

The Economics of Education

Background to the Discussions

1. Dr. Philip Coombs, Vice-Chairman of the International Council for Educational Development, set the keynote for the Conference by taking “a fresh look at the world educational crisis” and leading delegates into the Conference theme, “The Economics of Education”. In some circulated discussion notes he asked his audience to think about events since the mid-sixties and prospects over the next ten years. In his view the traditional linear expansion of educational provision had been quite successful in purely quantitative terms; but the upward curve of enrolments had started to flatten and, in any case, quality was being eroded and unit costs were continuing to rise.

2. Most existing educational systems had been inherited and had been designed for a select elite, not the masses. An educational revolution was needed, comparable with industrial revolutions. Even if only quantitative factors were considered, demographic pressures and the consequently expanding enrolments of developing countries made radical changes inevitable. Other pressures included inflation, oil prices, general world recession, and a continued upward movement in the real unit costs of education.

3. The bright side of the picture was a willingness to consider changes that would have been heresy ten years ago. Sometimes the changes envisaged were not very fundamental, but the creative thinking about alternative approaches was a good omen for an acceleration in the process of change and adaptation. Certainly the educational crisis was still very live and real, and needed all the thought and action it could muster.

4. Dr. Coombs was conscious of a consensus that priority must be given to the rural poor. That being the case, elitist education would not do; it brought no comfort to the masses who

never got to school, or who dropped out of school before even learning to read. Part of his answer was a drastic reorientation and recasting of existing schools; and an even larger part was non-formal education — mostly the training of children in functional skills that, apart from literacy and numeracy, were probably as well taught out of school as in school. Dr. Coombs ended by asking the Conference to consider which ministries should be responsible for programmes of rural non-formal education, emphasizing that it was the business of other ministries besides Education and Labour.

5. The first of the lead papers was written by Dr. Adebayo Adedeji, Executive Secretary, UN Economic Commission for Africa, and presented on his behalf by the Commonwealth Assistant Secretary-General, Mr. Anyaoku. Its subject was “Education, Economic Policy, and the National Budget”.

6. The paper directed attention to the critical needs in national development for skilled and educated manpower and the integral part which the planning and development of education must play in development generally. This part, however, was difficult to quantify. Fast rates of economic growth often went with fast rates of educational growth, but it was not apparent which caused the other; countries that allocated a small proportion of their budgets to education were usually those which lagged in the economic race.

7. Critical shortages of skilled persons often went hand in hand with a surplus of unskilled labour. Sometimes this was aggravated by a “brain drain”. The education system had to provide society with the manpower for productive activity; therefore it had to forecast manpower requirements for this purpose. Only then could changes and adjustments be made in the system, which might include its redirection towards job-oriented education and training. Guidance to school children and students, or career counselling, could help steer them in

useful directions. What was fundamentally important was to rectify imbalances by establishing a much stronger relationship between education and manpower planning.

8. Like Dr. Coombs, Dr. Adedeji saw many different ministries being involved in the necessary arrangements; they should get together both at central government and at field level, and co-operate with the private sector as well. This required a co-ordinating body, which many countries still lacked, reinforced by an advisory board consisting of representatives of employers, unions and other industrial organs, and educational institutions.

9. Educational development had to be related to priorities for social and economic development, but educational development was also influenced by demand — based often on political considerations and on a greater awareness of the benefits to be derived from education. This meant that there had to be an increasing allocation to education in national budgets; if this was investment, it did not stand up to any rate-of-return analysis. A closer relationship with the economy might be achieved by sharing some training responsibilities with major employers, whose systematic involvement in the training process would ensure that the products were job-related. Education was simply not amenable to the strict test of investment criteria. And it was an affront to human dignity if a man were regarded simply as an investment speculation.

10. Among the remedial contributions that Dr. Adedeji suggested were concentration on the local training of teachers, and the use of locally made equipment and other components; that is to say, a general substitution of local for foreign inputs. Another was more emphasis on vocational and technical training and less on formal academic courses. The developing world should be careful about imitating the educational systems of the more developed countries. No matter how important were the economic functions of education, he strongly believed that the needs of individuals for their own development and self-fulfilment ought to come first.

11. The second lead paper was written and presented by Professor Richard Jolly, Director of the Institute of Development Studies, University of Sussex. Professor Jolly's starting point was the inadequacy of past development

patterns and the need to replace them with projects, programmes, and policies from which the less well-off could directly benefit. Like Dr. Adedeji, he attached importance to the job-market linkages between school and work, which ought to be an important feature of the inter-relationship between the educational system and the rest of the economy.

12. Professor Jolly asked two basic questions: What were the options for meeting the basic need of education for all, given the realities of economic and financial constraints? And what were the critical constraints in the light of rapidly rising costs of education throughout the Commonwealth, especially in the poorer countries?

13. In some regions, especially the Caribbean, universal primary education had virtually been achieved, but the range of secondary enrolment ratios was still very wide. Public expenditure on education had risen extremely rapidly in virtually all countries. Nevertheless, the number of unemployed school leavers was growing and education was inappropriate for broad-based (specifically rural) development and for creating equality. Professor Jolly presented tables setting out details of enrolment growths at all levels. He was critical of traditional methods of determining fitness for jobs and promotion, and said that the differentials between pay for the highly qualified jobs and for those requiring only primary education were out of proportion. Salary structures drew skilled people away from the countryside, raised the cost of employing them, and made it impossible to expand the school system; particularly as teachers formed one of the major groups of beneficiaries. Education was being corrupted by preoccupation with higher incomes and better jobs, while its contribution to the needs of the majority and to rural development was approaching zero.

14. The main causes of high recurrent costs were teachers' salaries, low pupil-teacher ratios, the non-salary costs of education, and the capital costs per place. Together these explained why the proportions of national income spent on education in different countries differed much less than the percentage of school-age children attending school. It meant that the poorer countries had to spend a far higher share of their resources for each person in education than the richer countries. Professor

Jolly pointed out that teachers as a group, together with other groups with similar qualifications paid similarly, were the cause of any given share of developing country's resources buying much fewer teaching hours than it would in a developed country where they were paid something nearer to the norm.

15. Raising the ratio of pupils to teachers might not be all bad, particularly if it enabled a country to attain universal primary education. Ratios of 50 or more to one did not necessarily mean classes of that size: there were all sorts of options to prevent that — shifts, alternative day's classes, and so on — and there was nothing to prove that student performance would suffer all that much.

16. Another option Professor Jolly put forward was that of relying on outside resources rather than national ones. But this was not a complete alternative to changes in salaries and institutional structures within countries; and, in any case, many donors were not prepared to meet local costs. Still, in the context of Commonwealth co-operation, the dimension of international movement of teachers to the developing countries, and of students from the developing countries, was not to be overlooked. Expatriate teachers with very high salaries made the rationalization of salary structures more difficult; and the doubtful relevance of imported curricula, books and technologies stood in the way of educational reform. So did support from abroad that developed centres of extravagance rather than centres of excellence.

17. Professor Jolly emphasized that it was not simply a question of achieving U.P.E. by juggling with salary scales and pupil-teacher ratios; but finance tended to dominate discussion, and he thought the goals he had outlined were in the grasp of all Commonwealth countries if only they chose to achieve them.

18. The third lead paper, "Educational Financing", was written and presented by Dr. Malcolm Adiseshiah, Vice-Chancellor of the University of Madras. He illustrated, with tables, various aspects of the public financing of educational expenditure, and pointed out that the education budget was over 20 per cent of average total national budgets of developing countries, in individual cases as much as one third. One feature of educational financing in developing countries was that the share of private expenditure, whether from individuals,

endowments, institutions or fees, was small and declining. Voluntary bodies had lost some of their significance for education since independence.

19. Dr. Adiseshiah then turned to the question posed from a slightly different point of view by Dr. Adedeji: whether expenditure on education was investment, and whether any measurement of the rates of return on it meant anything at all. He made the point that the investment and consumption effect of educational expenditure on the same person could not be analysed in terms of one or the other; a simple proposition was that education increased future earnings through increasing an individual's productivity. Because of this and other imponderables, there was a return to the "social benefits" argument for large public expenditure on education — a return in fact to Adam Smith 200 years ago, whose grounds he quoted for preferring an instructed, intelligent, decent, orderly and critical public.

20. Dr. Adiseshiah listed a wide range of social benefits and commented on some of them. He regarded improved income distribution and social mobility as the most important. Next in importance were changes in attitudes and values that education brings about in people, as Adam Smith pointed out. Next was the improved public leadership for which education was necessary. However, investment in the fulfilment of political ambition raised questions, as did other social benefits. He felt, with the other lead paper writers, on safer ground in calling for a better mix of manpower skills, and for vocational and technical education programmes to improve productivity.

21. Although the prospects of boosting private finance were not bright, income from fees continued to make an important contribution, and his paper included an analysis of fees in India where, overall, they contributed 17 per cent to total educational expenditure. Dr. Adiseshiah concluded that, given an equitable scholarship policy, fees at secondary and post-secondary levels should be levied in developing Commonwealth countries.

22. A section of Dr. Adiseshiah's paper was taken up with a discussion of the general taxes (central and local), earmarked taxes, cesses, loans, tax relief, contributions in kind, and foreign aid and international assistance, that together made up the overall budgetary pro-

vision for education. With regard to the size and nature of the contribution that could reasonably be sustained from foreign aid and international assistance, his general position was that aid for irrigation schemes, textile factories and so on, released local resources, part of which could be used for financing education; and he regretted therefore that foreign aid had for long stagnated at 0.34 per cent of the combined national incomes of the O.E.C.D. countries as against their pledged 1 per cent. He saw a stronger case for educational aid than was commonly recognized, in that education was a public sector industry depending for most of its financing on government. He did not accept the argument that the lack of absorptive capacity was a reason for not aiding education; aid to education, by increasing the trained manpower needed for development, increased the country's need for foreign aid, but it was also a guarantee that it could be used effectively.

23. Dr. Adiseshiah ended by giving criteria for educational aid: the extent to which a country was making its maximum effort from its own resources, the extent to which the educational system was being planned and tied in with the country's national plan, and the extent of the reform of the educational system that was under way. The second of these criteria he thought particularly urgent and necessary if the creation of white elephants was to be avoided. Technical assistance and third country training had a great appeal to him, especially as these programmes tended to demand a little more from the more affluent Commonwealth countries.

24. In the discussions that followed the keynote address and the three lead papers, particular interest was shown in the desirable extent and possible techniques of manpower planning. The point was made that in any country there were people like secondary school leavers and university graduates to whom manpower planning could be applied, and others to whom it did not apply at all. Manpower planning and training, perhaps as distinct from education of a non-vocational nature, were seen to go hand in hand.

25. Dr. Coombs considered that it was not a question of manpower planning or no manpower planning. There could be no precision about forecasting, but it could reveal gross national maladjustments in the system — for

example 90% of doctors living in cities and 90% of people in rural areas — and could point the way to measures like the training of near-professional and para-medical staff to adjust the imbalance. Where an employment sector was maladjusted (e.g. too many engineers and too few technicians) there could be adjustment to narrow the differential between the salaries of the two, and make technicians' salaries more realistic in terms of the knowledge and skills required, and of the market.

26. Universal primary education was the subject of other points and questions. A suggestion for Commonwealth educational co-operation was made, to the effect that countries who had attained universal primary education some years ago might be able to help those that were planning it by identifying problems that they could expect to arise after (as well as before) universal primary education had been achieved.

27. The point was made that there were few schools in most rural areas. The schools in the market towns mostly took bright, highly motivated pupils on the path to academic education and employment in the cities. The different goals and curricula that Dr. Coombs and the lead paper writers called for would mean that rural schools would provide leadership for the rural areas from among their own people.

28. In these sessions, as in some others, small island territories pointed out that smallness brought different problems. A mini-conference of small islands might be the best forum in which these could be discussed. The New Zealand spokesman said that his Government might consider hosting a conference of this nature for the Pacific, and suggested that it might attract assistance from the Commonwealth Secretariat.

29. Because of the breadth of the ground it had to cover in considering "The Economics of Education", the Conference was then divided into three groups, one to consider each aspect of the subject covered by a lead paper. Group A, which considered "Education, Economic Policy and the National Budget" was chaired by Alhaji A.L. Ciroma (Nigeria), Group B, which considered "The Provision of Education and its Costs" by Mr. C. Roebathan (Canada), and Group C, which considered "Educational Financing" by Mr. Q. Munzur-I-Mowla (Bangladesh). The report of Group A is to be found in paragraphs 30–43, of Group B in

paragraphs 44–65 and of Group C in paragraphs 66–82.

Education and Economic Policy

Establishing Educational Policies for Development

30. To a large extent the pace of any society's development depends on the availability of an appropriate supply of skilled and educated manpower for harnessing and exploiting its resource endowments. This implies that a country's development does not only depend on endowments of natural resources and availability of capital resources, but more importantly on skilled and educated manpower with the proper attitudes and enthusiasm as the most essential precondition. Accordingly, the planning and development of education constitutes an integral part of the whole policy of social and economic development. No amount of capital investment uncomplemented by the human factor can sustain or enhance the development of any society.

31. Most developing countries are faced with the paradox of the shortage of persons with critically needed skills and a surplus of unskilled labour. Any strategy of human resource development must, therefore, aim at the production of these critically needed skills and also the creation of productive employment for unutilized or underutilized manpower. The needed skills occur at various levels including high- and middle-level manpower.

32. Rural areas are a particular example of need in most developing countries, and education has a necessary role in providing the essential skills for these areas. The attainment of basic literacy and numeracy should be made the goal of every country and form the foundation on which other forms of training can be developed. Apart from literacy and numeracy there should be opportunity for learning independently of the formal school system. This suggests that, in addition to conventional education, a thrust should be made towards non-formal remedies and on concentrating on the acquisition of skills that offer opportunity for self-employment as well as the more usual employment skills.

33. Rural development offers a unique opportunity for Commonwealth co-operation, and the Commonwealth Scholarship and Fellowship Plan — which at present performs a valuable service in facilitating the training of personnel from developing countries in institutions of higher education — might consider extending further this assistance to manpower needs at other levels.

34. However, since rural development is not the concern of the Education Ministries alone, there is a need to set up an inter-ministerial body consisting of senior officials from all the departments and ministries concerned, charged with this responsibility. Indeed, this was the method adopted with great success in India in preparation for the Satellite Instructional Television Experiment (SITE) which aimed at encouraging rural development in 2,400 villages selected because of their backwardness. The various ministries and All India Radio co-operated closely in providing these villages with educational and cultural programmes to improve health, hygiene, family life and farming. The co-operation was initiated and monitored at a high level and this no doubt accounted for the remarkably close co-operation that was achieved among the field workers.

35. Given the financial constraints in many countries, it is inevitable that selectivity will be applied in determining those who proceed in the formal education system beyond whatever level is available to all. This emphasizes the need for providing alternatives such as non-formal education to cater for those who are unable to proceed further in the formal system.

36. In developing countries, salary differentials present a hindrance to the introduction of alternatives in education. If non-formal education is to be acceptable, then a serious attempt should be made to reduce the disparity of levels of income between clerical and manual jobs. This can be achieved only as a result of clear government policy.

37. The private sector also has an important role to play, particularly in the field of on-the-job and in-service training. In large companies this is commonly performed by training officers employed by the firm; in other cases employees are given day release or undertake sandwich courses. Apprenticeships are another form of private training. But even those private organizations that make no provision for formal train-

ing of their workers do, in fact, perform a useful job of informal training that enhances the usefulness of employees. Thus Nigeria has an Industrial Training Fund for the training of workers to which government and private industry both contribute; Ghana has a National Vocational Institute and Public Service Secretariat that organize training for both the government and private sectors; and Australia and Britain also have a substantial participation by private organizations in education. However it is apparent that because of the profit motive, multinational and foreign companies do not always contribute to training as much as they might.

38. It is this need for widespread involvement and actual participation which makes it imperative to have some central co-ordinating machinery for the direction, monitoring, and review of manpower development priorities and strategies so as to ensure that proposed development is consistent with the current and future requirements of the economy. Such a central co-ordinating body ought to function at the highest possible governmental level and be reinforced by an advisory body composed of representatives from government, the major educational and training institutions, employers in the private sector, and labour unions where they exist. This composition is necessary in order to ensure a coherent perspective of the requirements and utilization aspects of human resource development.

39. Views differ as to whether education should be properly considered as an investment in human capital or as consumption. Perhaps the question should not be whether education is an investment or a consumption input, but rather, given the requirements and resource constraints on the development process of the developing world, whether it should be properly treated for planning purposes, as an investment or consumption expenditure. A major difficulty is that it is almost impossible to separate the consumption from the investment component of expenditures on education, so that the rate of return on any incremental expenditure on education cannot be computed. Since the rate of return is essential for consideration of alternative investment opportunities, and since it cannot be accurately computed for expenditures on education, such expenditure should not be regarded as investment. It must be noted, however, that there have been considerable

improvements in techniques of isolating the consumption and investment components for the application of rate of return analysis.

40. Another difficulty is that values, attitudes and cultural training cannot be quantified, and therefore cannot be calculated. Primary education with its emphasis on the teaching of basic skills is an inappropriate subject for this kind of analysis, especially since it is unthinkable to consider curtailing it on economic grounds. However, it is generally agreed that primary schools, while paying particular attention to literacy and numeracy, should combine training in life skills so that the school leaver can more readily establish himself by self reliance and not be dependent on employment in types of work that are strictly limited.

41. Since one of the major functions of the education system is to provide society with the manpower capabilities for productive activity, it follows that the system must be well geared to reflect the current and future manpower requirements of the economy. Considering the long gestation period in producing skilled manpower, particularly at the higher scientific-based categories, the education system must be given sufficient lead time in this task if an adequate and appropriate supply is to be made available at the right time. Herein lies the relationship between educational planning and manpower planning. As such, manpower planning is essentially an exercise to ascertain the current and future skill requirement necessary for the attainment of national development goals and aspirations. This information must be available to the education system well in advance so that the necessary changes and adjustments in the system can be undertaken in response to such requirements. These changes and adjustments may include, among others, redirection of the system towards job-oriented education and training, more emphasis on career counselling and guidance, and measures for more efficient utilization of skilled personnel. Manpower planning is based on information that is subject to variability. This has produced manpower forecasts that are inaccurate and brought the practice into disrepute in many circles. If it is to be of any real value it must have short- and long-term plans and be presented as a flexible guide. The problem is exacerbated by the practice of tying educational planning too closely to national economic planning; the many variables acting on the latter quickly playing havoc with the former.

Policies Involving External Factors

42. In developing countries there is sometimes a relationship between human resource development and the balance of payment problem. Most developing countries, faced with the urgency of educational development pay little, if any, attention to this relationship. Admittedly in most cases the foreign exchange component of expenditure for education is relatively small, but the alternatives for reducing this component must be given some priority in the strategy of educational development. Such alternative strategies include the training of local skilled personnel, localization of as much tertiary-level education as possible, and the manufacturing of school equipment and supplies locally. These are all import substitution inputs which have not been sufficiently incorporated into the strategy of educational development.

43. The “brain drain” is a phenomenon which takes place in both advanced and developing countries; but it poses a very serious problem to the developing world. It involves an international transfer of resources in any official balance of payments statistics. Unfortunately, this is a phenomenon which most developing countries are not able to arrest completely since it is induced by both pecuniary and non-pecuniary incentives. For example, the skills mostly involved in this transfer are those which are in great demand in the international market where developing countries are unable to compete either in pecuniary or non-pecuniary terms. In some cases the non-pecuniary incentives, such as working and research facilities, are the major consideration. Educational planning must therefore make allowance for this form of attrition. On the other hand some countries with large numbers of skilled unemployed, such as India and Sri Lanka, deliberately encourage a form of brain drain by encouraging their nationals to take up employment in other countries. A few underdeveloped countries allow a form of brain drain to act as relief to their population problems.

The Provision of Education and its Costs

44. Over the last two decades, the pace of development has accelerated significantly. Dramatic changes have taken place, reflecting the determination of governments to transform

their economies. Over all, however, development patterns have proved seriously inadequate; the benefits of development have largely accrued to the better off groups and regions within countries and to the better off countries in the world. The result is that in many countries the poor today are more numerous and often in more serious poverty than ever before.

45. Measures are needed, nationally and internationally, to support strategies to eradicate poverty and meet the basic needs for the whole population of each country. Amongst such basic needs is education: sufficient education to enable each person to develop his or her talents and abilities and to acquire the knowledge, skills and confidence to play a full and effective part in such development; and a total system of education — formal and informal and of the quantity, quality and relevance at all levels — to provide for broad-based development and to sustain a strategy focused on basic needs for the whole community.

46. Within the total system of education, primary education is of paramount importance. Indeed, universal primary education is generally accepted not only as a basic need but also as a basic human right. Some countries have already achieved it; others are approaching it; some countries are not yet within striking distance of it and are seeking assistance to accelerate their progress towards it; still others are unable to give priority to universal primary education because of the overriding need to develop those sectors of the education system that produce high-level manpower.

47. Professor Coombs has suggested six essential needs that are the minimum requirements of anyone living in the rural area of a developing country. These may be summarized as follows: (a) positive attitudes towards self, family and development; (b) functional literacy and numeracy; (c) scientific understanding of the environment; (d) functional skills for raising a family. (e) appropriate skills for earning a living; and (f) the skills necessary for civic participation. Few of these skills can be imparted in the primary school. Recognition of this fact may lead some countries to aim at providing *basic* education for all, rather than primary education, using non-formal as well as formal approaches to achieve this aim. Foundations can be laid in the primary school,

however, on which other learning experiences can subsequently be built. The school is only one of the places in which skills and attitudes are acquired. Most learning, in fact, takes place in non-formal situations. It is, therefore, important not to erect barriers between the formal and non-formal areas of education. Schools should be opened to the community and be part of its life. Interaction between the school and the community multiplies learning opportunities. Such interaction may be facilitated, and local participation in the life of the school enhanced, if the focus of educational development is shifted to the local level.

48. Non-formal education is not a poor relation of formal education, or an inferior substitute for institutional learning. Generations of political leaders, civil servants, teachers, parents and pupils have encouraged the view that education means schooling. Success in school examinations has been rewarded by well-paid employment in white-collar positions. Exhortation is unlikely to change deep-rooted attitudes which, in many countries, realistically reflect salary structures that give much higher rewards to white-collar workers than to artisans and farmers. Perhaps it is only when industrialization is well advanced, as in Malaysia and Singapore for example, where technicians and skilled manual workers receive a proper reward, that there will be changes of attitude on the part of teachers, parents and pupils.

49. The major constraint against expanding primary education is financial. It is important, therefore, to examine carefully methods of reducing unit-costs within the education system, in order to effect savings that can be applied to the expansion of the system. It is also necessary to consider alternative methods of funding education.

50. Circumstances vary so much from one country to another that it is not possible to recommend measures for adoption in all countries. It is believed, however, that it may be helpful to list a variety of measures, some of which may be suitable for adoption in some countries as they progress towards the target of universal primary education:

Schools as Production Units

51. Some schools, particularly in the secondary and technical sectors, may be able to

develop production units which will generate some income that will contribute to educational costs; Zambia, Uganda and Bangladesh have some experience in this field. The value of this concept lies as much in the inculcation of right attitudes towards manual work and in the encouragement of self-reliance as in the financial returns which are unlikely to be very significant.

Reduction of Unit-Costs at Secondary and Tertiary Levels

52. Although it is recognized that a reallocation of resources may be needed within the secondary and tertiary sectors in favour of expanding technical and vocational education, unit-costs in post-primary education as a whole are very high. These sectors absorb 50% of the education budget in many countries. There may well be scope for pruning costs in both secondary and tertiary education, (e.g. by reducing building costs, student-staff ratios, and revising the length of the education cycle) and for reallocating the savings to primary education.

Self-help

53. "Self-help" has been very successful in some countries, notably in the Harambee school movement in Kenya, in providing school buildings and paying teachers' salaries. Experiments in Jamaica dealing with productive rural units may also be of interest to other Commonwealth countries. In all cases it is important to create the right climate of opinion; otherwise appeals to communities to contribute their labour or money are unlikely to be successful.

Private Schools

54. In some countries, notably Hong Kong, private schools are well patronized and relieve the financial burden on the government. It is difficult, however, to regulate standards in private schools.

The Shift System

55. This system has been tried with varying degrees of success in Singapore, Malaysia, Zambia, Nigeria, Ghana and a number of other countries as a means of saving either on teachers' salaries or on capital costs. Zambia,

for instance, has a system of one teacher per double shift in the lower primary school, and a teacher per shift in the upper primary classes. However, experiments with a shift system in Trinidad and Tobago proved to be unacceptable.

Sources of Financing

56. Sources that are used to finance education include central and local government taxes, earmarked taxes, cesses, loans, tax relief, contributions in kind, and bilateral and multilateral aid. Provided the conditions attached to it are acceptable to the recipient country, foreign aid is welcome and should be increased far beyond its present levels. The likelihood, however, of substantial funds being provided, on a regular basis, from overseas sources is slim, and self-reliance is therefore seen as the best policy.

Day/Boarding Schools

57. Running costs of day schools are considerably less than those of boarding schools, and many countries are ceasing to make provision for boarding as their education system expands. Though the savings in cost may be substantial, the lack of boarding facilities, especially in rural areas, can lead to hardship for pupils who live at a distance from school and have inadequate facilities for study at their homes. In some countries (e.g. Ghana) boarding schools have served as a unifying element in nation-building.

Length of School Cycle

58. There appears to be no reliable research data on the relationship between the length of the school cycle and pupil attainment. Some countries have reduced the length both of the primary and secondary school courses without apparent deterioration in levels of achievement.

Revision of Teachers' Salaries

59. As Professor Jolly has pointed out, teachers' salaries are a crucial element in determining unit-costs because they absorb 70% to 95% of the education budget. If it were feasible to reduce them, the savings would be considerable. In practical terms, however, it would be

totally unacceptable to reduce teachers' salaries and leave unaffected the salaries of other members of the public service, or those in the private sector. Some governments may feel that the level of remuneration of educated workers, including teachers, is too high in relation to average per capita income in the country, and will endeavour to narrow the gap by means of a prices and incomes policy that will, *inter alia*, effectively reduce the salaries of high income groups (e.g. by raising salary levels for higher income groups at a rate lower than the increase in the cost of living, while giving full compensation for those at the minimum wage level).

Raising the Pupil-Teacher Ratio

60. Pupil-teacher ratios vary considerably from one country to another. According to Professor Jolly, twelve more Commonwealth countries could achieve universal primary education by adopting the pupil-teacher ratio currently in use in Jamaica, i.e. 57:1. Educational research has not established, so far, a firm relationship between class size and student performance. Experience, however, makes it abundantly clear that large classes place a heavy burden on the teacher, encourage passivity and rote learning, reduce the opportunity to give individual attention to pupils, discourage children from challenging, questioning and doubting, and generally reduce the quality of education.

Decentralization of Education

61. Hopes of realizing economies of scale by centralizing education administration and institutions have frequently been frustrated by the high cost of administrative superstructures and large capital outlays. The experience of some countries indicates that savings may be effected by pursuing a decentralized pattern of education administration, and by emphasizing the development of modest but efficient facilities at the local level.

Tuition Fees

62. While some governments are opposed to charging tuition fees for any form of education, especially for primary education, which should be compulsory and universal, others may con-

sider that fees should be charged at the secondary and tertiary levels for those in a position to pay them.

The Role of the Secretariat

63. Governments may require advice on the development of their education systems, including the implementation of programmes for universal primary education. It is noted that the Commonwealth Secretariat is prepared to consider requests for assistance in this field.

64. One of the functions of the Commonwealth Secretariat is to serve as a clearing-house for information on educational programmes and developments in member countries. *It is recommended that the Secretariat, in consultation with the governments concerned, should assemble information on the steps being taken to implement programmes of universal primary education in member countries and make this information available to other countries.*

65. It is considered that considerable benefit could be obtained if representatives of countries at similar stages of educational development were brought together in order to exchange ideas and to discuss problems of mutual interest. *The Secretariat is asked to consider arranging for a series of meetings on universal primary education, beginning with the countries that are farthest from achieving it.*

Educational Financing

66. The lack of an adequate data base with regard to the expenditure on, and the effectiveness of, non-formal education imposes severe constraints on those who attempt empirical studies in this area. While acknowledging this problem, we suggest that relevant research and experimentation should be expanded in an effort to identify ways in which to bring about the education reforms which are needed in many member countries. While universities' involvement in research and experimentation has been useful, there is evidence to suggest that it has suffered from a number of serious limitations, including lack of funding and over-concentration on the provision of "certification". Such involvement should perhaps be orientated more closely to non-formal education.

67. Education should be seen as an essential component of those national development plans which are aimed in particular at the improvement of the social cultural and economic environments of rural communities. Moreover, relevant programmes designed to improve significantly the conditions of the people in rural areas are essential if there is to be any chance of achieving rapid development in such communities. In this regard, stress should be laid on the desirability of providing adequate education and training facilities within rural communities, on whose initiative and active participation depend the success of rural development programmes. In implementing such programmes, the enthusiasm generated for projects initiated by communities is generally greater than the interest expressed in projects organized by governments.

68. *The exchange of ideas between member countries is most useful in facilitating the identification of solutions to common problems in non-formal education and rural development, and arrangements for such exchanges should be continued and expanded. It is recommended that the Commonwealth Secretariat should assist in this matter.*

Private Financing

69. There are considerable political difficulties inherent in most schemes to increase fees and other parental contributions towards the cost of education. In this connection, there are cost-saving benefits in day schooling as compared with boarding; such savings constituting forms of private financial contributions for education which communities are prepared to accept. On the other hand, some countries consider boarding schools as important tools for nation building in that they bring together young people from different communities. Where, for example, such schools are associated with farms, agricultural projects can sometimes make valuable contributions towards education costs. Importance is attached also to other programmes of work experience within schools.

Public Financing

70. This takes the form of taxes, cesses, loans, tax relief arrangements, contributions in kind, and foreign and international assistance.

Annual audits can be useful in helping to ensure the most effective utilization of these resources.

General Taxes

71. Most of the funds for education come from general taxes; the percentage of such revenue provided for education being dependent on Treasury allocations. It is clear that additional revenue will not be forthcoming from general taxes unless significant progress is made in achieving economic developmental goals. In these circumstances, the main hope of increasing such revenue currently lies in eliminating opportunities for tax evasion and avoidance.

72. With regard to taxes levied by local government authorities, there is often a strong political disincentive to raise additional revenue from such sources, due to local government officials' direct links with their communities and their consequent desire to limit tax increases.

Earmarked Taxes and Cesses

73. Experience indicates that the quality of training provided directly by large-scale industrial and agricultural enterprises could be improved. This is because those enterprises frequently view training narrowly in terms of their particular needs rather than in terms of the broader requirements of communities. Levies on such enterprises can constitute useful means of providing finance for some education and training programmes in which industrial and agricultural enterprises may have important parts to play.

74. Cesses can be useful in providing the financial resources necessary for specific small-scale and discrete services to local communities (e.g. local libraries). The collection and administration of such funds also increases the level of local control in planning and administration.

Loans

75. It seems likely that the reason why loans are infrequently used for financing education is that financial returns on education expenditure are neither separate nor quantifiable. However, in view of the urgent and widespread need for funds, all possible sources of loans should be explored to help meet both capital and recurrent costs.

Tax Relief and Contributions in Kind

76. There is a need in many countries for coherent national policies on income tax, gift tax relief, and other financial contributions made to education. Though the implementation of such policies would result in additional financial provisions for education, care should be taken to ensure that tax reliefs are not abused.

77. Some countries have achieved useful results through programmes designed to encourage local communities to provide contributions in kind. The establishment of similar projects in other countries depends upon the political will to develop co-operative arrangements between the education system and the communities which they are designed to serve.

78. While not strictly speaking being a contribution in kind, apprenticeship systems are making significant contributions to development, and methods should therefore be explored of expanding these systems.

Foreign Aid and International Assistance

79. One of the current problems facing aid-granting organizations is the small absorptive capacity of some countries for aid. Education and training assistance is necessary to increase this capacity in order to maximize the developmental impact of aid programmes.

80. The United Kingdom Government, through its Ministry of Overseas Development, has decided to transfer gradually its assistance for education and training from the formal to the non-formal sector, as far as it is practicable to do so. In such circumstances, any award schemes previously applying only to formal education could be broadened to include the non-formal sector, particularly in relation to rural development. Developing countries may wish to inform aid donors of relevant and meaningful non-formal education programmes for which they require financial support.

81. In connection with third country training, developed member countries experience problems in providing large-scale funds for such programmes due to balance of payments problems.

82. The interchange of personnel and the sharing of education and training resources between developing countries are commended

as most useful in all areas of education, including the non-formal sector. In respect of the funding of experts and the provision of scholarship support between such countries, the Commonwealth Fund for Technical Co-

operation remains willing to assist in these matters. However, the Fund's ability to respond to requests is governed by the financial resources which are made available to it on a voluntary basis by all member countries.