

**A GUIDE TO PLANNING AND ADMINISTERING GOVERNMENT
SCHOOL
TEXTBOOK PROJECTS**

With special emphasis on cost-reduction factors

by Douglas Pearce

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PREFACE

Recent research has made it quite clear that the textbook is one of the most constant elements conducive to efficient and effective learning. For many years, Unesco has promoted textbooks adapted to local contexts and has provided technical assistance to governments in their efforts to produce textbooks at the local level.

This technical assistance has taken various forms, often either based on curriculum development projects to render education appropriate to the socio-cultural environment, or on teacher training projects with an instructional materials production component to reflect new curricula.

Since the early 1980s, Unesco's general policy has been to promote a global and interdisciplinary approach, combining the points of view of educators, educational administrators, communication specialists and publishers.

In order to counterbalance the general tendency at that time to place heavy emphasis on printing equipment, Unesco, through its regular programme, promoted a series of regional seminars on how to reduce production costs of textbooks, inviting three categories of partner educationalists, administrators and specialists in publishing. These seminars demonstrated that a reduction of textbook production costs can only be achieved through efficient planning and management. The storage of printed textbooks, as well as the organisation of distribution networks, was also highlighted during these seminars.

The present study is complementary to the one previously prepared by the same consultant, Textbook production in developing countries: Some problems of preparation, production and distribution. It provides those interested in developing textbooks locally with different practical approaches to the solution of problems encountered during the overall process of textbook elaboration, production and distribution.

Division of Educational Sciences,
Contents and Methods of Education,
Unesco,
Paris

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TERMS USED

'Textbooks' as used throughout the Guide is intended to cover also other educational printed materials.

'Print', 'printer' and 'printing' are intended to cover all aspects of textbook manufacture including binding, as most textbooks produced for the less developed countries are paper-backed and are produced entirely by printers.

LDCs = less developed countries

DCs = developed countries

TPOs = government textbook publishing organisations

NOTES

All references are indicated in the text by the name of the author, and, in brackets, the date, and are listed in detail at the end of the Guide.

I. INTRODUCTION

Needs

A World Bank Review (Searle, 1984)* states that 'In 1973 only 6 per cent of education projects financed by the World Bank had textbook provision components, by 1983 this had risen to 43 per cent'. This is indicative of the rapid growth there has been worldwide in less developed countries (LDCs) of government sponsored textbook provision programmes.

The great majority of LDCs have met very considerable difficulties in operating their textbook programmes. The same World Bank Review lists shortfalls in nine completed textbook projects as being

poor quality books, inadequate distribution systems, inability to establish and maintain production schedules, inadequate procedures for handling paper procurement, teacher training activities out of phase with book publication, poor co-ordination between curriculum and manuscript development, and above all, failure to establish institutions that can provide good quality books after project completion.

It would be easily possible to expand this list of problems considerably, but it suffices for the moment to show that there is a need for better planning and improved execution of projects. That the problems faced are so considerable should not be allowed to deter those who wish to tackle them, most of them are capable of solution through better planning and a better use of available resources.

The frank and critical notes of this World Bank Review are particularly welcome as until recently one of the greatest difficulties confronting many textbook schemes has not in fact been finding ways of solving problems, but obtaining recognition that there are any problems to solve. This has partly been because the physical evidence of vast quantities of new textbooks - where often there has been little or nothing before - has tended to blind people to the very real problems that are being created. Moreover, many of the textbook schemes have been run on a very enthusiastic but highly amateur basis, and the necessary

*A list of references appears at the end of this Guide.

ability for constructive criticism has not been available, or where it has, has in some cases been ignored .

There can be little doubt of the value of textbooks in the education system. Unfortunately there appear to have been few systematic studies of the cost of providing textbooks or of their effectiveness in improving the performance of pupils. However, the conclusion of a study carried out in the Philippines (Natividad, 1983) was that

the costs of textbooks has increased pupil cost by less than one percent. On the other hand, on the basis of initial evaluations of the effects of Project textbooks, student performance appeared to have been raised by fourteen percent.

Previously many LDCs imported all, or most, of the textbooks they used. Now, many of these countries have established local textbook publishing (and also in some cases book manufacturing) industries to meet their needs. Often these industries have been established by government-run organizations. Even in some countries, like the Arab States, where there was previously a flourishing private sector textbook industry, government textbook publishing organisations (TPOs)* have been started.

Most of the LDC textbook-provision programmes have been started because of the shortage of low-priced textbooks suitable to meet local needs. But there have often been problems associated with defining exactly what is wrong with the existing textbooks being used, and establishing realistic and clear objectives of what the new programmes aim to achieve.

Most of the LDCs which have recognised their need for new textbooks, lack adequate local resources of all kinds including experienced writers, illustrators, editors, book designers, publishers, printers, booksellers, etc. Many of these countries have failed to recognize these problems and have planned textbook programmes which do not take full account of the lack of local resources.

Quite often the main problem of textbook programmes in LDCs is that the need for new textbooks has been recognised initially by educationists who have then set up organisations (which have varied widely from one country to another) to publish new books but they have not sought to employ the publishing expertise that is hooded for this.

*The term 'textbook publishing organisation (TPO)' is used throughout this Guide to cover all types of organisation which publish textbooks. Some of these may be very small units within departments of ministries of education with very limited responsibilities, others may be fully fledged and large government or private sector publishing houses. Unless otherwise stated, the term TPO is used to indicate a government organisation.

An example of this is Tonga, which is the smallest kingdom in the world, and whose textbook problems are typical of many small LDCs, and of some much larger ones too, but not all of them recognize the problems, as Tonga does. Cocker (1983), writing on this subject, says:

There needs to be a body of some sort to work on all the areas of planning, preparation, production and distribution of textbooks. Much of this work is done at present by curriculum officers, field officers and teachers. There should be a body simply to cater for needs specified by the Ministry's different divisions. Professional people with knowledge of techniques needed for translation, illustration, editing, writing, production and publishing. This is important as the people involved at present are either too busy doing their delegated jobs or are amateurs in the techniques necessary to produce the materials needed.

Quite frequently, government textbook publishing organisations have been set up in ministries of education, and have been so hampered by government administrative and financial regulations (which are quite unsuited to the running of such organisations) and so lacking in qualified and experienced staff, that their effort have been doomed to failure, or at the best to only marginal success, from the beginning.

Apart from the fact that many government TPOs are not fully realizing their objectives for the reasons given above, there is consequent wastage of funds and numerous ways in which costs could be reduced.

One example of this is a country in which a government TPO was established to meet the need for new primary-school textbooks. It was decided in some haste to adopt and translate a mathematics course published for primary schools in another country. This course later proved to be unsuitable, but it was virtually impossible to cease publishing it, and prepare and produce another course instead, simply because the cost would have been too great. Similarly, the language course proved difficult to put into use because of the resistance to using the national language in preference to regional languages. Considerable sums of money were wasted because the wrong sized printing paper was ordered; the books were not printed on web-fed presses, which would have been economical; and they were printed in one colour when four would have cost very little, if any, more if printed by the proper techniques; and were in the main unsuitably bound, and not produced in accordance with the specifications that had been established. Better research into needs, better planning and management, and the willingness to spend a little more on employing qualified staff, would have effected enormous improvements and savings to the scheme.

In recognition of the numerous problems associated with the provision of textbook and, in particular, ways in which costs might be saved, Unesco has held a number of seminars, which have resulted in published reports, and has sponsored and assisted research into this field. This Guide has drawn extensively on the materials that have been published and a list of the papers is included at the end of this Guide.

Problems connected with the production of textbooks have already been covered by Pearce (1982) in a Unesco publication entitled *Textbook Production in Developing Countries*. This Guide supplements that work by posing questions which may be used to examine existing textbook programmes or to assist in considering the formation of new ones. It aims to examine the problems in a non-technical manner which everybody can understand.

Other publications are available, some of which are listed in this guide, dealing with the professional and technical aspects of textbook preparation and production. Of particular note in this connexion is Richaudeau (1979) which is unfortunately available only in French and Spanish, and which is now in need of revision and updating

Many of the problems of government textbook programmes appear to stem from lack of adequate professional knowledge being applied at all stages from planning to operation. Not only has there been a lack of expertise, but there has also often been no recognition that this expertise is necessary and that it would improve results and save money. So at the planning stage, professional advice has not always been available; and, in operating the programme, writers, editors, illustrators, designers, publishers, and even printers, who have had no experience of textbook preparation and production have been employed. Inevitably there have been problems.

It seems likely that this situation will continue for many years to come, and until adequate training programmes are available and have been used.

Policy decisions regarding the objectives and overall plans of government TPOs are often made At a political or high administrative level, and sometimes without the benefit of skilled advice on all the aspects involved. Government officials in ministries of planning, finance and education often have to take decisions regarding the policies and plans of textbook programmes even though they have no experience of many of the issues at stake.

Nothing can satisfactorily replace professional staff, and the benefits which they can bring to running an organisation But until such time as fully professional people are available for all aspects of the planning and operation of textbook publishing programmes this Guide may prove useful to those who have at present to handle these operations.

Aims

It takes years to train textbook writers, textbook publishers, editors, book designers, and book-production planners and controllers. It would be fallacious, and potentially dangerous, to believe that in the brief length of this Guide it is possible to provide information sufficient to compensate for the lack of provision of these skilled people in textbook programmes.

The aim of this Guide is not in fact to teach anything to professional and technical people concerned with textbook matters about their own field of specialisation. For instance, it does not examine what constitutes a good textbook, but it does try to assist by outlining the qualities which should be looked for in identifying suitable textbook writers - the reason for this being that in many government textbook schemes those responsible for commissioning authors have had no previous experience of this work. No attempt is made to deal with cultural and learning problems associated with teaching in languages other than the mother tongue, but some of the practical aspects of language publishing difficulties are mentioned. The technical aspects of design and illustration are not covered, but the main administrative problems of running a publishing organization and some of the related cost factors are dealt with, with the aim of assisting those who may be responsible for these matters but are not trained in them. Similarly with printing, the Guide does not give technical details, but examines some of those basic matters which the publisher needs to understand if he is to have some hope of getting books well produced at a reasonable cost.

This Guide aims to place special emphasis on cost reduction factors in textbook programmes. But it needs to be kept in mind that to save money, more money often has to be spent on certain aspects of textbook schemes. Almost invariably more money is needed for research into needs and resources if sound plans are to be laid. Frequently, better remuneration is needed for authors to assure that the best of them are attracted to writing the manuscripts. Similarly, better remuneration is often desirable for illustrators, editors and other publishing staff. Substantial publicity and promotional campaigns are needed to sell books, and it needs to be assured that adequate discounts and terms of supply are provided to book-sellers. Concessional postal rates are desirable for the supply of books to rural areas. Moreover, and most importantly, textbooks may be made cost-effective.

The aim of this Guide is to focus attention on problems by asking questions. Where those responsible for planning or running textbook programmes are unable to answer these questions adequately, then there is a need for them to turn to professional advice.

The various chapters of the Guide aim to cover in a non-technical manner all areas of textbook provision. Thus, those in government responsible for education and planning and economic matters at a national level can see encapsulated the whole problem and be assisted in taking an overall view of matters.

Many of the matters dealt with are here apparently self-evident, especially to those who are professionally concerned with publishing textbooks. But experience indicates that it is precisely these matters which appear to require the exercise of common sense which are the most in need of mention and attention.

Many difficulties and problems also arise in textbook programmes because people responsible for one aspect of the work do not understand how the decisions they make may affect the work of others and the total costs. This

Guide illustrates many of the main problems in each field and highlights the needs for co-operation and co-ordination.

Even among those who use this Guide, it is expected that some will concentrate mainly on the section which most affects them. Thus, although the aim has been to achieve brevity, it has been thought necessary to include in the various chapters some duplication of points that are dealt with to facilitate their proper consideration by all those concerned.

The Guide has aimed at synthesising the main findings of the numerous seminars and reports and papers which have been published by Unesco in this subject area, and which are themselves based on extensive practical experience of the operation of government TPOs. But much of the content is also based on the author's own experience of publishing in LDCs.

Inevitably, taking into account the restrictions on the coverage of subject areas, which has already been mentioned, and the need for brevity, it has been necessary to be highly selective. It is hoped that comments and criticisms received concerning the Guide contents will facilitate the preparation of a revised and improved edition at a later date.

In examining the problems of government TPOs, a somewhat gloomy picture may have appeared. But it should be kept in mind that most of the problems described are capable of solution, and some countries have found these solutions. Inevitably it has been necessary to generalize, and the situations described in this Guide may be remote from those found in some countries. Frequently one finds that private sector TPOs are also not efficiently run and do not meet the needs of a country for textbooks. Everywhere the need is to examine problems, define them, and seek solutions.

Questions about various subject areas of this Guide have been placed at the end of each chapter in the expectation that the majority of readers will appreciate the explanations given before they attempt to examine the questions. But those with a good knowledge of the subject matter may wish to turn straight to the questions.

In sum, the main aim of this Guide is to take account of present problems of government textbook schemes, and their needs for better resources and more trained personnel, and to assist them by posing questions which may lead to a greater understanding of problems, and more adequate planning and improved administration of projects, with consequent reduced costs and the production of better textbooks.

II. ASSESSING PROBLEMS, NEEDS AND RESOURCES

Aim

The aim of this chapter is to assist in the carrying out of general surveys of the textbook situation designed to lay the groundwork in which it will be possible to decide on whether government assistance, intervention, or participation is needed in improving the supply of textbooks. Other chapters which follow examine in more detail the various aspects covered in a general way here.

All too frequently, new textbook publishing programmes have been started in LDCs, and government TPOs have been established, without there first being an adequate full-scale survey carried out to examine textbook provision problems and to make recommendations of the various methods which might be adopted in solving them. The identification of needs, and the establishment of plans to meet them, has often been on a piecemeal basis.

In examining needs, and proposing plans and policies, it is essential that there should be professional advice available. Usually there are available fairly readily in an LDC the economists and educationists with specialized knowledge of textbooks who will be required, but to this needs to be added the more difficult to find skills of a textbook publisher with experience in the operation of government TPOs.

Whether new textbook provision schemes are being considered, or the problems that have arisen with old schemes are being thoroughly examined, thinking starts, or should start, at the stage of how needs are assessed.

Quite frequently, it is seen that books being used in schools are not, for a variety of reasons, suitable: they are too expensive perhaps, or their background is wrong, or may be they have been primarily prepared for another country, and the desire is to have books, which meet curriculum needs, written by local authors and published and printed within the country.

It is frequently found that an LDC does not keep in touch with publishing activities in other countries and does not have a library of textbooks published elsewhere (some of which might be more suitable for use in its schools either in their present form, or after translation and adaptation, than those at present

being used) and decisions are reached too hastily that there is nothing available which is suitable. In consequence, long-term, expensive projects are launched to publish new textbooks.

Often too, there is no detailed examination made of the existing books to define exactly what is wrong with each of them and to discover if it might be possible to make changes to them which would make them more suitable. Often the publishers of these books are not consulted to see whether changes might be feasible, or whether, by making certain arrangements, prices could not be considerably reduced.

A tremendous number of potentially different courses are possible, and many of these have been tried in different countries, to facilitate the work of the private sector in meeting needs.

On occasions, the sole ground for wishing to produce a locally written and published course is that the existing imported textbook is too expensive. An example of this is given of a teacher, commissioned by the Ministry of Education in a small LDC to write a new English Course, who said:

The Course that I shall write will not be as good as the one we import and use in schools at present and I have pointed this out to the Ministry of Education. But they say that the present course being used is too expensive.

But further enquiries revealed that the Ministry kept no costing system for the books they produced and did not take account of the salaries of the teachers who were employed full-time in writing the books, or of the buildings they occupied and the staff and services which were employed to support them. Thus they had no way of knowing the exact cost of the books they produced, and it was very probable in fact that the course they planned to produce would prove to be not only inferior to the imported textbook but also more expensive. Moreover the Ministry had not made any attempt to negotiate with the private publisher either to produce a cheaper edition or to supply copies of the existing book at a lower price. Retailing profit margins etc. had not been examined either to see if they might in some way be lowered, simply because it had apparently never occurred to anyone to do any of these things.

Private sector problems

There should be provision for the voice of private sector textbook publishers to be heard, preferably through their own publishers' association, and their difficulties and problems should be considered. Quite often many of these problems are capable of fairly easy solution, but many of them do need the sympathetic ear of government; and sometimes, too, publishers need support and aid to be provided in various ways.

Enrolment figures

In assessing the quantities of textbooks that will be needed it is obviously very important that accurate school enrolment figures should be available with reliable predictions for future years. In some LDCs it has proved necessary to take special steps to see that these figures are made available when required.

Expenditure on textbooks

Quite frequently, in many countries, the exact amount spent on textbooks is not known. Provision is made, sometimes on a per capita basis, of a lump sum for the purchase of school materials. This figure is never subsequently analysed into expenditure on individual items.

If the cost of a scheme is to be measured, and if the results it achieves are to be measured and compared on a basis of costs, then the starting point should be an assessment of what present expenditure is, and efforts should be made to create a system of accounting for expenditure whereby this becomes feasible. Any survey carried out should include the best possible estimate of exactly how much is being spent by schools and by children on textbooks at present.

Purchasing power of parents

If a TPO is to sell the books it publishes it will need to know how much parents can afford to pay for books, and an examination should be made of this. Some parents in certain parts of the country, or from some income groups, will be less able to afford to buy books for their children than others, and it may be necessary to consider some way of facilitating the provision of books for them.

Distribution

Many of the problems of textbook provision relate to distribution. Often the problems of obtaining books, and their high costs, are connected with the considerable difficulties of bookselling. Any survey should concern itself with these matters and in seeking a solution to them. They are examined in more detail in Chapter VIII of this Guide.

Production

Similarly, book production problems are considerable in most LDCs and are factors which often are responsible for high costs, low standards, and late delivery. There is a detailed examination of many of the problems of printers in Chapter VII, and any preliminary survey of the whole field should take account of these aspects.

Thus, those who conduct a survey will be in touch with teachers, curriculum developers, writers, publishers, printers, booksellers, and they should also establish liaison with parents. Moreover, it is useful if provision can be made for continuing consultation with all those concerned all the way through the planning stages of a textbook scheme and during its operation.

Language policies*

Language policies, and the medium of instruction used in schools, have to be considered to assure that they are realistic, and that satisfactory manuscripts can be prepared and typeset and printed at reasonable cost to produce textbooks in the required languages, and that these books can be understood by pupils and used effectively by teachers.

The problems of either writing original works, or making translations in some languages are often underestimated. Writers of high ability with the necessary professional knowledge of the subject matter are difficult to find; training facilities for them are frequently lacking; and there are often problems over orthography, and the use of special scripts; even when the Latin alphabet is used, printers can be faced with great difficulties in obtaining typefaces with the special diacritical signs that some languages use. These matters often present considerable problems in producing usable textbooks, and sometimes create insupportable cost difficulties.

The use of an indigenous language is an important factor in promoting the growth of a local publishing industry in an LDC but it is often also responsible for increasing the prices of textbooks.

In-depth coverage of the problems of producing books for multilingual countries appears in a Unesco (1978) publication.

Surveying the total situation

The need for new textbooks for the school system in an LDC is usually identified first in one division of a ministry of education, and this is, more often than not, at the primary level. Teachers, teacher-trainers, curriculum developers, etc., are often involved in this process of identification. Quite frequently this has led in many LDCs to the commencement of a government publishing programme and the establishment of a TPO, to meet the need. Later, in some cases, needs have

*For some regions, the problem of language in textbook publishing is of a very crucial importance, and yet this is often overlooked to the detriment of the Third World textbook publishing. Therefore, the annex contains the list of issues to be considered on this matter, which is an extract of A Guide to Textbook Project Design and Preparation prepared by Anthony Read, Director of the Book Development Council, Publishers Association, UK. Some actions undertaken by Unesco in Africa in this field are also summed up in the same annex.

been identified at other levels of education, and also in other ministries, and the result has been sometimes a proliferation of small publishing units and TPOs throughout government. Almost always these are underfunded and understaffed as there are just not enough resources to spread around adequately. What is really needed is a proper survey of all needs at all levels of education throughout life followed by the establishment of a programme to meet these needs. Otherwise it is likely that too much of the total available resources will be concentrated in providing books at one or two levels and little or nothing will be done in other areas. There is now an increasingly widespread understanding that there is little point in teaching children to read in school and then providing nothing for them to read when they leave school; and there is recognition that loss of hard-earned literacy is a major problem. Thus there are much wider needs to be met than merely those of school children.

An example of the problems that arise through lack of research into needs and resources, and consequent poor planning, is given by one fairly large LDC where several divisions of the Ministry of Education had recognised the need for books in their areas and had each started at different times their own publishing programmes. There had been inadequate thought given to the previous role played by the private sector in providing textbooks, and how it would be affected by the introduction of government educational publishing activities. The private sector had not been consulted before the programmes were started, or even advised of what was planned. The government programmes were planned largely without any expert publishing advice. The divisions of the Ministry had not consulted each other concerning what they planned, and each had adopted different methods of preparing materials, and producing, publishing and distributing them. If some of the staff had been shared among the divisions, and the process of learning the problems had been a joint one, much better results would have been achieved at much lower cost. If the private sector had been consulted, and its co-operation sought and obtained, much more would have been achieved in solving the problems of the overall shortage of books. As it was, the private sector, with its most profitable form of educational publishing lost to government, was discouraged and, in consequence, the total educational publishing activity of the country, measured by number of titles produced, was reduced.

Need for assistance

Textbook publishing in LDCs tends to develop more slowly than other industrial activities. This is because it is a sophisticated operation which requires skills not always easily available; it is also a high-risk business in which it is often difficult to make profits. Entrepreneurs often prefer, therefore, to invest their capital in simpler industries with quicker and more assured profits.

To keep up with the rapidly growing education systems in LDCs, and their demand for textbooks, assistance is needed for textbook publishing, and in some countries the only apparent way to solve the problem is to set up government TPOs.

Unesco has for long advocated that governments should be self-reliant in the preparation and production of textbooks. But extensive experience gained in this field over recent years has indicated the need for caution, and for governments to research more fully, and plan more carefully, and to assure that the right resources are available in staff and money before launching ambitious textbook schemes. It needs to be kept in mind also that developed countries import very large quantities of textbooks and other educational materials, and that private sector TPOs in these countries often have their books printed overseas.

A Unesco publication (1984b) says, in dealing with textbook matters:

For many countries, the easiest solution would be to import such materials, at the risk, however, of twofold dependence: economic dependence (imports increase the deficit of the balance trade) and cultural dependence (a risk of using materials not well adapted to the needs and the socio-economic environment, because they have been designed abroad for foreign educational models).

Conversely, education systems have a natural tendency to organize and develop production units within Ministries of Education. Serious obstacles are encountered, not only from the view of administrative regulations, but also as regards the transfer of technologies which drastically limits the activities of such units.

Organizations interested in textbooks

The preparation, production, and distribution of textbooks has wide ramifications, which are not under the control of a ministry of education alone. Ministries of finance, planning, trade and industry, and customs-and-excise departments etc., are also concerned in matters such as: financial policies and needs; nationwide planning; encouraging and building up local industries; publishing, printing and bookselling problems related to import duties and taxes on books, printing paper, printing materials, machinery and equipment, foreign exchange and so on. In important policy matters such as the subsidizing of books, or free distribution to students and teachers, decisions often need to be made at cabinet level. In carrying out a survey and examining resources and problems there needs to be provision for consultations to be carried out with the various government ministries and departments concerned, and for the means to be established for a continuing process of dialogue to be conducted to assist in solving problems and producing plans.

Teaching materials produced in schools

Any survey of the textbook situation should concern itself with the activities of the schools in providing the written materials they need. It is not uncommon to find that teachers themselves write material, and often take it from other sources, and then photocopy, mimeograph or reproduce it in some way for the use of

their students. The costs of doing this are often met from school funds (and some are hidden in other ways such as the provision of school duplicating equipment and photocopying machines, and unpaid copyright fees). Many aspects of this type of activity merit encouragement, but the true costs of it need to be taken into consideration when deciding on the finance for textbook provision schemes. In many cases the costs are very high and their reduction may leave more money available to produce the core textbooks that may be needed.

Other government ministries interested in textbooks

Ministries of health and agriculture etc. are often closely in touch with ministries of education concerning matters which affect them in the school curriculum. Much can often be achieved by co-operation, too, when it comes to publications. Material used in primary schools can also sometimes be used in health education programmes for adults, and in agricultural extension work. Quite often ministries other than education establish their own publishing units to meet the needs for material in these fields. Co-operation and co-ordination of effort can often help to assure that scarce resources in skilled staff and funds are not dissipated, and that efforts are not duplicated. Moreover, other ministries often need the type of assistance that educationists can give them in putting over their message in educational programmes. So when surveys of the present situation and of future needs are being carried out it is useful if the wider picture can be kept in mind.

There is a need, too, to consider all aspects of lifelong education as provided through books, and any survey carried out would not be complete if it did not include an examination of the library system in schools and outside.

Resources

Having identified needs, and before making overall decisions about how they should be met, an examination of resources is required. Where are the resources to write, edit, publish, manufacture, distribute and sell the textbooks that are required? If the present resources are inadequate, how can they be improved through training programmes, and by providing the finance and establishing the climate in which a textbook programme will flourish? Can all this be done from within the country or will outside help be needed?

QUESTIONS ABOUT ASSESSING PROBLEMS, NEEDS, AND RESOURCES

1. Will professionally planned and staffed surveys be carried out to examine the present situation and identify textbook needs (along the lines of the relevant parts of the chapter of this Guide which deals with manuscripts) at the levels of the following:

- pre-primary and kindergarten school
- primary school
- secondary school
- technical institute
- college and university
- adult education
- literacy programmes
- community education
- village health education
- agricultural extension work
- co-operative training programmes
- other?

2. In reaching decisions about the shortcomings of the existing textbooks and their methods of supply to students and related problems, and their potential solutions, will a representative selection of the following people be consulted, and will detailed and comprehensive replies be obtained?

- students
- parents
- teachers
- educationists

- teacher trainers
- curriculum developers
- institutes of education
- textbook authors
- textbook publishing organisations
- book printers
- book wholesalers
- book retailers
- librarians
- Ministry of Trade and Commerce
- Department of Customs and Excise
- Ministry of Health
- Ministry of Agriculture
- Ministry of Social Welfare
- Ministry of Co-operatives
- Other organisations in government or the private sector which make use of textbooks or are interested in any aspect of them (see detailed questions in this connexion in other chapters of this Guide).

3. Will recommendations be made regarding the making of provisions for a continuous process of consultation to be conducted, so that any scheme which is started may have the benefits of the opinions and suggestions of those who are, in any way, interested in textbooks?

4. Will an examination be made of all the resources needed to produce new or improved textbooks including writing, editing, publishing, manufacturing, distributing, and selling?

5. If the survey reveals textbook needs at more than one level of education, will information be obtained so that a decision may be made of in how far these needs can be met on a basis of co-operation, or shared staff, facilities, funds, and other resources?

6. If information obtained through any aspect of the survey is insufficiently precise or comprehensive for decisions to be made about any steps that should be taken to improve the situation, or if in some areas deeper studies are needed, will steps be taken to remedy the situation?
7. Will those who carry out the survey either have experience of similar situations in other LDCs or will they, if they have not, study what has been done in some of these countries to remedy the situations regarding textbooks, and how the schemes they have run have fared?
8. Will special attention be focused on obtaining information which will make possible assessments of how many copies of each book at present being used in schools are sold or distributed free, and how many copies will be required of each new book which it appears will be needed?
9. Will an estimation be made of how much parents, or school authorities, have to spend at present on books in each subject at each level, and how much they might be able and prepared to spend in future on books-?
10. Will the survey pay attention to the problems of distribution and marketing of books and examine the present systems and problems as well as possible future solutions?
11. Will the survey include an examination of material produced by teachers and reproduced in schools or education offices, and the usefulness of this material, and the extent to which it is used and an estimation of its costs?
12. Will an attempt also be made to estimate how much of this material would continue to be needed, and be produced, if the existing books used in schools were replaced with new and improved ones, and what savings in cost might in consequence result? '
13. In considering the replacement of existing textbooks by new and improved ones will consideration be given to adopting, possibly after adaptation or translation or both, textbooks published for other countries? Will relevant books be collected to make this feasible?
14. Where official policy is to make use of an indigenous language in which little material appears in print, will full and careful consideration be given to all linguistic and other aspects of this including standardisation of orthography and terminologies in the subject areas of the textbooks that are planned? Are grammar books and dictionaries available to support and guide the work of writers? Are there authors with a sufficient knowledge of the subject areas of the language? Will the teachers and children for whom the textbooks are intended be able to benefit fully from them, or will some orientation and training in their use be necessary? Are experienced editors with a knowledge of the language and subject matter available? Are there difficulties in typesetting the language? Are special symbols, characters, diacritical signs, needed? If so, how widely available are they from printers? How far will their use restrict the number of printers

who can handle the work? Are they available for typesetting by machine, or will they have to be set by hand? How much will their use restrict the choice of typefaces available? How much will costs be increased by these matters?

15. To what extent will the programme depend on translation from another language to the indigenous language? How will this be planned and paid for to assure the submission of high-quality translations prepared according to strict schedules?

III. POLICIES, PLANS, AND THE ESTABLISHMENT OF TEXTBOOK PUBLISHING ORGANIZATIONS

General

Having examined the problems, needs and resources available to meet them, and having taken into account the opinions of all the various organisations and individuals interested in meeting these needs, it should then be possible to decide what, if any, action is required of government.

Action needed may vary considerably from one LDC to another. It may merely mean giving advice and encouragement to private TPOs at one extreme to, at the other, establishing full government TPOs with the staff finance and resources to enable them to meet all textbook requirements.

Aims

This chapter examines some of the methods of establishing policies and plans, and implementing them, for textbook programmes.

Some of the issues which will need to be resolved are of such importance that they may require political decisions, possibly made sometimes at as high as cabinet level. But it is important that they should be made on the basis of fully professional advice.

Co-operation with the private sector

If there is to be a programme to aid, or work in co-operation with, the private sector publishing industry, then a policy will need to be developed in this connection and a method devised of implementing and financing that policy. Often this can be done through a textbooks board.

In some countries private sector publishers (Quite often from overseas) have entered an agreement with a LDC government to publish the new textbooks that are needed. Sometimes this has been done on a shared basis with the government establishing its own TPO and gradually over the years, as it trains staff and

acquires experience, taking over the functions initially carried out entirely by the private sector TPO. This can be a solid and useful way of building up resources and it has on occasions been very successful. But sometimes the overseas TPOs have used this method primarily to establish their own titles and authors in the local market and have created a virtual monopoly for their own books. Before entering into agreements of this nature governments should, therefore, seek skilled and fully independent advice. This may enable them to negotiate very favourable agreements which will be beneficial in meeting needs in the long as well as the short term.

Support for private sector

According to Searle (1984):

The objective of a textbook provision system is to provide textbooks... through mechanisms that support, or at least do not damage, the growth of existing and new ventures for publishing and selling general books.

She also emphasizes one of the major problems as being the need for institutions that can provide on a continuing basis for the textbooks that are needed. Writing on this subject, and about the highly successful project in the Philippines, Natividad (1983) says:

The success of the national textbook project will not be measured by the number of books it will generate; rather, it will depend on whether or not a self-sustaining process is established that will ensure an adequate and continuing supply of quality textbooks.

In specific terms, this means the identification or organisation of a permanent agency that can be vested with all the powers and resources needed to sustain the continuing development, production and distribution of textbooks.

This means also recognition of the fact that textbooks development is both an educational and a publishing activity and ultimately it is better undertaken in the market of free and enlightened competition among experienced publishers working with educators.

Textbook/pupil ratios

Probably the single most important decision that has to be taken regarding costs of schemes where books are provided free of charge is the pupil/textbook ratio. The usual aim is to provide one book per pupil in each subject, but this often has to be balanced, when considering total costs, against the possibility of providing a choice of titles in each subject, or titles in subjects where no book is at present used, or supplementary reading books and other teaching materials. Some countries manage very well (where, as sometimes happens, three children sit at a bench) by having one book to three pupils. By providing one book to two

pupils (instead of one each) costs can often, depending on the number of copies printed, be very nearly halved.

Overgenerous initial targets for providing free copies of textbooks have sometimes led to schemes being abandoned altogether when funds became scarce, or to the concentration of all efforts in a very restricted area of book provision. Wide and long-term issues need to be carefully considered before decisions are made in this area. Decisions in this issue often have to be made at a political level but it is important that advice should be available from educationists publishers, librarians, and everyone concerned with book matters in the country.

Free of charge?

On the face of things, it would appear that much money is being wasted in LDCs because many of them provide free of charge a new textbook in each subject at each level each year for children. The children keep the books after the end of the year. Whereas it is not uncommon in developed countries to find that textbooks are expected to last three or four years or even longer, and that they are passed on from child to child.

Replacement copies

When books are provided to children free of charge, thought has to be given to how worn copies will be replaced. Quite apart from the wear and tear of normal classroom use, which is increased where children take the books home (and increases more when they carry them all backwards and forwards to school every day) there is also deterioration in storage in distribution centres and in schools, and mould, mildew, vermin and insects often account for fairly large losses each year. Inevitably, more copies have to be produced than the estimated pupil/textbook ratio. Losses will also occur through carelessness and theft. Only experiences can show in any LDC the annual percentage of these losses, but it will seldom be less than 10 per cent and often substantially more. Improvements can often be achieved through: educating children, teachers and parents in the care and respect of books; assuring that books are properly packed and carefully handled when they are despatched; and by creating suitable storage facilities in schools and distribution centres. Sometimes children have to pay for books they lose or damage, and sometimes they are penalized by there being no replacement copies available.

Making copies available for everyone

It is common to find in schemes where textbooks are provided free of charge to students that there are some people who would like to purchase copies because they are not, for one reason or another, entitled to receive them free. Sometimes students themselves would like to obtain for their own retention copies of the book which they borrow from school. But often there is no means of purchasing

copies. Any scheme to provide books free of charge should consider the merits and possibilities of making some copies available for sale. This can help to reduce total costs as well as avoiding frustration from would-be purchasers.

Physical and educational life of books

A very important aspect of reducing the costs of providing textbooks (where copies are not given free of charge to children for permanent retention) but one where the savings cannot easily be measured, is to make the physical and educational life of books the same. In other words, there should be an assurance from those responsible for adopting the titles which will be used or recommended in schools that they will not change for a specified number of years (around four is usually the target to aim at). Planning for new curricula, and the changes that will be needed in textbooks, can then be based around this supposition. Those who are responsible for planning the physical production of the books can then see that the paper selected for production and the materials and methods of binding employed are suited to a life of physical wear which will approximate to the planned educational life. This is a difficult target to achieve and requires good planning, co-ordination, and co-operation from all those concerned; but it is not only a potential money-saving objective but also beneficial from an educational viewpoint, as all too often new books are not available when needed to meet the requirements of a modified curriculum.

Whether to establish a TPO

The advantages and disadvantages of establishing a government TPO need to be studied. In particular, thought needs to be given to its likely effects, in both the short and the long term, on private sector publishing and on the total book needs of a country for lifelong education. Furthermore, a careful examination should be made of how far it will create a monopoly in textbook publishing in certain areas, and whether the overall result of this will be desirable.

The small LDCs (where often little commercial textbook publishing takes place) are often those most in need of establishing TPOs. Despite the complexities and difficulties of operating TPOs, these countries should not be discouraged. Low-cost printing techniques, and co-operation with other territories and overseas publishers have often produced at least partial solutions to the problems.

National planning

There needs to be a national plan for all educational books. If a TPO is formed then its policy should in turn be part of the national book policy. All too often TPOs are launched without thought being given to how their work will fit into the whole of the book provision needs of a country at all levels on all subjects for all children and adults.

Area of publishing

If a decision has been made to start a government publishing programme and form a TPO then the areas in which it will publish need to be defined, and also whether it will publish everything itself, or whether it will seek to encourage private sector publishers to do some, or most, of the work, and possibly assist them by providing or approving manuscripts or with grants, etc., to do so, and whether it will on occasions publish jointly with them. There is a very large variety of ways in which publication can be achieved and what is right for one book is not necessarily right for another.

Methods of publication and primary objectives

The questions in this chapter try to take account of some of the different approaches which have been made in various LDCs, but no doubt other, and equally workable, methods may be discovered in some countries. It is suggested that the primary need is to keep in mind two main objectives when considering which method to adopt the interests of education (and of students and teachers) and of producing the best possible books at the lowest possible costs. Sometimes the schemes of TPOs have been frustrated by having too many objectives, and attempts have been made to use them mainly as a vehicle to increase local industry, conserve foreign exchange, produce tax revenue, and make profits for government coffers (all of these, of course, are admirable objectives but they should be subordinated to the primary aims described above).

Smith (1977) has some interesting points to make on this issue:

It is especially ironical that the very governments that seem most eager to avoid the foreign-exchange cost of importing books, and also the most vehement in urging development of a local book industry, may also be the most blind about the need for facilitating the imports required by a local book industry. This blindness has shown itself over and over again in different parts of the world. It signifies a major breakdown in communication between the educational and cultural specialists who understand what a local book industry can do for a country - including its economic development - and the financial authorities who have tended to focus only on the income from the duties imposed.

The overall problem of import duties and the use of foreign exchange is of course extremely complex. Not even the wisest economist in a country can give a simple answer, let alone a foreigner with limited knowledge of all the factors involved. But some things can be said with assurance, including the inability of a printing industry to survive without the equipment and spare parts and paper and other supplies. Import duties imposed on any of those items have the direct effect of increasing the price of books if not completely blocking their publication. The economic planners of each country have to decide whether they want more books at lower prices, and if they do then

reduction of duties on printers' imports may be an essential way of helping achieve that goal.

In this connection also, Kotei (1981) says:

It is worth noting here the anomalous attitude by African governments in regard to state-supported institutions. Many African governments seem prepared to put up with losses incurred in the operation of public health, public transport plus other 'non productive' services, yet they insist that other social services upon which they depend for achieving proclaimed social and educational advantages must operate on commercial, profit-making bases. The rationale seems to be that if a social organization produces a commodity that is marketable, it must necessarily show a profit.

In holding these views, they assume that the enormous demand for books is commensurate with the people's ability to purchase books. Theoretically, this is a valid assumption, although to be realistic, the ability to purchase books among the vast majority of those who can read is limited by the requirements for other basic necessities of life, for example, food, rent, and medicine.

Potential for government TPOs

In theory there is every reason why government textbook publishing programmes should be more successful than those of the private sector, but in practice this has seldom proved to be the case. Ministries of education have the potential to arrange to co-ordinate fully the work of curriculum developers, authors, publishers, and teachers and to produce ideally planned, well-written, fully tested, and well-illustrated and manufactured books, which pupils and teachers will be able to use with maximum effect. To meet this potential, new approaches are often needed.

Need to examine activities of TPOs

The fact that many government TPOs operate less effectively than those in the private sector indicates that there is a need for close examination of their policies, methods of operation, and problems.

Beginning small

There can of course be too much planning and not enough action taken: a proposed project can be frustrated by attempting to make it a part of a much wider scheme, which because of its complexities and ramifications never gets off the ground. This needs to be avoided. Big and ambitious schemes need to be approached cautiously. It is almost always better to start in a small way and build up gradually. But there is no good reason why, when a textbook publishing

scheme is being considered, its wider implications should not be examined and preliminary provisions made to meet them eventually.

Outside assistance

The problem of establishing, financing, and staffing a TPO may to some governments appear so formidable that they wish to seek outside assistance. The possible participation of United Nations agencies often therefore needs to be considered and help may be available from the World Bank, Unesco, UNICEF, IBRD, FAO, etc.

Financial control

Finance officers, or treasury officials, are sometimes reluctant to agree to giving TPOs a degree of freedom from normal financial regulations, as they fear that this might lead to abuses. However, there appears to be no evidence that if a government TPO is operated on financial lines similar to those employed in the private sector, this will lead to malpractice. It is, nevertheless, recommended that adequate accounting and auditing procedures should be adopted to keep financial control.

General control and establishing a separate entity

In a private sector TPO there is usually a board of directors who make policies and plans and ensure that they are implemented. But they almost invariably do this with the benefit of expert publishing advice, usually in the form of an executive head of the organization who is also a member of the board and who, as its chief executive, is responsible for the day-to-day running of the TPO. This long-tried, and successful method of operating a private TPO needs to be kept in mind when a government forms its own TPO.

All too often responsibility is divided among many people in government textbook programmes, and some of them are not skilled in the tasks to which they are assigned, and there is no single person with overall responsibility for directing the whole programme. There is often poor co-ordination between curriculum development workers and authors. Even more frequently it is found that writing teams are unable to keep to writing schedules which have been established for them, and in consequence attempts are made (sometimes with disastrous results) to hasten the work of the publisher in editing, designing, and illustrating the books and the printer in producing them, and the books are not delivered on schedule to schools. Skilled co-ordinating and planning are essential.

In view of the fact that a TPO has financial, operational, and administrative needs and problems which are very different from a normal government department - because it is an industrial undertaking, and often also a trading organization - it is sometimes found best to establish it eventually as a

separate entity and give it the type of freedom and flexibility that it needs for its operations by creating it as a limited liability company (probably with the aim of not making profits, and often being to some degree dependent on subsidies from government), or as a statutory body, or a charitable organization.

Considerable care needs to be taken in controlling its activities. It is probably generally best if as much as possible of its operations on a day to day basis can be left to its director, and only residual powers to control overall policy and finance rest with a board, of which the Director should be a member and chief executive. If the Board has too much power, it is likely that a professional Director will find that non-professional decisions are being taken which he finds it difficult to implement, and that he is being robbed of the personal job satisfaction of taking initiatives. A loose hand on the reins is often the best solution.

Using local resources

It is highly questionable whether government TPOs should be placed under an obligation to use local resources irrespective of merit, and in effect thus be expected to provide finance for what amounts to subsidies to local (and sometimes inefficient) printing, or uneconomic production of paper. In effect subsidies to these industries are often being hidden in the budget for TPOs and ministries of education, and teachers and children are often suffering from being provided, in consequence, with fewer and poorer books. If subsidies are needed for local printing or paper manufacturing it is best that they are provided direct; then the cost of them, and their effect, can be more easily measured.

Administration

Government financial and administrative arrangements are seldom suited to the work of a TPO. It needs to have the sort of freedom of operation that a commercial publisher has. It needs to be able to employ free-lance illustrators and other part-time workers, and not to have to rely entirely on full-time staff. It needs to be able to pay people according to their ability and productivity, and to make varying payments for work of different quality. It is usually difficult for it to do this within the framework of a government organisation, but if it cannot do so then costs cannot be kept to the lowest possible level and work cannot be produced to the highest standards feasible.

Examples could be quoted, for instance, of several government TPOs which employ full-time illustrators who are not kept busy the whole time, and because the range of work that any illustrator can produce is limited, the books produced by those TPOs often have a dreary uniformity of appearance (this is not to say that full-time illustrators should never be employed though; in some organisations they are kept fully occupied and are able to work effectively).

Many of the problems of textbook publishing programmes stem from inadequate organisation. Provision is not made in some TPOs for some of the needed functions in textbook provision to be carried out at all; other functions are sometimes duplicated, or there is some overlapping; quite frequently, the precise duties of individuals are not defined; in some cases there is no one appointed with overall responsibility for the whole programme. It is essential to success that there should be an organization diagram prepared showing the publishing process, and that the functions and duties of each individual should be defined. In some countries the main problems are the relationships and functions of the various bodies responsible for different aspects of the programme. There is a tremendous need for a unified effort to be made between curriculum developers, authors, teacher-trainers, educational administrator the staff of government TPOs (including publishers, editors, designers, illustrators., marketing and sales staff etc.), printers, distributors and booksellers. One person, possibly the executive officer of a textbook committee, or board (who might also be the Director of the TPO), needs to be assigned the task of planning and controlling the whole programme and assuring that the necessary co-ordination and co-operation is achieved between the various organizations and groups concerned.

Most publishing problems are management problems. There is a tremendous need to assure that skilled and dynamic leadership is available for a TPO.

A Unesco (1980b) publication dealing with the establishment of industrial-scale manufacturing of educational materials advocates some form of protection from competition for them from firms in developed countries:

It is essential for markets to be organized, after consultation among the major buyers, in order to ensure their stability and subsequently their growth (i.e. a policy for use of the materials in question and a pricing policy must be formulated). Guaranteed outlets must be available if all the efforts to encourage growth are not to be wiped out by competition from firms in developed countries with their greater marketing promotion and advertising resources. Market organization is thus one of the essential conditions for limiting price fluctuations.

To this end, agreement could be worked out between the public sector and the industrial partners concerned. Such agreements would define respective obligations of the users (educational and cultural authorities) with regard to the grouping, timing, etc. of orders and of the manufacturers with regard to specifications of materials and equipment, medium term development objectives and marketing. These moisteres could be applied initially to industrial production of textbooks and the commonest type of supplies. They should also be routinely considered for the production of new materials resulting from technological developments, especially in the field of computer science.

On the other hand, as another Unesco (1984b) publication notes, in a few developed countries such as the United Kingdom and the United States there is no centralised planning in connection with the supply of textbooks.

There is no direct liaison between the Federal education authorities in Washington and tens of thousands of schools. It is not the role of the Federal authority to impose materials or methods of selection on the local authorities, but rather to finance projects, research production of materials and programmes and disseminate information.

In establishing new TPOs, problems have often arisen through detailed policies and plans for their operations being prepared before a director was appointed to run them. Quite often the plans and policies have been prepared by people who do not understand the professional aspects of textbook publishing, and inevitably this has presented difficulties.

Limiting initial publishing objectives

It is a mistake to expect a new TPO to launch itself directly into a substantial textbook publishing programme. It should cut its teeth on less ambitious projects and be given the time to train its staff and feel its way carefully through the jungle of problems it will meet. Given the difficulties it is likely to encounter, it is reasonable to expect that in its first year no books at all would be published and in the second year only one or two, and that then each year it might double its production up to its expected target. But the books in the first years would probably not be school textbooks for, as explained elsewhere in this Guide, these usually take at least three years to prepare and publish.

It should be remembered that most commercial TPOs start their publishing programmes on a very small scale and learn by trial and error, but government TPOs frequently aim at a large-scale start, and the errors they make assume consequent greater dimensions.

Financial systems

A TPO needs long-term financing - the annual budget system operated by governments is not satisfactory for this purpose. A continuing fund is needed to finance the production of textbooks, and funds voted should not be lost just because it proves impossible to spend them within the financial year. If there is insistence on the normal government annual budget system it almost invariably results in money being wasted, and in delays in publication, or even in publications not appearing at all. If revenue is collected from the sales of books it is best if this is paid into a revolving fund which finances publication. Initial capital to finance the programme is needed for this fund, and then annual supplements to make up the difference between revenue and expenditure and to allow for future expansion of the programme.

Tenders

Government tendering systems are frequently not suited to the work of TPOs in buying printing paper (which they often stock to supply to printers). Frequently the number of paper merchants able to supply printing paper in an LDC is limited, and this facilitates them working (as they sometimes do) in collusion to force prices up. Tenders boards are often restricted to obtaining supplies from local agents, and are not in a position to compare those prices with prices offered overseas. Too, tenders boards often do not have available to them the expert knowledge to assure that the paper ordered is the best for the work involved and that the paper supplied is in exact accordance with the specifications laid down. There have been specific examples in some LDCs where the paper obtained through competitive local tenders has in fact cost more than the paper freely available over the counter from other suppliers within the country and sometimes even from the same suppliers who have been awarded the contract.

There have been instances in some LDCs where collusion between printers has inflated the costs of printing contracts awarded by governments through tenders boards. It often proves possible for printers who have submitted unrealistically low quotations to be awarded the contract and then to produce poorly printed books using paper and other materials which are inferior in quality to those which have been specified and then to have their work accepted and paid for. Even if specifications are professionally prepared and fully implemented by printers, there are elements which it is almost impossible to specify which make the difference between a well produced or a poorly produced book. Much must depend on the integrity of the printer and his willingness to co-operate closely with the publisher in achieving the best possible work. The usual basis for acceptance of tenders is the lowest offered. In printing this is seldom a satisfactory method of choosing a printer. What is needed is not "one off" jobs done by the cheapest printer, but the building up of a continuous relationship between the TPO and a small group of printers who produce work of high quality and who are committed to improving that quality and ensuring delivery according to schedule. Of course, those printers' prices have to be low as well, but this is not the only, or necessarily the main, consideration. In the long run it often proves that the printers who charge slightly more are the most economical to use.

The prices these printers charge can be established initially in outline by obtaining quotations based on per page prices for different sized pages and in different lengths of printing runs. From time to time, the prices charged by those printers the TPO is using can be compared with other printers to see that they are still reasonable.

The board of the TPO should include people with publishing and financial knowledge who are able to scrutinize and compare the costs of the books the TPO produces. The management should then be given the maximum freedom to operate in a manner which will produce the best possible books at the lowest possible prices. Whenever possible the TPO should be freed from the necessity of working through a government tenders board.

Accounting and cost accounting

It is essential for a TPO to have a good accounting system along the same lines as that of a commercial publisher; including cost accounting, if it is to be operated at the lowest desirable costs. The profit or loss on each book and on the total operations should be known. In many government-run organizations no account is taken of overhead costs such as salaries, pensions, the costs of premises provided, electricity, the maintenance of buildings, etc. Unless records are kept of these costs, and they are treated as being part of the costs of producing the textbooks, then true costs will not be known. There is a fairly widespread tendency among civil servants and others to believe that because government budgets provide for many of these items there is no need to consider them further in thinking about the costs of producing textbooks.

In some countries it is believed that all textbooks should be produced by the government irrespective of what the cost of doing this may be, but even in those countries it would be useful if true costs were known as this is an essential preliminary step to saving money. If an analysed cost of each aspect of producing a textbook is available then it is possible to see how the money is being spent, and to begin to see where it might be saved. It is also then potentially possible to make valid comparisons between the costs of government produced textbooks and those of the private sector.

Pricing policies

There is a tendency in many governments to view all private sector publishers as entirely profit motivated. In fact a number of them act philanthropically and use grants and donations to subsidize the publication of books. Charitable organisations and university presses often aim to finance the publication of works of limited appeal, which would otherwise probably never appear in print, from the profits they make by publishing more popular works. In considering cost-reduction factors, governments would do well to keep this point in mind. There is no reason why, if a TPO is set up along businesslike lines, that it should not follow a similar pricing policy, and some of them in fact do.

In government TPOs that sell books, pricing policies are frequently not a matter of publishing economics; an element of subsidy is often included. Decisions on prices are therefore sometimes made at a political level.

Sometimes, too, books published by private TPOs are subsidized by government grants. Almost undoubtedly the most effective way of reducing prices in that case is for any subsidy to be applied to the publisher's non-recurrent costs of the textbook. This also obviates the necessity of applying further subsidies when the book is reprinted. The nearer to actual purchase of the book by the consumer that the subsidy is applied the less effective it will be in reducing the price. Thus, for example, a subsidy of a sum equivalent to 10 cents a copy of a book with a retail price of one dollar applied to the non-recurrent costs (typesetting, etc.) might reduce the retail price to 70 cents,

whereas if applied at the point of sale it would reduce it to only 90 cents (this example is based on a typical LDC price basis where production costs are multiplied by three to arrive at retail price).

On occasions, decisions made at a political level have forced textbook prices down unrealistically. Pricing policies must take account of all factors, including: the purchasing power of parents; the extent to which revenues must be made to cover not only production costs but also overheads and adequate rewards for authors; book wholesalers and retailers; the need to achieve high standards of production- the extent to which it is necessary to cover capital expenditure and finance expanded publication programmes in the future; the availability of government, or other, subsidies for textbooks in general or for particular titles. It is almost essential to success that decisions on this issue should be made on the basis of recommendations from a very experienced publisher.

An example can be quoted here of one LDC that established a government TPO which had its own printing facilities. It was expected to produce and sell books at extremely low prices, which were dictated by government, and at the same time to be fully self-supporting and produce revenues for government. No proper professional survey had been carried out to discover the feasibility of these objectives, and within a few years the organization had been forced to reduce production standards to an unacceptably low level; it had no funds to maintain and repair properly its printing equipment; or to finance the purchase of new equipment; neither did it have sufficient money to finance the publication of new books which it wished to produce.

Costs

Government officers see high published prices for books and compare them, often naively, with production costs and believe that by producing books themselves they can make considerable savings or even profits. What they should do instead is to examine the net profits of textbook publishers and understand that, if they can operate as efficiently as those publishers, that is likely to be the extent of the savings that they can make.

The head of a government TPO at an international seminar was recently applauding his country's efforts in making savings by printing its own textbooks, but on being questioned he revealed that the cost figures he had given did not include any element for salaries, buildings, electricity and other overhead expenses, which probably accounted for nearly half the cost.

One university bursar said a few years ago:

We should not employ commercial printers to produce books but should instead use the printing facilities in our Fine Art Department as it would be cheaper, there being no need to take account of the cost of depreciation of buildings and equipment, which has already been

purchased, and of staff salaries and other expenses as they are paid through the normal budget of the Department.

Sadly, but not altogether unexpectedly, that university is now on the verge of bankruptcy.

In commercial publishing, money is usually the main motivating force. The publishing entrepreneur is profit-motivated and often rewards his staff in relation to their usefulness in earning him profit. Thus his staff too become profit motivated, and in consequence very conscious of the need to keep costs to the minimum. But the civil servant is not usually motivated in this way, and there are greater difficulties for him in controlling costs. Usually in government organizations a budget is provided and it is expected that all of the money voted will be used within the financial year. Often the person responsible for the budget is criticized as strongly for underspending as he is for overspending. There is little incentive for him to reduce costs and save money. Moreover, he is frequently an educationist and his primary concern is with educational needs rather than with costs. If costs are to be reduced, a new type of attitude needs to be bred. This would be encouraged in government TPOs if savings effected could be employed to produce other books that were needed, or if government TPOs were run along commercial lines.

Some examples of views on cost saving methods have been given in one Unesco (1983b) publication:

If a country has a permanently constituted mechanism for identifying needs, such as a research organisation, the cost of such research may be absorbed in the running costs of the organisation....

Staff may be employed for a project on secondment from the education service. In this way costs may be absorbed through the regular funds available to the service, including the person's replacement costs...

Printing costs can be reduced in countries where the government has direct access to printing at cost only.

One might ask Are these really cost-saving methods or are they in fact merely ways of concealing true costs by transferring them to budgets of other government departments, or to organisations outside the TPO itself ?

Staff - general

One of the problems of LDCs is that often there is no consciousness of the need for skilled publishing staff. Often in commercial TPOs in these countries the publisher is merely an enterprising printer who works with authors and acts as a publisher, but he has little knowledge of book publishing and does not employ either full- or part-time editors, designers, trained illustrators, etc. Often in any case these trained personnel are not available locally. So when a government TPO is started, often the same mistake is made and no provision is made either to employ trained publishing staff, or to provide training schemes to remedy the

deficiency. If it were true that it is possible to operate satisfactorily without the services of these people then it is very likely that they would not exist anywhere in the world, but in fact all textbook publishers of any repute in the developed countries do employ these people either full-time on their staff, or on a fee-paid basis. These publishers are conscious of the need to apply appropriate skills to planning, co-ordinating and operating all aspects of textbook publishing programmes, and in this way to produce the best possible books at the lowest possible costs. The expense of employing skilled staff is usually more than recovered by the savings made in production costs.

Staff recruitment

It is often desirable that recruitment should be open to people outside the public sector, as those with the necessary experience are often found to be working in private publishing houses.

No supporting staff for the TPO should be recruited until after the director has been appointed. He should play a major role in recruitment and, as a minimum requirement, no staff should be appointed without his agreement.

In considering the appointment of staff, several factors should be kept in mind. If a TPO is established on a sound basis and is built up slowly it is unlikely initially, and at least that several months, for any staff at all will need to be appointed other than a secretary for the Director, who will himself be busy making surveys and plans. It is likely that staff appointed will need some initial training before they take up their appointments, and time should be allowed for this. The staff should be built up slowly as and when the demand for their services arises. There should be provision for in-service and local training, and, for many LDCs, overseas training too will be needed.

Career structure employment

Employing the right people and offering the right remuneration presents considerable problems. Frequently senior education officers are appointed to head TPOs but although they may have been highly effective in their former post they are not necessarily cut out to run a TPO, and they may be well over- or underpaid for the work they are asked to do. Moreover, it is not unusual to find that the only prospects of promotion for them are outside the TPO, in the education system, thus they are encouraged to view the post as only a stepping stone in their career. There needs to be a proper staff structure with career prospects, and opportunities of promotion within the organization, if staff are to be satisfied and fulfilled in the work they carry out. Good morale among the staff is essential to success.

The director

The director of the TPO should have a high degree of proven administrative ability, and the personality and status to maintain effective liaison with the numerous high ranking government officials and businessmen with whom he will deal. As publishing is largely the art of dealing with other people and getting them to perform the numerous tasks that are needed, he should have a high degree of ability in handling people who possess the wide variety of skills needed to produce textbooks. He should have sound experience in as many of the following fields as possible: educational publishing management (or management in other fields), editing, teaching, accountancy, marketing. He should have a sound business sense and be highly cost conscious, but at the same time he should also have a highly developed aesthetic taste and a love for and sympathy with the creative arts. The right person is worth seeking hard for, and rewarding adequately. It is unlikely that the paragon required will actually be found, and it is highly probable that whoever is recruited will need some training before he takes up his duties, and further training periodically at later stages.

The function of the director is largely one of planning and administration. He needs to understand clearly the resources that are needed to achieve the objectives of the textbook programme, and should have the ability to define these resources in a plan. When the plan is approved and the finance is available he needs to have the qualities which will enable him to seek out, recruit, train, guide, and inspire those who will assist him to operate the programme, and to pursue energetically the objectives that have been set, and manage the funds that have been provided.

Editors

In the great majority of TPOs in LDCs, both government and private, the very important role that editors can play in improving standards and minimizing costs is underrated and under-provided for. It is not uncommon to find that even some very large TPOs in LDCs do not employ editors, and that in so far as editorial work is carried out at all it is by the authors. Authors are seldom their own best critics. As Pearce (1982) says:

It is rarely possible for a good textbook to be prepared by the author alone: editorial and publishing experience is required in most cases at almost every stage in seeing that the textbook corresponds to the syllabus, that the relevance, sequence and weighting are suitable, that the format and length of the book are suited to needs and the probable cost. A well organized editorial office assures also that supervision and checks on a manuscript are kept from its conception until it is finally printed.

Some of the large private sector TPOs in DCs employ editors who specialise and carry out only one of the numerous editorial functions which include: development work and identifying areas in which the TPO should publish; list building; commissioning authors; working with authors to plan, revise, and finally

prepare a finished manuscript; carrying out final editing, including attention to factual accuracy, style, grammar, punctuation, and checking printers' proofs. In smaller organizations some, and sometimes all, of these functions have to be combined on the grounds of costs and scale of operations. But in fact they each require rather different abilities, qualifications and experience.

A Unesco (1983b) publication gives a useful summary of editorial attributes and functions:

For the purposes of this paper, a suggested working definition of an editor is a person who guides authors.

An editor may not be a specialist, but should be able to work with specialists, helping them to develop the material at a level suitable for primary school children. Ideally, such a person should have both a knowledge of the subject and the skills of editing. It was agreed that possession of both attributes is very useful in the task of preparing materials. An editor should have the skill to shape material in the most suitable and interesting form for the intended audience.

Dealing with the criteria for selection of editors, the same book expresses the following points:

In New Zealand, an editor ideally should be a trained teacher and a graduate, and should have writing or editing experience or both. An editor should have sound literary judgement, an ability to tap writing skills, the ability to assess whether a text is appropriate to the readership and, if it is not, what treatment is needed. Skill in shaping material for children and adults is looked for, as is an ability to make meaning clear and to see others' points of view. Editors should have the qualities that enable them to work co-operatively, yet independently, with art editors, curriculum developers, specialists in various fields and many other educationists. Applicants for positions in the School Publications Branch are given an assignment to test these qualities and skills.

Book designers

Book designers work in close co-operation with editors and illustrators to carry out a variety of tasks which include: selecting the typefaces to be used; arranging the layout of the pages, and the design of the cover; and choosing the style, method, size and number of illustrations. It is usual for them to have a qualification in graphic design, and to have a sympathy for, and understanding of what is visually of interest to children and the ability to translate this into educationally useful and attractively produced books. It is frequently difficult in LDCs to find people with the necessary training, experience and ability. More experience is often required through training courses, and by attachment to experienced textbook publishers.

Production controllers

Production controllers are needed to plan the specifications of books and to seek and commission printers to produce them, and then to control and supervise certain aspects of the printers work. They work closely in co-operation with editors and book designers in carrying out their work of planning the physical aspects of the textbooks.

Their work is of considerable significance in minimising costs and assuring high standards of production that accord with specifications that they lay down.

It is not common to find people in government TPOs employed full time in this work, although often the size of the programme would justify their employment and the costs of their emoluments would be more than saved by the economies they would effect. In some small TPOs resources may not be sufficient, and programmes may be too small to enable them to be employed. In which case editorial staff will need to be trained in this work.

In DCs production controllers have often received training exclusively in publishing houses, or have attended special training courses, but in LDCs it is often difficult to find people with the right background. It is then usually best to seek people with printing qualifications and with extensive book production experience and a thorough knowledge of planning and controlling production and costing

Freelance workers

The fact that a textbook needs so many different publishing skills to produce need not deter those small countries which wish to start their own publishing programmes. In fact many private sector publishers in developed countries start as one-man organisations, and they employ on a part-time basis the skills they need in editing, design, etc. Freelance workers in publishing may not be available at all in some LDCs, but it is possible to employ overseas assistance, and to couple this with a training programme for local people.

Treading

There should be adequate provision for training to rectify shortcomings revealed in the initial survey of resources, and which become apparent when recruitment takes place. There is always a place for in-service training, and this can sometimes be assisted where outside experts are available either on the staff or in the capacity of occasional consultants. But usually there is a need to look at training from a countrywide viewpoint and to see whether permanent formal training in various skills might not be established to meet the needs of the private sector as well as of government. There is almost invariably a need too for overseas training for some of the staff, and this can sometimes be achieved

through attachments to the overseas offices of international educational publishers.

The costs of training programmes in publishing, held either locally or overseas, can be high. Considerable wastage can take place where trained personnel either leave the government TPO soon after they complete their training (and in some cases never return to their own country after overseas training) and join the private sector - and quite frequently in positions outside the publishing industry. The matter of bonding staff and placing them under an obligation to work for the TPO after training needs to be considered, as do the potential benefits of having available, in the country as a whole, more trained people, although they may not be working for government. The matter of providing incentives in the form of additional increments, or promotion, for personnel who have completed training courses needs also to be considered. Clear objectives, policies and plans are needed in this field and it is almost invariably highly desirable that a training programme should be established at the same time as a TPO is planned.

Publishing information about activities

There is a great need for government TPOs to publish more information concerning their activities. Little is available in this connection at present. The publication of information would lead to a better understanding of problems and to their solution. New TPOs would benefit greatly by learning from the problems and mistakes that had been made in other projects. Indeed, the number of government TPOs that are operating now would justify the publication of an international journal dealing with their activities.

Consideration should be given to organizations producing annual reports, which would give full details of each title published (number of copies, number of pages and illustrations, type of binding, cost price, selling price, number sold, etc.), the number of staff employed and their functions, and information concerning progress and problems. These should be accompanied by audited accounts showing income and expenditure assets and liabilities, preferably presented in the same way as those of a commercial organization. Thus a true picture would emerge of what was being done and how successful it was.

Needs for long-term planning

When the resources or the supply of textbooks are substantially in the hands of governments, the winds of political and economic change may bear heavily on the provision of books, and perhaps substantially subsidised textbook programmes may have to be severely curtailed or even abandoned. In this connection it needs to be kept in mind that a probable minimum for the life of a sound, well-planned textbook programme is ten years, and that the life of many governments is much shorter than this.

Before a government launches a TPO or participates in textbook provision, there is a need for a government philosophy that sees textbooks as part of the school system (and therefore as indispensable as teachers and school buildings and furniture).

QUESTIONS ABOUT POLICIES, PLANS AND ESTABLISHING TPOS

Private sector TPOs

There are numerous ways of working in co-operation with the private sector TPOs to achieve publication of the new textbooks that may be needed. The following questions examine a few of the possibilities that are available.

1. Has thought been given to setting up under government auspices an organisation to enable textbooks (or better still manuscripts) submitted by the private sector TPOs to be examined and approved, recommended, or prescribed for a given number of years?
2. Has full consideration been given to the merits of, on one hand, supporting the private sector and assisting it to produce the textbooks that are needed, or, on the other hand, establishing a government TPO to do some or all of this work?
3. Have the respective long-term implications of these two methods of approach and their probable effect on the publication and sale of textbooks, and of all other literature also, been carefully considered?
4. The long-term publishing goals of a country should be a large number of book publishers (who will be able to produce a wide variety of books and provide competition as regards both quality and price) producing a very large proportion of all the books that are needed at all levels of education from cradle to grave, and who will also provide books for leisure and play a role in assisting the creation of an indigenous literature. To support this, a substantial and flourishing bookselling trade needs to be developed. The manner in which government publishing programmes are planned and conducted can play an important part in aiding or obstructing achieving these goals. Has careful and deliberate consideration been given, and has the voice of all those who are interested in these matters been heard, to whether the plans of government for textbook provision will assist in meeting these long-term needs?
5. In negotiating with publishers and printers does the government have available to it independent and expert publishing and printing advice on a permanent or ad hoc basis, or, alternatively, merely initially, to lay down principles which will facilitate these negotiations by government officers who are not themselves versed in these subjects?
6. Has thought been given to providing a guarantee to private sector TPOs that on publication of a given approved book, at an agreed price, schools, or education authorities, will purchase a guaranteed minimum number of copies each year for a given number of years?

7. In deciding whether to sell textbooks or distribute them free of charge, has thought been given to the needs for textbooks at all levels of education and how they will be provided? And not only the immediate plans to provide textbooks in certain subjects at a certain level, but also to the needs for textbooks in other subjects at other levels and how they will be provided, and also how supplementary and other reading material will be published and provided?

8. Has thought been given to the possibility of being able to reduce prices by giving publishers and booksellers guarantees that over a given period of time they would sell a specified number of copies of a book?

9. Have publishers been invited to submit proposals for the production of cheap editions (possibly after adaptation to make them more suitable) of books already being used in local schools?

10. Where it is apparent that imports of certain textbook titles are in substantial quantities each year, has thought been given to inviting the publisher's attention to this matter and requesting (or obliging) him to consider producing (possibly locally) a cheap edition of the book, or to reduce its price for that market?

11. Have discussions taken place with publishers to seek revision of existing books being used in schools to make them more suited to meet the needs (possibly with writing and editorial assistance provided by the ministry of education)?

12. Has consideration been given to offering (possibly through development banks) loans at favourable terms to enable private sector publishers to overcome their problems in providing capital? Or of grants or subsidies for individual books to assist in making publication feasible or in lowering prices?

13. Has consideration been given to the ministry, or educational organisations in the country, commissioning and approving manuscripts and then passing them to selected publishers for private publication at agreed retail prices?

14. Has the possibility been examined of the government (possibly through its TPO if it has one) selecting and negotiating with private- sector TPOs to publish under its own imprint and theirs jointly (possibly with shared costs and revenues)? For all titles needed? For some? Initially only, with the government TPO playing a greater role as it gains experience and consolidates its programme? (For example, in some LDCs the initial role of the government has been only to provide the manuscript, and then as it has built up its staff and resources, it has gradually taken over such functions as editing, designing, illustrating, planning and controlling production, marketing, stocking and distributing the books.)

Government Policies

The questions in this section apply whether the textbooks needed are published by the private sector TPOs or by a government TPO.

1. Will the numerous problems of the book industry, as expressed in the Guide and relating to finance, taxes, import duties, foreign exchange, training, postal rates, etc., which are within the province of government to change and control be examined at appropriate levels to see what might be done to alleviate them?
2. Is there a national plan and policy for books? If not, will one be produced? And will the textbook programmes be part of that plan?
3. Will a new textbook board be needed to implement the government textbook policy and to assist in the provision of manuscripts (and other aspects of textbook publishing) and to negotiate with private sector TPOs?
4. Will this board, if established, be provided with the membership, funds, staff and authority to act in a fully professional and effective manner?
5. If it is decided that books will be issued free of charge to students, will consideration be given now to the long-term implications of this? Will it apply to all books in all subjects at each level of education, or only in a selected number of subjects in the early years?
6. Will there be one book for each child, or fewer?
7. Will free distribution apply to all schools and all pupils or will some have to pay?
8. If the books are provided free of charge will they be kept in the classroom or will they be taken home every day, or sometimes?
9. Has consideration been given to the problems of storing books in the classroom or at home?,
10. Will books be provided for each subject under the scheme?
11. Will books in some subjects be published by the private sector and some by the government TPO?
12. If so, how will the private sector books be obtained?
13. If free textbooks are to be issued, will they be expected to last only one year (and be retained by the students) or will they be used for several years by successive pupils?
14. Will account be taken of the planned life of the book when production specifications are prepared to assure that money is not wasted and that books remain usable for as long as is expected?
15. Will account be taken of the need to produce extra copies of books produced to give away free to cover the losses that occur through carelessness and theft, and also from storage problems including fire, flood, dampness, mould, mildew,

vermin, insect etc.? and what means will be adopted to pay for and replace the copies lost? How many additional copies will be produced to cover these needs?

16. Are accurate enrolment and other figures available to assure that the plans can be implemented to provide books according to established textbook/pupil ratios, or estimated sales?

17. Inaccurate enrolment figures in some schools, or errors of various kinds, will result in over- or under-supply of books. What steps will be taken to rectify this situation and to provide a pool of books for entitled children who do not receive them?

18. Will attempts be made to co-ordinate the work of curriculum planners and developers, authors, the TPO, and printers and booksellers, so that changes in the curriculum which necessitate revised or new textbooks can be implemented smoothly and at minimum cost, preferably with the old books ceasing to be used when they are at the end of their physical life, and being replaced immediately by the new ones?

19. If books are to be sold, how will this be arranged? Through government channels? Through commercial booksellers? Through newly established government bookshops? What will be the short and long-term effect of this on commercial bookselling and the development of an indigenous publishing industry?

20. If textbooks are to be provided free of charge will some provision be made for additional copies to be made available for sale, and easily purchasable, by people who are not entitled to receive free copies?

21. Are books to be sold?

22. If so, at what prices and with what element of subsidy?

23. Is the true cost price of the books known?

24. If the books are to be sold at subsidised prices, will everyone be able to buy them at these prices?

25. Whatever system of supply is adopted to meet the needs for textbooks:

(a) will adequate staff be available to implement it;

(b) will the necessary finance be available as and when required;

(c) in other ways, will it be fully potentially possible to implement the scheme?

26. The establishment of a government sponsored publishing programme may create a monopoly in textbook publishing and reduce the number of titles available in certain subjects and thus remove choice from the teacher. Taking this

into account, and also the facts that restricted production may reduce the number of authors who can get their work published, and remove the competition which often results in lowered prices and better standards, do the advantages of the monopoly (such as the possible economies of mass production) outweigh the disadvantages?

Government TPOs

The following questions assume that an examination of the situation has led to the decision that the only way to meet the need is to form a government TPO.

1. Does it appear that the problems of planning and starting the TPO are so formidable and costly that outside assistance in the form of consultants, or staff, and funds may be required? Has consideration been given to seeking this from technical assistance bodies etc. of the United Nations or from elsewhere?
2. Will the plan for the TPO be produced with the benefit of the advice of a very experienced educational publisher with a knowledge of government TPOs?
3. How will the work of the TPO be planned and controlled?
4. Will there be a controlling board with the Director of the TPO as a member and its chief executive?
5. How will the work of curriculum developers, authors, the TPO, printers, booksellers and distributors be planned and co-ordinated to achieve an efficiently run programme?
6. Will full allowance be made for the problems of running a TPO within the framework of government financial and administrative rules and regulations?
7. Will the TPO be freed from the normal tendering system in buying printing, and in obtaining supplies it needs including paper?
8. Will the TPO be able to employ people on a part-time or fee-paid basis, in addition to its full time staff, to enable it to operate effectively just as a commercial publisher does? Will it be able to reward the people it employs in this way in a commonsense manner according to the quality of their work and their productivity, and pay varying rates accordingly?
9. Will adequate accounting and auditing procedures be adopted to assure that the work of the TPO is monitored and controlled and that the opportunities for malpractices are minimized, but at the same time the TPO is given the freedom to operate in the most effective and least expensive way possible?
10. Will the accounting system show true, full, detailed costs, and revenues, for each book published and for the total programme?

11. In what areas and in what subjects will the TPO publish textbooks? How will the remaining books that will be needed be published? Will there be a long-term plan in this connection so that both the government TPO and the private sector know where they stand and can provide the books that are needed?
12. Will the primary objectives of the TPO be established as to publish the best possible books within the resources available, which are of educational value and use for students and teachers, at the lowest possible costs? Will it be assured that other objectives remain subsidiary to these main items?
13. Will the targets for the publishing programme in the early years be modest and take full account of the problems that are likely to be encountered, and the need to build staff, and train them, and gain experience?
14. Will the TPO be allowed to arrange the printing of its books wherever is cheapest and best, and if necessary to obtain skilled services on occasions, when they are not available locally, from outside the country?
15. Will the functions of every organization and individual who works in the textbook programme be clearly defined?
16. Will an organisation chart be produced showing the publishing process, and the relationships between the different organisations and individuals involved in the programme?
17. Will one person, preferably the head of the TPO, be placed in charge of the whole programme and be responsible for obtaining the needed co-ordination of effort and co-operation?
18. Will it be assured that detailed plans for the operation of the publishing programme are prepared on a fully professional basis, and preferably after a director has been appointed for the TPO?
19. Will some type of revolving fund be established for the publishing programme, and will any revenues received from the sale of books be credited to this fund?
20. In establishing pricing of textbooks for sale, will professional advice be sought to assure that proper account is taken of such matters as the purchasing power of parents, the need to cover production and overhead costs, royalties to authors, margins to provide adequate discounts to wholesalers and retailers, and the needs to provide for capital expenditure and to finance later expansion of the publishing programme, subsidies available, and the maintenance of high production standards?
21. Will due recognition be given to the fact that each book published will be different and may require different treatment? If books are for sale, some may be more readily saleable than others. It may be possible to sell some books at a

modest margin of profit and others may require subsidies. Will there be recognition of this problem?

22. In subsidizing books will it be kept in mind that it is usually best to apply subsidies to non-recurrent costs such as typesetting and artwork, or the manufacture of printing films and plates?

23. Will steps be taken to assure that everyone involved in the publishing programme becomes cost conscious? That curriculum planned and authors are generally aware of the cost factors involved in the length of a book, the type and manner of illustration, the use of colour, and the type of paper and binding used, and that they consult with expert staff regarding any point of which they are not quite sure regarding costs before they set out to plan books? That everyone is made aware that by keeping costs low, more books can be produced, and available funds stretched further in meeting publishing targets? And at the same time will they be made aware of the dangers of making false economies which remove incentives from creative workers, and reduce production standards to points where textbooks become of an unacceptably low level and of reduced educational value?

24. Will staff be built up gradually as there becomes work for them to perform and as the TPO develops its skills and gains experience?

25. Will every effort be made to seek out and recruit the best possible person for the post of director?

26. Skilled staff will be needed for the operation of the TPO. Will a career structure of employment be established with salaries offered which compare well with the private sector? Will efforts be made to recruit the best available qualified people to the posts which are established, although they may at present not be working in government organisations?

27. To assure that professional opinion is taken into account, and that the staff recruited will fit well into the TPO, will it be guaranteed that the Director plays a maximum role in recruitment and that at a minimum requirement no staff will be employed without his agreement?

28. Will careful attention be paid to the very important role that editors can potentially play in a textbook publishing programme? Will considerable care be taken to see that the right number of editorial posts, with appropriate functions for each, are established?

29. Similarly, will recognition be given to the very important role played by book designers and production controlled and that if the programmes are large enough to justify their employment full-time then posts for them will be created? But failing this, either outside fee-paid workers will be employed to carry out these functions or staff editors and illustrators will be trained to carry out the work.

30. Where books are to be sold, will sales staff be appointed and trained as required for the work involved?

31. Will a training programme be established for the staff of the TPO which includes full- and part-time courses both locally and overseas as well as in-house training?

32. At the same time, will the training needs of private sector TPOs be considered and provided for, particularly when special courses by visiting experts are arranged for the government TPO staff?

33. Will incentives, possibly in the form of additional increments or promotion, be offered to staff who have successfully completed training courses?

34. Will staff of the TPO who receive training under expensive local or overseas courses be bonded to return and work for the TPO for a specified number of years after completion of the course?

35. Will annual reports be published for the TPO and for the whole publishing programme which give details of its achievements and of the problems that have been encountered? Will these reports include full details of all cost, production, and sales figures of each book individually, and of the programme as a whole so that the work can be measured and compared with similar work in the private sector?

36. Will recognition be given that the work of publishing textbooks is slow, and that it takes time to build up the necessary resources, and that one of the most important things is to build up institutions which can continue for many years to meet textbook needs? Will a minimum life of not less than ten years be established for the TPO and will funds be guaranteed for the projected programme during this time?

37. Will consideration be given to the difficulties of running what is in fact an industrial undertaking within the framework of government regulations, and to the desirability, and possibility, of establishing the TPO as a separate and independent entity?

IV. MANUSCRIPTS

Aim

In private sector publishing the identification of textbook needs, the commissioning of authors and the handling of their work is the responsibility of the publisher. It appears that probably more frequently than not, this is not the case in government textbook publishing programmes, and it is commonly found that the function of the government TPO starts only after a manuscript has been prepared and accepted. Because of this, the present chapter has been separated from the chapter which deals with publishing.

To lay the foundations for the preparation of the best possible textbook manuscripts, a good deal of preliminary work is needed.

This chapter assumes that the initial general work of identifying needs has already been done and it has been decided that new manuscripts should be prepared and published.

To publish or not to publish

The most important decision in a publishing programme is whether to publish a manuscript. In government textbook programmes there is fairly frequently only one book published on a subject at each level, and often the number of copies produced is very substantial. It is therefore even more important than usual to assure that every possible precaution is taken to see that only the best possible manuscripts obtainable are accepted. All too frequently, poor and untried manuscripts are turned into enormous numbers of unusable printed books.

How will new manuscripts be prepared?

Thought has to be given to who will revise the existing book or prepare the new manuscripts, and to the methods by which the work of the authors will be planned, supervised, considered, revised, selected, and edited.

Methods of obtaining new manuscripts vary considerably from one country to another. In some LDCs, individual teachers produce manuscripts either at their own initiative, or under commission from the TPO. Sometimes teams of teachers are appointed, or reliance is placed on the manuscripts being produced through teacher-training colleges, institutes of education, textbook committees or boards. On occasions teachers are freed from teaching duties on a whole- or part-time basis to carry out the work. In some countries, textbook writers are not themselves teachers but may be experienced in writing for children. The best solution is probably one which encourages a variety of methods and assures that those who believe they have the ability to prepare the books are given encouragement to try.

Faced with the need to write new textbook manuscripts, professional pride often makes it difficult for any ministry of education to say that it does not have available experienced teachers who are capable of producing the needed new material. Thus frequently teachers (often with a high level of teaching ability but completely lacking in writing experience) are appointed to prepare the manuscripts. Recognition is needed of the qualities required of writers, and for training facilities to be provided for them and for provision to plan and supervise their work.

Sometimes authors are paid royalties, sometimes fixed sums; or their services in writing the textbooks are taken into account in awarding increments and promotion. In considering these matters it is always best to treat people fairly and often desirable to take into account the methods and rates of payment offered by private sector publishers (for whom some of the authors might well work as an alternative to working for government) as well as the need to assure that the best potential writers are attracted to doing the work.

The conclusions of those who attended a Unesco Regional Seminar (Unesco 1963b) in Wellington, were that

Experience shows that overall, better results are obtained when authors are freed from their normal duties and are able to write full time. The availability of suitable persons to work in this way is a common problem.

But there are two problems associated with this. In some countries it is found that authors employed full-time over a long period of time tend to produce progressively less that can be published. There have also been problems of authors working full time and not being able to keep testing the materials that they write.

Revising and rewriting

Textbook manuscripts almost invariably need revision; sometimes so extensive as to amount to rewriting several times. The publisher needs to make provision for this by providing the editorial resources to work with the author in refining the

manuscript; allowing enough time in the publishing schedules for the possibility that the first draft of the manuscript is unlikely to be the last; and also by providing in the contract with the author for the manuscript to be submitted in parts - usually a chapter at a time - so that the revising process can start early, and so that where an author is radically out of line with the publisher's aims, he may be advised before he has completed the whole work.

Independent assessment of manuscripts

Private publishers recognize that there are many fields of learning in which their staff are not expert, and in consequence they employ outside readers and assessors to advise on whether manuscripts are publishable, or in what ways they need to be revised to make them publishable. They also recognize the value of obtaining more than one opinion on a manuscript. This is not always done in government TPOs, but there is almost invariably a need for it.

Costs

From the initiation of thought concerning manuscripts, costs should be kept in mind. The length of the manuscript, the number of illustrations, the use of colour in printing, the printing paper, the method and quality of binding, and the number of copies that will be printed have to be planned and related to the funds available and/or the purchasing power of the buyers, as well as to educational requirements. To assist in achieving this end, those who plan and write textbook manuscripts should be in touch with the publishers, editors and illustrators at the very earliest stage of preparation.

One of the major ways in which costs can in fact be kept low is by assuring that the manuscript is of the right length. This is a matter where consultation between the author, teachers and the publisher is essential. The manuscript should be neither too long nor too short for teaching purposes, but at the same time it should be, when it has been typeset and illustrated, of an economic length for production purposes (i.e. it should make up into completed pages measured in units of four, and usually in units of sixteen or thirty-two, depending on the size of the printed page, the size of the printing paper, and the size of the machine on which it is printed).

Considerable wastage is often found in books produced by TPOs in LDCs. In one country, most of the books produced at primary-school level had around three blank pages. Every book in each subject at each level had a one page notice from the Minister of Education explaining the textbook provision scheme; thus by the time the child had completed six years of primary school and had seen books in several subjects at each level he had had the opportunity of reading the Minister's announcement more than thirty times. The cost to the country was measured in millions of additional dollars.

The TPO and its editors need to be in a position where they can, at the very minimum, comment on and criticize the text with the authors and those responsible for approving it to assure that economic length is achieved. Preferably they should have the authority to assure that wastage does not take place.

Teachers' guides

As has already been mentioned elsewhere, when fewer than 3,000 copies of a book are printed the fixed costs (typesetting, etc.) form such a high proportion of total costs that the cost per copy is very high. Particular care needs, therefore, to be exercised in deciding whether teachers' guides are necessary and, if so, in controlling their length. In some cases, where requirements are for only a few copies, thought needs to be given to producing them by methods other than those normally used for printing textbooks, for example, mimeographing or using small-offset printing equipment.

Trial editions

Because new government TPOs do not have experience of textbook publishing, and also because in any case most textbook manuscripts can be potentially improved, it is best if trial editions of them (often produced by mimeograph of small-offset printing process) can be produced for testing in schools. Careful planning and control of this testing is desirable to assure that it is adequate and that teachers understand its objectives, and that suggested modifications are referred back to authors and editors so that revisions can be made. In some cases it may be desirable to test the books again in schools by producing only limited editions when printing takes place, and then considering the needs for further revision before producing numerous copies.

Textbook manuscripts published by private sector publishers are almost invariably produced by practising teachers who develop their teaching notes over a period of time and eventually are able to submit them in a final manuscript, the outline of which has previously been agreed to by a publisher. There is a progressive testing of the written material as it is prepared. but in government schemes writers, or teams of writers who are no longer practising teachers are sometimes appointed and there is no opportunity for the material to be tested in schools while it is being prepared. There are obvious and considerable dangers, in this that make adequate testing of material in the form of pilot editions very highly desirable.

Teacher training

Sometimes, when new textbooks are introduced for use in schools, new methods and approaches they employ may mean that teachers will need further training in

their use. It is important to keep in mind the need to have the books available, even if only in draft form, at the time this training is planned to be carried out.

But even after production has taken place, provision needs to be made for gathering comments from teachers as they use the books in schools, so that revision will be facilitated when new editions are required. The day to start revising a new book is the day it is published.

QUESTIONS ABOUT MANUSCRIPT

Identifying needs

1. Is it necessary to have a textbook at this level?
2. What book is being used in this subject at this level at present?
3. In what ways does the book being used fall short of meeting the needs (as regards, e.g., relevance to the curriculum, length, suitability of the language, interest and stimulation, illustrations, cultural relevance, price, etc.)?
4. Would it be possible to revise the book to make it suitable?
5. If so, has the matter been discussed with the publisher ? And have writers and illustrators who might make the necessary changes been identified?
6. If the price is too high, has thought been given, and have discussions taken place with the publisher, regarding the possibility of ordering copies in bulk at a high discount, or of asking the publisher to produce a special low-cost edition? And is there a possibility of facilitating this by the ordering of substantial numbers for school use or/and of guaranteeing to the publishers that over a given period a specified number of copies would be sold by the publisher or that, failing this, the TPO would purchase the remaining copies at cost prices, or some other incentive arrangement?
7. If it has been decided that an entirely new book is needed, has thought been given to the possible alternative ways in which it might be published either through the private sector or through the government, and what are the relative merits and demerits (including costs) of these methods?
8. Have those responsible for deciding if a new book will be needed had the opportunity of examining a good selection of similar books published worldwide (both in the language that will be used and in other languages)?
9. If a book published elsewhere might possibly be suited to meet the needs (possibly after translation and adaptation) has thought been given to how this might be done?
10. Is there an assurance that the new book to be written will in all ways be a distinct improvement on anything that is at present available? Will the total cost of production be reasonable and within the limits of the finance available?

11. Has thought been given to producing sufficient copies to meet the needs of more than one country? If so, has the matter been discussed with the publisher and with the other countries involved?

Preparing manuscripts

1. Are writers available with the necessary knowledge of the subject matter and of child development?

2. Do they have the ability to write clearly and simply and in an interesting and stimulating manner?

3. Do they have the stamina and perseverance needed to write a whole book?

4. Are they effective practising classroom teachers?

5. If not, when did they last teach relevant classes?

6. Will they be able to test the material in schools as they write it?

7. If they are to serve in a writing team, how are they likely to get on with other members of that team?

8. Do they get on well with their students and communicate with them easily?

9. Do they know the problems of other teachers in schools in other areas?

10. Do they know the problems of students in other schools in other areas where economic, social, religious, and cultural backgrounds may be different?

11. Is it feasible to write a single book which will cater to all the different needs?

12. If so, are the selected writers capable of doing this?

13. How will the writers be remunerated?

14. In deciding on the financial reward they should receive, will reference be made to what they might expect to receive if they were writing for commercial sector publishers?

15. If they write without payment as part of their official duties, will some payment be made for work which they may perform outside their normal working hours?

16. Will payment be in the form of a lump sum or a royalty based on the number of copies produced or sold?

17. Will a legally binding agreement be drawn up with the authors which specifies the arrangements made regarding permission to publish and payment terms?

18. If the authors are employees of the government, or the TPO, and prepare the manuscript as part of their official duties is there a contract giving their employers the right to publish the work?

19. Is there provision for discussion of the length of the text, the number and type of illustrations, and the methods of binding, the paper that will be used for printing etc. between, on the one hand, those who will design and specify the physical aspects of the book, and on the other the authors, editors, and publisher, so that a budget for the book can be established and then adhered to?

20. Is there a plan for the author to submit a draft of the outline of the manuscript together with specimen chapter and details of the contents of other chapters, and the proposed length of each chapter and of the total length?

21. In some textbooks, the use of more than one colour is very highly desirable, and in some cases, it is necessary for authors to know before they begin writing the manuscript whether colours will be used (e.g. mathematics books at primary level). Has the need and possibility of using more than one colour been examined and has this been discussed with the publisher?

22. Has very careful thought been given to the need for teachers' guides and the form they should take: whether they should include material which appears in the pupils' books; the numbers that will be required; comparative costs of different methods of production (e.g. normal printing, small-offset printing, mimeographing); whether a subsidy will be needed for them?

23. Sometimes authors prepare a whole manuscript and themselves collect the illustrations, or even produce them themselves. This often presents considerable problems for the publisher when the manuscript is submitted to him. Illustrations may be the wrong size, or produced by the wrong techniques which are not suited to reproduction, or may be merely photographic copies of original paintings, or illustrations from other books, which it proves impossible to reproduce well. Will authors and writing teams consult the publisher before they proceed with preparing any illustrations at all?

24. Will a trial edition be prepared? If so, how many copies will be produced and by what reproduction techniques?

25. Will the trial edition include illustrations, and if so how will they be reproduced?

26. Who will be responsible for: preparing the trial edition; distributing it; planning its use and devising and supervising the methods by which it is tried?

27. How will the feedback that comes from the use of the trial edition be used to revise the manuscript? Will the authors and editors be involved in this?
28. Will the production schedule allow adequate time for the production of the trial edition, the try-out in schools, and the consequent expected revision of the manuscript?
29. Has provision been made to have the manuscript assessed by readers as and when it is submitted and for these opinions, and those of the editors, to be taken into account and discussed with the author so that the needed revisions can be made before the manuscript is finalized?
30. Does the plan for the manuscript take account fully of the needs of the curriculum and other needs at a national and educational level?
31. Has a schedule been prepared for writing the manuscript which allows sufficient time for adequate testing of the material, revision, editing and production, so that it will appear in the form of a printed book at the right time for use in schools?
32. Has a date been fixed for delivery of the manuscript (preferably a chapter at a time) and will this be written into the contract with the authors?
33. What process will be adopted for final selection of the manuscript for publication?
34. Will practising teachers well versed in the subject matter of the book, but working independently from the author(s), be involved in the selection process?
35. Will there be a need to train teachers in the use of the book when it is published?
36. If so, who will be responsible for planning this training and putting it into effect?
37. Will allowance be made in producing the schedule for writing and preparing the book for copies to be available (possibly only in trial form) for the training planned for teachers in the use of the book?

V. PUBLISHING

Aim

Basic matters connected with planning, financing, administering, and staffing a TPO are dealt with in Chapter III of this Guide. That chapter attempted to deal with matters which are often decided at a fairly high level of government by planners etc. The present chapter deals with matters related to the actual publishing of textbooks. It is not aimed at professional publishers, and is not intended to replace expert publishing knowledge, but it attempts to provide some guidance regarding publishing textbooks to those who may have been appointed to run government TPOs but who lack publishing experience.

In the private sector the book publisher is usually involved (and certainly should always be) from the planning stage of a textbook manuscript right the way through the publishing process. But in many LDCs the government TPO plays a fairly passive role; it is merely expected to handle the arrangements to print and distribute the textbook and is not involved in the preparation of the manuscript (and sometimes is not even permitted to make any editorial changes to it) or even on occasions of the illustrations. To cater to this situation it has seemed best to have a separate chapter dealing with manuscripts rather than including them under the head of publishing. But the fact that the TPO often plays a very minor role in the preparation and selection of manuscripts should not preclude an examination of what that role normally is in private sector TPOs, as to study this, and possibly emulate it, might assist some government TPOs to increase their efficiency and standards of production, and lower their costs.

The publishing function

It appears that a great many people do not understand the role of the textbook publisher. In consequence, there is often a lack of proper provision in government TPOs for the work that the publisher should carry out.

Although the way in which textbook publishers work varies from one country to another and from one publisher to another, it is usual for it to proceed along the following lines:

1. A need for a new book is identified.
2. The publisher feels that it would be desirable and feasible to publish this textbook and he works with teachers and curriculum developers etc. to specify the need precisely and to produce an outline of the book.
3. He finds and commissions an author to write the manuscript, and draws up a contract with him.
4. The work is written, and submitted to the publisher in accordance with a schedule written into the contract (usually writing takes not less than nine months).
5. The publisher then examines the manuscript and often calls an outside and independent specialist readers to comment on it also. As a result of this the manuscript is often revised, sometimes considerably, by the author.
6. A limited edition of the book is produced by mimeograph, or small-offset, process for the purpose of testing it in schools (the book will usually cover a year's school work and testing it will take around that time, too).
7. As a result of the comments gathered from the testing, the manuscript is further revised by the author. The publisher then arranges for his editors to edit the manuscript to assure consistency in style, punctuation and grammar, as well as factual accuracy.
8. Attention is then given to the design of the book and the typefaces that will be used and the type and number of illustrations. This, as other factors, has to be done within the framework of the budget provided for the book and the cost price aimed at.
9. The publisher's production department staff then produce specifications for the paper, printing and binding of the book, and decides on the number of copies that will be printed (based on school enrolment figures or estimates of the number of copies that will be sold), and seek and accept quotations. They produce a schedule for printing, and then follow up the printer to see that it is maintained and that specified qualities are achieved, and the proofs received, corrected, and returned (from the time the final manuscript is received by the publisher to the completion of printing takes, as a rule, from six to twelve months).
10. Sometimes, special training is needed for teachers in the use of certain new textbooks. This needs to be planned so that the books will be available for use when the training is carried out, and that the

teachers have received the training by the time it is expected the books will be introduced to schools.

11. The publisher takes delivery of the book and arranges to stock it. He arranges distribution according to a schedule which attempts to assure that the book is available when needed in all parts of the country.

If one seeks confirmation of the fact that publishing is not a simple process, it has seldom been expressed more vividly than by Natividad (1983) writing on the Philippines textbook project

All in all, the Project has turned out more effective and visually attractive books. It has re-established the vital role of the editor and the book designer, and has done away, hopefully, with the common belief that publishing is like the dairy industry in which one puts in grass one end and expects milk to come out at the other; but rather that it takes the experience and expertise of professionals to transform a manuscript into a finished textbook.

Publishing is in fact the key problem of government textbook programmes. If suitably experienced publishing staff are available to plan and operate these programmes, and if they have the needed funds and the authority to use them effectively, most of the problems disappear or are greatly diminished.

Organization

Private sector TPOs in DCs until recent years mainly organized their work along 'horizontal' lines. They had editorial, marketing, production planning, production control, advertising, and sales departments, and manuscripts passed through all these departments to end up as textbooks in bookshops and schools. But there has been an increasing tendency in recent years to move away from this system and to organize publishing on 'vertical' lines. Separate departments are established to handle textbooks in various subject areas and at different levels of education.

A publisher is in charge of each department and is totally responsible for the textbooks that pass through his department, and this covers all aspects from identifying needs, to planning advertising and sales campaigns. Performance is thus highly dependent on the ability of the individual publishers and on the staff they gather around them. It appears that most government TPOs in LDCs are still organized on horizontal lines, and that this will persist until such time as a need to change the system is seen and staff become available to make this possible.

Procedures and systems

The essence of running a successful publishing organization is to establish sound procedures and systems for each aspect of the work, to employ staff who are

capable of handling these, and then to co-ordinate and supervise their work to assure that it proceeds smoothly and according to established schedules.

The systems which are established, coupled with the schedules for the production of textbooks, will assist in controlling the productivity and efficiency of the staff, and in reducing costs.

Much of the work of publishing is achieved by people outside the TPO, not by the staff themselves, thus the way in which this work is planned and supervised is very important. If, for instance, proper procedures are established for working with printers, and manuscripts accompanied by printing instructions are prepared very carefully so that the printer knows exactly, and in every respect, how they should be set up, time and money are saved and production standards are improved. Similar considerations apply when outside book illustrators, or editors, are being employed.

Scheduling

Schedules need to be produced for each textbook which allow adequate time for each phase of preparation, production, and distribution to be completed. It is essential that there should be adequate consultation with all those responsible for each aspect of the work before the schedule is prepared and that there should be firm commitments from them that they will produce the work according to deadlines that have been laid down. It is also essential that there should be one person responsible for seeing that each organization and individual keeps to the schedule. This may sound simple and self-evident, but in fact there are very few LDCs where the TPOs manage to establish schedules which are kept to rigidly. The main problems are often that not enough time is allowed, and that there is no one to enforce the programme.

When schedules are produced for textbooks, thought has to be given to how any possible amendments will be incorporated into revised editions, and also to whether the books will be replaced in a few years' time by new books to meet the needs of a modified curriculum. Thus co-ordination needs to be planned with editors, authors and curriculum developers to make this feasible.

The work of many printers is seasonal. If books can be printed at a time of year when printers are not very busy, or if they can be given plenty of time to produce the book, then they can often print at reduced costs and pass the benefit on to their customers.

But of course printing times must also be related to the needs to produce books for the beginning of the school year and to the amount of storage space and the problems of storage, in the time between printing and despatch to schools and booksellers.

Deciding OFthe quantity printed

If only one copy of a book were printed it would be very expensive. There are certain costs which remain the same, or nearly the same, however many copies are produced. Examples of these costs are typesetting and producing films and printing plates (countries with small populations, and which consequently need only a few copies of textbooks etc., thus have a problem in producing at reasonable costs the books they require, and often have to make compromise solutions to meet their needs such as using books published for other countries or employing low-cost printing techniques). Each copy of the first edition of a book is in consequence more expensive than reprints. To achieve low selling prices, private sector publishers often sell copies of the first edition of a textbook at a price which leaves them with a financial loss, in the hopes that the book will be successful and that they will make profits on reprints and new editions.

Deciding how many copies of a textbook should be produced is often a critical factor in the success or failure of a textbook project. Producing a greater number of copies reduces unit costs, and consequently makes it more easily feasible to reduce the selling price, and thus potentially to make it easier to sell more copies. But if more copies are produced than can be sold then the book often loses money. Many government publishing schemes ignore these basic publishing economics and produce the same numbers of copies of each book, irrespective of what the market for it might be. Planning and research are important in this respect. There needs to be an examination of the present situation to see what textbooks cost to the public, and how much parents might reasonably be expected to pay for them. A target price needs to be aimed at and taken into consideration in all aspects of planning and producing the book, not just when the number of copies to be produced is being considered. As mentioned earlier, consideration needs to be given to producing a limited number of copies in the first edition and providing an element of subsidy equivalent to reducing the retail price to what it would have been if a larger number had been produced, and then planning to cover costs (and possibly make profits) if the book is successful and reprints and further editions are produced. It is usually better, in other words, to provide a small subsidy to publish an experimental edition than it is to produce a large number of copies, many of which remain unsold.

Even when books are given away free of charge it is still important to produce the right number at one time. It is no good having to reprint frequently and pay high unit costs for small print runs. nor on the other hand is it good to print very large numbers and have storage problems, and possibly having to pulp them because there is a need for a new textbook or an extensively revised edition.

Vital to the decisions about how many copies should be produced are up-to-date school enrolment figures and details of how many students will be studying each subject and at what levels, and projected future figures. Where books are for sale, there must be reliable estimates of how many copies might be sold at the planned retail price. An estimate is also needed of the planned

educational life of the book, so that the probable number, and frequency of reprints can be decided.

Editorial functions

The qualifications and experience needed for editing are described in Chapter III. The need to provide for editors and editing has also been mentioned already in Chapter IV and in the Introduction. It is mentioned again here because of its very considerable importance in improving standards of publishing and because it is evident that in many textbook programmes there is no provision at all for the editorial function, and authors, or other people, lacking the required capabilities and experience, are expected to carry out this work. Experienced editors can play a critical role in planning, shaping, revising, criticising, rewriting, amending and finalizing a textbook manuscript. They can offer considerable help, guidance and support to authors, and assist in reducing costs by good planning.

Technical aspects of cost savings

There are many technical and professional matters which affect the cost of a textbook. These include the length of the text, the size of the type, the amount of space between lines, the area of type on each page, the number of blank, or partly blank, pages, the number and size of illustrations and their method of reproduction, the use of more than one colour, the quality of printing paper, the materials and the style of the binding, etc. All of these matters are really outside of the scope of this Guide, and information concerning them is obtainable in other publications. Many of them, in relation to costs and to teaching matters, are more complex than they might appear to be; but even to the layman there are certain aspects of them which are comprehensible and to which, by applying commonsense and by asking questions of specialists in these fields, including printers, the right decisions can be reached, books can achieve high effectiveness, and costs can be reduced. Thus, despite the fact that there are some dangers in oversimplifying the problems, some questions have been included at the end of this chapter to assist in planning books. The questions cover only a few of the major ways of saving costs and no attempt has been made to make them comprehensive.

A little knowledge of printing techniques can be sometimes costly. In one government textbook programme, the teachers were demanding that books printed at primary level should be in four colours, but the staff of the TPO (who were, unfortunately, not very experienced) said that this would be prohibitively expensive. But in fact, as the print runs were massive, and the wrong printing techniques, and the wrong paper was being employed, it would have been potentially possible to print all of the books in four colours and to save money on present costs.

In another LDC the TPO thought that typesetting costs were too high so they set the text on a typewriter and then asked a printer to produce it by offset

process. The printer gave a quotation for printing but at the same time offered to typeset the book properly, at his own expense, and to print it for far less than the quotation he had made if he did this. The TPO had overlooked the fact that in typing the text they had made the book very much longer in number of pages than it would have been if typeset (but, a word of warning here: it is not necessarily always more expensive to print a book from a type-written text than from a text set up by a composing machine).

Summarized examples of some of the recommendations made to two government TPOs by the author of this Guide may serve as examples of how costs can sometimes be reduced and funds better deployed

First example

1. Improve the quality of the paper and binding, and train teachers and pupils in the care of books. Loan the books to the pupils (not give them outright free of charge as at present) and in production, aim at a four-year life.
2. Include some colour illustration sections (which teachers were demanding) and thus increase the value of the books as teaching instruments.
3. Produce separate non-expendable workbooks, but only for lower level classes, instead of expendable workbooks at all levels as present.
4. Employ the savings in costs effected by the above measures (estimated at 50 per cent of current expenditure) to publish supplementary reading materials, none of which were being produced at present.

Second example

5. Print the college textbooks in another LDC (8.000 kilometres away) and bring them by air freight to the local airport. Expect in consequence far better typesetting, printing and binding, and for delivery according to schedule instead of late, and for total costs to be slightly less than 50 per cent of books printed locally.

Typesetting

Low standards of typesetting, and the inability, or unwillingness, of some LDC printers to check proofs before sending them to the publisher, result often in increased editorial costs and low standards of accuracy in the final printed work. In some cases (and expert advice is usually necessary on this matter) higher standards and lower costs result where LDC publishers have their own photocomposing machines, or use some other method of 'cold' typesetting.

Binding

A large part of production costs is related to binding the textbook. The type of binding used (and the binding equipment and skill employed) plays a major role in deciding the life of a book. Using inferior binding materials and equipment, and employing unskilled printers, is not a satisfactory way of reducing costs. Only those very well versed in the technical aspects of these matters are competent to plan the binding of a textbook to meet the needs as regards usage, length of life, and costs. These planning skills may not be available to a TPO, but it helps if the printer is asked to submit a blank, bound specimen copy of a textbook together with his quotation (using exactly the same materials and methods as for the final printed textbook). Teachers can then obtain a fairly good idea of how long a textbook is likely to last in the classroom.

To reduce costs, some countries bind several subjects for a whole year's work in one cover. Others produce books which have only one subject but cover the need for several years of school study. Inevitably wear is very heavy indeed on these books. The stimulation given to students of getting new books is lost. Some costs savings are effected initially but there appears to have been little research carried out on how the life of these books compares with that of the more usual method of producing one book on each subject for each year.

Cost effectiveness

In considering matters related to costs it is necessary to take account of how effective a textbook has been. This Guide does not attempt to examine the educational aspects of the post-publication evaluation of textbooks (but for those who are interested in considering these matters in detail a Unesco (1983b) publication includes a proposed Framework for Evaluation of Resources). Matters related to the use of textbooks include the training, competence and experience of teachers, and the amount of support they receive in their work, are outside the scope of the Guide, but attention needs to be drawn to the costs in manpower of evaluation, which may, if carried out in a comprehensive manner, be high. Some people feel, because of this, that instead of regular comprehensive evaluations, there should instead be a system of reviewing textbooks mainly on an ad hoc basis in response to adverse criticism concerning them.

Distribution

Planning, writing, selecting, editing, illustrating, designing and producing textbooks present very considerable difficulties, but when all this has been done, and the printed book has been delivered, only about half of the total problems have been solved. Factors related to distribution and marketing represent around 50 per cent of the energy and resources needed to complete the work. All too often these aspects of textbook provision are sadly neglected, and for many LDCs form a major aspect of their problems.

Some government TPOs contract out the work of selling or distributing the books that they produce.

Bookselling is dealt with Chapter VIII, and what follows covers only the TPOs' work of either sending out books for free distribution or of stocking them and supplying them to booksellers.

Storage, transport and delivery

The type of storage required for printed books is also suitable usually for printing paper, so the two can often be kept under one roof. Books need to be kept on racks, preferably metal, and printers should deliver them in suitable size kraft paper packets containing a specified number of copies (usually around thirty or forty) with a printed label on each end, to seal the packet, and giving details of the contents. Paper in sheets needs to be placed on pallets, to facilitate movement, preferably by forklift trucks. It is of course best if storage space is planned by professionals to assure that it is suitable.

There are dangers in government TPOs of developing what might be described as a 'storage mentality'. Quite frequently one finds that every book is placed in the government store, and all printing paper is sent there too, before being distributed for use. Private sector TPOs are too cost conscious to do this. It is often possible to make arrangements for printers to take immediate delivery of at least parts of consignments of paper when it is delivered from the paper mills or agents. Moreover, it is often possible for them to arrange to store books they have printed for limited periods, and then to make direct deliveries either to some of the larger distribution centres or schools or to the booksellers. These possibilities of saving double handling and carriage costs, as well as reducing damage in transit, need to be carefully examined. The aim should be to build the smallest feasible stores and to get the books quickly to where they are needed, in bookshops, schools, or in the hands of children, and not to keep them for long periods in warehouses. An examination of many government distribution schemes would reveal how enormous savings in costs might be made by doing this.

In some LDCs the problems of transporting books are considerable, and where books are distributed to schools in a government scheme there are sometimes great problems in getting them there and in assuring that they arrive at the right time and in good condition. The comparative merits, including costs, of a wide variety of methods need to be examined: Road, rail, sea, river, air, post, porters, or teachers collecting books from provincial centres which they may visit each month when they collect their salaries, are some of the methods employed.

It is difficult, and sometimes impossible, to achieve high efficiency, which would assure that remote schools have books available at the beginning of the school year, and at the same time, not to have to print very early and store for long periods of time at high costs for those schools which are near by. Some compromise is often necessary, but good planning helps.

Often, government sponsored schemes bring new storage needs not only in central warehouses but also in the provinces and at district and school and classroom levels.

Systems need to be devised to record the delivery and receipt of books at all levels, and to assure that mistakes in delivery do not leave schools and children short of books for considerable lengths of time. There needs to be provision for oversupplies to be returned.

Adequate packing, at the lowest possible costs, needs to be planned and provided for, which takes account of the storage conditions and the handling and method of transport. Extensive damage can easily be done to books if the packing is not adequate.

Packing containers and materials can often be reused and provision for their obligatory return and further use needs to be considered.

Selling

Selling textbooks produced by a government TPO represents usually fewer problems than those produced by private sector TPOs because the government books are frequently placed on prescribed or highly recommended lists produced for schools and in consequence sales become almost automatic. But even then the TPO has to assure that it gets the books to the booksellers in time and that they have adequate stocks when they need them. Part of the problem of doing this is sometimes the reluctance of TPOs to offer adequate discounts and credit terms to booksellers.

But in some LDCs the books produced by the government TPO are offered for sale alongside those produced by private TPOs and on the lines of equal competition. The need then to allocate funds for promotion of the books and to organize imaginative and substantial marketing campaigns becomes much greater.

Sales staff need to be employed, and often trained too, to visit booksellers and schools etc. and to promote and sell the books that the TPO publishes. They need to be backed with adequate publicity material in the form of brochures and catalogues.

Publicity material, and sales aids, need to be planned and produced to assist booksellers. This includes leaflets, posters, and special display stands or containers for the books. This material is provided free to booksellers; exactly what is given to each of them is related to their ability or potential to sell the books the TPO produces.

QUESTIONS ABOUT PUBLISHING

The questions that follow largely avoid the technical aspects of publishing and concentrate mainly on areas where administrative decision-making is the main issue.

1. Will there be a clear written and approved policy for the TPO's publishing functions?
2. Will this policy be part of the overall policy for the whole textbook programme which defines the functions and relationships of each of the organisations and individuals involved in the programme?
3. Will the policy for the whole textbook programme define exactly who will make final decisions about the acceptance of the manuscript, and who will be responsible for editorial matters and possible revisions and amendments that may be required? And for deciding on matters which are normally within the realm of the publisher such as design and format, materials used, numbers printed, etc.?
4. Will a well-produced plan be made for the TPO so that it can implement the publishing responsibilities defined for it under the policy?
5. Will that plan include an overall expected textbook production schedule for the first few years, and will this schedule lie related to the staff likely to become available and to their probable experience and abilities?
6. Will responsibilities be defined, and procedures established for each person working in the TPO?
7. Will a chart be produced showing the ways in which a manuscript will be handled from the time it is received to the time it is turned into a printed book and despatched to schools or to booksellers?
8. Will one person in the TPO be responsible for supervising the whole of the full- and part-time staff and outside fee-paid workers and ensuring that the publishing programme is implemented according to the publishing schedules that have been established which will show the length of time allotted to each phase of the work?
9. To achieve implementation of the schedules for the preparation, production and distribution of each textbook will provision be made for the necessary coordination and co-operation to be established between all those who are directly responsible, or who are concerned with, publishing matters, including curriculum

developers, authors, manuscript assessors, editors, book illustrators and designers, production controllers, printers, marketing and sales staff, booksellers, etc.?

10. The work of TPOs in LDCs is often somewhat different from that of their counterparts in DCs. Publishing often takes longer, mainly because authors are often inexperienced and manuscripts have to be revised several times before they are finally acceptable. Also, the procedures for commissioning them and examining them are more cumbersome and slower than in the private sector in DCs. Sometimes, too, printers are very inexperienced and it is not uncommon to find that numerous proofs have to be produced and checked before a finally acceptable version is produced. Occasionally, time is made up by reducing, or abolishing, the editorial function. Will the production schedules make enough provision for the time needed for each operation?

11. Will TPO staff be involved at the very earliest stages of planning manuscripts so that the books may be planned on professional lines and maximum economy and the highest possible production standards obtained?

12. Will decisions about the number printed of books intended for free distribution be made on the bases of accurate school-enrolment figures and the expected number of pupils studying the subject at that level? With allowances being made for losses which may occur through damage in transit or storage, and the need to provide some reserves for miscalculations in enrolment, or delivery of the wrong numbers of copies to schools, etc.? Will account be taken of how frequently reprints will be required and what the expected educational life of the books will be? Will account also be taken of the expected physical life of the book? Will the comparative costs of printing different numbers of copies be balanced against the problems of tying up available capital of book stocks and the costs and problems of storing books for lengthy periods?

13. If books are intended for sale, will the number printed be decided also on the basis of careful estimates of the numbers which might be sold, taking into account the buying habits and abilities of parents? Will enquiries be made to see if the planned textbook might be acceptable for use in other countries and if so whether additional copies might be needed for this purpose, or whether copies might be printed elsewhere, in addition, under licence on payment of fees?

14. To assure good planning of manuscripts, and assistance with their preparation by authors, and their subsequent amendment and revision, are adequately trained editors available and will they be given the necessary status and authority to use their expertise to the maximum advantage?

15. No one wishes to see poorly bound textbooks produced on inferior paper with few illustrations and narrow margins with pages crowded with small, and possibly difficult to read, type. On the other hand, there is a need in most LDCs to watch costs and see that funds are not wasted, and the aim is usually to produce the best possible textbook within the range of a limited budget. Taking these points fully into account, has thought been given to the following matters in attempting to reduce cost?

- i) Planning the length of the text to assure that it is correct for teaching needs and that there is no wasteful duplication.
- ii) Planning the illustrations to make sure that they enhance and explain the text, and are of the right size and of sufficient clarity to make them readily understood by pupils.
- iii) Assuring that none of the illustrations are superfluous or purely for decorative purposes.
- iv) Making sure that careful thought has been given to the need and costs of using more than one colour for printing.
- v) Where colour seems highly essential but costs appear to prohibit its use, including one section (or as it is called technically 'signature') which is printed in colour, or of printing at the same time several colour sections to be bound into different books?
- vi) Where a second colour is used, varying this second colour in the different sections of the book?
- vii) Assuring that space is not wasted by having blank pages?
- viii) Giving editors authority to plan, and reduce or increase manuscripts, or increase or reduce the number of illustrations, to avoid having blank pages and to make the book of an economic length?
- ix) Assuring that the type selected (and the space between lines) is suitable in size and clarity for the level of the intended pupils?
- x) Assuring that the margins are sufficiently wide to achieve printed lines of a suitable length, and which aid reading ability, but give a pleasing appearance and are not wasteful?
- xi) Reducing the preliminary pages to the minimum number to give the essential information related to the book and not to include superfluous information?
- xii) Using the inside and back covers to print information, charts, maps, etc. which might usually be included in the text pages of the book?

16. Will printers be asked to submit, together with their quotations for printing, two or three blank, bound, specimen copies of textbooks (using the same materials as the final book).

17. To enhance typesetting accuracy and facilitate speedy production, has thought been given (and has independent expert advice been sought) on the cost and feasibility of installing in the TPO, or making available through some other channel, photocomposing, or some other 'cold' typesetting, facilities?

18. Where local book production standards and prices from local printers are acceptable but typesetting is a weak link in the chain, has thought been given to the possibility of typesetting in another country and bringing printing proofs (or films based on them) into the country so that all other aspects of production can be handled locally?

19. Where a book published overseas is needed in large quantities locally, has thought been given to the possibility of negotiating with the publisher for the production locally of a joint imprint edition (which would be produced under the names of the TPO and the original publisher) and which would be printed locally from printing films or plates supplied by the publisher?

20. Alternatively, has thought been given to purchasing the book from the original publisher in the form of flat printed sheets, or unbound folded copies, with the intention of binding locally?

21. In large LDCs in particular, has thought be given to the possibility of decentralising printing (thus diminishing distribution problems and encouraging printers in many different parts of the country) and producing centrally, and sending out to printers, printing films or plates?

22. Has proper consideration been given to the different purposes and uses of teachers' guides, pupils' textbooks and workbooks in planning their production and the materials they will employ?

23. Has consideration been given to the fact that the life of a book is largely decided by the method of binding employed and that if metal staples are used they should be rust proof, and three should be used rather than two, and that over 96 pages it is better to use thread sewing or perfect binding?

24. Has thought been given to using a varnish, suitable for local climatic conditions, on the cover to increase the life of the books ?

25. Will high gloss inks be used on the covers to increase their life and resistance to dampness and wear?

26. Will very careful thought be given (and preferably will professional advice be sought) on the problems and costs of storing printing paper and printed books in: printing premises; stores of the TPO; at regional, provincial, district, school levels; students' homes; and bookshops?

27. Will these storage problems be related to physical aspects of the books when their production specifications are considered (thus enabling matters such as the introduction of rustless staples, other special binding materials, and insect proofing to be taken into account)?

28. In devising storage space, will the overall aims be kept in mind of storing the smallest member of books possible, consistent with meeting needs adequately, for

the shortest possible length of time before they are supplied to schools or booksellers?

29. In planning schedules for distributing the textbooks, will careful thought be given to the various methods of transporting them that may be available and their respective costs and suitability and efficiency?

30. In some countries it may be possible to get the textbooks to the large majority of schools fairly easily in time for the beginning of the school year, but because of transport problems and inaccessibility, it may be very difficult indeed to do this with the remainder. Will very careful attention be paid to this problem to attempt to find a solution or a reasonable compromise which is in the best interests of the textbook scheme as a whole?

31. Will the matter of packing the books when they leave printers' presses, and during the whole of their movements subsequently, until the time they are received by the consumers, be properly planned and executed to assure that adequate protection is given to them at minimum costs in materials and handling?

32. Will consideration be given, where possible, to returning and reusing packing containers and materials?

33. Will simple but adequate systems be devised for recording and keeping up to date, information concerning the numbers of copies which should be despatched to sub-warehouses, and to education offices and schools, of each book? Will systems also be devised to record the delivery and receipt of books until the time they reach the schools, and periodical checks be kept on stocks after that? Will systems also be devised to rectify short supplies, or over supplies, to assure that the right number of copies are delivered and there is minimized wastage?

34. Where textbooks are to be sold, will the benefits of doing this through commercial booksellers (including the provision of a round the year service, and the offering for sale of other books, not only to children, but also to adults) be considered?

35. If textbooks are sold through commercial booksellers, will they be given reasonable margins of discount on the retail prices and will they be granted credit in accordance with normal commercial practice?

36. Will booksellers be advised well ahead of publication of books of exactly what the TPO is planning so that they can place orders in sufficient numbers and have the books delivered to them in good time?

37. It may often be found that even when a TPO is dedicated to the principle of using bookshops (and in this context, this term is intended to cover all shops which sell books) that this will not be sufficient to meet all needs. The TPO should then consider other methods such as mail order, although in most LDCs this is fraught with the problems of poor postal services, and the difficulties of obtaining postal or money orders. Innovative methods of selling books in some

LDCs include using post offices, and asking government officials to take books to remote areas when they are travelling there for other purposes, co-operative organisations have too been persuaded to help with bookselling programmes.

38. Will sales staff be appointed and trained, so that they can visit booksellers (and also teachers) and introduce new books to them and obtain orders, and see that adequate stocks of textbooks published earlier are available in bookshops?

39. Will the booksellers be sent promotional material, and in some cases specimen copies of the books, so that they can show them to teachers in advance of publication?

40. if books are to be sold through government bookshops will thought be given to what effect this will have on commercial booksellers and on the needs to introduce bookselling into the life of the community?

41. In considering how textbooks for sale will be promoted, will a study be made to discover what might be the best ways of doing this, and an examination be carried out of how effective the various methods of advertising might prove and what their costs will be?

42. Will each textbook for sale be allocated a promotional budget, and will this be spent in a planned manner which will be adjusted from time to time according to the nature of the different books published and the experience that is gained of the effectiveness of the promotional techniques used?

VI. PAPER

Importance of paper

A good deal of what there is to say about printing paper is of a technical nature and is outside the scope of the Guide. But this is an important subject and merits separate treatment in this short chapter. The larger the number of copies of a book produced the higher is the percentage of total cost represented by paper. This can reach more than 60 per cent when very large numbers are printed. Thus the choice of paper used and the methods of obtaining it are very important financial aspects of book production.

Technical considerations

The strength of the paper and its resistance to wear and tear, the texture of the surface, the colour and the opacity, affect such matters as the techniques of printing that are possible and the ability to produce certain types of illustration well, the legibility of the type and the clarity of the illustrations, the speed of deterioration in colour, and the likely useful life of the book, as well as its weight and cost.

Selecting paper

The printing paper that will be used is so important that it is highly desirable that there should be always available independent and authoritative advice to help in its selection and define its source of supply. Even the smallest government TPO should have advice initially regarding the paper that it should buy and use. The bigger TPOs would often find that the cost of the full-time employment of a paper expert would be more than repaid by the savings that could be made. But one finds in practice that many TPOs do not employ expert staff in this field and often depend on their printer to obtain the paper they need. This usually means in effect that they are paying printers' profits and costs of obtaining paper on top of other costs, although this is often in fact an opportune way of obtaining paper when editions are small, or when a book needs a paper which is not of the standard usually used.

Manufacture

There are considerable difficulties for most of the LDCs wishing to start manufacturing printing paper. It usually needs to be produced on a massive scale if it is to be truly economic, and there are problems in finding sites where there is plenty of suitable water and electricity available and where the raw materials can be brought easily. Raw materials also are often lacking and have to be imported. In some LDCs which have started their own paper mills it has proved necessary to take measures to protect the industries by raising tariffs on imported papers.

As a Unesco (1980b) publication points out "the pulp and paper industries are the source of two groups of educational materials which alone account for over half the total value of educational materials and equipment, namely (1) textbooks and other publications, and (2) newsprint and writing paper". Expected expansion of demand in the years to come may leave LDCs short of the paper they need for textbooks and, as the same publication states: fin countries or groups of countries possessing both fibre resources and adequate outlets, such demand would seem to justify the establishment or plants producing for the domestic market, as long as the market is big enough to make the operation of such plants economically viable."

Taxes, etc.

In a good many LDCs there is an import duty imposed on printing paper and there are few places where this does not apply even when the paper is used for printing books. Thus this becomes a tax on knowledge. To lower the cost of producing newspapers, newsprint (the paper they are printed on) is usually exempted from import taxes and duties. Sometimes newsprint is supplied under a quota to newspaper publishers. But, in one way or another, in those countries where this applies, textbook publishers still often manage to obtain supplies and to use them for producing textbooks. Newsprint is not usually a suitable paper for textbook printing, except where there are needs for the very maximum economy and only a very short life is aimed at Newsprint quickly discolours and has very poor wear-and-tear qualities. Much of it does not take illustrations very well.

In some LDCs import tax exemptions are granted to textbook publishers for the printing paper they use. In some cases the paper is held in bonded warehouses for this purpose.

Governments need to give very careful consideration to the matter of import taxes on printing paper. Not only is it a tax on knowledge, but it also often acts as a barrier to the development of local printing and publishing industries and makes them less competitive with their overseas counterparts. Moreover, where governments are the main buyers (as in many countries they are) of textbooks published by the local textbook industry, the revenue from this source can be of a negative quantity by the time it has inflated book prices by

normal margins (e.g. where a commercial publisher multiplies his costs - and this is typical - by three to arrive at his selling price, and government departments purchase more than a third of the total number of copies that he produces at that price, then there is a negative revenue from the tax or duty imposed on the printing paper by the government).

Examples of cost savings

Examples of how in two LDCs money was being wasted are given in the following recommendations that were made by the author of this Guide concerning them:

1. Paper at present being bought is in metric sized sheets but the textbooks being produced are not. By changing the size of the textbooks to conform with 'A' standards, savings could be made of 13 per cent of paper costs, and 7 per cent of total production costs.
2. By buying paper in reels and printing by web-fed offset presses in four colours, instead of buying in sheets, and printing on small presses in black-and-white, books could be made more attractive and educationally useful and would be more durable (because more experienced and better equipped printers would be used and they would bind the books better) and savings of 30 per cent would be made on present printing and paper costs.

QUESTIONS ABOUT PAPER

1. Will consideration be given to the merits of the TPO ordering, stocking, and supplying to printers some, or all, of the paper that will be used in the programme as against asking printers to supply the paper themselves?
2. If it is decided that the TPO will order paper itself and supply it to printers as required, will it be assured that finance is available; payment can be arranged in a manner, and with a promptness acceptable to suppliers; systems are devised to place orders of an economic size but with the reasonable limits of the needs of the programme and keeping in mind at the same time the problems of finding storage space, and the deterioration that results from carrying stocks for too long (in this connection, paper mills might be approached with the request to deliver substantial orders in instalments) and that staff handling equipment, and transport are available?
3. Will exhaustive enquiries be made, and competitive quotations sought, locally and internationally to obtain supplies of the paper that is needed?
4. Will the desirability and possibility of freeing the TPO from the normal government tendering processes be examined to assure that the most suitable paper is obtained without undue delays and at the lowest possible costs?
5. Will it be assured that foreign exchange is available when required for the purposes of obtaining paper?
6. Will the government or private TPOs be placed under any obligation to use locally manufactured printing paper to produce textbooks for the government textbook programme?
7. Is there any tax or duty imposed on printing papers?
8. If the answer to either of the two immediately preceding questions is yes, then what effects does this have, and what disadvantages does it create, for the textbooks programme, and should any steps be taken, and by whom, to reduce or remove these problems?
9. In the selection of printing paper and cover cards will careful consideration be given not only to their costs and their suitability for printing, but also to the planned life of the textbooks and the expected useage they will receive?
10. Will independent and unbiased expert opinion be sought on the matter of selecting printing paper?

11. Will consideration be given (especially when the total needs of a textbook programme are small) to the possibility of regional co-operation being established by countries to achieve bulk ordering (which will result in economical bulk manufacture by paper mills) to assist in obtaining low quotations? (It should be noted that bulk ordering does not necessarily imply bulk purchasing, payment, or storage - each country could have its own responsibility for these.)

VII. PRINTING

General

Quite understandably, most LDCs prefer to print* locally the textbooks they need for their school system (but it needs to be noted here that many publishers in many developed countries get their books printed overseas in countries which offer the lowest prices and at the same time can provide high quality work delivered promptly according to schedule). But quite often a decision is made to print all books locally without first carrying out a survey of the country's printing industry and discovering whether it is really feasible to print the books and obtain good quality work at reasonable prices and for delivery dates to be met.

Private sector book printers

Often in LDCs printers are not experienced in book printing, although they may have well-established printeries producing other items. They often lack the essential folding, collating, and binding equipment for books as well as the necessary typesetting equipment and, perhaps more importantly, the specialised knowledge of book manufacture. Moreover, quite often they are expected by publishers in LDCs to carry out work in the design of books and the selection of typefaces which in developed countries the publisher himself does. They lack capital, and staff, and often work under considerable difficulties in selecting, obtaining, and maintaining equipment. In many countries the machinery and supplies they need are subject to heavy taxes and customs duties which make it difficult for them to provide books at low prices. Yet quite often imported printed books bear no taxes at all, and can thus be sold at lower prices than those manufactured locally.

Thus it is very important to the establishment of a cost-efficient textbook programme that there should be a careful examination of the country's printing industry and of its potential and problems. When this has been done it may be possible to examine what can be done to alleviate these problems, and to what extent books can be printed locally, and to what extent it will be desirable to print them elsewhere, and whether consideration should be given to establishing a government-owned printing capacity to produce the books that are needed.

A well-planned, efficient, and competitive book printing industry is a major requirement if textbook costs are to be kept low.

*The words 'print' and 'printing' as used here are intended to cover also binding and other aspects of book manufacture as most school books in LDCs are paperbacked and are produced entirely by printers.

Government sector book printers

In Western countries few book publishers have their own printing facilities and printing is contracted out. The reason for this is that printing has become highly specialized and it is not economical for publishers to have their own printing presses. They need to be able to deal with a wide range of printers who can offer them a variety of typefaces and different methods of printing and binding. They are aware, too, that their work is of a cyclical nature and that they cannot expect to keep any presses that they might own busy throughout the year.

But it is common to find in a great many developing countries that book publishers own printing equipment and produce all, or most, of the books they publish. It is not, therefore, altogether surprising to find that sometimes when government TPOs are set up in these countries those who plan them believe that it is necessary to also establish printing facilities. In some cases books could be printed better and more quickly, at lower cost either locally or overseas, than in the government facilities.

Many government established book printing organizations in LDCs have met very considerable problems. They are sometimes run as government departments and instead of working shifts, to assure that the work is executed and the printing presses are fully utilized, they work office hours and additional work is only achieved by paying expensive overtime (printing machinery and equipment deteriorates whether it is used or not and it also becomes out of date). True costs of production are not known because cost accounting systems are not employed; and sometimes where costs are revealed they do not include many of the overhead expenses of buildings, maintenance, the supply of utilities, staff salaries and other emoluments and benefits, etc. Thus proper comparisons with printing costs in the private sector are not possible. There are often difficulties in recruiting competent staff, providing training programmes, and establishing salary scales which are competitive with the private sector, and providing career structure employment and other benefits which assure that staff are fairly rewarded and encouraged to stay in the government sector. The replacement of worn equipment and parts, or the modernisation of printing plants, is often dependent on the vagaries of the annual budgeting system rather than on long-term development plans, and printers are expected to produce good work at low cost on old and dilapidated presses with worn parts. Sometimes political changes deprive these organisations of the funds they need in order to develop in a logical manner according to expanding needs.

When a commercial publisher employs a printer, he can reject his work if it is sub-standard, but when a government TPO employs a government printing organization, rejection is often not feasible. Moreover, government printing plants are often operated independently of the TPO, and not as a part of it, and their priorities are established elsewhere in government. This sometimes means that the TPO cannot get the books that are needed produced in time for the beginning of the school year.

In some countries, government book printing presses have been set up despite the fact that there was already an adequate and competent private sector producing all the books that were needed. The government presses have then in some cases found that they do not have enough government work to keep them busy the whole year round so they take on commercial work and compete with the private presses. Sometimes (for reasons discussed above), the government presses do not know the true costs of the work they perform, and the prices they charge may well be being subsidized at the tax-payers' expense. Similar situations to this are found in some LDCs in their university presses.

But where the pitfalls described above have been avoided it has been possible in some LDCs to establish efficient and cost-effective government book printing organizations.

QUESTIONS ABOUT BOOK PRINTING

Private sector book printers

1. How many printers are manufacturing books within the country?
2. What is their total capacity for book manufacture?
3. How do their standards of production (i.e. design, typesetting, reproduction of illustrations, printing, binding, paper, etc.) compare with those of book manufacturers elsewhere?
4. How many of these printers are producing work which would be of an acceptable production standard for the new textbooks needed for the school system?
5. What is the book-printing capacity annually of these printers who produce satisfactory work?
6. Could they work according to a rigid and reasonable time schedule for production?
7. How do the prices charged by these printers compare with equivalent books produced by printers in other countries?
8. Do printers have problems in the following fields?
 - Finding, and paying for, suitable and well-located premises.
 - Finding capital to finance their business. (What rates of interest do they have to pay on this capital, and what are the other terms of the loans, and are these reasonable?)
 - Recruiting managers and staff experienced in book production work and paying wages and providing benefits sufficient to retain their services.
 - Providing training facilities. (What are their training needs?)
 - Obtaining foreign exchange to enable them to import the equipment and supplies they need.
 - Obtaining spare parts and service for their machinery and equipment. (Do suppliers maintain local offices, and provide service for equipment, and

stock spare parts, and provide training in the use of equipment supplied?)

- Selecting which is the most suitable equipment to meet their needs.
- Obtaining independent skilled advice to assist them in this connection.
- Obtaining consumable supplies (e.g. films and photographic plates and chemicals for developing). (What are the problems?)
- Having to pay taxes and import duties on machinery and equipment and supplies (if so how much are they?) on:

- . printing paper
- . printing ink
- . cover boards and cards
- . other binding materials
 - . films
 - . plates
 - . developing chemicals
 - . process cameras
 - . developing equipment
 - . typesetting and composing machines
 - . printing presses
 - . guillotines
 - . collating machines, and other binding equipment

- Typesetting in local languages because of the need for special typefaces or for Latin alphabets accompanied by diacritics or special symbols.
- Irregular supply of electric power and fluctuating voltages.
- Storing books satisfactorily while awaiting delivery to publishers, etc.
- Providing books properly packaged and labelled to facilitate handling and storage and reduce wear and tear and deterioration due to climatic conditions ?

9. Is there possibly an unrealised potential for books to be produced locally for overseas publishers and then to be exported ? If so, why has this potential not been realized?

10. Because of the lack of publishing experience in the country, are printers being expected to carry out some of the functions which are normally considered to be the responsibility of publishers (e.g. the selection of suitable typefaces for the books needed, the planning of layouts and designs) and how well equipped are they for this work?

11. If foreign aid is provided to assist book printing in the country, is it done on a piece-meal system with individual organisations making their own bids for help? Or are there committees, or a single committee, in government, responsible for co-ordination, planning, seeking, and administering the aid?

12. Is there a Master Printers Federation in the country? How many printers support it? How well does it function? What are its problems? Does government recognize it as being the body through which it deals with the printing industry?

13. Has a survey been carried out of training needs in the printing industry?

14. What facilities are available within the country for formal training in printing and binding books?

15. What plans have been made to provide for the training needs which have been identified?

16. Is there in government any standing or ad hoc committee which is responsible for studying the problems of the book-printing industry and reporting on it to the various government ministries which are interested in its problems or which make use of its products?

17. If answers to the above questions indicate that the book printing industry has problems, has the government given consideration to ways in which these problems might be alleviated so that books could be produced locally, better than at present and more expeditiously at lower cost?

Government sector book printers

If consideration is to be given to setting up a government printing unit (or to examining the operations of an existing unit, or expanding it), the following questions are among those which need to be asked

1. Is professional advice available to determine the needs and to make recommendations concerning how they should be met? If not, will it be sought?

2. How many books is it expected that the printing unit will be required to produce each year and what will be their length and how will they be produced and bound?

3. Where will the premises for the printing unit be located and will they be erected, or bought, or rented? How long will it be before they are available?

4. What machinery and equipment will be needed initially and during each following year?

5. How will a manager be appointed for the organization and what say will he be given in the planning for the needs? How will he, and the staff that he will need, be paid and retained? What housing and other benefits will be provided?
6. What plans will be made for staff training?
7. What will be the capital and recurrent costs of the above?
8. What will be the policy and objectives of the printing unit?
9. Will it produce items other than school textbooks? Will it work for the TPO only, the Ministry of Education only, or will it work for many government ministries and organisations? Will it carry out work for the private sector?
10. How will it work in relation to the private sector printers? Will it compete with them? If so, will it do so on equal and unsubsidized terms?
11. What effect is it expected that the establishment of the printing unit will have on private sector book printers both short and long term?
12. Have private sector printers been consulted, and their opinions sought, about the proposed establishment of the government book printing unit?
13. How will the unit be financed to assure its uninterrupted and continuous operation and its smooth development and expansion, and increased capacity for production that will be needed? Will some type of continuous revolving fund be made available for its work?
14. How will its functions relate to those of the government TPO? Will it be (as is most likely to be the most successful arrangement) subordinate to the TPO and carry out the work of producing textbooks under its guidance, or will it be independent, or dependent for direction on some other body?
15. If the unit is independent of the TPO, how will arrangements be made to assure that it produces the books according to the specifications prepared by the TPO; maintains standards of workmanship acceptable to the TPO- and delivers the books according to schedules which are reasonable and are agreed with the TPO?
16. Will a proper costing system be installed so that the cost of each item produced will be known, and will it be assured that these costs reflect all overhead items so that valid comparisons can be made with the prices charged by commercial printers?
17. What will be the printing policy of the unit? Will it include an element of profit which will be used to finance, or partly finance, expansion of the unit when needed?

18. How will the prices charged by the unit to the TPO or to other government organisations (or where applicable to private organisations and individuals) compare with those charged by private sector printers locally and overseas for comparable work?
19. Will steps be taken to see that the maximum use is made of the machinery and equipment provided and that a shift system is put into effect to assist this?
20. Will some type of productivity arrangement, or bonus scheme, be introduced to assist in achieving high output and quality?
21. Will arrangements be made to control the quality of the work produced by the printing unit and for constant comparisons to be made with the work of other printers?
22. The unit will be a manufacturing and trading organization and it is unlikely that it will be able to operate effectively within the framework of government regulations, especially those covering financial matters. Will new regulations appropriate to its needs be devised? Will it be freed from the government tendering system?
23. How will the unit be controlled and how will decisions be made about its policies and its requirements for funds?
24. Will the unit be run professionally with decisions about printing matters being made by printers, or only after seeking their opinion and advice?
25. Will commercial-style accounts be produced to show the value and extent of the work performed by the unit, and the profits or losses that it makes and the value of its assets and liabilities? Will these accounts be published so that everyone can see for themselves the results of the unit's activities from a financial viewpoint?
26. Similarly, will annual reports be published concerning the unit's work and the problems it encounters?

VIII. BOOKSELLING

General

Bookselling is often one of the weakest links in the chain of textbook provision programmes. There is insufficient realization of the considerable problems of bookselling and of booksellers, and too little attention is given to attempting to solve these problems.

The efficient planning, organisation, and execution of bookselling is a very important aspect of the provision of textbooks produced for sale. Its impact on costs can also be highly significant.

Free distribution of textbooks is usually carried out by the TPO itself, or sometimes by a contractor, and is covered in the chapter dealing with publishing.

The process of getting books into the hands of booksellers is the publisher's function and is also dealt with in the chapter on publishing.

Aim

This chapter deals with the difficulties and problems of bookselling and booksellers. It covers not only proper commercial bookshops but also the bookselling activities often conducted by schools and education offices.

Commercial bookselling

If books are to be sold, there is little doubt that the best long-term way of doing this is through bookshops. All too frequently the short-term narrow view of getting books into the hands of students is regarded as being the matter of paramount importance, and little or no consideration is given to other needs. But there is now a growing awareness that if children are taught to read in schools and then fail to find anything to read when they leave school, they will become illiterate again, and the money spent on their education will be at least partially wasted. Bookshops can play an important role in lifelong education. If they are by-passed by schemes which supply books direct to schools or students they tend,

particularly in LDCs, to wither away and die. A community without a bookshop is one deprived of an important cultural, educational and recreational asset. The continued existence of bookselling facilities throughout a country is a matter which merits very careful consideration from those who plan and run textbook programmes.

The establishment of a local publishing industry and the building up of creative writing talent depends on the ability to sell books -without good bookshops, this becomes difficult.

Publishers in DCs usually attempt to supply all books through booksellers rather than through other channels because they realize that in the long term it is in their interest to do so.

Enterprising and efficient booksellers can play an important role in keeping teachers in touch with textbooks which may prove of interest to them. The best booksellers bring information about new books, or specimen copies, to the schools to show to teachers.

In some LDCs, booksellers establish book stalls in or near schools at the beginning of the school year to assist students in obtaining easily the textbooks they need. Moreover, they see that they have some stocks of these books throughout the year so that no one goes short.

Unfortunately, it is commonly found in LDCs that there are few really good bookshops, and often the majority of booksellers are very small and specialise mainly in selling textbooks. Often, these are sold at high prices, and are frequently ordered in insufficient quantities to meet the needs. Obtaining further supplies, when stocks run out, is often a lengthy business and especially so when the books come from overseas.

There needs to be an examination of booksellers' problems to see if some solution to them might be made and whether they might then not be better able to support the work of the TPO in selling books. Aid, advice, encouragement, and persuasion are needed.

In some countries, booksellers stocks have improved enormously when schools have become tied to obtaining supplies from them and have agreed, in some cases, to guarantee to the bookseller that if he does not sell the number of copies of a textbook which the school specifies, the school itself will buy the remaining copies.

Some TPOs have been able to persuade booksellers that in return for working through them (and offering reasonable discounts and terms of credit), the shop will stock all of the titles published by the TPO all the year round, and will also carry a range of other materials also. Moreover, it has been made a condition of supply that the books will be sold at the prices recommended by the TPO, and fixed discounts offered by the booksellers when libraries are supplied or copies are sold in bulk.

Government bookselling

Selling books to students through education offices and schools, if well managed, brings the potential advantages of assuring that the books are available in the needed quantities at the right time, and prices are kept low. There are often, however, problems in teachers handling the administrative matters, and the cash.

The textbook which a student buys from a bookshop is often more expensive than if he were able to buy it from his school. But textbooks which are sold in schools in LDCs often have a substantial hidden subsidy in them. No account is usually taken of the costs the school incurs in ordering and accounting for the books, storing them, forwarding the cash which is collected in payment, or the teachers' time spent in doing all these things. If full account were taken of these costs, then the prices would probably not be very different from those charged by bookshops.

Retail bookselling is an entirely different operation from book publishing. It needs different resources of all kinds including staff and premises. If a government textbook publishing programme decides to establish government bookshops to sell the books that are produced (and perhaps other books and stationery etc. also), it is far better for this to be done as an entirely separate operation from the TPO. Separate capital, accounting, management, staff, and premises are usually needed and the operation should be established in such a way that its performance can be compared to with private sector bookselling.

There have been a few examples of very well run government bookshops which provide a service not available previously from private booksellers; wholesale bookselling by government has also in some LDCs been very effectively handled and has assisted in supporting local commercial bookselling as well as handling the books published by the TPO. In at least two LDCs, it was necessary to establish government wholesale bookselling facilities to encourage local retailers before a government TPO publishing programme could begin.

Where these wholesaling operations have been operated they have been part of the functions of the TPO but accounting for them and staffing, etc., have been kept separate.

QUESTIONS ABOUT BOOKSELLING

Commercial bookselling

1. Will those responsible for planning methods of selling the books published by the TPO take into account the high desirability of assisting and supporting commercial bookselling in the country?
2. Will they also take due notice of the difficulty of building up flourishing, local, creative publishing, and encouraging authors, if there are no good bookshops, to sell the books that are produced?
3. Irrespective of whether the books published by the TPO are sold through government or commercial channels, will there be recognition of the importance of bookselling in lifelong education and the consequent need to examine the commercial bookselling facilities of the country to see whether it might be possible to improve them, and possibly to assist booksellers in solving problems that may arise from such matters as: obtaining foreign exchange; ordering and obtaining books from publishers and associated problems of credit and discounts; dealing with government offices and obtaining payment from them; finding suitable premises to carry on their business; raising the capital they need at reasonable rates of interest; assisting their customers by identifying exactly the books they need and discovering whether they are in print and from where they are obtainable; obtaining from education offices and schools lists of recommended books, and orders for supply, in sufficient time to obtain the books before the commencement of the school year, training their staff; and other problems?
4. Will some form of continuous dialogue be established with booksellers so that they can air their problems and so that government and the TPO can attempt to assist and encourage them? If no booksellers association is available for this purpose, and no national book development council exists, can this be done through the textbooks board or can a committee be established with this objective?
5. If commercial booksellers are to be used to distribute the books published by the TPO, has thought been given to fixing retail prices (and will efforts be made to see that booksellers do actually sell at these prices)? But will booksellers be permitted to deduct discounts from these prices (at agreed rates) when they supply libraries or bulk purchasers?
6. Will wholesalers receive additional discounts, over and above those granted to retailers, to enable them to carry out their work?

Government bookselling

If government bookshops are to be established, the following decisions will need to be made

1. Will the government bookshops be run on fully commercial lines without subsidies and in fair competition with commercial bookshops?
2. Will decisions about what they are to sell, and where they are to be established, be taken on the basis of what is already being done in the area by local booksellers, and how much the establishment of a government bookshop will affect their operations
3. If they are to operate with subsidies (possibly hidden in staff or premises provided), will it be assured that they do not undercut commercial suppliers and use (in effect) tax-payers' money to do this?
4. Will the government bookshops have the exclusive right to sell books published by the TPO or will they be available from other shops also? Will all shops receive the TPO's books at the same rate of discount and terms of supply?
5. In assessing the cost and desirability of establishing a government bookselling system (through teachers, schools, government bookshops, etc.), will full account be taken of all overhead costs involved, including the time taken by teachers, and government officers, and the costs of storage, transport, office running costs, and administration, etc.? And will due account also be taken of on the one hand the advantages of a government selling scheme (e.g. possible reduced costs, and having the books available in the required quantities at the required times if the scheme is efficient), and the disadvantages (e.g. the problems of teachers having to handle administration of the scheme and account for the books and cash, the difficulties of storing the books in schools, etc.)?

ANNEX

Language of publication*

Decisions on language of instruction will be determined by:

- (a) Political/Cultural Criteria - these are governmental/ internal issues and are not necessarily a direct concern of a textbook project. Nevertheless clear government preferences must be recognised, discussed and agreed at the earliest possible stage.
- (b) Pedagogic Criteria - learning will be most effective in a mother tongue. Other things being equal (e.g. number of literates and trained teachers in each language group) textbooks will work better in the first language context and this will tend to textbook production in multilingual countries.

NB: In a multilingual situation the probable need to switch from mother tongue to a more widely accepted language of instruction at some point in the education system and the pedagogic, financial and organisational problems associated with this should be noted.

- (c) Economic Criteria - except where individual language groups are large enough to economically carry origination costs single language production is cheaper than multilingual production.

The reasons are:

- (i) Multilingual approach reduces print runs and thus increases unit costs.
- (ii) Each language edition has to be individually typeset, and requires additional film and plate charges.

*Extract of *A Guide to Textbook Project Design and Preparation prepared by Anthony Read, Director of the Book Development Council, Publishers Association, UK.*

NB: this is less significant for highly illustrated books (e.g. at lower primary level) because one set of illustrations could normally serve for all language variants and at lower primary the proportion of text to illustration is usually low (NB: With widely different cultural backgrounds e.g. Islamic/Christians illustrations might not carry across to different editions and may need separate artwork which could increase costs substantially).

- (iii) Authorship costs are directly increased in proportion to the number of language editions used either by unique language authorship or by translation costs.
 - (iv) Machine make-ready costs will be increased proportionately with each language edition.
 - (v) With many (several) small print runs optimum running speeds may not be achievable.
 - (vi) Economies of long run manufacturing technology will often be lost.
 - (vii) There will be a proportionate increase in editorial Cost with the number of editions and there could be overmatter problems since different languages will not necessarily translate into the same page space as the original language without specialised editorial work.
 - (viii) Stock systems, warehouse requirements, distribution requirements are more complex and thus more expensive (they usually require better trained and more educated staff).
- (d) Technical Criteria
- (i) Difficulty in finding suitably qualified translators (or authors) in local dialects/languages.
 - (ii) Problems of editorial quality control and schedule keeping.
 - (iii) Limitation on type faces where distinctive orthographies exist.
- (e) Prognosis - While mother tongue editions are usually indicated on pedagogic grounds they can create (if there are several different editions involved) economic, technical and management problems which are particularly severe in small population, low income, heterogenous countries with underdeveloped educational and publishing infrastructures (e.g. Guinea). NB: problems described above are not necessarily inhibiting when language group(s) are large (e.g. India, Nigeria).
- (f) Possible Compromises for Small Countries

- (i) Mother tongue editions in lower primary grades only (But NB need to switch to common language of instruction and implications).
- (ii) Reduction in design, production standards to cut costs.
- (iii) Acceptance of higher cost books as price of mother tongue language policy.

Language Policy and Unesco Action In Africa

It is now the policy of many African countries to use national languages in education, at least at the primary level. This has brought to light the problem of the publication and provision of school textbooks, along with many specific inter-related factors which need to be taken into account, such as national and cultural specificities of school curricula, traditional presentation and illustration techniques, linguistic considerations, where dialects and alphabets are not standard, and availability of typefaces once agreement is reached on which alphabet will be used. All these factors create difficulties for publishers, particularly those outside the region. They also tend to restrict the market of a book to the section of the population using a particular language, which means that print runs are usually small. The smaller the print run, the more expensive the book and the less attractive its publication will be to a foreign publishing house. Local production is the simplest and most direct way to provide textbooks for educational purposes. This is why the Governments of many developing countries have now created school textbook projects.

Unesco subscribes to the principle that education is most successful when given in the language most familiar to the learner, and especially the mother tongue. The earlier the cycle of education, the more strongly this principle applies. Unesco therefore promotes the creation of local institutions to develop, print and publish school textbooks in local languages. In this connection, the Secretariat has helped to set up the Bureau d'Education rural (BER) in Burundi, the Education and Research Publishing and Production Centre (CEPER) in Cameroon, the Curriculum Development Centre in The Gambia. It further assists such institutions by providing technical personnel and training, and helps with the development and production of technical training materials.

Unesco has for many years encouraged and supported work on the content and presentation of school textbooks, supplying primers, basic grammars, spelling book and dictionaries in national languages, developing materials for teaching and teacher training and providing such training. A comprehensive Guide to Readability, Content and Methodology in African Language Teachings which will be published shortly and will be invaluable, not only for teachers, school supervisors and other educational personnel, but also for publishers. The readability description, the first ever undertaken for Africa, should help publishers to match the language of their textbook more accurately to the educational level of the children who will use them.

Unesco also urges countries using a common language to share educational publications, both to decrease costs and to improve quality by maximising the use of scarce qualified production personnel. The Guide to the Selection and Harmonisation of Terminology for African Language Education", which calls upon the collective thinking of African linguists and educators, was published by Unesco in 1987 as a means towards solving this type of problem.

The Regional Multi-disciplinary Seminar on the Harmonisation of Educational Publications in Common African Languages, which was held in Lome (Togo) in September 1987 recommended that:

- as a matter of policy, the strengthening of the status of the common languages by their adoption not only as teaching instruments, but also as legally recognized means of national and inter-state communication;
- the creation of inter-state institutes, or of mechanisms of cooperation between the relevant national institutions of countries with common languages, for linguistic and educational research for the use of these languages and for the preparation and use of common educational books and reading materials;
- intensification of cooperation between publishers as well as printers in countries using common languages, for exchange or joint publishing/printing/distribution of educational books and literature in these languages.

REFERENCES

- APEID, 1985. *Studies and Documents No 48. Paris, Unesco. Textbooks and Related Teacher Learning Materials: For Primary Classes.* Bangkok, Unesco.
- Black, A. & C., 1986. *Writers' and Artists' Yearbook.* London, A. & C. Black.
- Bolibaugh, J., et al., 1980. *Educational Development: A Practical Issue: Guidelines for the preparation. production and distribution of textbooks.* Paris, Unesco.
- Book House Training Centre, 1981. *Introduction to Book Publishing.* London, Publishers Association.
- Butcher, J., 1980. *Typescripts, Proofs and Indexes.* Cambridge, Cambridge University Press.
- , 1983. *Copy-editing: the Cambridge Handbook.* Cambridge, Cambridge University Press.
- Cocker, S.T., 1983. 'Tonga' in *Textbooks and Reading Materials: Vol. III.* Bangkok, Unesco.
- Dallow, E.L., 1979. *A First Course of Proof Correcting.* Bury St Edmunds, Northgate Publishing.
- Educational Publishers Council, 1982. *Publishing for Schools: A Short Guide to Educational Publishing.* London, Educational Publishers Council.
- Glaister, G.A., 1979. *Glaister's Glossary on the Book.* London, Allen & Unwin.
- Hart, H., 1983. *Hart's Rules for Compositors and Readers at the University Press.* Oxford, Oxford University Press.
- Heyneman, S., et al., 1978. *Textbooks and Achievement: What We Know.* Washington D.C., The World Bank.
- Hyde, S., 1977. *Selling the Book: Bookshop Promotion Manual.* London, Bingley.
- Jacob, H. (ed.), 1976. *A Pocket Dictionary of Publishing Terms.* London, Macdonald.
- Kotei, S.I.A., 1981. *The Book in Africa Today.* Paris, Unesco.
- Martin, R.E. (comp.), 1983. *A Glossary of Book Trade Terminology.* London, Publishers Association.
- Natividad, P.E., 1983. 'Philippines', *Textbooks and Reading Materials: Vol. III.* Bangkok, Unesco.

- Neumann, P.H. 1980. *Publishing for Schools Textbooks and the Less Developed Countries?* World Bank Staff Working Paper No 398. Washington D.C., The World Bank.
- Neumann, P.H.; Cunningham, M.A., 1982. *Mexico's Free Textbooks: Nationalism and the Urge to Educate.* World Bank Staff Working Paper No 541. Washington D.C., The World Bank.
- Oakeshott, P.; Bradeley, C., 1982. *The Future of the Book*, Part 1: The Impact of New Technologies. Paris, Unesco.
- Orivel, F., 1979. *Cost Analysis of the Philippines Textbook Project.* Paris, Unesco.
- Oxford University Press, 1983. *Oxford Dictionary for Writers and Editors.* Oxford, Oxford University Press.
- Pearce, D., 1982. *Textbook Production in Developing Countries: Some Problems of Preparation, Production and Distribution.* Paris, Unesco.
- , 1983. *Background Paper: Regional Seminar on Reducing the Costs of School Textbooks. Bujumbura. Burundi.* Paris, Unesco.
- Perfect, C.; Rookledge, G., 1983. *Rookledge's International Typefinder: The Essential Handbook of Typeface Recognition and Selection.* London, Sarema.
- Richaudeau, F., 1979. *Conception et Production des Manuels Scolaires: Cuide Pratique,* Paris, Unesco.
- Searle, B., 1984. *General Operational Review of Textbooks.* Washington D.C., The World Bank.
- Smith, D.C., 1977. *The Economics of Book Publishing in Developing Countries.* Reports and Papers on Mass Communication No 79. Paris, Unesco.
- Trevitt, J., 1980. *Book Design.* Cambridge, Cambridge University Press.
- Unesco, 1977. *The Economics of New Educational Media:-Educational Methods and Techniques.* Paris, Unesco.
- , 1978. *The Book in Multilingual Countries.* Paris, Unesco.
- , 1980a. *The Economics of New Educational Media. Vol. 2: Cost and Effectiveness.* Paris, Unesco.
- , 1980b. *Development of Industrial-Scale Manufacturing of Materials and Equipment Adapted to Educational Needs of the Third World.* Paris, Unesco.

- , 1981. *A Systems Approach to Teaching and Learning Procedures*. Paris, Unesco.
- , 1982a. *The Economics of New Educational Media. Vol. 3: Cost and Effectiveness Overview and Synthesis*. Paris, Unesco.
- , 1982b. *An International Survey of Book Production during the Last Decades*. Statistical Reports and Studies No 26. Paris, Unesco.
- , 1983a. *Textbooks and Reading Materials. Vol. 1: The Ready to Read Project - the New Zealand Experience*. Bangkok, Unesco.
- , 1983b. *Textbooks and Reading Materials. Vol. 2: Outcomes of Regional Seminar*. Bangkok, Unesco.
- , 1983c. *Textbooks and Reading Materials. Vol. 3: Textbook Production and Utilization in Asia and the Pacific*. Bangkok, Unesco.
- , 1983d. *Final Report: Regional Seminar on Reducing the Cost of School Textbooks in Africa*. Dakar, Unesco.
- , 1984a. *Technical and Economic Criteria for Media Selection and Planning in Educational Institutions*. Educational Studies and Documents, No 48. Paris, Unesco.
- , 1984b. *The Educational Administrator and Instructional Materials*. Paris, Unesco.
- Unwin, S., 1976. *The Truth about Publishing*. London, Allen & Unwin.
- Williamson, H., 1983. *Methods of Book Design: the Practice of an Industrial Craft*. London, Yale University Press.