	0	0	0	1
Documenter	1	0	0	0	0	0	0	1
Assistant documenter	3	2	0	0	0	0	1	0
Senior specialist or specialist in geography (promotions + course + thesis)	1	1	0	0	0	0	0	1
Drawer or drawer planner (after 10 years as drawer)	2	1	0	0	0	0	0	2
Section heads	4	4	0	0	0	0	0	4
Accountant	1	1	0	0	0	0	0	1
Clerk or writer	17	10	1	1	1	1	6	4
Typewriter	15	8	1	1	1	1	6	2
Janitor	13	4	1	1	1	1	6	1
Guards	4	0	0	0	0	0	0	4
Drivers	4	0	0	0	0	0	0	4
Other servants	5	4	0	0	0	0	0	5
Totals	256	87	45	14	9	41	53	18
			24	46	24	5	18	6
			25					