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Improvement of the pre-service and in-service training of educational personnel

Staff training and reform at the Bakht Er-Ruda Institute of Education

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STAFF TRAINING AND REFORM AT THE
BAKHT ER-RUDA INSTITUTE OF EDUCATION

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# TABLE OF CONTENTS

**INTRODUCTION**

Mission activities

**FINDINGS AND CONCLUSIONS**

- The Institute: history and present status
- Functions and responsibilities
- Curriculum development
- School supervision
- The Institute of Education for Primary-School Teachers
- The Institute of Education for Intermediate-School Teachers
- The Integrated Rural Education Centre
- The National Centre for Educational Research
- The Central Library
- The nursery schools

**RECOMMENDATIONS FOR FUTURE ACTION**

- Curriculum development and evaluation
- School supervision
- Teacher education and training
- Non-formal education
- Educational research
- Library services
- General recommendations

**ANNEX I - List of persons consulted**

**ANNEX II - References and documents consulted**

**ANNEX III - Lecture Notes: Psychology and Strategies of Educational Reform**

**ANNEX IV - Lecture Notes on Group Dynamics and Decisional Priorities in Integrated Educational Planning**
INTRODUCTION

1. The mission described in the present report was carried out from 7 to 28 November 1984 at the request of the Government of the Democratic Republic of Sudan, and was funded by UNESCO under its participation programme for 1984-1985.

2. The purpose of the mission was:

(a) to provide on-the-spot short training to the staff of Bakht Er-Ruda Institute (training for a multiplier effect) in the modern trends of teacher education, with special emphasis on integrated policies and plans for initial and in-service training in the context of such basic concepts as education for all, democratization of education, and the complementarity of formal and non-formal education, with emphasis on the role of teachers and school principals in school management and reform;

(b) to study the current situation of Bakht Er-Ruda and its role in teacher-training curricula reform and out-of-school education in the community, and report on possible feasible strategies and approaches for reforming and updating the Institute.

Mission activities

3. The mission left Cairo on 7 November 1984, almost one week later than the assigned date. The consultant had to participate as a member of the Egyptian delegation to the Pan-African Pugwash Conference on African security, held in Cairo, the first week of November. Pugwash co-operates very closely with UNESCO in matters of international peace.

4. The first day in Khartoum was organized as follows:

(a) visit to the Office of the United Nations Development Programme;

(b) visit to the Sudanese National Commission for Education, Science and Culture;

(c) briefing session with Mr. Hwein Bayoumi El-Sayeh, Dean of Bakht Er-Ruda Institute of Education, who was in Khartoum at the time;

(d) meeting attended by the Dean with the Secretary General and the staff of the National Council for Illiteracy Eradication and Adult Education, to discuss ways and means of co-operation between the Council and the Institute in the field of non-formal education.

5. The Dean of Bakht Er-Ruda Institute of Education asked the mission to participate with him in the closing session on 8 November of a workshop on Environmental Education. Discussions were held with the Director of the Institute of Environmental Studies, University of Khartoum, and the visiting professor, Dr. W.B. Stapp, in connection with the programme of environmental education in Bakht Er-Ruda Institute.
6. The mission left, in the company of the Dean and Professor Stapp, to Bakht Er-Ruda at noon on the same day, 8 November. On arrival, a tour of the Institute premises and campus was made. Ideas related to the programme of environmental education were discussed on the spot, and plans were finalized for the activities of the mission.

7. These activities included meetings and detailed discussions with the Dean of the Institute; directors of offices and centres, heads of departments and chiefs of units and sections (Annex I). The discussions dealt with the objectives, present activities, problems encountered, and proposed solutions and future plans of the respective office, centre, department, unit or section.

8. The mission visited the Institute of Education for Primary School Teachers; and the Institute of Education for Intermediate School Teachers. Discussions were held with the principals and the teaching staff of the two institutes.

9. The mission also visited the following schools and centres, where classroom sessions were observed and discussions held with the respective principals and teachers:

(a) White Nile Intermediate School;
(b) El-Dueim Intermediate School;
(c) Bakht Er-Ruda Primary School; and
(d) El-Mileh Integrated Rural Education Centre.

10. A visit was paid to the central library of Bakht Er-Ruda Institute of Education, and discussions were held with the chief librarian. The Audio-visual Aids Unit was also visited, in addition to the nursery school.

11. Two lectures (two hours each) were given to the staff of Bakht Er-Ruda Institute of Education on the subject 'psychology and strategies of educational reform'. (Annex III).

12. The mission took part in the activities of the first day of a three-month training course for the primary-school teachers to be appointed in the integrated rural education centres in various parts of the Sudan. The Acting Director of the Training Centre for the Integrated Rural Education Centre's teachers and some of the lecturers in the course, attended a two-hour presentation made by the mission on the objectives and methods of the integrated rural education centres. The presentation emphasized the following points:

(a) the need for IRECs within the framework of the role of education in development;
(b) integration of in-class and out-of-class activities in the farm and the workshop;
(c) integration of formal and non-formal education; and
(d) implications for teaching methods and the required changes in the teachers' attitudes and practices.
13. A lengthy meeting with the directors of the Centres, heads of departments and principals of the two institutes of education (primary and intermediate), was held in the office of the Dean. The following activities were undertaken in this meeting:

(a) presentation of the subject 'Group Dynamics and decisional Priorities in Integrated Educational Planning' (Annex IV), and demonstration of a simulation exercise on the subject;

(b) possibilities of introducing simulation techniques in pre-service and in-service teacher-training were discussed, in addition to other methods such as 'micro-teaching' and "action research";

(c) in this meeting of senior staff, discussions were held on major issues identified by the mission, concerning the present status and future development of Bakht Er-Ruda Institute of Education. The purpose was to ascertain the current thinking of the staff on these issues, and to provide the opportunity for group thinking.

14. In-depth consultations were held with the Director and staff of the 'School supervisors and Field Teachers' Guidance Office'. These consultations included:

(a) Professional development of the supervisor, requirements and means;

(b) The role of the supervisor in introducing some of the patent methods of teacher-training, such as micro-teaching, observation techniques of class-room interaction between the teacher and the pupils, and various applications of group dynamics in the school;

(c) Emphasis was put on ways and means to build up the morale of teachers in the field, with a view to ensuring that they would conform to an agreed group norm of excellence in performing the teacher-learning process;

(d) Review of the forms used in teachers' performance reports and the supervisors' manual. Modifications were suggested in the light of the above discussions;

(e) The modified form and manual were then presented to a wider audience of the school supervisors in the White Nile Province, whom the mission met in the town of Duiem;

(f) The mission took advantage of this opportunity to introduce to the group some of the recent trends in teacher training and school supervision, with special emphasis on the attitudinal aspects. Problems facing the field supervisors were also discussed.

15. The occasion of the Fiftieth Anniversary of Bakht Er-Ruda Institute of Education coincided with the convening of the 'Conference on Educational Curricula' in Khartoum from 24 to 27 November 1984. The Dean, his Deputy and all the senior staff of the Institute left for Khartoum to participate in this Conference, which is usually organized once every 5 to 10 years.
On the basis of a suggestion made by the Dean of the Institute, the Minister of Education and Guidance was kind enough to invite the mission to participate in the Conference. It was a unique opportunity to follow on-the-spot the deliberations of a distinguished group of Sudanese leaders, not only in education, but also in the political, economic and social sectors. More important, however, was the opportunity to observe on the spot, the distinguished position enjoyed by Bakht Er-Ruda in the educational scene in the Sudan.

16. In addition to participation in the above-mentioned Conference the mission had the privilege of meeting with the Minister of Education and Guidance, who confirmed the keen interest of the Government of the Sudan in up-grading the Bakht Er-Ruda Institute of Education, and briefed the mission on the Government's aspirations in this connection.

17. The mission also had the pleasure of meeting with the Education Under-Secretary and Chairman of the Conference in regard to the future developments of Bakht Er-Ruda as foreseen by the Ministry of Education and Guidance.

18. A second meeting was also held with the Secretary General and the staff of the National Council on Illiteracy Eradication and Adult Education, in connection with the role of Bakht Er-Ruda Institute of Education in strengthening non-formal education in the Sudan, in the light of the findings of the mission.

19. It was unfortunate that the duration of the mission did not permit attending the National Panel, which was due to be held at Bakht Er-Ruda on the occasion of its fiftieth anniversary. It was announced that the President of the Republic would be visiting Bakht Er-Ruda on this occasion. However, some of the papers prepared for this purpose were made available to the mission and views were exchanged on the subject.

FINDINGS AND CONCLUSIONS

The Institute: History and Present Status

20. Bakht Er-Ruda Institute of Education was founded in 1934 as a training college for primary-school teachers. Mr V. L. Griffiths, the first principal of the college, selected this country site, not far from the small market town of Dueim. The college started with a modest collection of huts and houses made from 'clay plastered over with mud and dung'. The idea was to live just one stage ahead of the ordinary Sudan village and no more. In that isolated place, staff and students generated a sense of community and purpose, which has become a legend in the Sudan.

21. At present and after 50 years, Bakht Er-Ruda is much more than the usual setting of an institute of education. It occupies an area of 400 acres, including farms of about 200 acres. It houses the Curriculum and Books Centre; the School Supervision and Field Teachers' Guidance Office; the National Centre for Educational Research, and audio-visual aids unit; the Institute of Education for primary-school teachers (IEPST); the Institute of Education for Intermediate schoolteachers (IEIST) which has 13 departments; the centre for the training of teachers of the Integrated Rural Education Centres (IREC's); three intermediate schools, one primary school; one integrated rural education centre, a central library, two nursery schools, in addition to the general secretariat (administration, finance, personnel, stores, public relations and follow-up).
Among the available facilities are a teachers' club, a workers' club, a co-operative society, a health service, postal and telephone services, mosque and theatre, in addition to farms, workshops and animal and poultry pens.

22. The distinguished position enjoyed by Bakht Er-Ruda Institute of Education in the educational setting in the Sudan is visibly demonstrated in the public interest shown in celebrations of its fiftieth anniversary, the tribute paid to the Institute by the President of the Republic in his Inaugural Address to the Parliament on 26 November, and the visit by the President to the Institute on 2 December 1984 on the occasion of the anniversary.

Functions and responsibilities

23. There is as yet no law or decree specifying the duties of Bakht Er-Ruda Institute of Education, but according to an official document on 'Educational policies' (1983), and other documents, these duties include:

(a) prepare curricula suitable for primary schools, intermediary schools (and in the near future, secondary schools) in the light of experimentation, try-outs, and field trials;

(b) prepare textbooks and teaching manuals;

(c) develop curricula, books and teaching manuals for teacher-training institutes;

(d) develop curricula, books and teaching manuals for the integrated rural education centres;

(e) train primary schoolteachers oriented to live and work in rural areas and capable of improving life in such areas;

(f) train intermediate schoolteachers through a one-year in-service training programme;

(g) up-grading school supervision through in-service training of supervisors, development of necessary forms and manuals for evaluation of teachers' performance, receiving summaries of these reports from all over the Sudan, and their analysis and feedback;

(h) ruralization of primary and intermediate schools through introduction of rural education in the curricula and establishment of young farmers' clubs, and formation of school general assemblies to allow student practice through these institutions on various activities related to life in rural areas;

(i) undertaking educational research;

(j) supervising the publication bureau which issues all the magazines and supervises the printing of school textbooks;
(k) develop teaching aids and introduce instructional technology in schools;

(l) provide technical supervision for 16 institutes of education for primary-school teachers throughout the Sudan. These institutes also serve to adapt training to conditions in different localities, as well as to assist Bakht Er-Ruda in trying out its syllabuses;

(m) experiment with adult education and other kinds of non-formal education, in collaboration with the National Council for Eradication of Illiteracy and Adult Education.

Curriculum development

24. Curriculum development and writing of textbooks and teachers' manuals, have been major concerns of Bakht Er-Ruda Institute of Education since its early days. However, in the early seventies, as a result of a shift of the educational ladder from 4-4-4 to 6-3-3, and a as a result of a huge educational expansion, the task of curriculum development was shifted from Bakht Er-Ruda to the Ministry of Education. New curricula were developed and books were prepared in a hurry. However, in a conference held in 1973, it was decided to reassign to Bakht Er-Ruda the task of curriculum development for primary and intermediate education, and in the near future secondary education, throughout the Sudan; in addition to curricula, textbooks and teachers' manuals for the integrated rural education centres and the primary and intermediate institutes of education. No less than 500 textbooks, teachers' manuals, general reading books on various topics, journals, etc. have been prepared at Bakht Er-Ruda.

25. However, it seems that as a result of the hasty manner in which curricula were developed and books were prepared in the early seventies, complaints are presently voiced by different quarters, including those expressed in the latest conference on curricula held in November 1984. These complaints included:

(a) Too many books: according to a recent survey undertaken by the National Centre for Educational Research, there are 146 textbooks and 75 teachers' manuals in current use, containing 10,161 pages for the primary and intermediate levels. In addition to overburdening the child, the vocabulary of some of these books is higher than the cognitive level of the child at the respective stage of development.

(b) The curricula do not relate the student to the cultural, spiritual and ideological tenets of the nation. The conference emphasized strongly the requirement that curricula should be designed within the framework of Islamic orientation in line with the overall orientation of the country.

(c) The curricula lack environmental relevance and dynamism. For example, the subject "Topics" (equivalent to the project method) developed at Bakht Er-Ruda in its earliest stages, was dropped out, and education almost regressed to rote learning.
Overlap and lack of continuity and integration between different school subjects. Only about 60\% of the required new books have been completed since the 1973 conference on curriculum. As a result, new books are used in the first three grades, while older books are still in use in the rest of the grades. This created repetition, waste and confusion.

Factual errors in some books in language and content. In some cases, the vocabulary is higher than the cognitive level of the child at the respective stage of development.

While the cost of books is getting higher, the level of production is getting lower.

26. A report prepared by the staff of Bakht Er-Ruda and submitted recently to the Education Under-Secretary put on record in the field supervisors' report that the curriculum is overcrowded and could not be covered in the actual school year, especially in view of the introduction of environmental, population and drug education, and practical activities in the curriculum. The same report attributes much of the present difficulties to the low professional competence of the teachers, lack of uniformity in their training especially at the secondary level. As a result, the teachers do not pay due attention to these latter aspects and emphasize rote learning. Though the classes visited by the mission were small in number, yet the evidence seems to confirm the above conclusions.

School supervision

27. The Office of School Supervision and Field Teachers' Guidance was established in 1949, then shifted to the Ministry of Education, and again was reinstated in Bakht Er-Ruda in 1982. Its responsibilities include:

(a) Enhancement of field supervision at the primary, intermediate and secondary education levels. The Office receives reports on teachers' performance from all parts of the Sudan, analyzes these reports and provides feedback on the quality of the teachers and adequacy of curricula syllabuses and textbooks.

(b) The Office provides technical supervision for 16 primary institutes of education throughout the Sudan. These institutes also serve to adapt training to the local conditions as well as to assist Bakht Er-Ruda in field trails of the curricula syllabi and the textbooks.

(c) Preparation of forms and supervisors' manual for reporting by the field supervisors on teachers' performance.

(d) Upgrading school supervision by organizing training workshops for field supervisors.

28. School supervision in the Sudan is presently suffering from the following problems as expressed by the office staff and the group of supervisors with whom the mission held a meeting in the town of Dueim:

(a) The Office has no say in recruitment and selection of the supervisors, and is thus unable to ensure that those appointed in the job would be capable of meeting the specified requirements.
(b) The supervision assignment is not attractive to the teaching profession due to the hardships involved, especially lack of adequate transport facilities.

(c) Lack of adequate training of the supervisors. The mission was told in its meeting with the White Nile Province Supervisors that some of them have not received the Supervisors' Manual, in storage at the Ministry. Some of them are not familiar with the modern forms of micro-teaching and observation methods of classroom interaction, though these methods were explained in the Supervisors' Manual.

29. Through inspection of a number of the completed forms for reporting on teachers' performance, and through discussions, the mission is under the impression that completion of such forms is a matter of routine often lacking objectivity and specificity, and thus having minor impact.

The Institute of Education for Primary-School Teachers (Mabruka)

30. The Institute was established in 1948 to train teachers for the primary schools. Before 1968, the duration of study was six years after completion of the primary school. At present, the duration is four years after completion of the intermediate school. The curriculum covers the regular secondary school subjects in addition to education, psychology and teaching practice. About 233 students are presently enrolled in the Institute.

31. Student teaching practice starts with an orientation stage (3 months) where simulated lessons are prepared and commented by the students and the instructor, followed by actually teaching for 6 weeks in a primary school, preferably in his native area. The final stage lasts for 3 months when the students' performance is evaluated. Micro-teaching is not practiced in this Institute.

32. A farm is attached to the Institute, and managed by a students' committee under the supervision of an instructor in rural education. In addition to raising the regular crops, there are facilities for raising cattle and poultry. However, the work on the farm was until very recently suffering from irregularities in irrigation. A pumping irrigation machine was provided to the Institute through UNICEF assistance. However, it seems that integration is lacking between this outdoor activity and activities inside the classroom. The metal and carpentry workshop is not presently operating due to lack of trained teachers.

33. The Students' General Assembly is divided into branches such as hygiene, sports, repairs, gardening, music, a co-operative shop, barber shop, first aid, students' club, arts, radio and television, photography, culture, etc.

34. The teaching staff of the Institute consists of three groups: (a) university graduates carrying a diploma in education, (b) graduates of Mabruka Institute; and (c) primary school teachers trained to supervise student teaching. The Mabruka Institute sets the norm and model for the sixteen similar institutes established throughout the Sudan to meet the demand for teachers after expansion and decentralization.
The Institute of Education for Intermediate-School Teachers

35. The Institute was established in 1949 to train teachers for intermediate schools. Due to the education expansion, the duration of the programme was reduced from two years to one year, including evening classes for three days a week. The Institute draws its students from intermediate schoolteachers who have completed secondary education and who have served for about three years teaching in intermediate schools. The student is required to study: general Islamic education, psychology and education, audio-visual aids, and two subjects from among a group of subjects (Arabic language, English language, mathematics and science) and one subject from a second group (advanced Islamic education, geography, history and arts education) in addition to one of the following subjects: rural education, physical education, music education and theatre education. The co-curriculum includes: sports and cultural activities.

36. In addition to teacher training, a major assignment of the staff of the thirteen departments of the Institute is curriculum development, and writing of textbooks and teachers' manuals under the supervision of the Curriculum Centre. Other assignments include: preparing questions for public examinations, technical supervision of other similar institutes (five at present in the Sudan), and in-service teacher training. The staff is presently active in developing curricula and writing textbooks for population education, environmental education and drug education programmes. The Institute also undertook with the British Council and a British publisher, the field trial of the new English course (the Nile) for the intermediate level.

37. The major problems facing the Institute as expressed by the Principal and the staff are:

(a) serious shortage of the staff due to expatriation to the oil-rich Arab countries. For example, the Science Department has in addition to its Chief only one instructor and an assistant for teaching practice, while its manning table provides for nine posts;

(b) as a result of this shortage and as a result of too many tasks assigned to the Institute, the staff is overburdened and left with no time for creative work, up-dating etc.;

(c) lack of work-shop facilities (e.g. carpentry, metal work, and dairy equipment) due to shortage of funds. In addition, due to shortage of staff qualified to teach the newly-introduced subject 'practical education', the students are not adequately trained in this subject;

(d) there is a general feeling expressed in the conference on curricula, that one year's training of teachers who might have already acquired bad teaching habits, leaves much to be desired;

(e) again, the Institute has no say in recruitment and selection of its staff. As a result, newly-appointed staff might find themselves engaged in curriculum development and book writing without adequate prior training.
The Integrated Rural Education Centre

38. About 76% of the estimated 21.6 million population (February 1983) of the Sudan live in rural areas. Only about 8% of a potential 200 million acres are utilized for cultivation. The illiteracy rate stands at about 68%: 62% among males and 82.06% among females (aged 10 years and above). Therefore, and in order to enable education to be an efficient and effective tool of socio-economic development, the Ministry of Education in collaboration with the World Bank (IBRD) undertook to construct 24 'Integrated Rural Education Centres' in the least developed rural areas of the country. The mission visited one of these centres located in the village of Mileh not far from Bakht Ez-Ruda.

39. There were 93 boys and 73 girls enrolled in five grades (a sixth grade was foreseen for 1985). The teaching staff consisted of seven male teachers and one female teacher. The Centre's building is much more advanced than the regular primary school, equipped with an excellent workshop and a farm. However, on visiting the classes, the mission unfortunately found no evidence of integrating the activities inside and outside the classroom. The same observation applied to the Dueim Intermediate School visited by the mission. Teaching inside the classroom adheres rigidly to the prescribed syllabus. In an Arabic reading lesson, entitled: 'The Rabbit and the Hunter' the mission found on questioning the pupils in this class (Grade 3) that no pupil had seen a rabbit, and no pupil dared to request any information on this unknown animal. Rote learning is still the dominant practice.

40. The centre's staff conducted a literacy survey in the village, and literacy classes are opened for men and women. The staff also managed to mobilize local efforts to form a co-operative wheat mill in the village. Lessons in home economics are offered to the village girls and women in addition to vocational training for the youth and general cultural programmes for the adults. There is a mixed farm where the adults and their sons in the school work together on the farm, in order to alleviate the adults' suspicions about the feasibility of this activity. Unfortunately, however, literacy classes are conducted in the traditional approach, although all the requirements for application of a work-oriented approach are available.

The National Centre for Educational Research

41. The Centre started in 1973 as a research unit, and then was upgraded in 1976 to become the National Centre for Educational Research. At present, the Centre's staff consists of the director, his deputy and a female researcher.

42. The Centre has managed to complete a number of research studies on an ad hoc basis. Illustrative examples published in its 'Journal of Educational Research' (Vol. III, 1979 and Vol. IV, 1980) are:

(a) objective dictation and national examinations;

(b) analytic study of Ascott tests for measurement of Sudanese intelligence;

(c) speed of reading.
43. The Centre is facing, according to its director, the following problems:

(a) shortage of staff;
(b) lack of clarity of the demand for research and its research findings;
(c) serious shortage of scientific references and journals and computer services;
(d) delays in getting the Journal printed and published on time.

The Central Library

44. The Central Library was established in 1945, and is considered second only to the University of Khartoum Library. It has a total number of 13,250 Arabic books and 10,420 English books. The library subscribes to 42 current periodicals, and in addition it receives 20 magazines presented mainly by the British Council. The average membership per year totals 750 borrowers, and over 1,000 readers.

45. Though the books are classified according to the Dewey Decimal classification scheme, cataloguing is not yet completed, due to the difficulty of securing an English typist. The library is directed by a senior librarian. His two assistants have migrated to the Gulf region and have not yet been replaced. At present, the postal library service is not operative, due to shortage of staff.

The nursery schools

46. The mission visited one of the two nursery schools attached to Bakht Er-Ruda. The building and equipment are quite adequate. Thirty boys and girls (aged 3 to 6 years) are cared for by two qualified female teachers and an assistant. Unfortunately, there was no indication that the nursery school is used for child study and observation.

RECOMMENDATIONS FOR FUTURE ACTION

Curriculum development and evaluation

47. Curriculum development in the Sudan is at present the responsibility of a group of overburdened instructors in the Intermediate Institute of Education of Bakht Er-Ruda under the supervision of the Director of the Curriculum Centre, who has no full-time assistants. Not a small proportion of this staff has had no prior training or experience in curriculum development. As a result, about 40% of the required new books have not been prepared, and the existing curricula and books leave much to be desired, as was clearly evidenced in the deliberations of the November 1984 Conference on Curricula. It is therefore recommended that a series of intensive workshops, aiming at a multiplier effect, be organized for in-depth training in curriculum development and evaluation, possibly with assistance from short-term international consultants.

48. It is recommended that these workshops be guided by the following principles:
(a) design of curricula in the light of the rational policies and the requirements of socio-economic development;

(b) active involvement of leaders in religion, politics, various sectors of the economy and public service, university professors of various disciplines, including psychology and education;

(c) up-dating of both content and methodology with due emphasis on affective (attitudes and values), and psychomotor objectives, and not only on cognitive objectives;

(d) emphasis on the preparation of books and teachers' manuals, on enquiry, problem solving, innovation and creativity, application and relatedness to life;

(e) emphasis on dynamism and activities, both individual and group, inside and outside the classroom, within an integrated balanced framework, transcending the artificial boundaries of academic subject matters, and aiming at developing in the students' desired attitudes towards manual work, democratic community action, etc.;

(f) a concerted effort should be made to minimize duplication, overlap, and atomism, and to optimize coherence, continuity and integration. For example, it would be advisable to relate without duplication, the newly introduced subjects such as environmental, population and drug education to the relevant subject matter such as geography, science, etc.;

(g) adequate flexibility should be maintained to ensure environmental relevance and adaptability of the curricula to the many and diversified local environments in the Sudan. For this purpose, the provincial institutes of education should be seriously involved.

49. Priority for attending these workshops should be given to those who are expected to stay (or who would be allowed to stay) on the job for an adequate period of time and/or those who are willing to move to other institutes of education in order to benefit them with their acquired experience.

50. The Curriculum Centre should be provided with full-time qualified curriculum development specialists in addition to the staff of the Intermediate Institute of Education whose teaching load should be decreased to allow them time for up-dating and creative development.

51. A secondary school for boys and another for girls should be attached to Bakht Er-Ruda for try-outs of secondary school curricula, a task Bakht Er-Ruda is expected to undertake in the near future.

52. The Curriculum Centre should be provided with the means to enable it to supervise the process of book writing and production, to ensure the suitability of the language standards to the respective stage of development; and the adequacy of production (format, size, color, etc.)
53. The Audio-visual Aids Unit should be provided with simple but efficient reproduction equipment, and a complete educational television unit. It should emphasize production of prototypes of low-cost indigenous instructional technology, and should conduct training workshops in order to demonstrate these techniques to the educational institutions throughout the Sudan.

54. The possibility should be considered to provide short-term fellowships for staff engaged in curriculum development, to allow them to visit some leading centres, especially those in developing countries with similar conditions.

School supervision

55. The role of the School Supervision and Field Teachers' Office requires clarification, especially after its transfer from the Central Ministry of Education to Bakht Er-Ruda. The Office receives summaries of teachers' reports prepared by the field supervisors, analyzes these reports and provides feedback. However, the Office has not say in recruitment and selection of the supervisors, presently based almost exclusively on seniority. It is recommended that the Office prepare a job description for the post of school supervisor, and be given the opportunity to share in ascertaining that the required specifications are met.

56. The school supervision post is becoming less and less attractive to the teaching profession due to the hardships involved. As a result, the number of school supervisors is much less than the required number, and thus teachers are deprived from adequate supervision. In order to attract the best qualified persons to this post, it is recommended to establish a system of appropriate incentives, and to provide adequate transport facilities, especially in distant areas and in tough terrain.

57. It is recommended to introduce some improvements in the performance reports currently in use, so that they would aim at assessing the actual performance in a more objective manner, rather than assessing traits which are difficult to rate objectively. An effort in this direction was made by the mission at the request of the Director of the Office. The revised version was presented to the staff of the Office and to the assembly of supervisors in the White Nile Province. It is recommended that such efforts be continued on a larger scale.

58. Modifications were also suggested by the mission to the Supervisors' Manual, aiming at making it more realistic and more likely to be applied. For example, the Manual suggests the use of observation schedules of teacher-pupil interaction and micro-teaching. However, the mission found that the majority of the supervisors are not acquainted with these methods and that very few of them actually apply them. It is recommended to simplify these methods and to organize a series of workshops for training the supervisors in these and other relevant methods.

59. The school principal is more or less a resident supervisor and he is required to take part in the completion of his teachers' performance report. It is, therefore, equally important to include school principals and senior teachers in the training workshops organized for the supervisors. A senior principal and/or teacher could also assist in supervision, especially in remote areas, where it might be difficult to provide adequate and regular supervision. It is also recommended that a newsletter be issued periodically and distributed to all concerned, to keep them up-to-date with development in the field of supervision.
60. School administration is interrelated to supervision. It is recommended that the Supervision Office in Bakht Er-Ruda be charged with the added responsibility of advancement of educational administration. In this connection, the Office could seek assistance from the National Institute of Administration in the Sudan.

61. Perhaps one of the greatest challenges facing education in the Sudan is the almost exclusive reliance on rote learning. There is a pressing need to build up among teachers a professional norm of dynamism in the teaching-learning process, which is pupil-centred rather than teacher-centred, based on activity, experiencing, group problem-solving, relatedness to life and application. Supervisors should receive intensive training in the social-psychological methods of attitude change and in the dynamics of team building, and the group discussion-decision methods.

62. A self-developed group norm of professional excellence is more potent than the supervisor's report in motivating the teacher to adhere voluntarily to a high professional standard of performance. By applying methods of group dynamics, the supervisor, the principal and the senior teacher could accomplish a great deal in their efforts to build up group morale so as to generate a climate of group learning and self-developed group norms. Supervisors, principals and senior teachers should be trained in techniques of sensitivity training, simulation and experiencing-based workshops, etc. It is recommended that staff of the Supervision Office be granted short-term fellowships for field study and training in the modern methods of educational administration and supervision.

Teacher education and training

63. At present, teachers for the Integrated Rural Education Centres (IRECs) are recruited from among primary school teachers, especially from the areas where these centres are located, and admitted to a six-month training course at Bakht Er-Ruda Centre for training teachers for IRECs. Such a scheme suffers, as observed by the mission, from the often-encountered difficulty of extinguishing the bad teaching habits acquired in the field. A more efficient and effective scheme would be, in the mission's view, to have Mabruka Primary Institute of Education in Bakht Er-Ruda specialize exclusively in preparing interested intermediate school graduates for teaching in the IRECs. Such a scheme would be especially feasible if the intention was to have the IRECs replace the regular primary school in the rural areas in the Sudan. However, in order to realize this aim, it would be necessary to build up a variety of models of buildings and equipment as indigenous and low in cost as possible.

64. Among the major objectives of the IRECs, are the interpretation of activities inside and outside the classroom and the integration of formal and non-formal education. To prepare teachers trained in both types of integration, it would be advisable to establish in Mabruka Institute a department of non-formal education. Equally important is to demonstrate to the student teacher through the daily practices of the Institute methods of integrating activities inside and outside the classroom within the framework of a dynamic and democratic social climate. The three IRECs in the area of Bakht Er-Ruda should be attached to Mabruka Institute for the purpose of training and experimentation.

65. If future demand for teachers of IRECs exceeded the supply provided by Mabruka Institute, some of the 16 primary institutes of education existing now in the Sudan, especially those in rural areas, could follow the model set up by Mabruka. Alternatively, but not exclusively, Mabruka Institute might operate a distance learning programme for training the needed teachers for the IRECs.
Several complaints were voiced in the Curriculum Conference held in November 1984, that the quality of the graduates of the Institute of Education for Intermediate School Teachers leaves much to be desired both in terms of subject matter and teaching skills. It is believed that the present practice of appointing graduates of secondary schools to teach directly after graduation in the intermediate schools without prior training is most likely to result in the acquisition of bad teaching habits which would be difficult to extinguish through a one-year in-service training course. Other factors believed to be related to this situation include: serious shortages in the staff of the institutes due to excessive migration to the oil-rich Arab countries; the resulting overload, especially in view of the engagement of the staff in curriculum development and book writing, and due to the inadequate laboratory equipment and instructional technology.

In view of the above considerations, the mission agrees with the recommendation made by the curriculum conference, that the Intermediate Institute of Education admit only interested students directly after completion of their secondary education, and that the duration of study be extended to two full academic years. Admission to the Institute should be based on carefully specified criteria. Such a course would be feasible, especially considering that the number of these institutes is gradually increasing, so that each province would have one or more institutes, and thus the gap between demand and supply could eventually be closed.

While it is desirable to maintain the present involvement of the staff of the Institute in curriculum development and book writing, it would be equally desirable to fill in the vacant posts in the institute from among the best available personnel and to ensure that they would stay on the job for a reasonable amount of time in order to allow them adequate opportunity for up-dating and creative self-development.

It is recommended to provide the Institute with the required laboratory equipment and instructional technology, especially complete educational television equipment for use in micro-teaching. The three intermediate schools in the area should also be attached to the institute for training and for try-outs of curricula.

The possibility of introducing a number of subjects and topics in the programme of study should be considered, such as: psychology of attitudes, psychological testing and measurement, guidance and counselling, educational planning, administration and supervision.

Non-formal education

Bakht Er-Ruda Institute of Education was the seat of some of the earliest forms of non-formal education in the Sudan, such as the pioneering experiment undertaken in the rural area of Um Gar (about 30 kilometres from Bakht Er-Ruda) in 1944, and extended to the Gezira Scheme in 1948. Since then, many workshops on non-formal education have been organized in Bakht Er-Ruda, the latest of which was held in 1984. Sudan was also one of twelve countries which participated in the world experimental work-oriented literacy programme, applying the functional approach (1969-1973). A Functional Literacy Act was passed in 1972, and a National Centre for functional literacy was established in Khartoum to train leaders in the functional approach. A series of books and manuals was prepared for different stages of literacy and for different sectors of the population. An
international evaluation task force rated the Sudanese projects as one of the most successful projects in the world experimental literacy programme. However, and seemingly due to economic-constraints, the functional approach was replaced by what has been termed the 'civilization-centred' approach, which deals with topics of interest to workers, farmers and women, but which does not claim to aim at integrating literacy with vocational training, agricultural extension or home economics.

72. Sudan is presently preparing for a national comprehensive literacy campaign, co-ordinated by the National Council for Illiteracy Eradication and Adult Education. It is recommended to organize as part of this campaign, a functional literacy project in the area of Bakht Er-Ruda and the Gezira Scheme, sponsored by the National Council, and capitalizing on the rich resources and experiences available at Bakht Er-Ruda and the Gezira Scheme. Such a project could cover all the sectors of the economy active in the two areas, where all the component requirements are available, including trained teachers, books and manuals prepared by the functional literacy project, supplemented by some follow-up books, and concentrating on agricultural extension, vocational training in agriculture based industries and rural home economics. Such a potentially successful project could help greatly in identifying and testing ways and means of integrating formal and non-formal education in the Sudan.

Educational research

73. Research to be meaningful and useful, should be based not only on demand, but also on actual needs. The National Centre for Educational Research in Bakht Er-Ruda should therefore base its long-term plans on both surveys of educational problems and/or recognized needs expressed by all concerned, including politicians, agriculturalists, industrialists and parents. On the basis of such surveys, priorities could be identified in the light of available resources.

74. In its capacity as a National Centre, and in view of the widely-spread complaint of the low quality of the educational system output, the Centre should be in a position to undertake a national educational assessment project, for which all the available resources would be mobilized. Such assessment would require the development of tools for assessment and diagnosis standardized on representative samples in order to allow for generalization and derivation of indicators for appropriate solution.

75. A major contribution of the Research Centre should be the development of research tools, aptitudes, achievement, interest and personality. Very few of these tools are available at present in the Sudan. Such an ambitious project should engage the joint efforts of the Centre, schools of education and university departments of psychology. These tests are essential tools not only for research, but also for educational, vocational and personality counselling, a service which is not provided yet in the educational system in the Sudan.

76. Action research is the most fitting approach to be applied in spirit and letter in Bakht Er-Ruda, through the joint efforts of the researchers and practitioners in research design, implementation and application. Such research could be effective in both formal and non-formal education. The staff of Bakht Er-Ruda should be provided with the opportunity to acquire the required skills and attitudes conducive to realizing the efficiency and effectiveness of action research.
In addition to providing the Research Centre with the badly-needed qualified staff, research strategies should lean heavily on the collective effort of all interested and willing professional members of the staff, and should also involve the student teachers as much as possible.

Measures and mechanisms should be developed to ensure that research reports are aimed not only at publication, but are also studied, discussed, and implications considered and put to action. Of course, the likelihood of application would be greater if the research was based on actual problems and needs felt by the decision-makers.

Library services

The library should be provided with at least one assistant and part-time English typing service, to enable it to initiate bibliographic surveys and documentation, and to resume its postal library services.

The library should be put on the mailing lists of the international, regional and bilateral assistance donor agencies who might be in a position to ease the shortage of hard currency needed for the purchase of foreign books and for subscription to foreign journals. A modest budget is also needed to enrich the libraries of the two institutes of education, the National Centre for Educational Research, the three intermediate schools, the primary school and the integrated rural educational centre.

General recommendations

Bakht Er-Ruda Institute of Education has been operating so far without the guidance of definitive formal regulations, thanks to the high status enjoyed by its consecutive deans. During the years, many changes have taken place, including withdrawal of some of its functions and their reassignment. In view of decentralization and educational expansion, there is a pressing need expressed by the staff, to have Bakht Er-Ruda benefit by the guidance of a Presidential or Ministerial Decree or their equivalent, to define clearly the functions and responsibilities of the Institute, and its organization and mandate. Such a Decree might stipulate the formation of an advisory scientific board responsible and accountable to the Minister of Education and Guidance to propose for his approval the annual plan and to supervise the implementation of educational policies.

The staff of Bakht Er-Ruda should be carefully recruited from among the best qualified available personnel. They should also be given adequate opportunity to acquire the relevant experience so that they may contribute efficiently and effectively to the realization of the objectives of Bakht Er-Ruda. Promotion of the staff of Bakht Er-Ruda when due should not be conditioned by transfer to another post outside the Institute. This does not mean, however, that the staff of Bakht Er-Ruda should not be transferred to other relevant posts where they could benefit other institutions. On the contrary, one of the objectives of Bakht Er-Ruda is to produce educational leaders for the whole of the Sudan, but the transfer of staff should not be premature. A healthy balance should be effected between staff mobility and continuity.
83. Various international and regional organizations might find it more economic and efficient to channel its technical assistance to education in the Sudan via Bakht Er-Ruda in view of its many and diversified functions. The Government of the Sudan might wish to transform the Bakht Er-Ruda Institute of Education into a Regional Centre, thus benefitting, with its rich experience and resources, a wide range of Islamic, Arabic and African countries. To conclude: the history and future of education in the Sudan is the history and future of Bakht Er-Ruda; any assistance provided would be in the mission's view, most cost-effective.
ANNEX I

LIST OF PERSONS CONSULTED

Central Ministry of Education

- His Excellency Professor Dr. Osman Sayed Ahmed Ismail, Minister of Education and Guidance.

- Mr. Mohei El-Din Wahby, Under-Secretary, Ministry of Education and Guidance.

- Mr. Hassan Ahmed Youssuf, Chairman, National Committee Celebration of the Fiftieth Anniversary of Bakht Er-Ruda Institute of Education.

- Mr. Awad Ahmad. Rapporteur-General, the Conference on Educational Curricula.

- Mr. El-Senousi Ibrahim, Secretary-General, National Committee for celebration of the Fiftieth Anniversary of Bakht Er-Ruda Institute of Education.

- Mr. Ali Moussa Mohammed, the National Commission for Unesco.

The National Council for Illiteracy Eradication and Adult Education

- Mr. Ibrahim M. Arbab, Secretary-General.

- Mr. Ali Moussa Mohammed, Deputy Secretary-General.

- Mr. Abd-El Azeem El-Nourani, Head, Planning, Evaluation and Research.

- Mrs. Hanem El-Shourbagy. Programme.

Institute of Environmental Studies, University of Khartoum

- Professor Dr. Mamoum Dauod El-Khalifa, Director.

- Dr. William B. Stapp. Visiting Professor.

United Nations Development Programme

- Mr. A. Holcombe, Resident Representative.

- Mr. Rafik Shukr, Finance and Administration.

- Mr. Najm El-Din Abu Bakr. Assistant Programme Officer.

Bakht Er-Ruda Institute of Education

- Mr. Hussein Bayoumi El-Sayeh, Dean.

- Mr. Al-Gaili Abu-Bakr, Deputy to the Dean.

- Mr. Salman Ali Salman, Director, Curriculum Centre.

- Mr. Moussa Kasem El-Sayed, Director, National Centre for Educational Research.
- Mr. Ez El-Din Abd-El Rahim Al-Magdoub, Head, Science Dept.
- Mr. Said Ahmed Said, Head, Dept. Education and Psychology.
- Mr. El-Hassan Babikr Suleiman, Head, English Dept.
- Mr. Fathi Ishak, Head, Dept. Rural Education.
- Mr. Rasheed Ali Ibrahim, Chief, A.V. Aids Unit.
- Mr. Merghani Moh. El-Hassan, Acting Director, Centre for training of teachers of the (IRECs).
- Mr. Osman Abdel Majeed, Principal, Institute of Education for intermediate-school teachers.
- Mr. Abd-El-Qadar Mohamed Serour, Principal, Institute of Education for primary-school teachers.
- Mr. Farouk El-Hussein, Principal, White Nile Intermediate School.
- Mr. El-Faki Awad El-Kheir, Principal, Bakht Er-Ruda Primary School.
- Mr. Bashir El-Toreichi, Principal, El-Mileh Integrated Rural Education Centre.
- Mr. Rahim Mohd. El-Faki, Chief Librarian.
- Mr. Hassan Bashir, Secretary-General, Bakht Er-Ruda.
- Mr. Bereir Mohd. Tom, Public Relations Officer.

Directorate of Education, White Nile Province
- Mr. Mohd. El. Hamdullah, Deputy Superintendent of Schools.

Unesco Consultants
- Mr. Bashir Abd-El-Rahim Klob, instructional technology.
- Dr. Zakia El-Sofi, curriculum and educational materials.
- Mr. El-Sayd Ahmed El-Sheikh - population education.
ANNEX II
REFERENCES AND DOCUMENTS CONSULTED

Books

Reports
4. Department of Adult Education. Progress in illiteracy eradication in the Sudan in ten years. Report submitted to the National Conference on Planning for the Comprehensive Campaign for Illiteracy Eradication and Adult Education (mimeog. in Arabic, no date given).

Papers
Acts


Syllabuses, textbooks, and teachers' manuals

14. Bakht Er-Ruda Institute of Education. Samples of curricula syllabuses, textbooks, and teachers' manuals for:

(a) primary education
(b) intermediate education
(c) Integrated Rural Education Centres
(d) Institute of Education for Primary-School teachers and
(e) Institute of Education for Intermediate-School teachers.

Journals

ANNEX III

LECTURE NOTES ON: PSYCHOLOGY AND STRATEGIES OF EDUCATIONAL REFORM

Reform is Change

Education is a tool of change for self-development.

The meaning of self-development within the framework of educational objectives: (cognitive, psychomotor and affective) and in relation to:

- Formal education: primary and intermediate and teacher education
- Non-formal education

Basic concepts

- Universalization of education
- Democratization of education
- Life-long continuing education
- Complementarity of formal and non-formal education
- Mutuality of relationship between the school and the community
- Integration of the educational objectives, etc.

The Central Role of the Concept of 'Attitude' in Education at all Levels

Definitions: beliefs, attitudes, behavioural intentions and behaviour; formation of attitudes and values measurement of attitudes and values.

Change of attitudes, applications in formal and non-formal education.

Cognitive methods: lecture, audio-visual aids, talks, discussions, field visits, museums and exhibits, posters, etc.

Psychomotor methods: learning by doing, laboratory schools, micro-teaching, school farms, the practices followed in the integrated rural education centres in the Sudan, co-curriculum, young farmers' clubs, etc.

Group - Decision Methods:

Some classical experiments, e.g. the study of social climates: democratic, autocratic and 'laissez-faire'; change of nutrition habits, the role of student government, and various forms of group activities.

Implications for:

- Student and teacher interaction in the classroom
- Teacher training: pre-service and in-service
- Practices in the integrated rural educational centre
- Curriculum development and evaluation, school supervision and administration
- Non-formal education
- Educational reform
ANNEX IV

LECTURE NOTES ON GROUP DYNAMICS AND DECISIONAL PRIORITIES IN INTEGRATED EDUCATIONAL PLANNING

The Need for Educational Planning

Process of Planning

Infra-structure planning:
- diagnosis
- policy formulation
- costing of future needs
- feasibility testing
- establishment of priorities within available resources and target-setting
- plan formulation

Plan elaboration:
- programming
- project identification and formulation

Plan implementation.

Evaluation, revision and replanning

Fish-Bowling Exercise:

Decisional priorities among four projects in a programme for reducing educational wastage (i.e. projects with the same objectives).

How to identify decisional priorities among programmes such as formal and non-formal education.