

Chapter XIV
Developing a framework for budgeting for household surveys in developing countries

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Abstract

The present chapter aims to provide recommendations on careful and logical budgeting for a survey exercise. Readers are shown that there are two ways of viewing such a budget -- in terms of accounting categories or in terms of survey activities -- and are therefore encouraged to develop the budget using the approach of detailing accounting categories within each survey activity. The final product is a matrix of costs, which can also be used throughout the survey exercise to record real expenditure. Documenting and discussing real survey costs so as to provide input material for future exercises are greatly encouraged. The critical interplay between the design of, and the budgeting for, a sample survey, is emphasized throughout.

Key terms: survey design, survey budgets, survey implementation.

A. Introduction

1. A survey is a costly exercise in terms of both time and money; hence, it is imperative that one plans, in detail, the expenditures that one expects to incur from the start of the exercise to its end. Furthermore, one has to plan for contingencies, emergencies and unexpected economic changes, and to ensure that these unforeseeable events will be covered by the proposed budget. One way in which to plan for contingencies is to build into the survey process the ability to adjust the scope of work of the survey, including sample sizes, thereby allowing one the flexibility to deal more capably with unforeseen economic changes that may affect the survey implementation. A survey budget should be considered a dynamic part of the survey process, changing according to real needs during survey implementation. Tools for monitoring expenditure will be developed alongside the budget, and constantly updated to reflect real budgetary progress.

2. As the size of the budget and its allocation to various components within the survey exercise will have a direct impact on the quality of the survey results, one cannot emphasize too often the importance of detailed planning and budgeting. A detailed discussion of cost issues in the design of household surveys is presented in chapter XII. United Nations (1984) emphasizes the importance of balancing costs and quality as follows: “Ideally, priorities should be determined on the basis of analysis of costs and benefits of various alternative ways of using the scarce resources” (para. 1.5). Often, the budget for the survey is fixed and the sample designer is tasked with developing a design, with acceptable error levels, within this budget.

3. The setting up of a detailed budget for a proposed survey is often a cumbersome exercise, since it entails minuscule planning and preparation. In addition, survey planners are in a bit of a quandary at the time of planning, since the budget cannot be properly estimated until the final survey plan is in place, and yet the budgeting has to take place before the final survey planning/design. Here, experience with budgeting and costing in previous surveys plays an important role. It is also necessary to remember that optimal sample allocation cannot be considered without also considering the costs: for example, in stratified sampling, one can choose between minimizing cost for a fixed level of precision, or optimal precision for fixed costs (Scheaffer, Mendenhall and Ott, 1990). However, cost models often are not realistic, do not allow for changing circumstances which may arise during the course of the survey, and usually consider only errors in one variable. It is important, therefore, to maintain detailed records of budgeting and eventual expenditure, in order to support the growing advocacy that encourages survey practitioners to make cost information available so as to assist in future survey planning.

4. Traditionally, survey data are required for use in planning and/or policy decisions, and therefore results are required as soon as possible. Often, the survey will have to be carried out within a strict time frame, with deadlines for completion of various stages of the survey being specified by funding agencies. However, it must be remembered that using a little extra time can lead to the acquisition of data of much better quality; survey practitioners should therefore be prepared to argue for this at the budgeting stage of the exercise. For example, if, as is often the case, the time and/or the budget allocated to the management and analysis of data is/are insufficient, then the quality of the survey results may be in jeopardy. Thus, it is necessary at the

budgeting stage to “juggle” time, costs and errors, in order to come up with the most appropriate framework within which to operate.

5. The present chapter aims to shed some light on:

- How to go about preparing a budget
- Pitfalls to be expected at the time of survey implementation
- Developing tools with which to manage and report on survey finances

with reference specifically to personal interview household surveys in developing countries.

B. Preliminary considerations

1. Phases of a survey

6. As a starting point, before examining in some detail the main components of the budget for a household survey, it is wise to remind oneself of the main phases of a survey, since the costs for each stage of the survey must be planned for and adhered to wherever possible. The phases of a survey can be summarized as follows:

- Survey design and preparation
- Survey implementation
- Survey reporting

The components of these phases have been expanded upon in some detail in previous chapters.

2. Timetable for a survey

7. A second essential item to consider when drawing up a budget is the timetable for the whole exercise. Usually, when one is planning a survey, funds will have been promised on the basis of a completion date and, possibly, various other imposed deadlines. In order for the survey processes to work well, it is essential that a realistic timetable be drawn up alongside the budgeting framework, and then adhered to during survey implementation.

Example 1

8. Suppose one has been commissioned to carry out a survey in a large city in order to provide basic information on informal sector enterprises, their operation and success. Various donors are interested in the results since they wish to provide assistance in the form of business training and microfinance to deserving entrepreneurs. In particular, the donors would like to ensure that gender issues are addressed and, in the future, would want to monitor the impact of any assistance given. The donors are willing to allocate funds for a small survey for the purpose of interviewing 500 households/owners of small businesses in the city. A time period of three months will be allowed for completion of data collection, and an additional one month for production of a basic draft report. A proposed budget for this survey is to be submitted.

9. Below is a first draft (Gantt chart) of a possible timetable for such a survey. When one considers the time available for particular tasks, one has to estimate the staff needed to carry out and complete those tasks within the allocated time, for example, if four weeks have been allocated to conducting 500 interviews, including callbacks, an allocation of about 24 interviews per day will be required. The length of the questionnaire, the number of interviews per day, and the distances between respondents will now dictate the field staff required.

Table XIV.1. Proposed draft timetable for informal sector survey

Task	Week number																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Consultations with donors/publicity	•	•				•	•						•	•	•	•	•
Questionnaire design and testing	•	•	•														
Sampling design and sample selection		•	•	•	•	•											
Design of data entry			•	•													
Data analysis planning			•	•	•												
Field staff recruitment		•	•	•													
Training of enumerators and pilot				•	•	•											
Printing of questionnaires					•	•	•										
Fieldwork and checking							•	•	•	•							
Data entry and validation						•		•	•	•	•	•					
Data cleaning and analysis						•					•	•	•	•	•	•	
Production of graphs and tables														•	•	•	
Report preparation				•	•			•	•	•		•		•	•	•	•
Archiving				•	•											•	•

10. The above chart shows:

- How phases of the survey overlap, for example, data entry design will take place at the same time as questionnaire finalization, data entry itself begins very soon after the first questionnaires become available, and data cleaning can start even before all the data has been entered.
- How some tasks continue to run throughout the survey period, for example, report preparation should be an ongoing task for the survey coordinators since each step of the study has to be reported upon.
- How, in some cases, it is not possible to begin one stage before completing another, for example, final printing of questionnaires cannot take place until piloting is complete and then the window for printing is short, occurring parallel to the main

training (keeping in mind that it is always recommended to begin the interview process as soon as possible after training).

3. Type of survey

11. Budget development may depend on the type of survey to be conducted. In respect of budgeting, there are two main types of surveys to be considered here, namely, country-specific budgeted surveys, and user paid surveys.

Country budgeted surveys

12. Each country has specific (government) departments that have the responsibility for conducting periodic surveys, for example, health and nutrition surveys, demographic household surveys, income, consumption and expenditure surveys, and agriculture and livestock surveys. Most of these studies are likely to have:

- Some common infrastructure that is in place and is used again and again in exercises of this nature, in other words, it is part of an “integrated” programme
- Been budgeted for by central government, although donors may be asked for additional funding
- Permanent staff to take part in the surveys
- Available information technology equipment and transport facilities

and so on. In other words, these surveys are part and parcel of everyday life with respect to certain sections of the public sector and, as such, will rely heavily on previous studies for input into the budgeting of the current study. These surveys are usually carried out using a national representative sample, and often have a somewhat flexible timetable, with deadlines being expressed in months rather than in days. Some of the budgeting items presented in the remainder of this chapter may not be applicable to such surveys.

User paid surveys

13. A user paid survey is not linked to any central government programme but is, rather, carried out by a private organization that will be funded by various non-governmental organizations and donors, both national and international. These surveys may be “one-off” exercises from which quality results are needed quickly. On the other hand, such surveys may be used for programme monitoring and, sometimes, extended data analysis may be required for modelling purposes to plan for future activities. Agencies conducting such surveys may have:

- Limited infrastructure upon which the survey process can rely
- A pool of staff upon which to draw for such studies
- Limited information technology equipment and transport facilities
- Limited fixed resources

or they may be well setup, having carried out a number of such studies during the recent past. Fixed resources and overheads have to be budgeted out and if the organization is private, profit considerations have to be taken into account. Sample sizes for such surveys are usually not too large and often the survey will be concentrated in only a few geographical areas of the country. Stringent timetables and deadlines are often a characteristic of these surveys and, unfortunately, data quality frequently suffers because of insufficiently realistic planning.

4. Budgets versus expenditure

14. Budgeting for a survey is carried out well before implementation of the survey begins and the budgeting framework has to be drawn up and submitted to funding organizations before the real planning begins. Consequently, certain basic assumptions about the survey design have to be made at the time of budget development. On the other hand, the actual survey expenditures reflect what really happens during the course of the study. Survey implementers need to be aware of this distinction and to realize that the budget has to take care of the eventual costs. Expenditure is heavily dependent upon time in respect of such changes as inflation, exchange rates, etc., and, of course, will differ from country to country, sometimes quite substantially. It is recommended that budgeting be done in terms of man-days, distances travelled, etc., as well as in terms of forecast cost (using international currency), in order to better deal with soaring inflation and similar unexpected changes in macroeconomic conditions within a country. As mentioned previously, the survey budget is a dynamic entity, lending itself to constant updating, once the real expenditure during implementation has become a reality.

5. Previous studies

15. “One learns from past experience” is an adage with which we are all familiar. However, in the case of survey budgeting, this is a very much more difficult task than one would expect. It appears that, worldwide, there is a tendency to report rather badly/incompletely on survey costs, which means that retrieving information for planning of the next survey is a rather difficult task. When requesting cost information from organizations that had recently carried out surveys, the author discovered that only original budgets were most often available, and yet it was reported that actual cost allocations differed from budget allocations owing to a number of extraneous factors such as inflation. Actual costs did not seem to have been reported anywhere and all parties appeared to have accepted that this was normal and acceptable, as long as the exercise stayed within budget. A further problem in reviewing budgets from past surveys is the lack of reporting on hidden costs, for example, free use of vehicles, director’s salary, etc. The fact that such costs are often treated as overhead costs and do not enter into the survey budget exercise will thereby mislead the researcher in the future.

16. It is hoped that reading this chapter will encourage survey implementers to keep track of everyday costs and to document them fully so that researchers of the future can learn from past experience. Full documentation leading to cost per interview for the survey is tremendously valuable to those wishing to budget for similar exercises in the future. Cost per interview captures all aspects of actual survey costs, including design, fieldwork, data processing and reporting, and provides a nice overall summary of real costs.

C. Key accounting categories within the budget framework

17. There are two ways in which one can view a survey budget and, eventually, survey expenditure, namely, according to survey activities or according to common accounting procedures. It is recommended that, when drawing up the budget framework, one does so by considering accounting categories separately within each survey activity. One can then summarize the accounting categories overall, drawing on the information from each activity, and bring them together for presentation to funding agencies. At the same time, it would be useful to show the funding agency the detailed budgeting for each survey activity, so as to emphasize the particular needs for each activity. Table XIV.2 below provides an example of such an approach, using a matrix to illustrate the need for budgeting from the two points of view.

Table XIV.2. Matrix of accounting categories versus survey activities

	Consultations	Design	Sampling	Fieldwork	Data processing	Reporting	Total
Personnel							
Transport							
Equipment							
Consumables							
Other							
Total							

18. By comparing it with the timetable presented in the Gantt chart in table XIV.1, one observes that table XIV.2 aims to highlight the same survey activities as were shown in table XIV.1. Although, for reasons of space, some grouping has been done here, within each cell in table XIV.2 above, there would be a need for fine detailing of exactly how the costing arises.

19. The present section will focus on identifying accounting categories that are relevant to survey budgeting, while section D will focus on budgeting for survey activities and section E will “pull it all together”. The categories mentioned below are not exhaustive and it may be necessary to (re)define additional survey-specific categories.

1. Personnel

20. Wages and salaries for all staff should be carefully calculated and incorporated into the budget. Additional costs to be considered here include those that may arise if the survey extends over a long period of time: for example, rising inflation may necessitate a rise in salaries. One also has to plan for ill health and staff mobility.

21. Salaries paid to staff should be in line with local conditions but it should be remembered that since survey staff work long hours, including night-time and weekends, and that this will often consist of contract work, the remuneration should take this into account. Fringe benefits may be needed and must be included in the budgeting process. Remember that workers who feel they are not paid enough may tend to make mistakes, thus increasing the non-sampling errors. Depending on the length of the survey, one may wish to pay the staff by the day, by the week or by the month. It is essential that funds be available right from the start of the study, to pay

salaries and wages on time and in full. Out-of-town allowances will be required if enumerators and team leaders are working away from home. Some survey implementers tend to pay field staff on the basis of “per completed interview”. However, this practice can lead to a good deal of bias and is not to be recommended.

22. All categories of staff, from the lowest to the highest, should be accounted for, including those who may be working only part-time on the project. The survey timetable will guide one in assessing the time to be worked by each potential staff member.

23. A staff loading chart is one way to draw up the salaries and wages section of the budget. This again uses the matrix approach to provide an overview of the possible time uses for each member of the survey team. An example is shown in table XIV.3 below. As above, additional detail within each cell will be needed during the planning process.

Table XIV.3. Matrix of planned staff time (days) versus survey activities

	Number of staff	Number of man-days in each activity						
		Consultations	Design	Sampling	Fieldwork	Data processing	Reporting	Total days
Manager								
Supervisor								
Team leader								
Enumerator								
Data clerk								
Analyst								
Secretarial								
Drivers								
Other								
Total days								

24. Fieldworkers should be given a daily allowance (per diem) to cover their meals, drinks and other basic needs while on duty. The size of such an allowance should be within local limits, but perhaps somewhat larger than the usual, so as to cover situations where food is scarce and to ensure that funds are available for emergencies.

25. Accommodation costs of all staff who are working away from home have to be budgeted for and paid in a timely manner. In many cases the staff themselves prefer to find their own accommodation as they move from area to area; but in other cases, it will make sense for some central arrangements to be made.

2. Transport

26. Transport costs can be estimated fairly well if one knows the location of the respondents, that is to say, after the basic sample design has been established. Depending on the circumstances, one may advise enumerators to secure their own transport, recording costs for future refund, or one can choose to provide transport to each team of fieldworkers. The latter option is to be preferred since then the team will be working as a “team” and the team leader will find it much easier to keep track of the interview schedule. Additional costs that cannot be

foreseen would include a rise in fuel prices, unexpected weather patterns rendering certain roads impassable, and so on, and such eventualities should be covered in the contingency costs.

27. Transport costs for regular meetings of team leaders with survey managers should also be budgeted for, once again aiming at adhering to consistent data-collection methods.

28. It may be necessary to buy or hire vehicles/motorbikes/bicycles for the fieldwork and budgeting for these can be difficult in situations of rising inflation.

3. Equipment

29. It is usually possible to provide good estimates of likely expenditure on equipment well in advance of the survey exercise. Problems that can arise with these aspects of the budget usually centre around rising prices and availability of needed items. If this is likely to be the case, one is advised to purchase items well in advance and to purchase enough to cover the whole survey exercise. Information technology, communications, photocopying and printing equipment will need to be considered here.

4. Consumables

30. Items to be considered under this portion of the budget include all kinds of stationery, software, fieldwork needs such as bags, maps, identifying documents and clipboards, other office facilities, and so on. Consumables for printing and duplicating will constitute a major portion of this section of the survey budget since it is essential to have 24-hour access to copying facilities throughout the survey period.

5. Other costs

31. There will always be a modicum of publicity and information costs during a survey exercise. The extent of these activities will be totally dependent on the nature and size of the survey and can take place at various times throughout the survey period. Examples of such activities include meetings or workshops with all interested parties, including community leaders and end-users, contacting respondents in advance, advertising, etc. Publicity should be ongoing throughout the survey as information is fed to interested parties in preparation for the final dissemination of results.

32. During some phases of the survey, large numbers of staff will be employed. It is essential that sufficient space be organized for lengthy meetings (for example, during training), for storage of questionnaires, for data entry clerks and supervisors to work in comfortable surroundings, etc. Sometimes it will be necessary to hire alternate venues, for example, ones that are closer to the fieldwork area, while at other times, one will have ready access to these venues.

33. Training costs can mount alarmingly unless adequate preparation is undertaken. Training costs include accommodation costs for training facilities and transportation costs for training interviews, plus per diem expenses for all involved. All these costs need to be taken into account.

34. It is easy to forget about all the communications that are necessary when one carries out a survey. These will include use of telephones, e-mails, faxes and post. It is often difficult to budget for these items, since one never knows the quantities that will be needed. Generally, a lump-sum figure is arrived at, often as a percentage of the whole, which it is hoped will cover the real expenses. Ongoing communication with the teams in the field are essential so as to ensure both that unforeseen events can be dealt with quickly, and that consistent data-collection methods are adhered to. In countries where the cell/mobile phone network is reliable, these instruments provide an extremely useful means of instant communication.

35. “Hidden” costs refer to budgeting for items/infrastructure already “in place”, such as computers or office space. Other hidden facets of the budget that may not be too obvious include operating costs for personnel who are employed to carry out tasks in more than one project, and for transport and consumables that will be utilized over a number of different projects, each with its own budget. Usually, it is advisable to try to estimate the actual time/quantity that will be spent/used in the exercise being planned, although sometimes one can broadly estimate these additional overhead costs as a percentage of the whole. It is important that all of these hidden costs be identified and accounted for so that, in planning for future surveys, one is aware of them and can plan accordingly, even though the situation may have meanwhile changed.

6. Examples of account categories budgeting

36. As mentioned earlier, information about actual survey costs is extremely difficult to access. The first example below was provided courtesy of Ajayi (2002) and refers to costings collected from a number of African countries in respect of End-Decade Goals (EDG) surveys conducted in the lead-up to the United Nations request for indicators of child and maternal health and welfare.

Example 2

37. Information on survey costs according to accounting categories was available from 12 countries. Examples of the categories used in country-budgeted surveys are displayed in table XIV. 4 below, which indicates the proportion of the total budget assigned to each.

Table XIV.4. Costs in accounting categories as a proportion of total budget: End-Decade Goals surveys (1999-2000), selected African countries (Percentage)

Country	Personnel ^{a/}	Transport	Equipment	Consumables	Other	Sample size
Angola	62.7	22.2	9.6	1.3	4.2	6 000
Botswana	79.2	0 ^{b/}	10.1	3.5	7.2	7 000
Eritrea	64.0	0 ^{b/}	28.0	4.8	3.2	4 000
Kenya	62.3	22.8	3.3	4.7	6.9	7 000
Lesotho	75.1	5.2	5.8	2.3	11.6	7 500
Madagascar	31.2	6.5	33.3	12.8	16.1	6 500
Malawi	32.0	17.3	23.9	21.6	5.2	6 000
Somalia	43.8	17.7	5.0	1.0	32.5	2 200
South Africa	69.3	24.0	1.5	3.7	1.5	30 000
Swaziland	29.8	4.3	1.9	1.0	63.0	4 500
United Republic of Tanzania	77.9	12.8	1.6	1.2	6.5	3 000
Zambia	81.8	5.2	2.0	5.6	5.4	8 000
Overall	62.9	14.9	7.4	6.3	8.5	7 054

Source: Ajayi (2002)

^{a/} Including per diems.

^{b/} Indicating the impossibility of extracting this information separately.

38. It is clear from table XIV.4 that there is considerable variation in budgeting via accounting categories for similar surveys in different countries. We would expect increasing sample size to be accompanied by an increasing proportion of budget allocated to personnel costs; however, this does not appear to be the case, for example, when comparing South Africa with the United Republic of Tanzania. Nevertheless, it is probably true that most surveys are expected to use up to two thirds of their total budget on personnel costs, including per diems during fieldwork. For any national survey, the next most costly item is likely to be transport, which will of course vary according to the area needing coverage, and is likely to use up between 15 and 20 per cent of total budget. Financing for these surveys was provided by the United Nations Children's Fund (UNICEF) and the Government concerned, with the proportions borne by UNICEF varying considerably from country to country.

Example 3

39. The present example refers to budgeting for a household survey conducted in 1999 as part of the Assessing the Impact of Microenterprise Services (AIMS) studies (Barnes and Keogh, 1999; Barnes, 2001) investigating microfinance operations in Zimbabwe and thus refers to a user-paid survey [funded by Management Systems International (MSI) via United States Agency for International Development (USAID)].

40. Table XIV.5 shows that a high proportion (75 per cent) of budget was assigned to personnel, including per diems. This arose, in part, from the survey design, which was a follow-

up exercise of a baseline study conducted in 1997, necessitating the location and/or identification of the same respondents, an extremely time consuming exercise.

Table XIV.5. Proportion of budget allocated to accounting categories: Assessing the Impact of Macroenterprise Services (AIMS), Zimbabwe (1999) (Percentage)

Personnel	Transport	Consumables	Other	Sample size ^{a/}
75	8	912	5	691

a/ Final sample size was 599, owing to non-location of 92 of the 1,997 respondents for various reasons.

D. Key survey activities within the budget framework

41. Once one is aware of all aspects of the survey that will require budgeting, one can then define and lay out the accounting categories that will be used. Next, one considers the phases of the survey and draws up a complete budget, using the defined accounting categories, for each phase separately. This will lead to drawing up the budget framework using a matrix approach as outlined in section C.

42. With future cost documentation in mind, the real costs will become evident as one moves phase by phase through the survey, and budgeting in the same way will render comparisons that much easier and will enable one to keep a sharp weather eye out for notable differences between budget and costs.

43. In addition, this approach will assist in keeping one aware of the close linkages among data quality, the survey timetable and the budget.

1. Budgeting for survey preparation

44. Within this phase of the survey, one encounters budgeting for all the preparations that will be necessary to put the survey in place. One should consider all of the accounting categories in turn and estimate exactly what will be needed within each. It may be wise to put in place early orders for consumables, stationery, equipment, vehicle use, etc., if one is working in a high-inflation environment. Staff recruitment and publicity will be important activities, as will preparing and finalizing the sample design and the questionnaire(s) and their accompanying manuals, and early preparations for data entry and management.

45. A major part of the survey design process is the preparation of the sampling frame. The type of survey will dictate the nature of the frame but sometimes considerable time or extensive travel, or both, are required either to update an existing frame or to generate a new one. This will include the need to decide on listings, whether of households, villages or some higher- level sampling unit, and such listings require separate budget allocations.

46. Other activities here that can take considerable time are the preparation of the questionnaires along with training and fieldwork manuals.

2. Budgeting for survey implementation

47. As survey implementation is likely to be the most costly aspect of the survey, careful budgeting within each accounting category, for each possible scenario, is extremely important. The time and budget allocated to the final printing of the questionnaires must be carefully thought through and planned well in advance with reliable sources. It is important to remember that, at the same time as the fieldwork begins to move forward, central office activities should be gearing up towards data entry.

48. As was emphasized before, the time allocated to the fieldwork should not be trimmed in order to fit within budget, since this can lead to the compromising of data quality owing to increases in non-sampling errors.

3. Budgeting for survey data processing

49. Budgets for data entry, validation, cleaning and analysis should be planned with all possible scenarios in mind, so as to ensure that these activities are not at risk of being rushed, leading to poor and incomplete reporting. A large amount of printing will be done during this stage and skimping on stationery will detract from the overall quality of the results. Adequate information technology facilities, including back-up facilities for entered data (CDs, disks), will also be required.

4. Budgeting for survey reporting

50. Once the fieldwork is complete and data entry well under way, one will be working within the next budgeting phase, namely, reporting and finalizing. Once again the survey design will play a part here, since it will have determined the extent of data analysis and the level of reporting required. Ongoing documentation throughout the survey exercise is highly recommended, since a daily diary of activities, decisions, problems, and costs will feed nicely into the descriptive sections of the report. Accounting categories should be considered carefully and adequate amounts assigned to each for this final survey phase.

5. Examples of budgeting for survey activities

51. The information in the examples presented in section C.6 above is presented here from a survey activity perspective.

Example 4

52. Referring back to example 2 (EDG surveys), information is available here for costing of particular survey activities for 10 countries. Table XIV.6 below provides a summary.

Table XIV.6. Costs of survey activities as a proportion of total budget: End-Decade Goals surveys (1999-2000), selected African countries (Percentage)

Country	Preparation	Implementation ^{a/}	Data processing ^{b/}	Reporting ^{c/}	Sample size
Angola	0 ^{d/}	83.6	6.1	10.3	6 000
Botswana	10.4 ^{d/}	59.1	21.7	8.8	7 000
Kenya	0 ^{d/}	93.9	2.6	3.5	7 000
Lesotho	0 ^{d/}	73.2	18.6	8.8	7 500
Madagascar	0.3	78.6	3.0	18.1	6 500
Malawi	5.0	62.7	16.4	15.9	6 000
South Africa	1.3	93.1	2.9	2.7	30 000
Swaziland	63.0	23.4	7.5	6.1	4 500
United Republic of Tanzania	22.7	72.4	3.6	1.3	3 000
Zambia	0.4	92.0	6.4	1.2	8 000
Overall	7.0	81.0	6.0	6.0	7 054

Source: Ajayi (2002)

a/ Including training, design, pilot and data collection.

b/ Including data entry, management and analysis.

c/ Including report production and dissemination.

d/ Indicating the impossibility of extracting this information separately.

53. All countries, except for Swaziland, show the large proportion of costs that have to be assigned to survey implementation: it is probably reasonable to estimate that 70-90 per cent of budget will be devoted to this survey phase. Since (as may be recalled from table XIV.4) Malawi showed fairly high costings for equipment, this could explain the larger proportion allocated for data processing and reporting costs shown in table XIV.6. However, no explanation is available for the relatively high proportions allocated by Botswana and Lesotho for data-processing costs. In this case, countries were requested to provide a “matrix” of costs, showing accounting categories within survey activities; unfortunately, only the United Republic of Tanzania and Eritrea provide such a summary.

Example 5

54. Referring back to example 3, information on costs by survey activity for the AIMS 1999 Zimbabwe survey is presented in table XIV. 7 below.

Table XIV.7. Costs of survey activities as a proportion of total budget: AIMS Zimbabwe (1999) (Percentage)

Preparation	Implementation ^{a/}	Data processing ^{b/}	Reporting ^{c/}	Sample size
4	85	8	3	599

^{a/} Including location of respondents, design, training, pilot, and data collection.

^{b/} Including entry, management and cleaning.

^{c/} Referring only to localized reporting up to production of clean data sets; detailed data analysis and final reporting were carried out under separate contracts.

55. The fairly high proportion of survey implementation costs in the total budget, as illustrated above in this user paid example, are likely to have stemmed from the fact that the sample for this AIMS survey consisted of 691 respondents being followed up from the previous (1997) survey, the costs of locating whom were fairly high (22 per cent of total budget).

E. Putting it all together

56. Once one has prepared costs within accounting categories for each type of survey activity, a matrix of accounting categories by survey activity can be drawn up with a view to facilitating a final consideration of the survey budget. Constructing such a matrix assists the survey planners in viewing the exercise on a global level, ironing out inconsistencies and overlaps, and highlighting the major costs to be expected; and assists funding agencies in comparing costs across various surveys, thus conducing to a better assessment of the validity of the proposed budget.

57. As mentioned above in example 4, only 2 out of the 21 countries involved in the EDG surveys actually produced the requested matrix of costs in accounting categories by survey activities. Therefore for this example, we cannot compile a matrix of accounting categories by survey activities.

58. However, the information for the AIMS survey is available and the cross-classification of tables XIV.5 and XIV.7 is shown in table XIV.8 below.

Table XIV.8. Costs in accounting categories by survey activity as a planned proportion of the budget: AIMS Zimbabwe (1999) (Percentage)

	Preparation	Implementation	Data	Reporting	Overall
Personnel	3	65	5	2	75
Transport	0	8	0	0	8
Consumables	0.9	9	2	0.1	12
Other	0.1	3	1	0.9	5
Overall	4.0	85	8	3	100

59. A matrix such as that presented above in table XIV.8 which shows clearly the budgetary needs for a survey exercise, will encourage the funding agencies to consider an application favourably. In addition, if these details are available, one can more easily adjust the budget to meet unexpected needs in times of rising inflation. Finally, the ongoing recording of expenditure that must occur throughout the survey process, is easily adapted to fit into a similar matrix of actual costs. Obviously, a matrix like the one above but containing actual dollar amounts as well, will also be required.

60. The final summary that a funding agency will wish to see when presented with a proposed budget is an estimate of cost per household or other sampling unit. Once again, this figure can serve as a boundary marker for realistic consideration of the budget by comparison with similar exercises.

61. Such a matrix easily lends itself to dynamic changes during survey implementation, since it provides a global view, thereby allowing one to see how to reduce expenditure in one area while increasing it in another, more needy area. Changes in survey design, funding received and implementation realities can be accommodated in this way. When the AIMS (1999) survey was actually implemented, changes to the proposed budget had to be made, mainly in the area of personnel costs, owing to unforeseen ever-increasing inflation. The survey implementers were able to transfer funds from the consumables, transport and other categories under the survey fieldwork (implementation) activities, so as to pick up the additional costs for personnel that were warranted. Table XIV.9 below shows the actual real expenditure matrix for this survey.

**Table XIV.9. Costs in accounting categories by survey activity as an implemented proportion of the budget: AIMS Zimbabwe (1999)
(Percentage)**

	Preparation	Implementation	Data	Reporting	Overall
Personnel	3.3	69.3	5.6	2.5	80.7
Transport	0	6.6	0	0	6.6
Consumables	0.6	7.1	2.1	0.1	9.9
Other	0.1	2.5	0	0.2	2.8
Overall	4.0	85.5	7.7	2.8	100

F. Potential budgetary limitations and pitfalls

62. However carefully one plans one's survey exercise, the reality on the ground never meets the expectations. Being aware of this in advance is important, since one can then include what are referred to as contingency costs in the final budget application. This category is usually assessed as a percentage of the total cost, assembled along the lines recommended in previous sections: usually 5-10 per cent is acceptable as a contingency measure.

63. Apart from the inclusion of a contingency percentage, one must be fully aware of in-country conditions when planning for a survey, particularly if the country's political and/or economic situation is not stable. Funding agencies should be made aware of such possibilities at

the time of budget submission, and by staying in constant communication with them during the course of the survey, one can quickly alert them to events that are causing the budget to move out of line. Such events include both man-made and environmental problems; and issues such as local politics, economics, weather patterns, migratory movements, etc., must also feed into the ongoing communication with those providing the funds and/or commissioning the survey.

64. For example, in the Zimbabwe 1999 AIMS study, inflation had been steadily rising for some months and the survey coordinators thought they had taken this into account when drawing up the survey budget. However, just as fieldwork was about to begin, the authorities froze the United States dollars exchange rate at an unrealistically low level, thus not matching the ever-increasing rate of inflation; planned costs then became totally unrealistic. Fortunately, Management Systems International was sympathetic and allowed a cost increase for completion of the exercise.

65. In cases such as the one above, it may be necessary for survey implementers to reduce staff, retaining only those who are most efficient, or to cut costs in other ways, for example, by using lower-cost stationery, public instead of hired transport, consolidating operations to reduce overheads, etc. Alternatively, it is advisable, if allowed by those funding the survey, to include in the statement of the survey process a note to the effect that the scope of the survey may be subject to alteration owing to unforeseen circumstances, which would allow, for example, a change in sample size so as to take account of rising costs.

G. Record-keeping and summaries

66. It was mentioned earlier that the ongoing daily recording of events during the survey exercise will be essential if one is to keep track of all the decisions made and the options considered when making those decisions. This includes recording expenditure.

67. The survey coordinators should, at the survey preparation stage, devise a series of forms for use by all employees in recording daily activities and expenditure in full detail. Such forms should include details of hours worked, tasks completed, interview details, transport details, etc., which can be summarized on a weekly basis. In this way, one will be able to both maintain a tight watch on the budget and identify possible problems at an early stage. In addition, a system of payment only upon production of valid receipts should be instituted wherever possible.

68. Monitoring and reporting actual daily survey activities, and their consequent costs, are a critical survey management responsibility. Different forms of recording are suitable for different phases of the survey.

Survey design

69. During this phase, the survey manager will be in close touch with all activities, thus making the monitoring a fairly straightforward task. A daily diary is a useful way of logging who has done what, and this can be summarized in a weekly report. A parallel record of actual costs for transport, consumables, accommodation, etc. can be kept and will be supported by the weekly

summary so as to provide a weekly cost report. Examples of forms for the maintaining of daily and weekly records are provided in the annex to this chapter.

Survey implementation

70. During survey implementation, the survey manager will need to rely heavily on his fieldwork team leaders to provide him with their daily diarized activities plus actual costs and receipts recorded. Once again, the manager should make a weekly summary detailing all costs and days worked by team members, so that a check on percentage of budget used can be easily made. Examples of forms to be used are provided in the annex.

Survey reporting

71. Once again the survey manager will be more closely in touch with the activities during this phase and a system of diarizing daily activities and costs will enable a weekly summary to be maintained. Forms to be used are provided in the annex.

Tracking expenditure against budget

72. It is advisable for one person to be given the responsibility of undertaking ongoing tracking of expenditure against budget. He or she should provide a weekly overview of expenditure to date, together with budget allocations (see annex for an example). If this mechanism is in place from the start of the survey period, it will be fairly straightforward to foresee problems and, if necessary, apply for reallocations of budget. Survey practitioners should realize that increasing the budget once the survey has started is a very unusual occurrence and thus that adjustments are the key to success in producing the final product.

H. Conclusions

73. This chapter has aimed at providing some useful hints and advice in respect of planning a survey budget by means of detailed consideration of all components of the survey. A dynamic approach incorporating budgeting from two points of view has been recommended and illustrated by examples.

74. It remains to be emphasized that this detailed planning is crucial if one is to successfully carry out a transparent, reliable and high-quality study. Of similar importance is the need for the daily recording of all activities and actions, which can then smoothly feed into the accounting process and be maintained as a reliable record for future survey planning.

Annex
Examples of forms for the maintaining of daily and weekly records

Personnel daily activity log			
NAME			
Date	Activity	Location	Time spent
Total number of days			

Daily interview log				
NAME of Enumerator				
Date	Location	Interview Code No.	Time spent	Result of interview/comments

Personnel weekly summary activity log			
NAME of team leader		Date of report	
Personnel name	Activities summary	Location	Total number of days
Total number of days			

Personnel daily expenditure log					
NAME					
Date	Location	Activity	Details of expenditure	Amount (dollars)	Receipt No.
Total amount (dollars)					

Weekly expenditure log					
NAME of team leader				Date of report	
Personnel Name	Location	Activity	Details of Expenditure	Amount (dollars)	Receipt Nos.
Total amount (dollars)					

Weekly expenditure summary						
NAME						
Item	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Personnel						
Wages/salaries						
Accommodation						
Meals						
Other						
Transport						
Consumables						
Other						

Weekly expenditure summary*								
Item	Budget	Cumulative expenditure	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Personnel								
Wages/salaries								
Accommodation								
Meals								
Other								
Transport								
Fuel								
Vehicles								
Public								
Other								
Equipment								
Consumables								
Other								
Total to date								

* Can be set up as a spreadsheet (for example, with EXCEL).

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