



*Teaching Materials - copy  
 Health Learning Materials*

INTERREGIONAL HEALTH LEARNING MATERIALS PROGRAMME

Interregional Meeting on Health Learning Materials  
 Arusha, Tanzania, 10-14 December 1984

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The meeting was opened by Dr A. D. Chiduo, Minister of Health of the United Republic of Tanzania. He was welcomed, on behalf of the participants (see list in Annex I), by Dr Ezra Teri, Director of the Centre for Educational Development in Health, Arusha (CEDHA). In WHO's introduction, the meeting was reminded of the two principal aims of the interregional programme, namely:

- collaboration with countries so that they can become self-reliant in the development and production of teaching and learning materials appropriate to their own needs and priorities, and in direct support to primary health care; and
- the provision of interregional support to encourage the sharing of resources, and eventually the extension of the programme through technical cooperation to other developing countries.

1. PROGRESS REPORTS ON COUNTRY PROJECTS

Representatives of Benin, Kenya, Morocco, Mozambique, Nepal, Nigeria, Rwanda, the Sudan, Tanzania, and of a NGO, the African Medical and Research Foundation (AMREF), enlarged on the reports already submitted and distributed, describing the progress made in implementing their respective Health Learning Materials (HLM) projects. There were questions and discussion after each presentation.

In most cases, the framework of the HLM project within the country had been established in accordance with the project document, official commitments made and the administrative structure worked out with the appropriate national bodies, usually the Ministries of Health and Education and a university medical faculty. This preparatory phase had often been prolonged due to difficulties in identifying priorities for materials production. However, as the ultimate aim of each project is the development of materials relevant to real needs for the effective delivery of primary health care, such a delay was both understandable and acceptable. In two countries, the project had not advanced much beyond the planning stage, due either to internal political problems, or to the absence so far of external funding and consequently of key management staff. In both cases, the constraints are now being cleared up and the projects are beginning to move ahead. The other countries were in the process of assessing their needs and resources and were already producing a limited quantity of relevant health learning materials. Training of managers and technicians had begun (with AMREF playing an important role in support to the English-speaking countries) and supplies and equipment were being ordered and installed.

Particular note was taken of the planned activities in Kenya, the Sudan and Tanzania where HLM projects were serving as focal points for the creation of health manpower development institutions. Funds attracted to HLM plans were being used also to introduce such essential processes as curriculum development, teacher training and operational research. In this manner, HLM projects were beginning to assume the role of underpinning the overall health manpower effort in support to primary health care.

Some common problems and constraints emerged:

- (a) Funding: Although all countries had gone ahead, using the limited means at their disposal, they did not have enough funds to carry out all the activities set out in Phase I of the various project documents. Project plans had therefore to be modified so as to make most effective use of funds available, as exemplified in Nepal. Meanwhile, efforts at country level to attract additional funding from potential donors were being intensified.
- (b) Training: The greatest need expressed was for training for those designated as programme managers, authors and editors. Management training for project staff was also seen to be of capital importance. Although training of technicians in the operation and maintenance of equipment was given high priority, this could usually be arranged fairly

easily at national or regional levels, especially profiting from the increasing exchange between countries. This whole subject gave rise to an important discussion described in Section 2 below.

- (c) Premises: In most cases, projects did not yet have suitable accommodation but this constraint was gradually being overcome. All national administrations had adhered to their commitments in the project documents, and had made available the necessary space, which now required modification, furnishing and equipping.
- (d) Staff: Certain key staff members were still being sought in some countries, and also by AMREF. This was sometimes due to lack of funds and sometimes to the fact that individuals concerned had yet to be released from other posts. It was recognized that such transfers within national administrations could not be effected rapidly.

## 2. TRAINING

Training of staff was seen as a major priority in the preliminary phases of project activities. The following requirements for training were identified by the group:

- (a) Consultants:
  - (i) Brief visits for specific tasks in relation to the projects, e.g., advising on development of project proposals, participation in planning and funding meetings.
  - (ii) Longer visits, e.g., for assisting in book inventory, project evaluation, conducting courses and workshops.
- (b) Workshops:
  - (i) On writing, adapting, editing and publishing of manuals. This would mostly involve specialists and teachers although it was suggested that journalists and other professional writers could be involved. Subject experts are not always the best writers. There should ideally be a period of preparation before each workshop - perhaps using distance-learning techniques - during which participants would do some creative work in relation to their subject areas so that they can benefit to the full from the workshop.
  - (ii) On the development of curricula and the design of training programmes.
  - (iii) For teachers and other users on how to incorporate health learning materials into their curricula, and how to use them to best effect.
  - (iv) On illustration, graphic design, use and maintenance of photographic and audio-visual (AV) equipment and materials.
  - (v) For librarians and administrators on the organization of a clearinghouse and the building-up of data banks; on design and display of materials and on the educational uses of health learning materials.
  - (vi) On planning and management for senior staff.
  - (vii) On testing and evaluation of materials for HLM staff and teachers.
- (c) On-the-job training: For technicians, e.g., printers, AV operators, designers, operators of microcomputers and word processors, equipment maintenance staff. This would be mostly within a country (e.g., Kenya Polytechnic, Kenya Institute of Education). In addition, AMREF was ready to provide such training, and the Mozambique Ministry of Health printing unit could accommodate two or three printing technicians at a time.
- (d) Study tours:
  - (i) To other institutions in the region (e.g., AMREF (Kenya), DTCP (UNDP, Bangkok), ENDA (Senegal)), for project managers and senior staff.
  - (ii) Occasionally for special courses abroad, e.g., M.Ed. at the WHO Regional Teacher Training Centre at the University of New South Wales, Australia, for staff involved in project planning and evaluation.

Certain aspects of training were given particular emphasis. These were:

- wherever possible, training should be carried out within the developing world, and preferably in countries participating in the programme.
- in view of the inevitable loss of trained technicians to more lucrative posts, training must be a continuous process. There should always be understudies for key personnel. It was recognized that this doubling up of staff would present difficulties for national administrations.
- there are many possibilities for training in English, fewer in French, least in Portuguese. Efforts should be made to redress the balance, e.g., facilitating the appointment of a French-speaking specialist to join AMREF staff, giving extra support to ENDA, INADES (Côte d'Ivoire) and similar institutions, and intensifying the search for suitable training facilities for Portuguese-speaking staff.
- to be really effective, training courses and workshops demand considerable preparation beforehand, often with the help of external consultants at the planning stage until adequate expertise is built up locally.
- good job descriptions based on a detailed task analysis must be prepared, so that a realistic training programme can be developed for individual project staff.
- a consolidated time-frame for training of different categories of staff in the preliminary phases of projects would simplify the arrangements for training, tailored to special needs, both within and outside countries.
- tuition and special training (e.g., at AMREF) must be paid for from project funds, and allowance made for this in the expenditure plans.
- details of relevant courses, given by national institutions in countries participating in the programme which accept short-term foreign students, should be collected by WHO and circulated to the HLM network.
- services of students who are completing their master's degree in an appropriate speciality should be considered for carrying out under supervision such tasks as the preparation of a book inventory, or the conduct of operational research in the planning of distance education.

### 3. IMPORTANT AREAS FOR FURTHER INVESTIGATION

Three items were selected for discussion, for which background papers had been prepared to form the basis for group work. These were:

- (i) distance education;
- (ii) "usability" of health learning materials, including field-testing with target groups;
- (iii) text-processing of materials.

A brief description of the results of group work and subsequent plenary discussion on each of the three subjects is contained in Annex II below.

### 4. RECOMMENDATIONS FOR FUTURE STRATEGY

The most important subject for discussion was the future strategy to be adopted in the HLM programme. A number of key issues were identified, and are described in the succeeding paragraphs.

There was general agreement on three broad areas for development in each of the participating countries. These areas are as follows:

- (i) Broadening of project objectives. A HLM project cannot function effectively in vacuo. All the project objectives specify that health learning materials should be developed in direct support to primary health care. This aim must, however, be translated into action. The meeting approved the initiative of Kenya, the Sudan and Tanzania in building the HLM project into an integrated health manpower development institution, where it will act as a support to such essential activities as teacher preparation, curriculum development and operational research. It was recommended that all national HLM projects, including those of newcomers to the network, should consider following these examples, adapting them to their own local situations and requirements. External funding is likely to be attracted to projects with an outcome of improved national health manpower development, directly related to primary health care needs.

(ii) Implementation of project activities. Now that preliminary phases are under way in most of the participating countries, steps should be taken to make a realistic revision of the original HLM project documents, in accordance with national administrative requirements and funds available. Note was taken of the recent revision of the preliminary phase in Nepal, where a more modest set of activities had been planned to enable the project to operate within the limited external funds so far received. It was considered essential that such activities as inventory of needs and resources, identification of priorities for health learning materials production, selection and training of key staff and establishment of project premises, should go ahead without delay, using to best effect the existing government and external resources.

(iii) Conduct of operational research. In addition to the operational research in health manpower development currently being planned in Kenya, the Sudan and Tanzania, it was agreed that there was a need for all participating countries to conduct studies in the three areas for further investigation outlined in Section 3 and Annex II of this report. Such studies would demand not only the services of external consultants in the early stages, where possible from within the network, but also the stepping-up of exchange of experience and staff between countries. Guidelines should be developed on each of these areas, based on country studies, and prepared with the assistance of AMREF, DTCP, UNICEF and WHO. An early outcome of this activity, in relation to usability of materials, will be the publication by AMREF of the final version of the manual on health learning materials design, testing and production, presented in draft to the meeting in English and French versions. Participants were requested to send their detailed comments on this draft manual as soon as possible to WHO Geneva for collation and forwarding to AMREF. It was considered that the manual in final form would provide a valuable tool for implementation of HLM projects.

A number of more specific conclusions were reached in relation to future strategy at country, regional and interregional levels. These were as follows:

(iv) Strengthening the HLM network. The strength of the overall programme depends on the effectiveness of the network of countries. Already, there have been important contacts established among members in the exchange of ideas, materials and people. Joint training programmes for senior staff have begun and new projects will thus have the benefit of experienced personnel. It is likely that other countries in Africa and Asia will opt to join the programme in the near future. Meetings and exchanges should be arranged so that they can observe at first hand what is being done elsewhere, and profit from the advice and experience of current members of the network.

(v) Clearinghouse activities: The importance was emphasized of the interregional clearinghouse function performed by WHO Geneva. This facilitated the free exchange of materials and ideas between participating countries, and introduced them to potentially useful materials produced elsewhere in the world. It provided a source of information on new developments relevant to the HLM programme, on approaches to the problem of securing external funding, and also on consultant services to meet specific requirements of country projects. It was recommended that this clearinghouse activity should be expanded to introduce a regular newsletter, with information on current activities within the network and on developments in operational research and funding, and to provide a forum for the discussion of common problems and their solution. The regional clearinghouses currently being set up by the WHO African and Eastern Mediterranean Regional Offices would also provide valuable sources of information and materials.

(vi) External funding. The most effective approach to potential donor agencies takes place at country level, and is made by the Government or Ministry of Health to the embassy or mission concerned. Channels of communication with donors vary from country to country. Network members should explore possibilities within their own countries, take the initiative in making informal contacts to interest people in the project, and keep key officials informed of progress in the project and of new developments within the network. UNDP and WHO would provide support, centrally and at country level, to government requests for external assistance. UNDP was ready to set up cost-sharing projects at country level so as to spread the load of assistance among donors. Sometimes it is possible to link on to an existing programme in a related field. For example, the WHO/UNICEF Joint Nutrition Support Programme (JNSP) already operates in Ethiopia, Mozambique, Nepal, the Sudan and Tanzania, and may provide some support to HLM projects in these countries. Similarly, large World Bank programmes may contribute to projects, as in Kenya and Morocco. Meanwhile, central

efforts, such as WHO's approach to the Arab Gulf Programme for United Nations Development Organizations (AGFUND), should be intensified. A draft of a proposed brochure (Annex III) to support future fund-raising efforts, both centrally and at country level, was discussed. It was agreed that it should be edited, printed and distributed in English and French versions.

(vii) Monitoring and evaluation. The sequence of activities in the project documents should provide the basis for regular monitoring of HLM projects against targets. It was, however, recommended that an independent external evaluation should be budgeted for at the end of major phases of the projects. Such external evaluation reports are appreciated by donors who have contributed funds. A note of caution was expressed in that periodic evaluation should not be allowed to disrupt the implementation of the project. As a safeguard, and to increase the solidarity of the network, it was proposed that at least one member of the team of evaluators should be a HLM project manager from another country.

(viii) Management training. The need for competent managers at different levels in the HLM projects was stressed throughout the meeting. WHO was requested to collect and distribute manuals and other literature on management relevant to the programme. There would be a case for producing a manual or distance-learning package on HLM management in the developing world if little is found to be appropriate. WHO should also explore possibilities for management training relevant to the HLM programme, and keep project staff informed through the clearinghouse. Such training could, with advantage, include participation by key staff in a well-managed project operation elsewhere.

In conclusion, participants recorded their appreciation of the arrangements made by the host institution, CEDHA. They also welcomed the new member of the network, Ethiopia, and expressed regret that the representative from this country had been unable to attend the meeting.

List of participants

Members

Dr Abderazak Cherkaoui, Chef, Division de Formation des cadres techniques, Ministère de la Santé, Rabat, Morocco

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Dr Ramesh Adhikari, Institute of Medicine, Tribhuvan University, Kathmandu, Nepal

Professor Séraphin Bararengana, Doyen de la Faculté de Médecine, Université national du Rwanda, Butare, Rwanda

Dr Tewabech Bishaw\*, Head, Department of Health Education and Manpower Development, Ministry of Health, Addis Ababa, Ethiopia

Dr Barthélémy Raphaël Darboux, Assistant Biologie humaine, Faculté des Sciences de la Santé, Cotonou, Benin

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Professor Abdul Rahman Abdel Salam, Director, Educational Development Centre, Faculty of Medicine, Khartoum, Sudan

Dr Ezra M. Teri, Principal, Centre for Educational Development in Health, Arusha, Tanzania Chairman

WHO Staff

Dr W. D. Clarke, Director, BLAT Centre for Health and Medical Education, London, United Kingdom (Consultant)

Dr M. A. C. Dowling, Technical Adviser, Division of Health Manpower Development, World Health Organization, Geneva Secretary

Ms C. McDougall, Cotignac, France (Consultant)

Dr W. J. Pigott, Office of the WHO Programme Coordinator and Representative, Kathmandu, Nepal

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\* Invited but unable to attend.

Other organizations invited

Dr Juan Braun, PSC Adviser, UNICEF Regional Office for Eastern Africa, Nairobi, Kenya

Dr P. L. Petit, Vice-Principal, Centre for Educational Development in Health, Arusha, Tanzania

Dr J. L. Popp, Editor (HLM), African Medical and Research Foundation, Nairobi, Kenya

Dr C. H. Wood, Medical Director, African Medical and Research Foundation, Nairobi, Kenya

Observers

Mrs R. M. Kakande, Nurse Coordinator, Commonwealth Regional Health Secretariat, Arusha, Tanzania

Mr J. Kirknaes, Promotion Coordinator, Health through Sanitation and Water (HESAWA), Mwanza, Tanzania

Professor A. M. Nhonoli, Regional Secretary, Commonwealth Regional Health Community for East, Central and Southern Africa, Arusha, Tanzania

Professor E. Parry, Dean, School of Medical Sciences, University of Science and Technology, Kumasi, Ghana

Dr L. Vanderschmidt, Co-Director, Center for Educational Development in Health, Boston University, Boston, Massachusetts, USA

Important Areas for Further Investigation(i) Distance education

- (a) Distance education is an effective way of updating and maintaining competence in health workers who are widely scattered throughout a country (e.g., Morocco) or who work in remote areas far from supervision (e.g., Nepal). Direct experience in its use on a national scale was described by AMREF, in Kenya, and by the representative from Morocco.
- (b) It is, however, a complicated technique requiring careful planning and management. The courses must fit the needs and capacities of the learners, some of whom may not be fully literate in the language used; many of whom will be young adults fully employed as health workers during the day, and who will therefore be obliged to study in their own time.
- (c) Methods employed in distance learning include the use of:
- written texts, preferably with illustrations.
  - radio broadcasting, especially at off-peak hours.
  - audio-cassettes, pre-recorded or for recording broadcasts, and associated with texts, illustrations or slides.
  - television, a medium largely restricted to peri-urban areas in most developing countries.
  - more expensive, and thus usually inapplicable, methods include two-way radio, video and film.
- (d) Training specially geared to the problems of distance learning must be provided for all members of the production team. This team comprises authors, editors, and script writers, those who operate and maintain the equipment, and those who distribute the material throughout the country and follow up on its use by students and health staff. They all must develop new skills, and specialized training is available (e.g., DTCP in Bangkok, AMREF in Nairobi, International Extension College in Cambridge, England).
- (e) Imagination, innovative ideas and a readiness to experiment are important in organizing the distribution of material and arranging feedback from and dialogue with the learners. The teaching packages must be attractive and easy to understand. Incentives must be provided to motivate individuals to learn, especially as many of them will be studying outside their working hours. In Morocco, for example, successful completion of a correspondence course is an essential step towards promotion.
- (f) Few countries in the HLM network have a well-developed distance learning system. It was agreed that planning should begin at once on how such a system could be set up in each participating country, and consultancies and training programmes arranged accordingly.

(ii) "Usability" of health learning materials

- (a) Good planning, combined with careful writing and testing of health learning materials will ensure that the content of the materials is readily understood, and thus their "usability" for "target groups" (interested users) increased.
- (b) Production should be carried out by teams of people with a variety of skills. The job of each health worker must be clearly defined for the writers. Students or recently qualified health staff can be useful as part of the production team. They can judge the material as users as well as producers. For example, students at the Medical Training College, Nairobi, develop and test manuals for health workers as an elective in their diploma courses.
- (c) It is essential that the style and presentation of materials are directly suited to the targeted groups of health workers, so that they can readily translate what they read into action.

- (d) To ensure (c), it is necessary to test materials directly with target groups. A combination of testing methods should be used, appropriate for the task and to the available resources. These methods are described in detail in a manual which has been developed by AMREF, and which was presented in draft to participants (in English original and French version translated by WHO) during the meeting. It is hoped that this manual will provide an important guide for project managers, editorial committees and other HLM staff. This emphasis on preliminary testing should not be allowed to delay the production and distribution of a first run of materials when the need is urgent (as in the Portuguese-speaking countries in Africa). The first edition must, however, be followed by user trials and subsequent modification.
- (e) Every effort should be made to obtain feedback from users throughout the production and testing process, so that local guidelines can be established for manual writing. This will help to ensure usability of future productions, and such guidelines should be shared with other participating countries.
- (f) Adaptation and/or translation of existing materials must also be subject to the same criteria of usability by target groups as newly developed materials.

(iii) Text-processing

Two background papers, by DTCP, Bangkok, and WHO respectively, were presented on the use of microcomputers and text-processing as applied to the developing country situation. In addition, some participants had provided information about local experience with microcomputers in their countries. The following conclusions were reached in discussion:

- (a) Text-processing could make an important contribution to the development of health learning materials. It was comparatively inexpensive and enabled texts to be easily corrected or modified. Moreover, the use of compatible systems would allow the exchange of materials in diskette form, and thus facilitate and speed up adaptation. Other uses for the microcomputer include data-processing, collating the results of tests and surveys, compiling mailing lists and correspondence.
- (b) Training is the key factor in computer operations. The user of a text-processing programme must be proficient in typing, and should undergo a period of preparation, perhaps by distance learning, before attending an informal course, such as that offered by AMREF. Such a course would include computer installation, applications and maintenance.
- (c) Although computers are now fairly reliable, it is important to provide for efficient maintenance. Servicing contracts within a country are expensive. The alternative would be to have compatible systems within the HLM network. There could be a central storage point where spare parts could be exchanged and expendable supplies of paper, ribbons and diskettes made available. AMREF offered to provide such a service to the network.
- (d) Choice of hardware and software will depend on the availability locally of good servicing and spares. The ideal would be a compatible system, but a decision must be taken in accordance with what is accessible within each country. A basic microcomputer package and printer would be necessary, and ideally a second microcomputer in order to provide back-up capacity.
- (e) Where possible, every piece of hardware and software should be tested centrally before being sent out to HLM units to ensure that the system is in good working order. Once again, AMREF undertook to render such a service if required.
- (f) Dedicated word processors are usually more expensive than microcomputers. The latter, together with a text-processing programme such as Wordstar, can provide a wide range of applications for HLM units. A complete microcomputer unit and printer, capable of producing material in photoready copy for offset printing, can cost up to US\$10,000.
- (g) Local computer agents in developing countries often charge high prices for purchase. It would thus be preferable for UNICEF or WHO to buy the equipment for the network. If the equipment could be standardized, bulk buying would save money. The software and other materials should be despatched, where possible, through UN channels. Text-processing software is already available in most major languages.

## HEALTH LEARNING MATERIALS

### (A Vital Step Towards Health For All)

Disease, malnutrition, hunger, poverty and ignorance make up the normal life cycle in much of the developing world. Aid programmes can and do help but success should not be measured in handouts of money, food and medicine. It comes with self-reliance, when people have acquired the means and incentive to help themselves and others break away from the deadly life cycle. This is not, of course, a fresh discovery. It forms the core of the current campaign in support of Health for All through Primary Health Care.

Good training is vital to the strengthening of Primary Health Care, and one key factor in determining the quality of training, whether of doctors or of village midwives, is the availability of books, manuals, slides, films and other learning materials; relevant to the local situation and tailored to fit the needs of teachers, students, health staff and the communities they serve. Such material is lacking throughout the developing world.

Many Third World doctors and health personnel do their studies in a foreign language, already a handicap. When they return to their home country and try to pass on their skills to other health workers, they frequently find that the few books which exist are largely irrelevant, written in a language which most learners cannot understand, and are usually out of date. Manuals are poorly illustrated and often in tatters. The handful of films and slides available bear little relation to local health needs. Quality reference material is often non-existent. This situation is common throughout health learning institutions of the developing countries.

A new approach was needed to meet this challenge, at the same time providing direct support to Primary Health Care. So in 1981 the Health Learning Materials (HLM) Programme was created jointly by the World Health Organization and the United Nations Development Programme, with the support at country level of UNICEF.

It was not possible to launch operations in all developing countries simultaneously. Instead, the idea was put forward to a small group of countries in different parts of the world, including countries in which four major languages (Arabic, English, French and Portuguese) were widely understood. The HLM Programme was conceived as a research project, beginning on a small scale with a relatively modest budget. However, it would have a built-in capacity for expansion so that every bit of additional funding could be readily absorbed. Project documents drawn up by the governments concerned for a five-year period have been planned with this in view.

The HLM Programme has two aims:

- to enable health workers within a growing number of countries to become self-reliant in planning, producing and distributing adequate quantities of the teaching and learning materials they need in support to primary health care;
- to encourage those countries to pool their resources and experience so that gradually they will build up a network through sharing knowledge and mutual collaboration. Once problems have been identified and solved, other countries will be brought into the network. This is a matter of time and funding.

Eight countries - BENIN, KENYA, MOROCCO, MOZAMBIQUE, NEPAL, RWANDA, the SUDAN and TANZANIA - are already carrying out the first phase of their respective projects, using limited money which has been made available and, at the same time, exploring other sources of additional external financing. NIGERIA is completing its workplan. ETHIOPIA has made its request to participate in the programme. In each case, the national government has committed approximately one quarter to one third of the total budget required.

The project documents were all drawn up by the national authorities, usually as a partnership between the Ministries of Education and Health, in cooperation with a university-level health sciences institution. These institutions are, in many cases, the

focal points for the projects. At the end of five years, the external support will end. By that time, each project will have a core of trained staff and an established HLM unit within the national structure, competent in the planning and production of relevant materials to meet the changing needs and priorities of the health system.

The African Medical and Research Foundation (AMREF) is a nongovernmental organization based in NAIROBI (KENYA), providing consultation and on-the-job training opportunities for the whole HLM programme. AMREF has years of experience in producing materials for health workers all over Eastern Africa and is willing to share its expertise with projects in other parts of the world.

Sufficient external funds have been attracted to the Programme to begin the training of key staff, both within the country and abroad. In every project, training is of paramount importance. Workshops have been carried out and planned for authors, editors, teachers and technicians to ensure that every piece of material produced will be well presented and easily understood by the users.

Already special project staff are developing their skills in certain aspects of production, and interregional exchanges are increasing. There are unlimited opportunities for technical cooperation among the developing countries (TCDC) that make up the HLM network. At a meeting of participating countries held in December 1984 at one of the national project sites - ARUSHA (TANZANIA) - future strategies were worked out jointly, taking into account individual problems and constraints, and plans were discussed for standardizing material, where practical, and sharing experiences and production facilities.

The momentum is increasing. WHO continues to provide advice and practical assistance as required. This includes the evaluation of progress and ensuring that, as additional external funding becomes available, it will be used to the best effect. The HLM project is already serving as catalyst in extending national health manpower effort to include curriculum development, teacher training and research. Thus, as they become self-reliant, countries will have the satisfaction of having created the basis for an effective health care delivery system for their peoples.

The urgent requirement is additional donor support, to give these countries the encouragement they need to achieve their objective of self-reliance in health learning materials production. The spin-off in terms of improved health worker training will be enormous, and the impact on the health of the people will be enduring.