

**THE
PLANNING AND
WRITING OF
GRANT-ORIENTED
RESEARCH
PROPOSALS**

Revised Edition

**O.A. Bamiro
O. Oladepo
A.I. Olayinka
L. Popoola
A. Soyibo**

CONTENTS

**THE PLANNING AND WRITING
OF GRANT-ORIENTED RESEARCH
PROPOSALS**

Revised Edition

**O.A. Bamiro
O. Oladepo
A.I. Olayinka
L. Popoola
A. Soyibo**

© The Postgraduate School,
University of Ibadan,
Ibadan, Nigeria.

E-mail: postgrad@mail.ui.edu.ng

Website: <http://www.postgraduateschool.ui.edu.ng>

First Published June 2003
Second Printing 2010

All Rights Reserved

ISBN 978-36969-0-4

Printed by Sapphire Prints

08034892535

UNIVERSITY OF IBADAN LIBRARY

O.A. Bamiro
O. Oladipo
A.L. Olayinka
± Popoola
A. Soyibo

CONTENTS

Foreword		v
Chapter 1	Introduction	1
Chapter 2	Preparing To Write: The Planning Stage	3
Chapter 3	Types of Grant-Funded Research Proposals	7
Chapter 4	The Basic Features of A Research Proposal	10
Chapter 5	Typical Format of A Research Proposal	13
Chapter 6	Criteria for the Assessment of Research Proposals	28
Chapter 7	Some Reasons Why Proposals Fail	30
Chapter 8	Summary and Conclusion	32
Appendices		35

FOREWORD

It is universally accepted that research is essential for sustainable development in any society.

In view of this, The Postgraduate School, University of Ibadan inaugurated a workshop planning committee in 2003, with the aim of producing a manual on the basics and rudiments of writing grant-oriented proposals for research and scholarly work. This resulted in the manual titled: *The Planning and Writing of Grant Oriented Research Proposal* which was first produced in 2003. Incidentally, I was the convener of that planning committee.

That workshop which was mainly for University of Ibadan faculty and researchers later led to others with both national and regional scopes. At each of the subsequent workshops within and outside the University of Ibadan, this manual became a valuable reference material.

As a result of increasing demand for this book, a revised edition that reflects minor changes has been produced. It is hoped that this edition will continue to be of immense value to research and scholarly endeavours.

Labode Popoola, Ph.D, FFAN
Dean, Postgraduate School, University of Ibadan

Chapter 1

INTRODUCTION

Research seeks to understand given situations like natural or social phenomena through observation or experimentation and to explain them. In the natural sciences, being able to understand and explain natural phenomena like gravity, electricity, nature of matter, etc. led to such applications in the development of advanced technologies like the spacecraft, computers, the internet, to mention a few. On the other hand, in the social or behavioural and applied sciences, the ultimate objective of research is to aid decision making in policy analysis and implementation, with a view to improving the quality of life of the peoples of the world.

Conducting research is a costly activity. The researchers have the ideas and the capacity to solve problems, but often lack adequate funds with which to implement them. Consequently, researchers have to look for funds, usually from donor agencies to finance their research. On the other hand, the funding agencies (Foundations and Corporations) have the financial resources but not the other resources needed to create programmes. When we bring these two together effectively, the result is a dynamic collaboration. Grant makers are vitally concerned about social problems, injustices or inequities that they are willing to commit their money to address these problems. In essence, they see a gap (or need) between what is and what ought to be, and their mission is to close this gap. The gap represents their view of the world. Successful grant writers are able to reflect the "priorities" of the sponsor. Too often, grant applicants focus on their own need for funds instead of matching their projects with the sponsor's priorities. One should select sponsors that share one's view of the world and tailor the research proposals to them. *Sponsors view grants as investments in an improved future.* Proposals are funded when they express the same priorities shared by the sponsor. Projects are rejected when they do not precisely reflect the priorities of the sponsor.

The Planning and Writing of Grant-Oriented Research Proposals

Getting a grant is hard work. There is a lot of competition for the meagre resources available from donor/funding agencies and this imposes very high standard of evaluating the application for funding of research proposals received. Grants are "free" in that you do not have to pay back the money. However, if you are awarded a grant you may be required to provide a periodic program and/or financial reports to the funding organization. The researcher needs to follow a step-by-step process in the search for funds. This takes time and persistence to succeed. After you have written a proposal, it could take as long as a year to obtain the funds needed to carry it out.

A grant proposal is a unique document. A good proposal requires careful preparation, sensitivity to your audience and the ability to answer some key questions. The proposal must be carefully written and well-reasoned. Some grant proposals are rejected because they contain bad ideas. On the other hand, *most grant proposals are rejected because they contain good ideas but are poorly written.* An appreciation of the invaluable contributions of grant-winning research proposals towards the professional profile of staff and awareness of the need to improve the competence of academic staff in the art and science of writing research proposals provided the impetus for the Postgraduate School, University of Ibadan, to organize this Workshop.

The recommended procedure in this book is not a formula to be rigidly adhered to. Rather, it is a suggested approach that can be adapted to fit the needs of a donor agency and the peculiarities of each situation. In Chapter 2, the major steps involved in the preparation stage of proposal writing are discussed. Chapter 3 examines the two major types of grant-funded research proposals. The basic features of a research proposal are presented in Chapter 4. The typical format of a research proposal is discussed in Chapter 5. The criteria considered during the review of a research proposal are outlined in Chapter 6. Nonetheless, it needs to be stressed that even a perfectly written agency. Some of the possible reasons for this are outlined in Chapter 7. We conclude with a summary of useful hints in the preparation of a research proposal in the last chapter.

Chapter 2

PREPARING TO WRITE: THE PLANNING STAGE

Before putting pen to paper, you need to do some homework. With a grant proposal, you are explaining how your project fits the grant committee's objectives. So before you write, you have to understand these objectives and prepare yourself to address them.

- **Learn about the granting agency.** Check the organization's journals, publications, annual reports, lists of previous grants awarded, and Web site. Look for a mission statement, major projects and do some research on the history of the organization.
- **Research the granting institution's offerings.** This is essential if the grant covers expenses for research at a particular facility. Be prepared to identify the particular resources (artifacts, manuscripts, equipment) that are essential to your project.
- **Find out who is on the selection committee.** It could be professors, librarians, collection curators and business leaders who underwrite the grant or a combination. Be prepared to tailor your application (the language you use and the technical level of your explanation) to that particular audience.
- **Be ready to describe the nuts and bolts of your project and how the grant will be utilized.** Produce an itemized budget estimating cost of your work as well as a timeline outlining how long it will take to complete the project.

Identifying appropriate Funding Agencies

Research proposals can be either solicited or unsolicited (See Chapter 3). It is important to identify potential donors willing to fund an unsolicited research proposal. First, donors have their own priorities, largely influenced by macro-political and economic considerations. Second, most donors also have spatial and locational priorities, besides sectoral priorities. In the recent past following collapse of the

Soviet Union and Communism in Eastern Europe, attention has shifted to East European economies, in preference to Africa, for example. In addition, issues relating to the environment, gender, conflict resolution and health (in particular, the HIV/AIDS pandemic, the Severe Acute Respiratory Syndrome (SARS) are in focus now. Hence, the need to identify potential donors who might be willing to fund the research project can be seen to be of utmost importance.

The identification of appropriate funding agencies can be done through a deliberate search for funding centres, computerized databases, development offices, publications, and libraries. It is important to search for funds from institutions that have goals similar to the purpose and goals of your project. One should, therefore, look for specific funding priorities and preferences of the funding institution. Following this, it is crucial to make direct contact with funders to support the project and also to request for proposal guidelines plus a list of previously funded projects. It is also expedient to ask for the funding range and the average size of awards.

Contacting the funding agency

It may be necessary to contact the funding agency in order to give your project the opportunity of being funded. If funding agencies offer technical assistance, it is important to ask for how proposals are reviewed and how decisions are made including budgetary requirements, preferences and payment processes.

Obtaining proposal guidelines

The guidelines can tell you among others issues related to eligibility, funding priorities, proposal format, budgets, evaluation criteria and submission deadlines. It is important to read the guidelines carefully and over and over again.

Deadline for submission

You must plan to submit your proposal on (but preferably before) the deadline. If you are sure that you do not have enough time to prepare a competitive proposal that meets the deadline, then do not waste

your time preparing a half-baked proposal that will not merit selection. In this regard, one should know the funder's policies on late submissions and exceptions. Factor this information into your timeline.

Determining the required personnel

The need to identify required personnel such as consultants, trainers, and other persons who are likely to be involved in the project cannot be overemphasized. You should not assume that these people would participate fully in the proposal write-up. You should therefore seek their availability and obtain permission to include them in the project. During this process, their individual compensations should be negotiated.

To submit the concept paper to potential funding agencies, effort should be made to ensure that their rules and regulations are not breached. For example, most agencies frown at multiple submissions. Since funding agencies usually operate in networks – organizational networks as well as networks of reviewers, it is easy most of the time to get detected, if such a rule is breached. Sanctions, which often are heavy, are usually swift and unyielding. If a positive reaction is obtained, then a full-blown proposal is required. This step and the next will be discussed later, in this paper.

Every funding agency stipulates in clear terms its objectives and the research themes that are fundable. Oftentimes such themes are prioritized. This is the starting point for any proposal writing since a proposal not within any of the themes and/or not reflecting the objective(s) of the agency automatically attracts a check in the "reject" box on the review form. For example, the specific objectives of the African Technology Policy Study (ATPS) are to: (a) generate a critical mass of knowledge for strengthening policy making and for identifying and assessing the impact of past and present policy on technological change and its consequences for development; (b) building a continuous interactive process of knowledge diffusion by fostering linkages among researchers and between researchers and the private sector, policy makers, and other end-users; and (c) disseminate and encourage the utilization of research results through

publications, a biennial international conference, dissemination seminars, and policy round tables.

The underlined portion above is to accentuate the fact that the agency is interested in policy-oriented researches and the dissemination of the research results to policy makers. In other words, the agency is interested in researches that form useful inputs to government policy. Furthermore, the research themes of the Nigerian Chapter of ATPS are encapsulated below:

**Research Themes of the Nigerian Chapters of ATPS for 2003
Competition**

- (i) Biotechnology
- (ii) Information and Communication Technology;
- (iii) Health;
- (iv) Agriculture and Technology;
- (v) Environment and Sustainable Development;
- (vi) Poverty Reduction;
- (vii) Energy

Researchers are requested to identify in their submission, the themes under which their proposals would be assessed (at most two).

The main objective of another agency, the Development Policy Centre (DPC), Ibadan is akin to that of the ATPS. Its main objective is to assist in strengthening national capacity for effective and efficient policy formulation and implementation. It is interested in policy appraisal research in 30 sectors, including: Employment, Income, Agriculture, Food Security, Industry (Manufacturing), Energy, Transportation, Technology, Telecommunications, etc. Suffice it to note that every agency publishes its objectives and research themes to guide researchers. It is essential to get a copy and fully digest it before setting out to write any proposal.

The types of grant-funded research proposals are presented in the next chapter.

Chapter 3

TYPES OF GRANT-FUNDED RESEARCH PROPOSALS

There are two major types of grant-funded research proposals: unsolicited and solicited research proposals. The process of developing, writing, submitting and following up of the two types of proposals often differ markedly.

Unsolicited Research Proposals

Writing unsolicited research proposals has the following major steps or stages:

- Formulating the project idea;
- Developing and writing a concept paper;
- Obtaining peer group reaction to the concept paper and/or support of collaborating individuals or agencies.
- Identifying and communicating with potential donors;
- Writing a full-blown proposal;
- Follow-up Action and Rewriting and Resubmission (where necessary).

The first step of an unsolicited research proposal involves recognizing the existence of a problem, an unmet need, a condition that requires a change in the present course of action or inaction. It may be at the policy-making level or at the conceptual theoretical level of a process or intervention which eventually influences policy-making in the long-run. It is necessary to define the problem in a researchable form such that it meets the requirements of most potential donors. In this regard, writing a full blown proposal may be time-wasting and unwise, in case the concept is not acceptable to any funder. The trick often employed is to write a *CONCEPT PAPER* (sometimes also called *LETTER OF INTENT* or *LETTER OF ELIGIBILITY*) of between five to ten pages.

This paper identifies briefly:

- The research problem and the need to address it;
- The objectives of the study;
- The theoretical framework/literature review and methodology;
- The anticipated results and its value-added to knowledge and/or policy-making (i.e. the potential benefits of the project).

The next stage involves obtaining the feedback of colleagues, bosses and other professionals to the concept paper. Be prepared for criticism! If one reader doesn't understand parts of your text, others are likely to have the same problem. This stage also involves communicating with possible collaborating agencies whose support potentials donors might require later. This area requires being able to "sell" one's idea to those, whose help one might need later and hence needs careful handling, particularly the possible human relations issues that can ensue. In this regard, it is important to be able to identify the useful comments and those that are not too-useful, in trying to improve the concept paper later, in case it is adjudged good enough to develop to a full-blown proposal by potential donors.

Solicited Research Proposals

Solicited Research Proposals often come in one type of announcement or the other. The procedure to follow is often spelt out in these announcements which can be in form of flyers, brochures, posters, or on websites. Usually the announcements often contain such information as:

- The Donor/Funding Agency and its priorities
- The background to the project and its objectives
- The scope of the Research
- Eligibility issues
- The Structure of the Proposal
- Grant Award Procedure
- The Submission Process
- Who and Where to Contact for Further Information.

Sometimes Solicited Research Proposals start with the writing of a CONCEPT PAPER along the lines described earlier (See Section 3.1).

Types of Grant Funded Research Proposals

Some funding agencies, (e.g. the African Forestry Research Network, AFORNET), after approving a concept paper, award small grants to develop the concept paper into full-blown proposals. Others ask for full-blown proposals without giving small grants.

We now turn our attention to the basic features of a research proposal in the next chapter.

Basic Questions to be Addressed by a Research Proposal

(a) What is the problem to be investigated?
(b) Why is the problem socially and academically important to be worth study?
(c) What objectives are to be achieved through the research?
(d) How will the research process be carried out?
(e) What types of results are expected from the research?
(f) What are the potential benefits of these results?

Chapter 4

THE BASIC FEATURES OF A RESEARCH PROPOSAL

A research proposal is expected to be a description of the intended research. It should address six basic questions encapsulated below.

Basic Questions to be addressed by a Research Proposal

- (a) What is the problem to be investigated?
- (b) Why is the problem socially and scientifically important to be worth studying?
- (c) What objectives will be achieved through the research?
- (d) How will the research process be carried out?
- (e) What types of results are expected from the research?
- (f) Who are the potential beneficiaries of these results?

- a. The first step in preparing a grant-oriented research proposal is to clarify the purpose of the project. This addresses the issues of putting the research problem in the proper context. In effect, it defines the research problem in the context of what would be known through the results of the proposed project that is not known now. It attempts to convince potential funding agencies that the research problem is well conceptualized and that it is worth "researching into".
- b. The next question addresses the issues of why the problem is worth studying. It provides a "needs analysis" for the project as a follow-up to the project background given in the problem statement.
- c. Next, the author goes to address the general goals and specific objectives of the study. Goals are general statements

of what is ultimately to be accomplished. Objectives are more specific and measurable and are usually explicitly used to assess whether a project has fulfilled its mandate or not within the specified time frame using the available resources. For example, the objective of a research project could be any of the following:

- *To identify new drug targets for African trypanosomiasis, Chagas disease, leishmaniasis, malaria and tuberculosis, and of developing diagnostics for early leprosy infection.*
- *To determine inequality of access to prevention, therapy and information in respect of malaria and tuberculosis.*
- *To characterize the occurrence of groundwater in a typical low-latitude environment underlain by Precambrian basement complex rocks, etc.*

1. The next step addresses the issue of how to carry out the project. In this regard, the researchers must convince the potential donors and their reviewers that they are familiar with the current state of knowledge in relation to the issues being addressed. The literature review must be very current and the theoretical framework that will be used in analyzing the data generated by the study must be seen to derive from one or more appropriate state of the art approaches reviewed. It is also important that the researcher is able to know when not to use a sledgehammer to kill a fly. Sometimes, simpler and more direct approaches will provide better insights than sophisticated and esoteric mathematical and statistical approaches, whose assumptions the available data collection set may not meet. Here the different data sources and methods of data collection must be clearly stated. Researchers must be precise in their terms. For example, "looking at the relationship between x and y" is rarely a useful precise operation in the social sciences or humanities. Rather, "examining the correlation between x and y" may be better. It is better to state precisely the method of data collection like participant observation, focus group discussion, structured, semi-structured or unstructured interviews, etc. The types of instruments to use must also be attached as appendices. The precise methods of analysis must be explicitly stated. When using descriptive

statistics, it is important to state which type, how and when they will be used. It is important to formulate the types of models that will be used, the methods of estimating them and the types of software to use. More often than not, in a third world setting, researchers do not know the models to use and seldom have any inkling of the software to use. It is better to indicate this because in budgeting, there may be a need to have software search and acquisition as a line budget item.

2. In the next step, the technical aspect of the proposal must address the issues of what types of results will be expected from the research, particularly in relation to how they contribute to knowledge, public policy and future directions of research.
3. Finally, it is necessary to state ways of disseminating the research results, particularly in policy research. This may involve organizing end-to-study workshops, book publication, policy briefs or publication in professional journals.

Following this goal identification, you need to decide on who will benefit from the study including direct and indirect beneficiaries such as target audience and other institutions. In addition, the expected project outcomes need to be determined as well as draft timeline that includes the planning phase, proposal writing, and the intended date of commencement of the project.

The format of a research proposal is discussed in the next chapter.

Chapter 5

TYPICAL FORMAT OF A RESEARCH PROPOSAL

The main components of a research proposal are shown below.

Components of a Proposal

Executive Summary:	umbrella statement of your case and summary of the entire proposal.
Statement of Need:	why this project is necessary.
Project Description:	nuts and bolts of how the project will be implemented and evaluated.
Budget:	financial description of the project plus explanatory notes
Organization Information:	history and governing of the organization, its primary activities and audiences, and services .financial description of the project plus explanatory notes
Conclusion:	summary of the proposal's main points.

Based on the foregoing, a research proposal may include the following sections:

1. Covering page
2. Abstract/Executive Summary
3. Complete literature review
4. Statement of the research problem
5. Research objectives
6. Expected results and impact
7. Research methods
8. Complementary activities
9. Institution and personnel
10. Timetable
11. Budget
12. Conclusion
13. Curriculum Vitae or Resume of collaborators
14. Participating Agencies
15. Letters of Support
16. References
17. Appendices

Each of these sections is described below.

Covering page

The covering page should contain the following information:

- i. Title of the project
The title is a label, not a sentence. Choose as few words as possible to describe the contents of the proposal adequately. Use proper syntax.
- ii. The name(s) of the research reader(s) (Conventionally, the researchers should be listed in order of importance to the research, the first researcher being acknowledged as the Research Project Coordinator while others are Associates).
- iii. Name and address of the recipient research institution where applicable.
- iv. Date of presentation to the Agency.

Abstract/Executive Summary

Every research proposal should include typically a one page *informative* executive summary of the project. An abstract must not simply list the topics covered in the proposal. A well-prepared abstract enables readers to:

- identify the basic content of a proposal quickly and accurately,
- determine the relevance of the proposal to their interests, and thus
- decide whether or not they need to read the proposal in its entirety.

The latter is often the case when many proposals have to be evaluated. The abstract may be used as the basis of short listing of proposals to be read in more detail. It is perhaps the most critical part of the proposal. Because, reviewers, as decision-makers are very busy people, expected to review several proposals, besides their pressing primary assignments and a lot more other secondary assignments, a good summary places a proposal in good light for more focused reading and attention. In preparing the abstract, the author(s) should remember that it would be the most widely read portion of the proposal. The abstract must be able to stand alone, as a very short version of the proposal rather than as a description of it. Readers (and even reviewers) may be influenced by the abstract to the point of final judgment before the body of the proposal is read.

The summary must be short and concise. It should convince reviewers and potential sponsors that the project is relevant to their particular concerns, the needs of the country and above all, that it is well thought out. Though short, it must cover all the essential points of the full proposal like the problem statement, objectives, methodology and how the expected results can contribute significantly to the solution of an urgent problem or to addressing an important unmet need. If uninformative phrases such as "is discussed" or "is shown" appear in the abstract, it is almost certain that the above criteria are not met. References should not be cited in the abstract.

The estimated total project cost is an essential part of the summary. It allows the decision maker to relate costs to anticipated outcomes and to assess the economic feasibility of the project or the results of its interventions in the longer term.

Most experienced writers prepare their title and Abstract after the proposal is written, even though by placement these elements come first.

In this case, the researcher should have in mind (if not on paper) a provisional/working title and an outline of the proposal he or she plans to write. The major items to be included in the Executive Summary (and the order in which they should appear) are given in the following table.

Items to include in the Executive Summary

Problem:	A brief statement of the problem or need you have recognized and is prepared to address	One or two paragraphs
Solution:	A short description of the project, including what will take place and how many people will benefit from the program, how and where it will operate, for how long and who will staff it.	One or two paragraphs
Funding requirements:	An explanation of the amount of grant money required for the project and what your plans are for funding it in future.	One paragraph
Organization and its expertise:	A brief statement of the name, history, purpose, and activities of your agency, emphasizing its capacity to carry out this proposal.	One paragraph

Literature Review

If the funding agency reads beyond the executive summary, you have successfully piqued his or her interest. Your next task is to build on this initial interest in your project by enabling the funding agency to understand the problem that the project will remedy. Literature review entails an examination of what others have said or done in the field covered by the research proposal. The idea here is to go through existing literature on the subject and relate it to the research proposal. There are a number of benefits that could be derived from the review of existing literature.

- First, it must be recognized from the outset that all knowledge is an accumulation of the contributions of others. It would, thus, be unwise for one to ignore the works of others since important dimensions of the problem can be easily missed. In fact, quite often, one could discover during the literature review exercise that the planned project has already been done by others, a discovery that may result into re-orientation of the topic to be investigated or even a complete abandonment of the study altogether. Similarly, the researcher could take advantage of this discovery and reshape the proposal in a way that fills the gap earlier studies may have overlooked.
- Second, literature review helps in the refinement of methodological and procedural matters. There has been a general tendency by many researchers to want to go into the field as soon as a research grant is secured before familiarity with methodological issues. These matters can be effectively attended to when familiarity with what already exists is realized.
- Third, literature review allows one to assess the importance, or otherwise, of completed studies. In this regard, the researcher is expected during literature review to have an open mind and critically determine the utility value (defined in terms of the soundness and validity) of existing data.
- Lastly, while it ought to be acknowledged that one of the aims of literature review is to avoid duplicating a study unintentionally, there is also a need to recognize that there is nothing inherently wrong with replicating an earlier study if a good case for doing

this is made. For instance, if the researcher can prove in a research proposal that there is an ample justification to challenge and/or verify some doubtful findings of an earlier study, then a re-visit of the subject matter is justified. Indeed, ultimately, literature review, through the examination of related studies, allows the researcher to present his/her case more convincingly and to demonstrate how the findings would enlarge, modify, or even reject existing knowledge. It is the researcher's ability to convince the agency that he/she understands the problem in the context of already existing knowledge that would enhance the chances of the acceptance of the proposal for funding.

From a cursory examination of some of the successful proposals funded by ATPS, Bamiro (2000) found that Literature Review took, on the average, 30% of the content. This is not surprising as other aspects of the write-up – Research Problem, Research Objective, Expected results and Impact, and Research Methods – flow from the literature review. It must, therefore, be well researched and presented. However, do not do overkill.

Research Problem

The section on Research Problem should provide a clear description of the problem that is to be investigated through the research, and the question(s) that will subsequently guide the research process. This section should, therefore, include background information on aspects such as:

- (i) the problem area and major research gaps in terms of policy and development issues related to the research;
- (ii) the social, scientific and development relevance of the problem to be investigated;
- (iii) a brief and preliminary overview of the literature and/or research done in the field related to the problem, and
- (iv) a statement as to how the research project will contribute to the solution of the problem(s) identified.

Research Objectives

The objectives in the proposal should be formulated in the operational terms in reference to the issue(s) upon which the research

Typical Format of a Research Proposal

will focus, the research questions to be answered, and the types of results expected to be achieved. This section should include:

- (i) *General objective(s)*: these are understood as the overall aims of the research project, and
- (ii) *Specific objectives*: these are understood as the concrete process in the research, which are directly addressable by the methodology and which are followed in order to achieve the general objective(s).

Reference is made herein to a proposal sponsored by ATPS. In the Research objective the researcher stated:

The broad objective of the study is to carry out research to document access to technology and technological innovations in the domestic energy sector in Nigeria as a result of the energy crisis for the purpose of technology policy planning in the domestic energy sector (Bamiro, 2000).

The specific objectives were:

- To document recent technological innovations in the domestic energy sector in Nigeria;
- To document access to technology in the domestic energy sector, highlighting user preferences subsequent to the domestic energy crisis;
- To examine the socio-economic implications of technology use in the domestic energy sector following the energy crisis; and
- To investigate the policy implications of the domestic energy crisis on the technology use and innovations.

Expected Results and Impact

The section on expected results and impact should outline the types of results and impact expected of the research project. Particular attention should be paid to describing the outcomes of the research in terms of their contribution to:

- (i) the solution of specific problems upon which the research has focused;
- (ii) existing knowledge in the technical and scientific area under enquiry;

- (iii) the process of policy formulation and/or implementation in the problem area related to the research;
- (iv) practice in the field of enquiry;
- (v) the development process at the local, national and /or regional level; and
- (vi) the research capacity of the recipient institution.

This section should also make reference to obstacles that might be encountered in the development of the research and in the eventual use of the results. *Researchers must show that they have established links with research users to determine need, and defining objectives, and have taken steps to ensure dissemination.*

Research Methods

There is need to give a detailed description of methods and procedures used, including sample size and means by which data will be collected, analyzed and interpreted. This section should describe details of the research design and the procedures to be followed to achieve the research objective and enable a scientific assessment of the proposal. The following information should be included in this section according to the type of research to be carried out:

- (i) a brief statement describing the general research methods to be followed;
- (ii) provision of support materials required to facilitate the development of the research and achievement of its objectives;
- (iii) dissemination and/or extension activities that are intended to present, to the research and policy-making community, preliminary or final results of the project. These could include meetings, seminars, workshops and conferences, media events, etc., that take place during, immediately upon the conclusion, or some time after the project ;and
- (iv) intended publications to be prepared as part of the project. These could include working papers, journal articles, conference papers and books. Mechanism to be used for distribution should also be listed when possible.

To achieve the research objectives referred to in Section 5.5 above, the following research methods could be adopted.

- (a) *Study Locations:* The researcher divided the country into two ecological zones with two locations (one rural, one urban) in each zone, making four locations over all.
- (b) *Data Collection:* This was to be from primary sources and secondary sources. Primary data were those to be obtained from field survey using Questionnaire, random sampling technique and Focus Group Discussions. The secondary sources were data collected from NEPA, NNPC, Research institutions (universities, polytechnics, private establishments, etc.) involved with machine fabrication.
- (c) *Data Analysis:* Quantitative data were to be analyzed using the EPI, INFO and SPSS computer packages, while findings were to be presented using frequency tables, cross tabulations and inferential statistics where necessary.

Institution and Personnel

The purpose of this section is to provide information about the professional expertise of the researchers who will undertake the research project, and the existing research capacity of their institution(s). Specifically this section should describe:

- (i) the present and potential capacity of the sponsoring institution(s) in relation to infrastructure, experience in the field of study, and links with other national and regional organizations working in the same field;
- (ii) the role and responsibilities of each member of the research team;
- (iii) the capacity of the research teams both of the present field of expertise and previous research experience, including their Curriculum Vitae, and of the training that might be required to increase this capacity, and
- (iv) the way(s) in which the research project might complement the existing programme of work of the research institution.

Time-table

The time-table (activity schedule or work-plan) outlines the activities, targets and their corresponding time schedules. It is essential to give milestones and timelines for a research project. Milestones are major achievements towards meeting the objectives of the project. They are discrete, clear measurable products, which indicate the progress of the project and the time by which each task would be accomplished (for example: recruitment of x number of patients during the second to fourth months of a research).

There are several ways of presenting the time-table. One common approach is to list all the component activities and indicate the start and end of time schedules, in a Gantt-chart format. Yet another type involves listing the component activities row-wise and filling in the respective column details like: Timing, Output Target, Critical Assumptions and Indicators of Achievement, among others. A third approach involves listing the time milestones column-wise and filling in the respective activities under these columns. Appendices 1, 2 and 3, respectively show the Gant-Chart, Work-Plan and the Time-Milestone Format of Activity Schedules. This section should include an approximate schedule of activities for the duration of the project.

Funding agencies usually indicate the possible duration of project execution. ATPS stipulates a period of 12 or 18 months for project duration. In contrast, DPC stipulates only six months. Time Plan for the execution of the Domestic Energy Project is shown in Appendix 4. The proposed activities over the 12-month plan period have been indicated.

Budget

The budget is basically a cost projection and it should provide the details as to the expected costs of the project. It is important to assess whether the specified activities can be accomplished within the budget and whether the costs are market reasonable (e.g. too low or too high). It is also good to assess whether one has input sufficient budget detail and justification. Additional sources of support for the project, either matching funds or in-kind support should be included. Many funding agencies provide mandatory budget forms that must

Typical Format of a Research Proposal

be submitted with the proposal and they should, therefore, be used (See Appendix 5). For example, the World Health Organization Multilateral Initiative on Malaria (MIM) usually stipulates that a fully justified budget for the research project consolidated in a single budget page be provided as well as other sources of funding available to the institution/research group. It also specifies that MIM/TDR funds cannot be used to cover institutional overhead. It helps greatly if the researcher is able to source information on the limit of funding for the project to guide him or her in defining the scope, and by extension, the cost of project execution.

In preparing the budget, the following aspects should be considered:

(i) *Personnel Costs*

This should include a list indicating salaries of Researchers, Research Assistants, Technical Personnel, Technical Services, Secretarial Staff and any other personnel to be involved in the research whose salary is paid by the project. In each case, details should be provided indicating: salary per month or day, number of months for which they are covered, and total cost for the period.

(ii) *Equipment Costs*

Equipment costs will include items like laboratory instruments, computer software and hardware. Agencies usually frown on grant proposals that include a huge equipment budget disproportionate to the amount and kind of work in the proposal.

(iii) *Field Work Costs*

The field work cost should provide details of the cost expected to be incurred in collecting, processing and analyzing information, including items such as data gathering, reproduction of instruments, local travel and per diems, and computer time.

- (iv) *Materials and Supplies*
The section on materials and supplies should include details on costs for items such as office materials, photocopying and reproduction of materials, and communications and mail.
- (v) *Reproduction of Final Report(s)*
There should be a section on the cost of reproduction the final report(s) of the research for dissemination purposes.
- (vi) *Complementary Activities*
When applicable, the budget should include details of the cost of activities directly related to the research project such as seminars, workshops, or training.
- (vii) *Contingency*
Contingencies will cover unforeseen circumstances like omitted items and possibly inflation. It should be pointed out that some funding agencies lace a percentage limit to this while some other agencies frown at it outright.

In those cases where the budget includes items required by the researcher that are unusual and/or need clarification, a section of "Budget Notes" should be included explaining such items. The agency sponsoring the research may require a *recipient contribution* to the project. Where possible, this local contribution should be estimated in monetary terms; otherwise, in-kind contributions should be specified.

As much as possible, details that enable a systematic build-up of the budget should be made. For example, headings should include item description, quantity/no. unit, rate and amount. A remark column may be included to enable line items be summarily explained. By going to this level of detail, the applicant is able to query the basic assumptions and modify accordingly while building up the proposal. This is essentially an iterative process that usually converges to a reasonable budget when painstakingly applied.

It is also usual to lump many small items together under a line item termed *Miscellaneous*. This is not to be confused with contingencies, which have been outlined above.

Conclusion

Every proposal should have a concluding paragraph or two. This is a good place to call attention to the future, after the grant is completed. If appropriate, you should outline some of the follow-up activities that might be undertaken to begin to prepare the funding agency for your next request. Alternatively, you should state how the project might carry on without further grant support.

This section is also the place to make a final appeal for your project. Briefly reiterate what your organization wants to do and why it is important. Underscore why you need funding to accomplish it. Don't be afraid at this stage to use a bit of emotion to solidify your case.

Curriculum vitae or Resume

The curriculum vitae can be full-blown or abridged. It is expected to highlight the education, a list of the professional positions and the experience members of the team will bring to the project. It is desirable that work done in areas similar to that for which funding is being sourced be underscored. Each participating staff can list five publications that relate directly to the work on the proposal, and five other supporting publications. We should give this page some thought, because we want to convey our experience and capability to conduct the work we are proposing. We should avoid conveying any sense of puffing up our record.

Participating Agencies

At the time of submitting the research proposal, researchers should indicate their institutional base and the expected contribution of their institution to the research project. [Most agencies feel more comfortable where there is institutional backing for the researcher(s). It is a form of insurance that the project will be executed at least. It is pertinent to note that there have been few cases of researchers more or less abandoning projects after receiving the take-off grant.]

In cases where no previous collaboration has existed between the institution presenting the proposal and the funding agency, copy of the document certifying the legal status of the institution should be attached to the proposal.

In those countries where requests for research funds from external sources require approval from the government, the Director of the institution should submit a copy of the official documentation providing government clearance.

Letter of Support

Letters of support are often required from the highest level to show the donors that the cooperation of the relevant officials has been sought and obtained. In those cases where the research will be carried out in collaboration with other institution(s), or the research funds will be administered by another party, the Director of the institution submitting the proposal should submit a document certifying such collaboration.

It is necessary to give insight into the activities of the participating or collaborating institutions, highlighting in particular, what the expected results can do to improve their operations and/or improve capacity building.

References

References are compulsory additions to the proposal. The style and punctuation of the references is usually left to the authors to decide in most cases, unless a particular format has been stipulated by the funding agency. References to manuscripts that have been accepted but not yet published should be designated by the journal, followed by the notation "in press". Information from manuscripts submitted but which are not yet accepted for publication may be cited in the text as "unpublished observations". It is important for the authors to verify all references against the original documents.

Appendices

Additional information that is not directly part of the proposal but which is considered to be relevant for the understanding of the project should be attached to the research proposal as an annex.

Appendices should include those materials that can help illuminate and clarify some issues. Included in this group are sample questionnaires and list of variables but will be used to measure the concept discussed in the proposal (where necessary).

UNIVERSITY OF IBADAN LIBRARY

Chapter 6

CRITERIA FOR THE ASSESSMENT OF RESEARCH PROPOSALS

The criteria often considered by reviewers in assessing research proposals for approval include the following:

- (i) Relevance
- (ii) General mastery of the subject matter
- (iii) Identification of the research problem
- (iv) Focus of Research Objectives
- (v) Conceptual Framework
- (vi) Overall Methodology
- (vii) Research viability
- (viii) Possible user linkage

Researchers should, therefore, pay particular attention to them. The best proposals answer two basic questions:

Question 1: What is at stake in my project?

No matter who is making the decision to fund your project (business executives, scholars, etc) they will all want to know one thing: Is your project a good investment? This issue should take a prominent place in your proposal. Address it at the beginning of your proposal and may be at the end as well. And make sure you answer this question for two audiences: the professional audience of peers in your field as well as non-specialists.

Question 2: What exactly can you accomplish in this time frame and/or with this money?

You need to be specific and realistic about what you can accomplish with this grant. This is where your itemized budget and timeline come in. If you can set out achievable goals and present a realistic plan for achieving them, the committee will trust you to use their funding responsibly. As a bonus, doing this planning beforehand will help you put your plans into action.

What happens next?

Submitting your proposal is nowhere near the end of your involvement in the grant-making process. Grant review procedures vary widely, and the decision-making process can take from a few weeks to six months or more. During the review process, the funding agency may ask for additional information either directly from you or from outside consultants or professional references. Invariably this is a difficult time for the grant-seeker. You need to be patient but persistent. Some grant-makers outline their review procedures in annual reports or application guidelines. If you are unclear about the process, don't hesitate to ask.

If your hard work results in a grant, take a few moments to acknowledge the funding agency's support with a letter of thanks. You also need to find out whether the funding agency has specific forms, procedures, and deadlines for reporting the progress of your project. Clarifying your responsibilities as a grantee at the outset, particularly with respect to financial reporting, will prevent misunderstandings and more serious problems later.

A rejection is not necessarily the end of the process. If you are unsure why your proposal was rejected, ask. Did the funding agency need additional information? Would they be interested in considering the proposal at a future date? Now might also be the time to begin cultivation of a prospective funding agency. Put them on your mailing list so that they can become further acquainted with your organization. Remember, there is always a next time.

The reasons why proposals fail are highlighted in the next chapter.

Chapter 7

SOME REASONS PROPOSALS FAIL

It should be pointed out that situations may arise in which a well written proposal submitted to a funding agency might still be rejected. The following reasons may be responsible for such.

- **The application is outside the purview of the funding agency.** The applicant either failed to learn about the agency's restrictions or areas of interest or misunderstood them.
- **The subject is not relevant to an issue of regional or national importance or lacks sufficient scientific significance.** Most funding agencies seek to fund projects that offer the prospect of replicable solutions to societal problems or that will make a significant contribution to knowledge in a particular field.
- **The methodology appears to be flawed.** A proposal may address a problem of significance which is important to the funding agency, but it may be rejected because it approaches the problem in a way that the reviewers do not believe adequately tests its own assumptions or because it fails to ask the right questions.
- **The applicant has not included measurable outcome indicators in the proposal.** Without some means of measuring success of the project, funding agencies will not invest their resources.
- **The funding agency is not the most appropriate source of funds for the proposed project.** If reviewers believe another government program or private foundation is a more appropriate source of funding, they may decline a proposal regardless of its merits. In some cases, they will refer the grant seeker to the more appropriate source.
- **The funding agency has already funded a similar project.** It is rare that a problem of regional or national and sometimes scientific significance is perceived in only one place at one

Some Reasons Proposals Fail

time. If the funding agency has already funded someone else who has approached the same problem in the same general way, a turndown is likely.

- **The funding agency's priorities and interests may have changed.** Because both governmental agencies and foundations are concerned with addressing changing societal problems or advancing technology, their priorities and interest are constantly evolving. What was a priority a month ago may now have been replaced by an emerging issue.
- **The proposed project does not allow for the highest and best use of the agency's funds.** Most funding agencies do not consider charitable effects of a proposed project as a major decision factor. Instead, they have goals of putting in place programs which can be self-sustaining and can be replicated or which will have a major impact on a discipline.
- **The applicant has failed to demonstrate fiscal accountability.** Funding agencies will make grants only to those organizations that have demonstrated ability to manage the funds judiciously. Failure to provide sufficient detail regarding fiscal systems and experience can result in a turndown.
- **The applicant has used the "shotgun" approach.** It is clear to reviewers when the applicant has not read or understood the agency's interests and application procedures and has instead forwarded a generic proposal to many funding sources at the same time. Lack of "match" with the agency's priorities and criteria ensures a turndown.

Chapter 8

SUMMARY AND CONCLUSION

In this paper, we have attempted to summarize the main issues involved in writing research proposals that may have potentials for external funding. Undoubtedly, there are many ways of doing this. What has been done here is just to spotlight one (or a combination) of such ways. Successful grant writing involves the coordination of several activities, including planning, searching for data and resources, writing and packaging a proposal, submitting a proposal to a funding agency, and follow-up.

It is important that researchers, when writing proposals for multi-disciplinary research projects, should try, as much as possible, to take note of the following key elements which can enhance the chance of success:

- There should be a good choice of project in terms of theme and geographic focus. Pay attention to target population and likely donors/funding agencies. Provide adequate background information.
- Provide clear statement of intended impact and project objectives.
- There should be clear milestones and ways to measure output.
- The proposal should show evidence of inclusiveness; involve stakeholders as far as possible in the development and implementation of the project. Consider gender.
- Innovativeness. What is new (innovative) in this project. Is it the methods or approaches? New products?
- Provide a clear project implementation plan that also lends itself to accountability and transparency.
- The budget must be realistic. Where possible, the contribution of the applicant or his/her institution (in cash and/or kind) should be shown.

Summary and Conclusion

- There should be indication of potential sustainability of the project achievements.
- Provide information on links with existing initiatives/projects, especially by the same donor.
- Demonstrate capacity of the applicant to implement the project.
- The proposal should show good project structure (logical) and good command of the English Language.
- Ensure that the summary, or abstract, accurately reflects the needs and values of the agency. This page is often copied and made available to people (such as legislators and policy makers) who oversee the granting agency;
- Anchor the research on solid theoretical foundation, as good theory breeds good practice;
- Avoid being 'jargonese', to the extent possible, as reviewers from different disciplines might be involved in the review process and some are easily put off by technical 'jargons';
- Define the research problem within the context of a perceived need, particularly in the case of policy research;
- Work within the specified framework of donors, particularly in the case of solicited research proposals;
- Be precise in methodology, data collection approaches and method of analysis;
- Give the draft write-ups to colleagues, especially those perceived to be more experienced, for peer-review. Comments from such reviews may be used to fine-tune the proposal;
- The document should be spell-checked using a specific language form e.g. US or UK English, to ensure consistency in word renderings. Also, check on compound words;
- Keep within the specified page limit. ATPS specifies a maximum of 25 pages. [In contrast, the DPC stipulates 10 pages]. In a situation where there are many proposals, any factor can be used for the elimination of proposals, and
- Follow-up research proposals in accordance with the guidelines of donors, if need be.

The Planning and Writing of Grant-Oriented Research Proposals

Writing a winning proposal takes effort but is worth it. Your grant will support your project, improve your professional profile and help you make valuable career contacts. So expend the effort and look forward to reaping great benefits. **Good luck.**

REFERENCES

- BAMIRO, O.A. (2000). *General considerations in writing winning proposals for sponsorship of action research, advocacy and related issue-driven programmes*. Paper presented at the Proposal Writing Workshop for Polytechnic Staff in Nigeria, held at the Polytechnic, Ibadan, 15 to 17 August 2000. 12pp.
- CARMICHAEL, K. AND PETERSON, K. (2003). *Graduate Grants: Writing a successful proposal*. FastWeb.
- JANOVSKY, K. (not dated). *Project Formulation and Proposal Writing*. World Health Organisation (Limited Distribution).
- OLADEPO, O. (2001). *Report and presentation of manuscript and proposal*. Paper presented at the Workshop on Manuscript and Proposal Writing for Academic Staff, Faculty of Public Health, University of Ibadan. October 2001.
- SOYIBO, A. (1989). *Research Design and Management*. Paper presented at the Training Programme on Planning and Budgeting under the New Civil Service Reforms, NCEMA, Ibadan, February, 5-18, 1989.
- SOYIBO, A. (1996a). *The Power of Ideas and the Ideas of Power*. Inaugural Lecture, University of Ibadan.
- SOYIBO, A. (1996b). *Writing research grant-oriented proposals for humanities-based disciplines*. Paper presented at the Postgraduate School Seminar, University of Ibadan, Ibadan. February 28, 1996. pp.14.

Appendix I

SOME USEFUL WEBSITES ON WRITING RESEARCH PROPOSALS

UNIVERSITY OF IBADAN LIBRARY

APPENDICES

SOME USEFUL WEBSITES OF DONOR AGENCIES

1. <http://www.conida.lu/index/calls/1999/>
2. <http://www.commonwealthfoundation.org/>
3. <http://www.dfid.gov.uk/>
4. <http://www.carbontrust.com/>
5. <http://www.tbnoa.gov.gr/grants/eng.htm>
6. <http://www.org.noaa.gov/nrgp/eng/eng.htm>
7. <http://www.epa.gov/ncr/ncr/1999/ncr99.html>
8. <http://www.nsl.gov/home/csrp/eng/start.htm>
9. <http://www.epa.gov/ncr99/>
10. http://www.ilsa.org/cies/ia_scholar/vstulb.htm
11. <http://www.warwick.ac.uk/index.htm>

Appendix 1

SOME USEFUL WEBSITES ON WRITING RESEARCH PROPOSALS

1. <http://fdncenter.org/learn/shortcourse/prop1.html>
2. <http://fdncenter.org/learn/shortcourse/prop2.html>
3. <http://www.Montana.edu/wwwvr/propwrit.html>.
4. http://www.grantproposal.com/inquiry_inner.html
5. <http://www.proposalwriter.com/checklist.html>
6. <http://www.cmu.edu/develop/infoserv/prop/cgaf.html>
7. <http://literacy.kent.edu/Oasis/grants/first.html>
8. <http://www.upguides.org/index.html>
9. <http://www.library.wise.edu/libraries/Memorial/grants/proposal1.htm>
10. <http://www.cpb.org/grants/grantwriting.html>
11. <http://www.uvm.edu/~reshmp/miners~1.htm>
12. http://www.ssrc.org/programs/publications_editors/
13. <http://www.cfda.gov/public/cat-writing.htm>
14. <http://www.unl.edu/nepscor/newpages/noframes/pubs/writers/writing.html>
15. <http://www.Whitaker.org/sanders.html>

SOME USEFUL WEBSITES OF DONOR AGENCIES

1. <http://www.cordis.lu/inco2/calls/1999907.htm>
2. <http://www.commonwealthfoundation.com/>
3. <http://www.dfid.gov.uk/>
4. <http://www.carboncyclescience.gov>.
5. <http://www.rdc.noaa.gov/~grants/index.html>
6. <http://www.ogp.noaa.gov/mpe/gcc/index.htm>
7. <http://es.epa.gov/ncer/rfa/02dmvep.html>
8. <http://www.nsf.gov/home/crssprgm/start.htm>
<http://www.cpa.gov/ncerqa/>.
9. http://europa.eu.int/comm/europeaid/tender/gestion/pg/e03_en.htm
10. http://www.iie.org/cies/vs_scholars/vsfulb.htm
11. <http://www.avh.de/en/index.htm>

12. http://www.iaf.gov/index/index_en.asp
13. <http://www.lindberghfoundatio.org>
14. <http://www.jsmf.org>
15. <http://www.research.hq.nasa.gov/>
16. <http://geo.arc.nasa.gov/sge/health/chaart.html>
17. [http://www.hq.nasa.gov/office/olmsa/.](http://www.hq.nasa.gov/office/olmsa/)
18. <http://www.nsf.gov/pubs/2001/nsf01135/nsf01135.htm>
19. <http://www.nsf.gov/pubs/2002/nsf022/start.html>
20. <http://www.nebf.org/>
21. http://www.nippon-foundation.or.jp/sinsei/kai_enjo.html
22. <http://www.opecfund.org>
23. <http://www.odi.org.uk>
24. http://www.pioneer.com/pioneer_info/ISF_Guidelines.pdf
25. http://www.pioneer.com/pioneer_info/corporate/intl_guidelines.htm
26. http://www.pioneer.com/pioneer_worldwide/worldwide.htm
27. <http://www.rolexawards.com/home-flash.jsp>
28. <http://www.sanrem.uga.edu>
29. <http://www.sanrem.uga.edu/phase3/>
30. <http://www.urf.ac.za/funding/swedishcall.stm>
31. http://www.summitfdn.org/index_2.html
32. <http://www.twows.org>
33. http://www.toyotafound.or.jp/e_guide/ep2_lguide.htm
34. <http://www.wgf.org>
35. <http://www.wennergren.org>
36. <http://www.wennergren.org/Programs.htm>
37. <http://www.ifs.de>
38. <http://www.unesco.org>

Appendix 2:

Gantt-Chart Format of Activity Schedules

Activities	Jan.	Feb.	March	April	May	June
Activity 1	XXX	XXX				
Activity 2		XXX	XXX	XXX		
Activity 3			XXX			

Work-Plan Format of Activity Schedules

Activity (By components)	Timing	Output Target	Critical Assumptions	Indicator of Achievement
Component A Activity 1 Activity 2 • • • • •				
Component B Activity 1 Activity 2 • • • • •				

Appendix 3: Time-Milestone Format of Activity Schedule

Jan.	Feb.	March	April	May
Activity 1	Activity 3	Activity 4	Activity 6	Activity 8
Activity 2 • • • •		Activity 5	Activity 7	Activity 9
				Activity 10

Appendix 4: Time Plan for the Execution of the Energy Survey Project over a Period of 12 Months (after Bamiro, 2000).

ACTIVITIES	1	2	3	4	5	6	7	8	9	10	11	12
Visitation to Research Locations – Meeting local heads and obtaining permission												
Desk Work: Preparation of Instruments, Recruitment, training of field workers; pre-testing.												
Field Work-interviews and Focused Group Discussions.												
Collection of Secondary Data												
Monitoring and Supervision of Field Work/Visit to India												
Data Analysis												
Draft Report												

Planning and Writing of Grant-Oriented Research Proposals

Writing																				
Preparation and Submission of Final Report																				

Appendix 5. Budget (Currency _____ Exchange rate used 1US \$ = _____)
 Date _____

Item	Institutional Contribution			Donor Contribution		
	Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3
PROFESSIONAL SERVICES						
Salaries (\$ _____ for _____ months)						
Consultancies (\$ _____ for _____ months)						
Honoraria (\$ _____ for _____ persons @ _____ months)						
SUB TOTAL						
LABOUR						
_____ person days for (activity) @ \$ _____						
SUB TOTAL						
EQUIPMENT						
Computer (give type) @ \$ _____						
Copies (give type) @ \$ _____						
etc.						
SUB TOTAL						
MATERIALS, TOOLS AND EQUIPMENT						
Seedlings @						

Appendices

\$ _____						
Spades @						
\$ _____						
Printing paper, pencils, pens						
etc						
SUB TOTAL						
TRAINING						
Postgraduate fellowships _____ persons @ \$ _____						
Short comings _____ per year for _____ persons @ \$ _____						
Workshops _____ per year for _____ persons @ \$ _____						
SUB TOTAL						
LITERATURE						
Books and publications						
Production of brochure						
Quarterly newsletters _____ issues @ \$ _____						
SUB TOTAL						
COMMUNICATION						
Telephone, fax, email						
Others						
SUB TOTAL						
TRANSPORT						
_____ cars @ \$ _____						
Hired transport _____ mileage @ \$ _____						
SUB TOTAL						
TOTAL						
CONTINGENCY (_____ %)						
Taxes /charges (where applicable)						
GRAND TOTAL						