

SOMALIA

THE DISTRIBUTION OF INSTRUCTIONAL MATERIALS IN SOMALIA

Strategies for Improving the Textbook Distribution System of
The Somali Education System

August 1986

IEES

Improving the
Efficiency of
Educational
Systems

Florida State University
Howard University
Institute for International Research
State University of New York at Albany

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MINISTRY OF EDUCATION

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IMPROVING THE EFFICIENCY OF EDUCATIONAL SYSTEMS

I. Introduction

An abundance of research in developing nations now exists to provide empirical support for the belief that textbooks are one of the most effective school inputs. Teachers and other school personnel have long argued for the importance of textbooks and their effect on student achievement. Donor agencies have indicated their support by steadily increasing their support for textbook provision projects. As a result, textbooks and other instructional materials of increasingly high quality are being produced for expanding education systems in developing nations. This is the case in Somalia today, where a major curriculum reform effort is now culminating in the production of a series of relevant and practical textbooks for primary education.

The design and production of instructional materials, however, cannot result in improvement in the quality of education systems without an effective system for providing the materials to the teacher in the classroom. Important lessons have been learned in the past decade from donor-supported book provision systems. The following areas have been identified for special attention by those undertaking the planning of education distribution systems:

- Special attention should be given to the financial feasibility of any proposed book provision system.
- An effective distribution system should be coordinated with the production of quality instructional materials and adequate teacher training.
- Appropriate institutional arrangements for managing the book provision system should be established.

Evaluations of textbook provision projects in developing nations have also identified important factors affecting the success of distribution

systems. The following have been identified as frequent causes for shortcomings in implementation and outcomes of the projects:

- Lack of appreciation of the complexity and technical requirements of a viable book provision system, and hence too little use of the required expertise during preparation and appraisal.
- Insufficiently thorough analyses of the adequacy of the existing arrangements and necessary infrastructure for providing textbooks.
- Failure to design satisfactory and politically acceptable institutional arrangements for managing textbook provision.

The results of these problems, in some countries, have been distribution systems which are inadequate, the inability to establish and maintain provision schedules, inadequate procedures for handling procurement, and systems that cannot be afforded or cannot be successfully implemented by existing government agencies.

On the other hand, evaluations of successful textbook provision projects have identified the following common characteristics:

- adequate staffing;
- minimum level of managerial competence;
- operating procedures that were codified, reviewed regularly, and changed as necessary;
- flexibility with regard to procedures, so that management could make changes it considered necessary;
- sufficient stability of staff so that both individuals and the institution could learn from experience; and
- mechanisms to upgrade the professional qualifications of staff as such needs emerged.

An effective distribution system for instructional materials must depend upon reasonably reliable transportation and upon a flow of relatively accurate and timely information from central offices to schools and from schools back

to central offices. Both of these conditions, however, are often difficult to organize and maintain in most developing nations. The difficulty of both transportation and communication in Somalia makes the regular operation of an education distribution system even more of a challenge.

Implementing a workable system within existing human and fiscal constraints is a task which requires careful planning, coordination, and the dedication of much effort to a long period of implementation, trial, and revision. In Somalia, the present system for distributing educational materials is inadequate to meet the demands of the education system. This study examines the needs of the current system and proposes strategies for meeting those needs.

This study was conducted in Somalia at the beginning of the 1986/87 school year. This was a time of great stress for the Ministry of Education as it was striving to deliver the first books of the new Somali primary curriculum to schools, evaluating the consequences of the decisions of major donors to postpone investment in the education sector, and developing a proposal to implement a transitional strategy for immediate assistance to schools, while carrying forward its commitment to long-term educational goals.

This study, therefore, focuses on strategies which provide immediate steps to be taken to improve the distribution system, without requiring major donor funding or reallocation of existing Ministry resources. Long-term strategies for building an effective system for the provision of instructional materials in Somalia are considered and are proposed for implementation when additional external assistance becomes available or when the education sector receives a higher relative priority of government funds.

II. Background

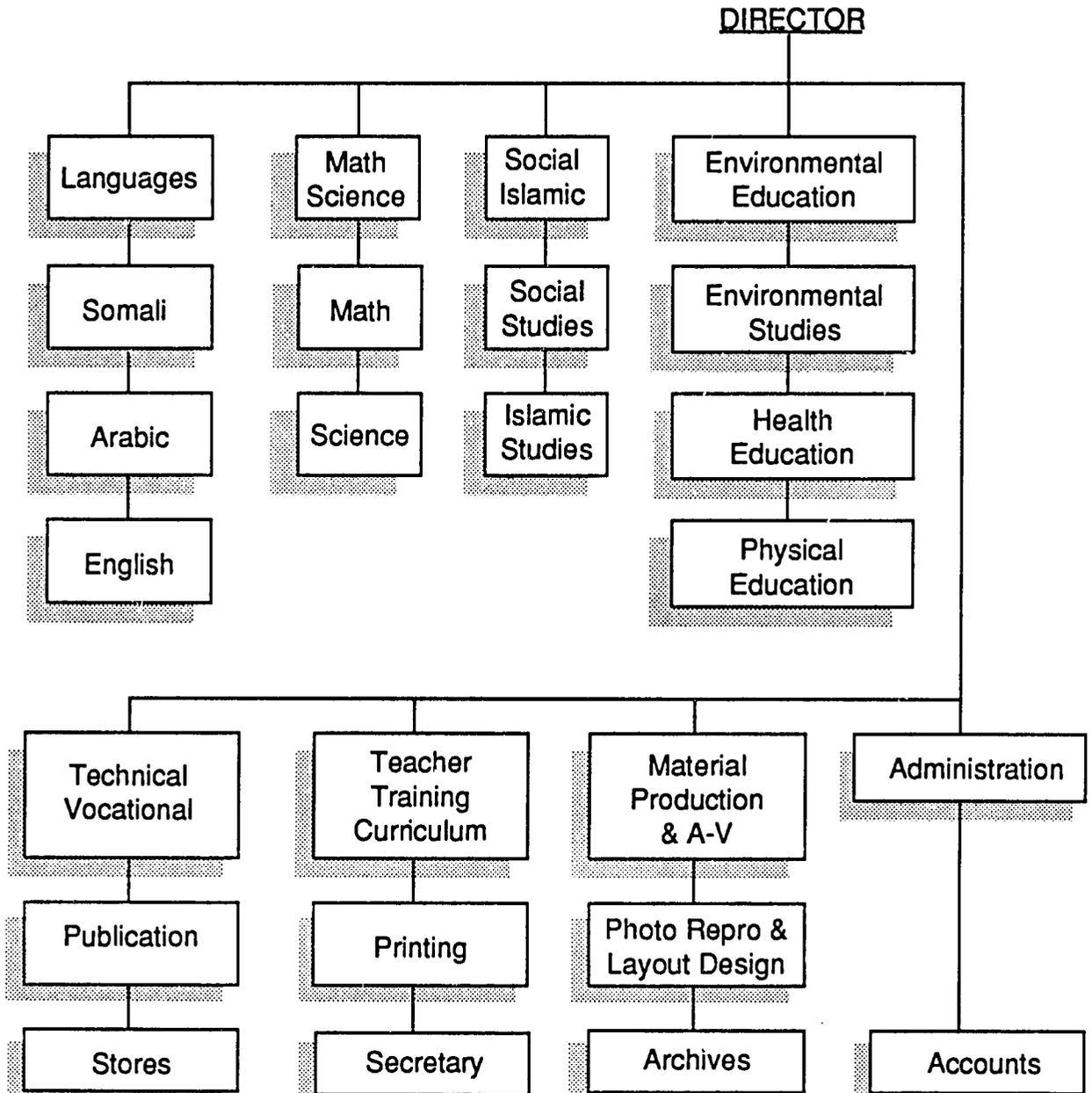
Instructional materials for the Somali education system are designed at the Ministry of Education (MOE) Curriculum Development Centre (CDC). Prototypes produced and tested by CDC are then printed at the Ministry of Information State Printing Agency (SPA). Textbooks printed at SPA are transported to the MOE Central Stores where they are kept until the trucks of the Central Stores are available to deliver them, along with chalk, blackboards, chairs, visual aids, and other materials, to the Regional Education Offices (REO) throughout the country. The key elements in this arrangement are discussed below.

A. Curriculum Development Centre

The CDC was a major component of the Third IDA Education Project. It receives assistance from UNICEF (New Curriculum Project), USAID (Health Education Project) and technical personnel assistance from DANIDA, British Council, UN Volunteer Programme, ALESCO, and the Mennonite Mission. The CDC is organized as illustrated below.

MINISTRY OF EDUCATION

CURRICULUM DEVELOPMENT CENTRE



The CDC received UNICEF support for the New Primary Curriculum (NPC) Project in 1983 and completed the curriculum design in 1984. The NPC was the result of MOE response to declining primary enrollments and was based on three fundamental principles:

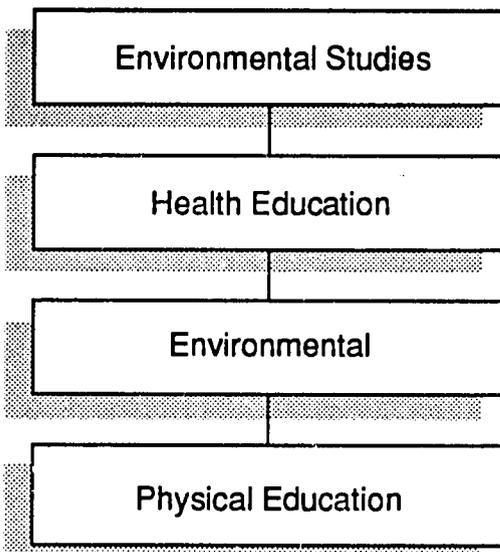
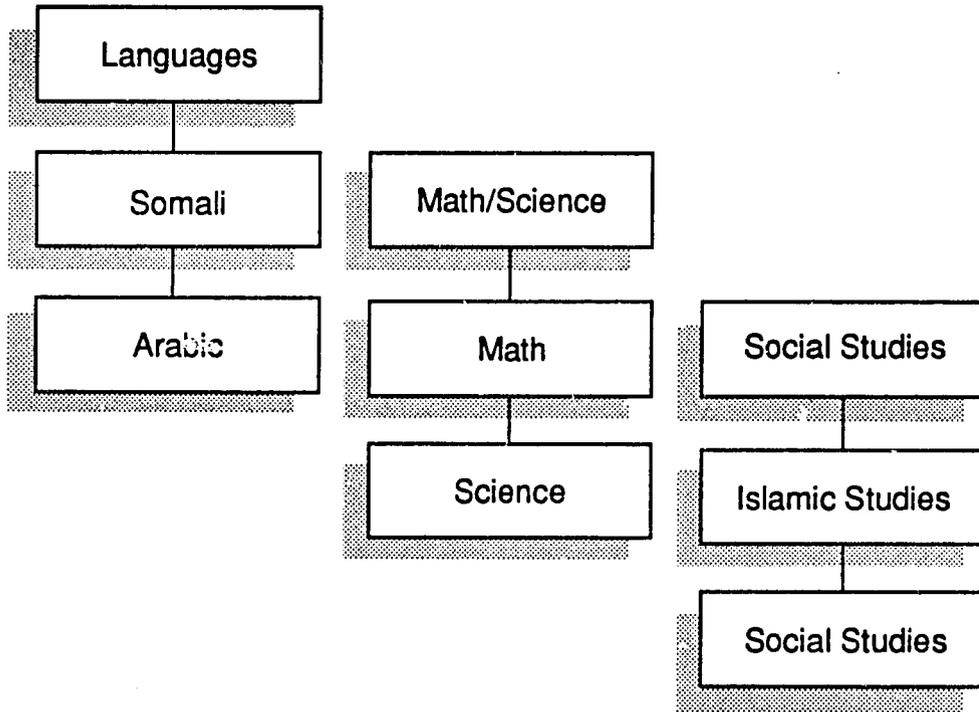
1. Relevance to the environment of the Somali pupil and in particular recognizing the central position of Islam in Somali life;
2. promotion of skills training in opposition to earlier over-reliance on memorization; and
3. stress on the applicability of knowledge with regards to preparing pupils for a useful and productive life in their homes and communities.

The structure of the new curriculum is illustrated on the following page.

Materials planned for the new curriculum include pupil textbooks, teachers guides, audiovisual kits, and supplementary readers. Because of the difficulties inherent in the present national printing system, only the pupils textbooks and teachers guides are currently being produced. The CDC, which has two offset printers and limited stapling equipment, has been producing the Grade 2 teachers guides on an emergency basis in order to get the guides into the hands of the teachers as quickly as possible.

Lessons for the new textbooks are written for each class period. Textbooks are coded by level and week. Teachers guides are coded to the texts and include a reduced copy of the text page along with instructions for teaching the specific lesson. Physical Education does not require a pupil textbook, but teachers guides and a teachers resource book for this subject have been produced for Grade 1 to 4. Environmental Education is first introduced into curriculum at Grade 5.

NEW PRIMARY CURRICULUM



CDC has completed textbooks and teachers guides for Grades 1 and 2. Grades 3 and 4 are scheduled for completion in 1986. A complete schedule of CDC production is provided on the following page.

Prior to undertaking the development of the new curriculum, textbooks were written by part-time contracted personnel (usually secondary teachers). CDC staff were tasked only with proofreading responsibilities. Most of those textbooks (still being reprinted at SPA and distributed to schools) suffer from serious design, content, and methodological weaknesses.

Samples of the new materials are produced by CDC and field tested in schools. After revision, camera-ready copy is produced at CDC and taken to the SPA for mass production. A source of delay in this process is the necessary text composition process at SPA. Proofs of texts composed at SPA must be returned to CDC for correction, and mistakes are frequently found. After all corrections have been made, the text copy is again returned to CDC, where each line is cut by hand and pasted onto a dummy page to prepare camera-ready copy. CDC has prepared a proposal (Appendix Six) for donor funding to purchase the necessary text composition equipment to permit in-house composition, which would eliminate this time-consuming process.

For the school year beginning in September 1986, Grade 1 materials are scheduled to be used in Grades 1 and 2 and Grade 2 materials in Grades 3 and 4. As of late August, however, it was estimated that perhaps only one-third of all primary schools had received Grade 1 textbooks. Grade 1 teachers guides had not yet been printed, nor had Grade 2 textbooks and teachers guides. Grade 2 teachers guides were being printed on the CDC offset presses and bound by CDC staff in an effort to supply them to the teachers.

TEXTBOOK PRODUCTION SCHEDULE

1985	Jan - Feb - Mar Bk 1/Wk 1-18	Apr-May-Jun-Jul Bk 1/Wk 19-36	Aug - Sep - Oct Bk 2/Wk 1-18	Nov - Dec - Jan Bk 2/Wk 19-36
1986	Feb - Mar - Apr Bk 3/Wk 1-18	May-Jun-Jul-Aug Bk 3/Wk 19-36	Sep - Oct - Nov Bk 4/Wk 1-18	Dec - Jan - Feb Bk 4/Wk 19-36
1987	Mar - Apr - May Bk 5/Wk 1-18	Jun-Jul-Aug-Sep Bk 5/Wk 19-36	Oct - Nov - Dec Bk 6/Wk 1-18	Jan - Feb - Mar Bk 6/Wk 19-36
1988	Apr-May-Jun-Jul Bk 7/Wk 1-18	Aug - Sep - Oct Bk 7/Wk 19-36	Nov - Dec- Jan Bk 8/Wk 1-18	Feb - Mar - Apr Bk 8/Wk 19-36

B. State Printing Agency

Final camera-ready copy is provided by CDC to the Textbook Production Unit (TPU) at SPA (an agency of the Ministry of Information). These are later returned to CDC where originals of all texts are stored in a well-organized manner in an air-conditioned area.

TPU/SPA textbook production during the past four years is summarized below.

1982	11 textbooks	407,000 copies
1983	22 textbooks	707,000 copies
1984	14 textbooks	570,000 copies
1985	10 textbooks	550,000 copies
Average annual production 1982-85:		558,500

This production record, when compared with projected textbook needs for the next five years, indicates a serious deficiency of printing capacity at TPU/SPA.

Projected Textbook Requirements (five years)

Primary education (New Reform Curriculum)

Elementary (Grades 1-4)

9 texts x 4 grades x 150,000 copies 5,400,000

Intermediate (Grades 5-8)

10 texts x 4 grades x 150,000 copies 6,000,000

Secondary education (Forms 1-4)

10 texts x 4 x 100,000 copies 4,000,000

Teachers guides

116 texts x 10,000 copies 1,160,000

Supplementary readers

48 texts (4 @ 12 levels) x 30,000 1,440,000

TOTAL 18,000,000

Average annual production needed.....3,600,000

Average annual production 1982-85.....558,000

Present capacity as % of projected needs.....16%

The projected needs for textbooks presented above does not include the textbooks needed for Primary Teacher Training Institutes in Mogadishu, Hargeyza, or at other locations. Likewise, it does not include projections of any textbooks needed for inservice training activities, Nonformal Education, or Technical and Vocational Schools within the system.

It is clear from this projection that serious attention should be given to increasing the productive capacity of TPU/SPA in order to meet future needs of the education system.

When textbooks have been printed, they are transferred to the MOE Central Stores (MOE/CS) in Mogadishu. The system requires TPU/SPA to notify MOE/CS, which then picks up the textbooks and transports them to be stored until distribution. TPU/SPA, in practice, frequently transports the materials in their own trucks to MOE/CS (difficulties with maintenance and parts replacement for the two five-ton trucks frequently cause delays in schedules).

C. Ministry of Education Central Stores

The MOE/CS is operated by the MOE Department of Administration, one of four departments headed by Directors General under the Permanent Secretary and Minister of Education (Appendix One). The Department of Schools (Primary,

General Secondary, and Technical) is responsible for informing the Administration Department of the textbook requirements of the system. Much information on textbook needs is currently gathered by the School Inspectorate. At the same time, REOs, DEOs and even Headmasters often request materials directly from MOE. Inadequate coordination is a key factor which thwarts Ministry attempts to improve the distribution system.

MOE/CS has two five-ton Fiat trucks which are used to deliver educational materials to REOs in all 16 regions of the country, including large amounts of materials for the refugee camps in remote areas of Somalia. Three smaller trucks are used for delivery of materials to schools in the Mogadishu area. Until recently, only one five-ton truck was operating. After the materials are delivered to the REOs, there is no formal MOE system for transporting them to any of the 82 District Education Offices (DEO) or to the 713 elementary schools, 695 intermediate schools, and 79 general secondary schools in the system (Appendix Two). REOs report that their fuel allowance is not adequate for distributing the number of texts delivered to their stores, and that the stores themselves are frequently not physically adequate. REOs must often rely upon transportation provided by other government agencies, donor agencies, and private voluntary organizations operating in the area. Delivery of materials may be dependent upon the initiative of the headmaster, or other community members, in organizing transportation. The reality of road conditions and distances in the country results in irregular deliveries in remote areas. Those areas of course also have the fewest resources for distributing materials from the regional level once they have been received.

Storage of materials at MOE/CS is far from ideal. Materials are not boxed or protected in any way. They are stacked directly on the floor and

materials on the bottom are subject to water damage. Dust and dirt blown into the area through open doors or open wall vents add to the damage. Many items fall from the high stacks or are further damaged while being moved or loaded. MOE estimates that perhaps 25% of materials are lost through damage while in the distribution system. Meticulous receipts are kept by MOE/CS staff of materials delivered, and these are entered into large ledgers at the CS office. That information, however, does not regularly flow to the rest of the system and other departments may not be aware of what has been delivered and what has not. The Department of Administration was able to provide a list of the total number of textbooks printed by TPU/SPA from 1982 to 1985 (Appendix Three) and a summary of textbooks received, distributed, and on-hand from 1985 to 1986 (Appendix Four). These summaries do not, however, indicate when or where the textbooks were delivered, nor the subject, level, or number of textbooks delivered to each region, district, or school during those years.

The August 1985 study, Enhancement of School Quality in Somalia, noted the following factors contributing to the shortcomings of the existing MOE distribution system:

- lack of transportation facilities,
- lack of fuel for transportation,
- absence of a systematic procedure for distribution,
- lack of trained personnel to handle the distribution system,
- lack of experience and expertise among REOs and DEOs in the distribution of textbooks,
- the enormous quantities of textbooks involved,
- lack of reliable data on textbooks requirements, and
- lack of clear delegation of responsibilities.

The following section of this study examines strategies for improving the distribution system by eliminating or reducing the effects of these factors on the operation of the system.

III. Strategies for Improving the Distribution of Instructional Materials

1. Strategies for the long-term improvement of the distribution system.

Improving the distribution of instructional materials is an area of immediate concern to MOE, as well as to REOs, DEOs, and individual schools. It is of interest primarily because of the strong commitment of both the GSDR and the MOE to expanding access to education to rural areas of the country, thereby raising the national level of literacy and numeracy. MOE educational statistics consistently reveal that rural schools have far fewer textbooks than urban schools. MOE reports that a recent survey of primary schools in two regions indicated that 90% of all primary schools responding to the survey had no textbooks at all in their stores, while only 10% of urban area primary schools included in the survey reported having no textbooks.

MOE has continued to make improvements in the existing distribution system to support its commitment to providing educational opportunity throughout the country. As in other areas of immediate need, such as teacher training and textbook production, the economic realities of capital and recurrent expenditures have constrained attempts at improvement. If education were to receive additional government funds, or if it were to become a higher priority for multilateral and bilateral donor funding, the following long-term investments might be considered:

- A. Creation of a central MOE administrative unit to supervise all aspects of producing and providing instructional materials.

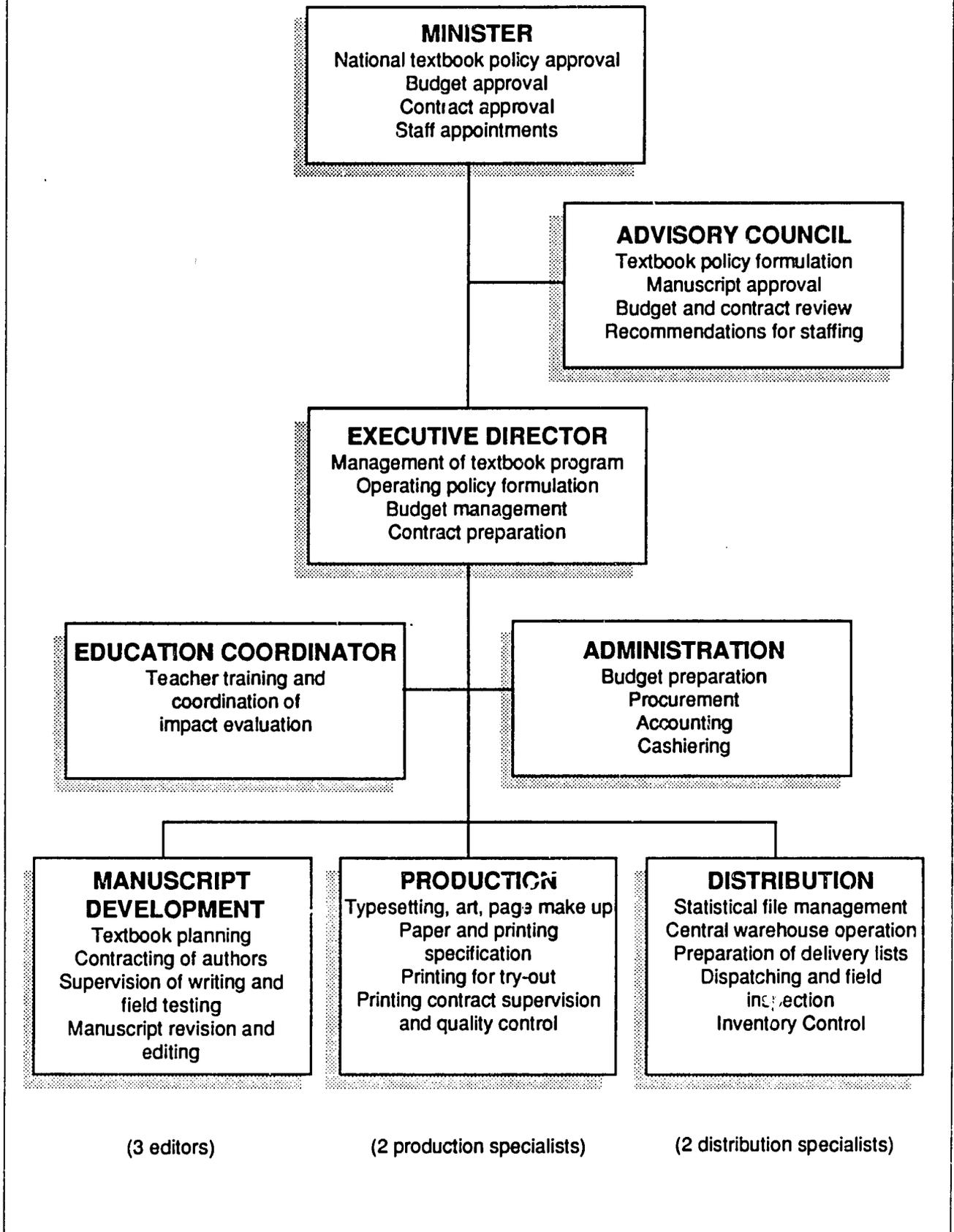
The most effective coordination of all activities involving instructional materials would be achieved through the creation of a central MOE unit responsible for all aspects of providing instructional materials throughout Somalia. A typical organization chart for such a unit is illustrated in the following figure. The advantages of coordination and accountability inherent within such a system are obvious. Although the creation of such a unit could result in a greatly improved system, there are serious objections to this adopting this solution at this time:

- The process of creating an additional MOE administrative unit would require a lengthy period of analysis, preparation, and implementation. Immediate improvements in the distribution of materials is required as the MOE is now implementing the first levels of the new reform curriculum.
- The costs of creating a new department and successfully implementing and operating it would be beyond the current fiscal capacity of the MOE without drastic reallocation of existing funds, which would result in slowing or halting the progress of other MOE programs.
- A drastic reorganization of MOE personnel would result in an immediate loss of momentum within the ministry at the very time it is most needed.

- B. The expansion of TPU/SPA facilities and/or the construction of decentralized MOE printing facilities.

The expansion of TPU/SPA facilities and/or the construction of MOE printing facilities at other decentralized locations (such as Hargeyza in the North-West Region) could greatly contribute to the improved distribution of materials. This is clearly a priority and will become a necessity at some time in the future when the system expands to offer access to even more areas

TEXTBOOK AGENCY ORGANIZATION CHART



of the country--and when the number of schools offering incomplete levels decreases. At the present time, however, the investment required to undertake this step would not immediately affect the overall performance of the distribution system nor would it remedy the systemic deficiencies now resulting in few materials reaching schools in most areas of the country.

- C. The purchase of additional MOE vehicles for distribution of instructional materials.

MOE/CS currently operates two five-ton Fiat trucks, and 5 smaller Fiat (N-3 and N-110) trucks. No information on annual operating costs is currently available, but frequent repairs are reported to be both expensive and time-consuming. One of the large five-ton trucks, necessary for deliveries of materials to REOs, has only recently been repaired and returned to service. Tire replacement is frequent and expensive (c. 40,000 S.S. per tire). The purchase of two, or possibly three, additional five-ton trucks could increase MOE capacity to deliver materials to remote regions on a regular basis. This should certainly be considered as a long-term goal, but for the immediate improvement of the system, constraints of capital and recurrent budget effects must be considered before recommending purchasing additional vehicles for distribution of materials. The attention of the MOE--and the limited resources now available--should be focused on the systemic problems in the distribution system before considering the purchase of additional vehicles.

- D. The construction of additional storage facilities at MOE/CS and REOs.

MOE/CS should be expanded or additional facilities constructed and additional warehouse equipment (such as forklifts and materials for boxing of

textbooks) would improve the system. These plans should be taken as long-term goals of the system. For immediate improvement, they would not contribute to the rapid delivery of materials to schools on a scale to justify sufficiently the costs at this time. Similarly, the costs of constructing adequate storage facilities at REOs would be difficult to justify in terms of immediately making textbooks available in schools throughout the country.

2. Conclusions of systemic deficiencies for immediate improvement of the distribution system.

From the analyses presented in the previous sections of this study, it can be concluded that the major deficiencies in the present distribution system (contributing to the present shortage of instructional materials in classrooms in many areas of the country) are of two types:

A. Inadequate information flow. Although the agencies and departments within the existing distribution system maintain records of their activities, these bits of information do not adequately inform the actions and responses of the complete system. The result is that the end-users of the system--the school classroom teachers--do not know when instructional materials will arrive, which materials will arrive, if they will arrive at all, or how to effectively initiate a procedure to ensure that the needed materials will be provided. Two MOE workshops on textbook distribution (December 1985) concluded that there existed no adequate system of record-keeping or inventory for REOs, DEOs, or Headmasters. The report on these workshops (Appendix Five) concluded that the absence of this information made it difficult therefore to estimate the books needed (subject, level, or number) or to forecast future

needs for books. A committee, composed of five workshop participants, conducted a sample survey of ten schools, five in Mogadishu and five in regions outside the city. This survey found that students did not have textbooks in most classes, especially in the lower primary grades. In some classes, the teacher had a single copy of a text--and it was learned that the teacher himself had purchased the book in the market.

B. Inadequate distribution system beyond the regional level. The existing distribution system, even though faced with significant problems of inadequate printing capacity, storage facilities, transportation, coordination and information flow, has been able to provide instructional materials--often at irregular intervals--to the regional level. Once delivered to the regional level, another set of problems frequently prevents the effective delivery of materials to the classroom. REOs report that storage facilities at that level are inadequate, resulting in further loss of materials through water damage and destruction by insects, such as white ants. The delivery of materials from REOs to DEOs raises another barrier, as fuel allowances are inadequate and REOs must often rely on other government agencies, private voluntary organizations, multilateral or bilateral donor agencies, or the initiative of DEOs or individual schools to organize transportation--if the DEOs or schools have received information that materials are then available at the REOs. The MOE workshop on textbook distribution (Appendix Five) concluded that, although there were books in some of the regional stores, they often did not reach the districts. The MOE/CS has recently undertaken the delivery of new reform curriculum textbooks to all regions in an effort to provide these new and effective learning materials to all primary schools in Somalia. It may be

concluded, however, that many of these textbooks will not reach the students for whom they were intended.

3. Strategies for immediate improvement of the distribution system.

The strategies proposed in this section for immediate improvement of the system for distributing instructional materials are based upon a number of critical assumptions. Any strategy considered must:

- be implemented within the existing administrative framework of the MOE and be supported by MOE policy;
- be feasible within the constraints of existing MOE resources and not require major external assistance or reallocation of resources;
- result in immediate reduction of performance demands upon the current distribution system, rather than increase such demands;
- serve as a framework for future expansion and improvement of the distribution system as additional resources become available (and as the education system expands after achieving its present objectives of qualitative improvement);
- address the two areas of immediate concern identified above: inadequate information flow and inadequate distribution beyond the regional level; and
- support the current MOE initiative for a transitional integrated strategy to implement the new reform curriculum in primary schools.

Based upon the preceding analyses and the assumptions listed above, the following recommendations are made for the immediate improvement of the distribution of instructional materials:

- Reduce the performance demands now made on the existing distribution system by initiating a policy of providing class-sets of all instructional materials. This policy will result in an immediate reduction of:
 - printing time and costs,

- required storage, record-keeping, and transportation costs, and
- replacement costs of materials lost to school dropouts.
- Improve the information flow within the distribution system by utilizing existing MOE computer capacity to collect information on school supplies of instructional materials, forecast needs for specific materials, and generate and maintain a notice/receipt system of distribution.

This system would result in:

- the creation of a data base of instructional materials usage throughout the system,
- MOE capacity to identify specific material needs by subject and level for all schools (eliminating the need for distribution of all materials to all schools each school year),
- MOE capacity to notify schools of dates of scheduled deliveries of materials and items and quantities included, and
- MOE capacity to access records of past deliveries of materials to schools and to provide that information to all units within the distribution system for planning purposes.
- Bring the transportation of instructional materials closer to the schools by delivering materials to the DEOs. This would result in:
 - avoiding the distribution system bottleneck now identified at REO level,
 - avoiding the costs of constructing additional storage facilities at REOs, and
 - placing the instructional materials closer to the schools (with bulk and weight reduction due to class-set use of materials, thus making the logistics of transportation to schools less difficult).

These strategies are discussed in greater detail in the following section.

IV. Implementation Strategies for Improving the Distribution of Instructional Materials

This section presents a tentative action plan for implementing the strategies for immediate improvement of the distribution system as discussed in Section III of this study. It should be emphasized that details of this implementation will be modified during the planning and implementation, based on priorities and experience within the MOE.

1. Implementation of a class-set policy for instructional materials.

A. Policy Promulgation. MOE should promulgate the policy of providing a class-set of all required instructional materials for each subject taught at each grade level at existing schools. MOE Planning and Statistics should be utilized to provide information on classes taught at existing schools and current enrollment data, as well as providing--in the future when this information is collected on school survey forms--the required information regarding textbooks and other materials on hand for each school.

B. Procedures definition. This information on enrollment and texts should be supplied to all agencies involved in the production and distribution of instructional materials, the Department of Administration, the Department of Schools, and the Department of Education Development. Procedures for distribution of class-sets and collection of data on all instructional material should be defined by MOE. As the Office of Planning and Statistics collects school statistics in October and November of each year, there is adequate time for planning and scheduling of materials delivery dates prior to the beginning of the next school year in September of the following year.

DEOs (and the schools within each district) can receive the computer-generated notice of delivery with adequate time to arrange transportation of the materials from DEO to school.

MOE school statistics should be analyzed to evaluate those schools reporting no storage facilities (MOE data collection forms may be revised to collect more detailed information in this area). UNICEF should be involved in this effort as it has already provided a number of primary schools with storage boxes and plans to expand this program.

2. Design and implementation of a computer-based system of instructional materials distribution.

A. System Design. Technical assistance should be requested to assist in the design of a computer-based system which would collect data on needs of individual schools and generate notice/receipt forms for the delivery of class-sets of instructional materials to DEOs. This assistance should include the coordination of concerned MOE personnel with the Departments of Planning and Administration, the Inspectorate, REOs, DEOs, and Headmasters, as well as the training of Planning and Statistics personnel in the requirements and operation of the system.

B. Trial and revision. A workshop should be held following the design phase and coordinated with the technical advisor assisting with the system design. This workshop should bring together all MOE agencies involved in the distribution system as well as field staff who will be involved in the distribution system and result in a trial of the system in selected areas.

Revisions in the design should result from this trial.

C. Implementation of the System. All MOE agencies responsible for the distribution of instructional materials will be responsible for the training of staff prior to the implementation phase. Lessons learned during the trial phase should be disseminated within the MOE and any revisions carefully coordinated across agencies.

3. Delivery of instructional materials to DEO level.

A. Planning objectives. The Department of Administration, in collaboration with the other MOE agencies involved with distribution, should plan objectives for the system of DEO-level deliveries. This effort should be coordinated with the trial of the computer-based record-keeping system in limited regions (and possibly with the trial implementation of the transitional strategy for improving primary education).

B. Procedures definition. The Department of Administration, in collaboration with the other MOE agencies involved and the technical advisor assisting in the development of the computer-based record-keeping system, should define the procedures for delivering of class-sets of instructional materials to the district level. This process should be based upon the notice/receipt system designed by the technical advisor and be coordinated for delivery of all materials prior to school year start-up in September.

C. Trial of delivery system. The DEO-level delivery system, informed by and coordinated with the computer-based record-keeping system, should be trialed within selected regions and adjustments made in the system as necessary. The delivery system must depend upon the information available from the MOE computer-based system and can be expected to improve as the

quality of that information improves. The delivery system can be expected to become more efficient as:

- It receives more accurate information concerning the grades taught at each school within districts;
- It receives more accurate information concerning the current enrollments within each school and each grade; and
- The notice/receipt system generates accurate information concerning which texts are needed at each school.

D. Implementation of the delivery system. The Departments of Administration, Schools, and Education Development should coordinate the implementation of the delivery system following the trial in selected regions. It will be the responsibility of these departments to ensure that all personnel understand the operation of the system and are prepared to implement the new procedures.

V. Estimated Costs of Recommended Strategies for Improving the Distribution System

1. Policy Implementation for providing class-sets of all instructional materials.

Implementation of this policy will result in an immediate savings due to the reduced number of materials required each school year. Just as significantly, it will result in an immediate reduction of the performance demands placed on the production and distribution agencies. The savings realized as a result of not attempting to provide all schools with all texts every year should offset the additional fuel costs of delivering materials to the DEO level.

MOE statistics gathered to date on storage facilities in schools suggest that many schools in Somalia have no storage facilities. This indicates that it may become necessary to provide basic storage facilities to schools. This could be done most practically through the provision of simple metal lockers. UNICEF has undertaken a program in Somalia of supplying basic instructional packages to primary schools in such storage lockers and has indicated an intention to expand that program. MOE should request the expansion of the UNICEF program to all primary schools in support of the transitional strategy for improving primary education now under development.

2. Development of a computer-based record-keeping system for the distribution of instructional materials.

The following are estimated costs for the development of a computer-based record-keeping system for the distribution of instructional materials as described in the preceding section of this study.

- a. Donor Inputs

- Personnel

- 1 Technical Advisor for 1 month

- Somali support staff (typists, translators)

- Materials and Equipment

- Computer software and diskette supplies

- Other

- Travel (1 R/T airfare from the U.S. to Somalia)

- Transportation

- Per diem for technical advisor

Postage and telephone

Duplication costs

b. Inputs by Somali Government

Personnel

10 staff from Administrative, Schools, and Education

Development Departments

Facilities

Office space for technical advisor

Equipment and Materials

Computer equipment

Other

Administrative support costs

Vehicles for technical assistant and operating costs

The recurrent costs of operating the computer-based system for collecting data on instructional materials in schools and generating notice/receipt forms for materials delivery should be covered by the annual recurrent budgets of the MOE. The additional data can easily be collected via the MOE School Data Collection Form now being used (Appendix Seven). The additional notice/receipt form would be generated once annually and distributed and collected through existing MOE channels.

3. Workshop for MOE staff to coordinate and implement the strategies for immediately improving the distribution system.

The following are estimated costs for providing a workshop for MOE staff to coordinate and implement the strategies described in this study and to be

further developed by MOE staff and the technical assistant provided by donor funding.

a. Technical Assistance

Personnel

1 Technical Advisor for 6 days (concurrent with 2. above)

b. Estimated Workshop Expenses

Per Diem

Number of participants: 47

Number of days: 6

26 participants from outlying regions

Meals 300 So. Sh.

Lodging 100

Incidentals 100

500 So. Sh. x 6 x 26 78,000

11 participants from Mogadishu

100 So. Sh. x 6 x 11 6,600

10 participants from MOE staff

500 So. Sh. x 6 x 10 25,000

TOTAL 109,600

TRAVEL

17 participants from outlying regions
(not requiring air travel)

1000 So. Sh. x 17 17,000

9 participants from outlying regions (requiring air travel)	
5000 So. Sh. x 9	45,000
21 participants from Mogadishu	
100 So. Sh. x 21	2,100
TOTAL	64,100
GRAND TOTAL	173,700

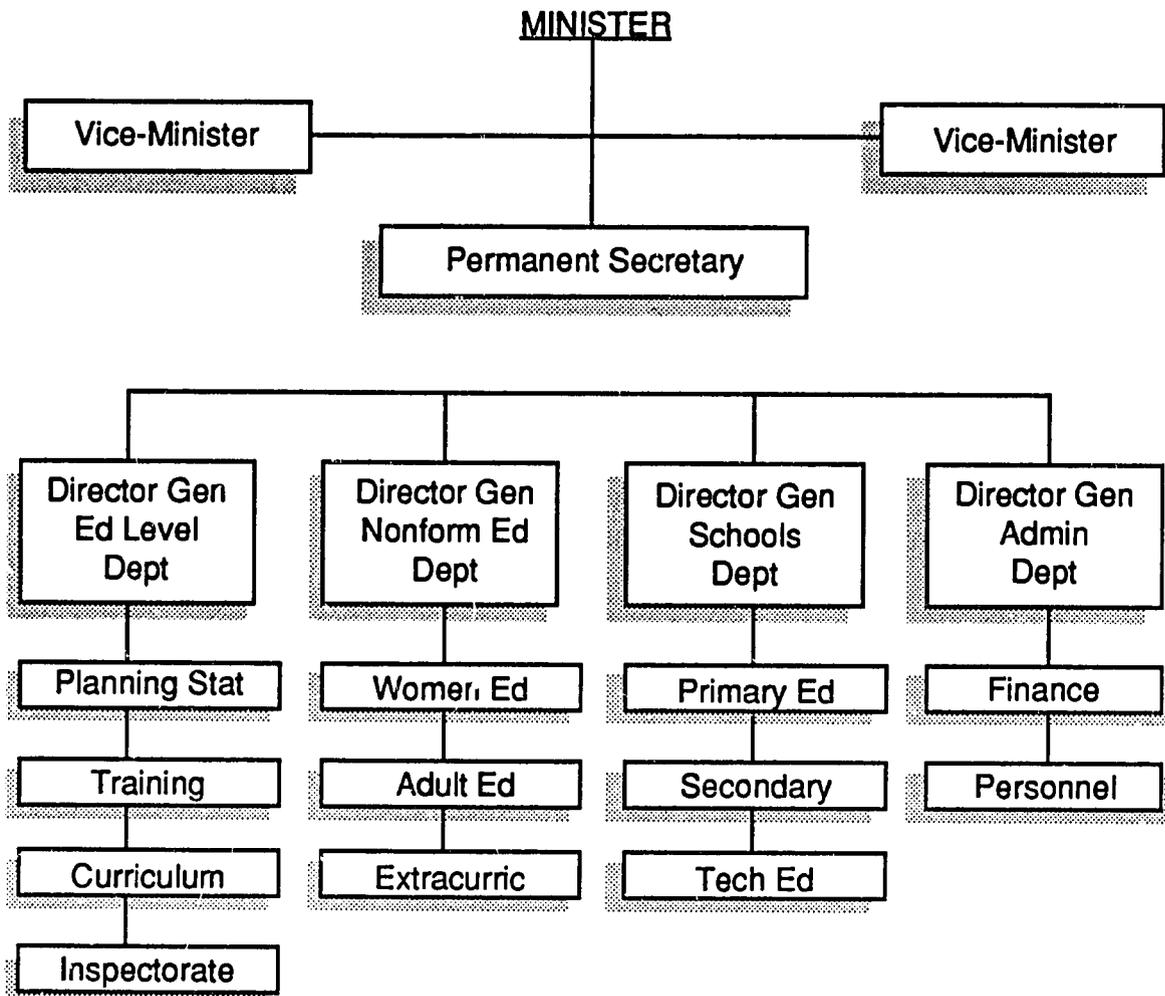
USAID Mission/Somalia has indicated support for these activities to be provided through the CIPL funds program. This support should be requested as the above activities can be scheduled and further defined by MOE.

APPENDIX ONE

MINISTRY OF EDUCATION ORGANIZATIONAL CHART

ORGANIZATIONAL CHART

MINISTRY OF EDUCATION



APPENDIX TWO
NUMBER OF SCHOOLS BY REGION AND DISTRICT

REGION	DISTRICT	ELEM	SCHOOLS	INT	SCHOOLS	SECONDARY
W/Galbeed	Hargeysa	28		21		10
	Gabiley	25		16		1
	Doorama	22		15		3
	Seylac	7		2		-
	Lughaye	5		2		-
	Berbera	3		3		1
Togdheer	Burco	13		11		5
	Buuhoodle	8		5		-
	Oodweyne	6		1		-
	Sheekh	6		2		1
Sanaag	Ceerigaabo	11		10		2
	Ceel Afweyn	4		4		1
	Badhan	9		7		1
Bari	Boosaaso	5		4		1
	Qardho	8		7		1
	Caluula	7		6		-
	Qandala	2		2		-
	Iskushuban	9		8		-
	Bandar Beyla	2		2		-

Nugaal	Garoowe	4	4	1
	Taleex	1	1	-
	Eyl	6	4	1
	Laascaanood	6	7	1
Mudug	Gaalkacyo	5	5	1
	Hobyo	3	2	-
	Xarardheere	6	4	-
	Jariiban	3	3	-
Galgaduud	Dhuusamareeb	4	5	1
	Ceel Buur	8	9	1
	Ceel Dheer	5	5	-
	Gaabuudwaag	2	-	-
	Cadaado	4	4	-
Hirraan	Beled Weyn	29	26	2
	Buulo Burto	11	9	1
	Jalalaqsi	9	5	-
Sh/Dhexe	Jowhar	38	31	3
	Balcad	12	10	1
	Cadale	44	4	1
	Addan Yabaal	4	3	-

Banaadir	Wadajir	7	7	4
	Waaberi	4	4	2
	Xamar Jab Jab	2	2	2
	Hodan	8	8	5
	Hawlwadaag	6	6	5
	Wardhiigley	6	7	1
	Boondheere	4	4	2
	Xamar Weyne	2	2	1
	Shangaani	1	1	1
	Cabdulcadiis	2	2	1
	Shibis	3	3	2
	Yaaqshiid	4	4	2
	Kaaraan	3	3	1
Sh/Hoose	Marka	37	32	3
	Afgooye	32	29	5
	Wanleweyn	10	7	1
	Qoryooley	27	19	1
	K/Waarey	7	5	3
	Sablaale	3	3	3
	Daraawe	5	5	2
	Bay	Baydhabo	19	16
Buur Hakaba		12	11	1
Qansaxdheere		5	4	1
Diinsoor		10	10	1

Bakool	Xuddur	3	2	1
	Waaqid	4	3	-
	Ceel Barde	3	3	-
	Yeed	1	-	-
	Tiyeeglow	3	3	-
Gedo	Garbahaarey	6	5	1
	Luuq	10	9	1
	Baardheere	10	9	1
	Beled Xaawo	1	1	-
	Ceel Waaq	3	3	-
	Doolow	1	1	-
J/Dhexe	Bu'aale	9	7	-
	Jilib	29	25	2
	Dujuuma	3	3	3
	Saakow	12	8	-
J/Hoose	Kismaayo	13	14	4
	Jamaame	27	26	1
	Badhaadhe	9	7	-
	Afmadow	3	3	1

TOTAL 82 Districts 713 Elem 596 Int 108

Source: Statistics of Education 1983/84, MOE Planning Department.

APPENDIX THREE
SUMMARY OF TEXTBOOKS PRODUCED (1982-85)

Daabacaadda Buugaagta (1982-85)

Laga soo bilaabo bishii May 1982, buugaagta la daabacay waxa ay dhanyihiin. 60 buug. Buugaagtani waxa ay u kala baxaan: 18 buug D/dhexe, 32 buug D/sare, 10 buug Manhajka Cusub gaar ahaanna D/hoose iyo laba buug oo loo daabacay dugsiyada Mihnadaha.

D/Dhexe:

<u>F.5aad</u>	<u>T.buugta</u>	<u>Sanadka</u>	<u>F.6aad</u>	<u>T.buugta</u>	<u>Sanadka</u>
1. Carabi	45,000	1983	1. Soomaali	36,000	1983
2. Soomaali	45,000	1983	2. Carabi	36,000	1983
3. Saynis	45,000	1982	3. Diin	36,000	1983
4. Juqraafi	45,000	1982	4. Saynis	36,000	1983
5. Taariikh	45,000	1982			
6. Diin	45,000	1983			

<u>F.7aad</u>	<u>T.buugta</u>	<u>Sanadka</u>	<u>F.8aad</u>	<u>T.buugta</u>	<u>Sanadka</u>
1. Carabi	25,000	1982	1. Carabi	30,000	1982
2. Xisaab	25,000	1982	2. Diin	30,000	1982
3. Diin	25,000	1983	3. Xisaab	30,000	1982
4. Soomaali	25,000	1984	4. Soomaali	30,000	1984
5. Saynis	20,000	1986			

D/Sare:

<u>F.9aad</u>	<u>T.buugta</u>	<u>Sanadka</u>	<u>F.10aad</u>	<u>T.buugta</u>	<u>Sanadka</u>
1. Ingiriisi	60,000	1982	1. Ingiriisi	110,000	1983-84
2. Juqraafi	50,000	1984	2. Taariikh	50,000	1983
3. Bayooloji	50,000	1984	3. Diin	50,000	1983
4. Kemistari	50,000	1984	4. Carabi	50,000	1983
5. Suugaan	50,000	1984	5. Kemistari	50,000	1984
6. Carabi	50,000	1985	6. Juqraafi	50,000	1984
			7. Suugaan	50,000	1984
			8. Bayooloji	50,000	1984

<u>F.IIraad</u>	<u>T.buugta</u>	<u>Sanadka</u>	<u>F.IIraad</u>	<u>T.buugta</u>	<u>Sanadka</u>
1. Diin	30,000	1983	1. Diin	15,000	1983
2. Kowloot.	30,000	1983	2. Juqraafi	15,000	1983
3. Bayooloji	30,000	1983	3. Kemistari	65,000	1983
4. Juqraafi	30,000	1983	4. Suugaan	15,000	1983
5. Suugaan	50,000	1983	5. Taariikh	15,000	1983
6. Fisigis	50,000	1984	6. Bayooloji	65,000	1983
7. Ingiriisi	50,000	1985	7. Carabi	50,000	1983
8. Xisaab	50,000	1985	8. Fisigis	50,000	1984
9. Carabi	50,000	1984	9. Ingiriisi	50,000	

MANHAJKA CUSUB:

I Hoosy	1. Xisaab	50,000	1985
	2. Soomaali	50,000	1985
	3. C/bulsho	50,000	1985
	4. Carabi	50,000	1985
	5. Diin	50,000	1985
	6. Saynis	50,000	1985
	7. W/casf.	50,000	1985
	8. C/degaanka	20,000	1986

D/MIHNADAHA

1. Scientific English	10,000	
2. English for building	10,000	1986

P.N.

Manhajka Cusub lamarka 7aad , buugga Waxbarashada Ganfimaadka
 ay kuma oeroon Bakhaarka Wasaaradda. Buuggan waxa lagu soo daabacay
 dalka debeddiga, gaar ahaanna dalka Kiiniya sidaa awgeed waxa uu
 yaalaa bakhaarka X.H.Manaahijta.

Ismaaciil Cali Sarreeye
 Madaxa Qaybta Madbacadda & Farshaxanka ee X.H.M

APPENDIX FOUR

**SUMMARY OF TEXTBOOKS RECEIVED BY MINISTRY OF
EDUCATION, DISTRIBUTED, AND ON HAND (1982-86)**

JAMHUURIYADDA DIMOQRAADIGA SOOMAALIYA
WASAARADDA WAXBARASHADA IYO BARBAARINTA

KUTUBTA DUGSIYADA SARE EE LA DAABACAY 1982 - 1986 WAA SIDA HOOS KU GORAN

Mandada	IX			X			XI			XII		
	Galay	Baxay	Haraa									
Carabi	45000/83	2720	<u>42200</u>	50000/83	50000	-	49060/84	28740	<u>20320</u>	49000/83	41180	<u>7820</u>
Diin	-	-	-	50000/83	50000	-	30000/83	30000	-	15000/83	15000	-
Juqraafi	42500/84	28730	<u>13770</u>	46000/84	19000	<u>27000</u>	30000/83	30000	-	15000/83	15000	-
English	60000/82	60000	-	47000/85	31535	<u>15465</u>	44600/85	25130	<u>19470</u>	48360/	27420	<u>20940</u>
Bayoloji	50000/84	50000	-	46300/84	19500	<u>26880</u>	30000/83	30000	-	38000/85	22430	<u>15770</u>
Kimistri	46000/84	25950	<u>20050</u>	50000/84	28260	<u>21740</u>	30000/83	30000	-	48000/85	13200	<u>34300</u>
Fisikis	18640/86	-	<u>18640</u>	32700/84	-	<u>32700</u>	49500/84	41580	<u>7920</u>	44600/84	37440	<u>8160</u>
Taariikh	-	-	-	50000/83	50000	-	-	-	-	15000/83	15000	-
Suugaan	50000/84	50000	-	47000/84	31000	<u>16000</u>	48000/83	35400	<u>12800</u>	15000/83	15000	-
Xisaab	-	-	-	-	-	-	47100/85	14970	<u>32130</u>	20000/	-	<u>20000</u>

JAHUURIYADDA DIMOQRAADIGA SOOMAALIYA
WASAARADDA WAXBARASHADA IYO BARBAARINTA

KUTUBTA FASALLADA Iaad (KOOWAAD) WAXB. ASAASIGA EE LA DAABACAY

Maadada	I		
	Galay	Baxay	Haraa
Saynis	47200/86	19090	28110
Diin	48000/86	12320	35680
Soomaali	49000/85	38000	10800
Xisab	48300/85	35470	12870
Cil/Beesha	48900/86	22860	26040
Carabi	48760/85	28680	20080

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APPENDIX FIVE
REPORT OF MINISTRY OF EDUCATION WORKSHOP
ON TEXTBOOK DISTRIBUTION

REPORT ON TEXTBOOK DISTRIBUTION IN SOMALIA
(Draft - Submitted by M. I. Berger, I.E.E.S.)

I. INTRODUCTION

This report is the result of a workshop that was organized by I.E.E.S. and supported by C.I.P.L. funds.

The discussions and reports given at the meetings and the evidence presented all point to one conclusion: the educational system in Somalia is at a critical stage and the unavailability of textbooks for school children will seriously affect the ministry's plan for radical qualitative improvement. The number of children attending school is decreasing and those children who are attending are not receiving adequate education materials. If the quality and quantity of education is not improved it will have serious consequences for the nation's future. Under present conditions not only is the national policy of universal education being thwarted but even for those attending school there are no adequate facilities.

This report explores only one important aspect of the education situation - textbooks. Research has consistently shown that one of the most important variables in education in developing countries is textbooks. For example, a World Bank report reviewing the literature on studies done in twelve less industrialized countries on the relationship between textbook availability and academic achievement concluded that the availability of books is the most consistent factor predicting academic achievement. Textbook production and distribution is therefore central to any improvement of the nation's educational system.

In December, 1985, two workshops on material distribution were held. This report grows out of those conferences. There has long been the recognition that the production and distribution of textbooks was a serious challenge to the nation's educational system. Moreover, educators familiar with the system at the national and local level knew that something had to be done to improve the textbook situation. Often textbooks are inaccessible to students. These workshops were organized with the purpose of bringing together educational officers to see how to improve the situation.

The first phase of the project was a four-day meeting held on Dec. 16, 17, 18, and 19. During these four days a planning committee comprised of representatives from CDC, Central Inspectorate, Planning Department, State Store and Book Production Unit met to design the main workshop for regional educational officers. The first task the planning committee set for itself was to find out what was actually going on in textbook distribution. Reports were given by representatives from CDC, State Store, Printing, Central Inspectorate, and the Department of Planning, from these reports and the data gathered. It became evident that there was no adequate systematization of the distribution process, transportation was a major problem, there was no effective way of holding educators' accountable for distribution, and there was insufficient information about the distribution system (e.g., how many regions and districts had storage facilities and how many children had received books).

The second workshop was held on Dec. 22, 23, 24. The planning committee set an agenda for the workshop. The participants were asked to examine three areas: production and printing of textbooks, storage, and distribution.

On the basis of their own experience the regional education officers were to report on actual conditions and give recommendations. The reports given by R.E.O.'s representing five regions (Bay, Hiraan, Lower Shabelle, Banadir, Middle Shabelle) conformed to the hypotheses and analyses made earlier by the planning committee.

The most remarkable result of the workshop was the change in belief amongst the participants on one basic assumption about textbook distribution. The conventional belief had been that the reason textbooks have not been distributed was a lack of resources, most particularly, in transportation and fuel. Although this undeniably is one constraint in textbook distribution, it turns out to be, upon closer examination, not the only problem. An equally serious problem, the participants realized, is the lack of an efficient and effective infrastructure to administer the resources available.

Although material resources are needed (storage facilities, transportation), the fact is that presently there are textbooks that have been produced and printed that are not in the hands of students. The CDC is anxious that the new curriculum materials are printed and distributed. What books have been printed are in unfurnished storerooms in Mogadishu and other regions.

Five committee members conducted a sample survey in five schools in Mogadishu and five schools in regions outside the city, they found that in most classes, particularly in lower primary, the children did not have books. At best the teacher had one copy and often that copy was purchased by the teacher on his/her own initiative. The acceptance of this condition, with teachers copying the text onto the board and students then copying this material into their notebooks, can seriously effect the quality of education because students often do not understand what they are writing.

II. FINDINGS AND RECOMMENDATIONS

1. Finding:

At present the country does not have the printing capability to produce the basic textbooks needed in schools.

1. Recommendation:

- a. Methods should be found to increase textbook production at State Printing.
- b. The printing capacity of CDC should be increased.

2. Finding:

Although there are books in some of the regional stores, these books often do not reach the districts. As a consequence, there are presently textbooks in regional stores while students do not have any books.

2. Recommendation:

In the distribution of texts from State Store to the schools the delivery should be made directly to the district, especially if the route goes directly from Mogadishu to the district before reaching the regional office.

3. Finding:

Many districts and regions have inadequate storage facilities. Books are often found lying on floors in empty rooms and rapidly deteriorating. These rooms have no shelves. Headmasters also do not have storage facilities.

3. Recommendation:

Resources should be found to provide storage cabinets and shelves for textbooks.

4. Finding:

There is no adequate system of record-keeping or inventory by headmasters or regional and district officers. It is therefore difficult to make estimates of books needed or to forecast future needs for books.

4. Recommendation:

Create a textbook register which will allow for accounting of the books received and distributed.

General Conclusion and Recommendation

Children in urban and rural regions do not have the textbooks necessary for their education. In most schools the teacher is the only person with a textbook. A major cause of this situation is the lack of accountability by anyone getting books to students. No one segment of the educational system is directly responsible for textbook distribution.

Recommendation:

The Ministry of Education should establish a separate, autonomous agency directly reporting to the Permanent Secretary which will be responsible for textbooks. To be effective the agency must be given sufficient resources and authority.

4/12

With the newly established school policy to begin classes in September it is imperative that action be taken now on these recommendations so that an adequate supply of textbooks will be available and distributed before the new school year.

The new textbook agency should be appointed as soon as possible and begin its work immediately. The first tasks of the agency should be to prioritize the books to be produced and distributed for the coming school year; arrange and supervise a new, more efficient distribution system; and prepare and produce a textbook register.

Appendix 1 - Composition of the Planning Committee

1.	Cali Xasan Gacal	Planning Department
2.	Jeylani Abu Sheek	" "
3.	Safiyo Yuusu Ciimi	" "
4.	Maxamed C/llahi Xirsi	" "
5.	Cusmann Cali Xuseen	" "
6.	Xasan Suleyman Cabdi	I.E.E.S.
7.	C/raxmaan Cali Xuseen	"
8.	Madiina Maxamed Weheliye	"
9.	Xasan Dahir Obsiye	C.D.C.
10.	Ismaciil Cali Sareeye	"
11.	Xuseen Diiriye Jaamac	"
12.	Abdullahi Maxamed Abtidon	General Inspectorate
13.	Faadumo Axmed Sheek	" "
14.	Jaamac Saalax Maxamed	" "
15.	Cabdalla Shariif Axmed	Central Store
16.	Sheek Cali Abukar	Book Production Unit

Support Staff

1.	Cali Cabdullahi Nuur	C.D.C.
2.	Cumar Cabdi Macalin	"
3.	Xuseen Maxamed Suleeman	"
4.	Cali Xaaji Maxamed	"
5.	C/raxmaan Sallad Muse	"
6.	Luul M. A.	"

Appendix 2 - Composition of the Workshop

Bay Region

1.	Maxamed Culaabe Ceynaashe	District Inspector
2.	Xasan Xuseen Cawaale	Storekeeper
3.	Maxamed Xasan Maxamed	"
4.	Cabdulladiif Axmed Sheek	"
5.	Axmed Jumcalle Cabdulle	"

Hiiraan Region

1.	Sheekh Cumar Weheliye	Inspector
2.	Yuusuf Jimcalle Weheliye	"
3.	Maxamed Axmed Cilmi	"

Lower Shabelle

1.	Xasan Ciise Caalin	Storekeeper
2.	Mayow Maxamed Maye	"
3.	Xasan Maxamed Xaaji	"
4.	Jaamac Ismaciil Muse	D.E.O.

Banadir Region

1.	Muuse C/llahi Warsame	G/inspector
2.	Xuseen Bulxan Warsame	"
3.	C/llahi Maxamed Ciyow	"
4.	C/samad Macallin Yuusuf	"
5.	Xasan Suleeman Cadi	I.E.E.S.
6.	Maxamed Cadi Mahdi	East R. E. Xamar
7.	Xuseen Cabdi Geelow	" "
8.	Cumar Sheekh Maxamed	West R. E. Xamar
9.	Xuseen Maxamed Adan	" "
10.	Cabdi Tahliil Siyaad	Central R. E. Xamar
11.	Xaliimo Maxamed	" " "
12.	Xasan Saney Maxamed	" " "
13.	Maxamed Calasow Cilmi	North R. E. Xamar
14.	Abuukar Cali Cadow	" " "
15.	Maxamed Sabriye	Central Store
16.	Xuseen Muuse Yuusuf	C.D.C.
17.	Xuseen Diiriye Jaamac	"
18.	Cusmaan Cali Xasan	"

Middle Shabelle

1.	Cumar Cali Maxamed	Storekeeper
2.	Maxamed Yuusuf Cali	"

Lecturer

- | | | |
|-----|-------------------------|--------------------|
| 1. | Jeylaani Abu Sheekh | Planning |
| 2. | Cabdalla Shariif Axmed | Central Store |
| 3. | Xasan Dahis Obsiiye | C.D.C. |
| 4. | Ismaciil Cali Sareeye | C.D.C. |
| 5. | Sheekh Cali Abiikar | Printing Book Unit |
| 6. | Cali Xasan Gacal | Planning |
| 7. | C/llahi Maxamed Abtidon | Inspector |
| 8. | David Jamy Clark | C.D.C. |
| 9. | Mark Berger | I.E.E.S. |
| 10. | C/raxmaan Cali Muuse | I.E.E.S. |
| 11. | Mike Kiernan | C.D.C. |

Appendix 3 - An Outline of Considerations for a Textbook Agency

I. Information needed

1. How many children in school - enrollment projections
2. How many books available: stored, used, printed, written
3. How many books needed in the next five years
4. The life span of a textbook
5. Production capability - printing
6. Storage capability

II. Problems

1. How to collect data
2. How to get support
 - a) Government
 - b) Donors

III. Needs

1. Storage cabinets
2. Transportation and fuel
3. Information gatherers
4. Technical advisors
5. Minimum requisites for each grade

IV. Areas for Improvement

1. Textbook production
2. Inventory methods
3. Storage methods
4. Forecasting needs
5. Data base
6. Redistribution method
7. Assignment of responsibility, accountability

V. Future Plans

1. Establishment of a Textbook Agency
2. Follow-up workshop

APPENDIX SIX

**MINISTRY OF EDUCATION PROJECT PROPOSAL FOR
TEXTBOOK PREPARATION, PRODUCTION, AND DISTRIBUTION**

SOMALI DEMOCRATIC REPUBLIC

MINISTRY OF EDUCATION

PROJECT PROPOSAL

Textbook Preparation, Production and Distribution

Prepared by:

Curriculum Development Center

July 1986

TEXTBOOK PREPARATION, PRODUCTION AND DISTRIBUTION

1. Present Situation

Significant changes have been made in the process of textbook production over the past decade. Three phases of development can be identified. The first was the Textbook Writing Campaign of the mid 70s which was successful in providing Somali textbooks for the Primary and Secondary schools. The second stage was a major revision exercise. The task of getting the first series of Somali texts into the schools as quickly as possible resulted in a great deal of error - understandable as the language was new and there were insufficient numbers of trained curriculum developers available to the Ministry. The third phase came about as a result of the IDA assisted Curriculum Development Center. Textbooks are now prepared in a systematic manner (New Primary Curriculum Project) and are sent as camera-ready copy to the State Printing Agency. At this stage therefore an important qualitative goal has been achieved: all new materials go through the full process of curriculum development.

The emphasis now shifts to the problem of mass production and distribution. At present Somalia is not able to print the quantity of textbooks needed for either the Primary or Secondary level. In this we are talking about the production of a single textbook per subject, leaving out other material needs: supplementary readers, charts, etc., and ignoring the needs of other post-primary educational institutions. Further, in the case of the textbooks which are printed there are the problems of quality and life expectancy. The quality of binding is not able to withstand the kind of usage the books are subjected to; the paper is of below average quality and the covers not strong enough. Lack of sufficient storage capacity, compounded by the absence of what can be called the 'textbook tradition' has resulted in books having a life expectancy of not much more than two years. Therefore reprinting needs, especially of Secondary texts which get priority, delays the printing of much needed textbooks for the Elementary grades. This situation has had a serious effect on school enrollment and has contributed to the general decline in the quality of instruction at all grade levels.

2. Facilities and Capacities

The printing of trial materials is carried out at CDC, which, however, has limited printing capacity (2 off-set A4 printing machines) and limited material supplies.

Mass production is carried out at the national State Printing Agency (SPA) which is assisted by IDA loan funds (3rd Education Project). Because of technical and material supply difficulties production at SPA is well below capacity.

3. Project Objectives

This component of the 5th Education Project sees textbook printing not as an entity as itself but as one stage of an educational process designed to bring about radical qualitative improvement in Primary and Secondary education. A textbook is the result of a series of educational activities, each of which need to be specifically addressed.

The 3rd IDA Education Project helped to set up the national Curriculum Development Center. This is now a functioning institution and has already begun to implement the New Reform Primary Curriculum, which introduces totally new teacher and pupil learning materials into schools. The implementation schedule is delayed by the inability of SPA to print the newly prepared texts according to plan. In July 1986, only 8 of the 33 available New Curriculum texts have been printed; by the end of August 1986, 16 further titles will be added to the waiting list.

PROJECT OBJECTIVE NO. 1

INCREASE CAPACITY OF PRINTING THE STAGE PRINTING AGENCY TO CATER FOR THE NEEDS OF THE NEW CURRICULUM AND THE REPRINTING OF SECONDARY TEXTBOOKS.

The textbooks (New Curriculum) produced at SPA are revised versions of trial texts printed at CDC. Testing and trialing are vital stages in the curriculum process: they guarantee that the mass produced product will find a receptive audience in schools. CDC's capacity to print is severely limited. To assist SPA the CDC prints as many of the Teachers Guides as possible, leaving few resources to print trial materials. In this situation CDC can only print sample units and has therefore to extrapolate from the results the kind of revisions necessary.

The preparation of camera ready copy at CDC has greatly increased the availability (for printing) of new and attractive materials. It has also greatly reduced the work-load at SPA, which has now only the tasks of plate making and printing. However, CDC has to get the photocomposed text from SPA and this entails a great deal of running back and forward to SPA daily. Providing CDC with a basic photocomposition unit would lead to much greater efficiency all round.

Therefore CDC's needs are two-fold: increased assistance in the preparation of camera ready copy; and an extension of its off-set printing facilities.

PROJECT OBJECTIVE NO. 2

INCREASE MATERIALS PRODUCTION CAPACITY AT CDC: a) IN THE PREPARATION OF MATERIALS: b) IN THE PRINTING OF TRIAL MATERIALS.

CDC's Primary Reform Project should be completed by the end of 1988 or soon thereafter. By that time the preliminary work on the next major project, Secondary Curriculum Reform, should be well underway. CDC has carried out the

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Primary Reform with a minimum of technical personnel assistance; this will not be possible for such a task as secondary reform. However, the academic staff of CDC will by then be sufficiently trained in the approaches to curriculum development: needs analysis, setting of objectives, selection of methodologies, material testing, etc. They will need technical personnel assistance in the selection of content to ensure that the latest developments in the particular disciplines are incorporated and in teaching/learning activities. The CDC would also like to see self-instructional methodologies incorporated into the materials thus making them more multi-purpose (correspondence education, teacher training upgrading, vocational and technical subject courses, etc.) than before. The workshop system would be used in this exercise, utilizing subject experts from the university and other institutions of higher learning.

PROJECT OBJECTIVE NO. 3

SUPPORT FOR SECONDARY REFORM CURRICULUM AT CDC.

Educational development is often a series of shifts in emphasis. In 1982 there were few materials available for Primary schools, practically none at Elementary level. Now materials are available; some have been printed but even less distributed. Distribution and storage therefore come next under the spotlight - or microscope. Systematic distribution involves four main activities:

1. assessment of needs at school, district and regional levels;
2. an efficient and effective distribution system;
3. an efficient and effective storage system;
4. a reporting and problem analysis mechanism;

A fifth activity - effective use of the textbooks distributed is also a critical area but it relates to questions of teacher training and school management which are covered in other components of the project proposal.

It is worth noting at this stage that textbook life expectancy is very low (2 years or less). Though this can be accounted for to some extent by the quality of cover, paper and binding, and by the absence of adequate storage facilities, it is also caused by the absence of a 'textbook tradition'. It is necessary to consciously develop an awareness among teachers and pupils that textbooks are valuable school property. Pupils (and parents) should be told that they have the right to access to textbooks, and that damage must be compensated. The Ministry should look into the question of 'class sets' system, though this is only possible if classroom storage is provided.

PROJECT OBJECTIVE NO. 4

PROVIDE ASSISTANCE TO DEVELOP A SYSTEMATIC DISTRIBUTION AND STORAGE MECHANISM FOR THE MINISTRY OF EDUCATION.

SUMMARY OF SUBCOMPONENTS:

1. State Printing Agency: equipment and material supplies; short-term technical personnel assistance;
2. Curriculum Development Center: equipment and supplies;
3. Curriculum Development Center: Secondary Reform Project: technical personnel assistance, workshop funding, educational materials;
4. MOE: New Unit: Textbook Distribution and Storage: transport, storage equipment, fuel, short-term consultancies for planning, data-analysis equipment;

Justification

The four subcomponents are to be seen as both a continuation of services previously assisted by earlier IDA projects and as a developmental strategy, having as its objective the qualitative improvement of education identified by the Ministry as its major objective for the next five year development plan period (1987-92).

Research findings continue to support the premise that access to textbooks contributes significantly to educational improvement. This, however, must be modified by adding that the kind of textbook is important (especially its relevance to the environment of the pupil) and that the provision of textbooks is supported by concomitant developments in teacher training (pre- and in-service) and the Inspectorate.

The textbook production component is planned to complement the objectives of the Teacher Training and Educational Management components. The materials of the new Primary curriculum form the core of the materials used in the methodology courses at both pre- and in-service level. The Educational Management component provides for a systematic training programme for the Inspectorate, which will include courses on curriculum evaluation, textbook distribution, classroom observation, etc.

While the New Primary Curriculum was being planned, writers were made conscious of the fact that the materials should have a life expectancy of 15 to 20 years. This will allow for other curriculum activities to take place: the preparation of charts, supplementary readers, low-cost teaching aids, etc., which will reduce the reliance on the single textbook and motivate teachers to plan their own learning activities. Indeed, it can be argued that only when a school system has a basic syllabus and series of textbooks that real curriculum development can commence.

In 1983 the CDC took a decision to leave secondary curriculum reform until the Primary reform was well underway. The rationale was that as the objective of the new curriculum was to produce 'self-directed' learners, these would not be available for secondary selection for a number of years. Within the next year or so CDC will have to face the problem of secondary reform. This will be a formidable task as it relates to areas such as manpower needs and the prediction of those skills needed by Somalia over the next twenty to thirty years. The fact, however, that secondary education today leaves a lot to be desired must be confronted.

The Distribution and Storage component is a logical extension of all the activities of the project. Unless textbooks get into schools a start cannot be made to improvements. Consideration will have to be given to ways of making this component in some way self-financing. A textbook levy, properly organized, could defray some of the expenses and encourage greater parent interest in the school textbook situation. The Somali society has organization resources which are often underutilized by planners; it might be a rewarding exercise to examine this area in greater depth.

PROJECTED OUTPUTS

1. Increased production of school textbooks from present average of under 500,000 per year (10 texts) to 1.5 million (30 textbooks);
2. Increased textbook testing and trialing activities at CDC: to produce 3,000 copies of each test unit: average 30,000 units per year.
3. New Secondary Curriculum:
 - a) as the outcome of an in-depth study of the present curriculum;
 - b) to introduce new subjects in line with modern needs (e.g., Development Studies; Economics, Health Science; Agricultural Science, etc.;
 - c) to develop a totally new set of learning/teaching materials, adopting more multi-purpose and self-instructional approach;
4. Systematic Textbook Distribution and Storage:
 - a) development of a textbook needs projection system;
 - b) development of a cost-effective distribution system;
 - c) provision of improved storage facilities at national, regional, district and school levels.



EQUIPMENT NEEDED TO EXTEND PRINTING FACILITIES AT CDC

1. 1 photocompositor unit	50,000	
2. 1 processor for above	10,000	
3. 2 composers	15,000	
4. 1 reprocamera	8,000	
5. 1 copyproof processor	300	
6. 1 platemaker (A3 off-set)	8,000	
7. 1 dehumidifier	1,000	
8. 1 vacuum dust extractor	2,500	
9. 1 worktable	1,000	
10. 2 off-set machines e.g. HAMADA 700CDC	50,000	
11. 5 worktables	2,500	
12. 1 collator	25,000	
13. 1 heavy duty stapler	3,000	
14. 3 joggers	3,000	
15. 1 folder	2,500	
16. 18 special windows (prevention of humidity and dust)	9,000	
17. 9 airconditioners	6,000	
18. 3 light-tables	1,560	
19. 2 waxing machines	2,000	
	TOTAL	
		"))
		200,300
	Freight 15% = 30045	30,045
	Contingencies 12½%	25,037
	GRANDTOTAL	" ()
		250,382
		" £) ,

Diagram I

TEXTBOOK PRODUCTION 1982-86 [ine] DISTRIBUTION

Grade \ Subject	SOMALI	ARABIC	ENGLISH	ISLAMIC STUDIES	MATHS	SCIENCE	PHYSICS	BIOLOGY	CHEMISTRY	SOCIAL STUDIES	HISTORY	GEOGRAPHY	
1	'85	'85	N/A	'85	'85	'85	N/A	N/A	N/A	85	N/A	N/A	
2			"				"	"	"		"	"	
3			"				"	"	"		"	"	
4			"				"	"	"		"	"	
5	83	83	"	83		82 / 85rp	"	"	"		82-Arabic withdrawn	8-Arabic withdrawn	
6	82	83	"	83		82	"	"	"				
7		82	"	83	82		"	"	"				
8	84	82	"	82	82		86	"	"				
1	84	85	82				N/A	84	84	N/A		84	
2	84	83	83 / 85rp	83			"	86	84	84	"	83	84
3	83	84	85	83	85		"	84	83	83	"		83
4	83	83	85	83	86		"	84	83 / 85rp	83 / 85rp	"	83	83

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STATE PRINTING AGENCY

TEXTBOOK PRODUCTION 85-86

Book Title	DATE SUBMITTED TO SPA	Plate making required	First Printing	Reprint	DATE Completed	Production TIME
Eng. F3 S	17.11.84	✓	50,000		7.2.85	58 days
Biology F4 S	9.2.85	—	—	50,000	15.2.85	7 days
Maths F3 S	10.2.85	✓	50,000		27.3.85	45 days
Religion F1 S	8.4.85	✓	—	—	—	—
Eng. F2 S	14.4.85	—	—	50,000	16.5.85	32 days
Chemistry F4 S	19.5.85	—	—	50,000	2.7.85	43 days
Arabic F1 S	7/7//31.7	✓	50,000	—	10.8.85	33 days
Science G.5OP	12.8.85	—	—	50,000	18.8.85	7 days.
Maths Grd I/PP	18.8.85	✓	50,000	—	1.9.85	12 days.
Somali Grd I/PP	3.9.85	✓	50,000	—	18.9.85	15 days
[Eng. F4] S	22.9.85	✓	50,000	—	10.10.85	18 days
Social St. Grd NP	14.10.85	✓	50,000	—	2.11.85	18 days
Science Gr. NP	4.11.85	✓	50,000	—	18.11.85	14 days
Arabic Grd NP	10.12.85	✓	50,000	—	20.12.85	8 days
Islamic St. Grd NP	23.12.85	✓	50,000	—	29.12.85	6 days
ENVIRONMENTAL ED. BK 5 NP	18.1.86	✓	20,000	—	21.1.86	3 days
Physics F2 S	21.2.86	—	—	50,000	6.2.86	16 days
English ESP S	10.2.86	✓	10,000	—	16.2.86	6 days
Physical Ed. Gr. 1-2 NP	15.2.86	✓	10,000	—		9 days
Maths F4 S	17.4.86	—	—	20,000	24.4.86	7 days
Science ^{sr.2} OP	14.5.86	—	—	20,000		

S : SECONDARY (11 books)
 OP : (old) Primary curriculum (2 books)
 NP : New Prim. Curriculum (8 books)

APPENDIX SEVEN

MINISTRY OF EDUCATION SCHOOL DATA COLLECTION FORM

SMALL DEMOCRATIC REPUBLIC

MINISTRY OF EDUCATION

Form "C"

Please type
or print

Department of Planning and Inspection - Planning

Serve Academic years 19___/19___.

SECTION - I - GENERAL INFORMATION

1. Region _____, 2. District _____, 3. Town _____
4. Base of the school _____, 5. Management _____
6. Course Offered _____

Base of course	Minimum Admission Requirement	Duration	Annual intake Capacity

7. Total Number of classes in all grades in the school _____

8. Accommodation in the school:-
(a) For teaching. (i) Classrooms _____ (ii) Science Labor. _____
(iii) Workshop rooms _____ Total (a) _____
(b) For administration and other purposes. (i) Staff rooms (including Princi-
pales rooms) _____ (ii) Office rooms _____ (iii) Store rooms _____
(iv) Library rooms _____ (v) Other rooms _____ Total (b) _____

9. Utilisation of classrooms:-
(a) N°. of classrooms being used _____ (b) N°. of classrooms not being used _____
(c) Reasons for classrooms being not used, if any _____

10. Is the school working in single or double shift _____
if double shift. (a) Grades/Classes in the first Shift; _____
(b) Grades/Classes in the second shift _____

11. Is the school housed in its own building _____

12. Has the school light? Yes/No, Drinking water? Yes/No, Sanitary facilities? Yes/No, Adequate laboratory facilities Yes/No, Adequate workshop facilities? Yes/No.....
13. Is it a boarding/day/partly boarding school? _____
Capacity of the boarding house dormitories, if any _____
No. of boarding in the school. Boy _____ Girls _____ Total _____
14. Medium of instruction _____
15. Total number of periods per week. For teaching _____
For practical work in the workshop _____ Total _____
Length of each period (in minutes) _____
16. Name of the Headmaster/Principal _____
Date _____

Signature of the principal

17. Shaqalaha Maamulka iyo Adseega (5)

Nº.	Nagaca Shaqalaha	Nagaca Shaq. (*)	Rag Dumac	Da'aa	Sannadka la qoray	Heeriz Waxbarasho.
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						

(5) Liiskan kama jirana barayasho dugsigu iyo maamulaha.

(*) Ku qor halista haddii uu ka mid yahay:- (Karsani, Darewal, iKariyo, Adseega, Ilaaliyo, Nadiifiyo D.M.)

VII

SECTION - II - STUDENTS

18. NUMBER of classes and students by Grade.

Name of Course	Grade I			Grade II			Grade III			Grade IV		
	No. Cl.	Students		No. Cl.	Students		No. Cl.	Students		No. Cl.	Students	
		MF.	F.		MF.	F.		MF.	F.		MF.	F.
												6
												8
												10
												16
T O T A L												

19. No. of repeaters by Grade, (Included item 18 above).

Name of Course	Grade I		Grade II		Grade III		Grade IV	
	MF	F	MF	F	MF	F	MF	F
T O T A L								

20. Students by age, grade and sex, (the total number of students in each grade should tally with those shown under 18 above).

A G E	Grade I		Grade II		Grade III		Grade IV	
	MF	F	MF	F	MF	F	MF	F
Below 14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
Above 25								
T O T A L								

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SECTION - III - EXAMINATION RESULTS

21. Give below results of the final and promotion Examination held at the previous Academic year: 19___/19___.

Name of Course	N ^o . Set Passed	Grade I		Grade II		Grade III		Grade IV	
		MP	P	MP	P	MP	P	MP	P
	N ^o . Set N ^o . Passed								
	N ^o . Set N ^o . Passed								
	N ^o . Set N ^o . Passed								
	N ^o . Set N ^o . Passed								
TOTAL	N ^o . Set N ^o . Passed								

SECTION - IV - STAFF

22. (a) Number of teachers (including principal and all Somali and Non-Somali teachers?)

STAFF	Full - Time Teachers		Part - Time (*) Teachers		All Teachers	
	MP	P	MP	P	MP	P
Number						

(b) Part-time (*) Teachers (including under (a) above).

Name of the Teachers	Name of other School where teaching	N ^o . of period per week taken in.	
		This school	Other school

(c) Administrative and subordinate staff.

Staff	Secret-ers	Messen-ers	Watchmen	Driver	Cooks	Sweepers	Others	TOTAL
N ^o .								

(*) A part-time teacher is one who teaches in two or more schools.

2). Give below particulars of teachers (including principal and all Senior and non-Senior teachers as shown under 2: (a).

No.	Name of teacher (1)	Sex (2)	Date of appointment (3)	Nationality (4)	Permanent on contract or not (5)	Grade & Salary (6)	Academic Qualification (7)	Subject Taught (8)	Date of birth (9)	Teacher Training Qualifications		Length of Industrial Experience (12)
										Institution (10)	Length of Course (11)	
No. (A) Full-time Teachers :												
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												

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4. Give below particular of Part-time teachers (including all Somali and non-Somali teachers as shown under 22 (a) above). - 6 -

Name of teachers	Sex	Date of birth	Date of appointment	Nationality	Permanent on contract or sid.	Grade & Salary	Academic Qualification	Subject Taught	Teacher Training Qualifications		Length of Industrial Experience
									Institution	Length of Cour.	
Part-time Teachers (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

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