

“Our education must counteract the temptation to intellectual arrogance ; for this leads to the well-educated despising those whose abilities are non-academic or who have no special abilities but are just human beings. Such arrogance has no place in a society of equal citizens”.

Education for Self-reliance

JULIUS K. NYERERE

Since long before Independence the people of Tanzania, under the leadership of TANU, have been demanding more education for their children. But we have never really stopped to consider why we want education—what its purpose is. Therefore, although over time there have been various criticism about the details of curricula provided in schools, we have not until now questioned the basic system of education which we took over at the time of independence. We have never done that because we have never thought about education except in terms of obtaining teachers, engineers, administrators, etc. Individually and collectively we have in practice thought of education as a training for the skills required to earn high salaries in the modern sector of our economy.

It is now time that we looked again at the justification for a poor society like ours spending almost 20 per cent of its Government revenues on providing education for its children and young people, and began to consider what that education should be doing. For in our circumstances it is impossible to devote Shs. 147,330,000 every year on education for some of our children (while others go without) unless its result has a proportionate relevance to the society we are trying to create.

The educational systems in different kinds of societies in the world have been, and are, very different in organization and in content. They are different because the societies providing the education are different, and because education, whether it be formal or informal, has a purpose. That purpose is to transmit from one generation to the next the accumulated wisdom and knowledge of the society, and to prepare the young people for their future membership of the society and their active participation in its maintenance or development.

This is true, explicitly, for all societies—the capitalist societies of the West, the communist societies of the East, and the precolonial African societies too.

The fact that pre-colonial Africa did not have "schools"—except for short periods of initiation in some tribes—did not mean that the children were not educated. They learned by living and doing. In the homes and on the farms they were taught the skills of the society, and the behaviour expected of its members. They learned the kind of grasses which were suitable for which purposes, the work which had to be done on the crops or the care which had to be given to animals, by joining with their elders in this work. They learned the tribe history, and the tribe's relationship with other tribes and with the spirits, by listening to the stories of the elders. Through these means, and by the custom of sharing to which young people were taught to conform, the values of the society were transmitted. Education was thus "informal"; every adult was a teacher to a greater or lesser degree. But this lack of formality did not mean that there was no education, nor did it affect its importance to the society. Indeed, it may have made the education more directly relevant to the society in which the child was growing up.

In Europe education has been formalized for a very long time. An examination of its development will show, however, that it has always had similar objectives to those implicit in the traditional African system of education. That is to say, formal education in Europe was intended to reinforce the social ethics existing in the particular country, and to prepare the children and young people for the place they will have in that society. The same thing is true of communist countries now. The content of education is somewhat different from that of Western countries, but the purpose is the same—to prepare young people to live in and to serve the society, and to transmit the knowledge, skills, and values and attitudes of the society. Wherever education fails in any of these fields, then the society falters in its progress, or there is social unrest as people find that their education has prepared them for a future which is not open to them.

Colonial Education in Tanzania and the Inheritance of the New State

The education provided by the colonial government in the two countries which now form Tanzania had a different purpose. It was not designed to prepare young people for the service of their own country; instead, it was motivated by a desire to inculcate the values of the colonial society and to train individuals for the service of the colonial state. In these countries the State interest in education therefore stemmed from the need for local clerks and junior officials; on top of that, various religious groups were interested in spreading literacy and other education as part of their evangelical work.

This statement of fact is not given as a criticism of the many individuals who worked hard, often under difficult conditions, in teaching and in organizing educational work. Nor does it imply that all the values these people transmitted in the schools were wrong or inappropriate. What it does mean, however, is that the educational system introduced into Tanzania

by the colonialists was modelled on the British system, but with even heavier emphasis on subservient attitudes and on white-collar skills. Inevitably, too, it was based on the assumptions of a colonialist and capitalist society. It emphasized and encouraged the individualistic instincts of mankind, instead of his cooperative instincts. It led to the possession of individual material wealth being the major criterion of merit and worth.

This meant that colonial education induced attitudes of human inequality, and in practice underpinned the domination of the weak by the strong, especially in the economic field. Colonial education in this country was therefore not transmitting the values and knowledge of Tanzanian society from the generation to the next; it was a deliberate attempt to change those values and to replace traditional knowledge by the knowledge from a different society. It was thus a part of a deliberate attempt to effect a revolution in the society; to make it into a colonial society which accepted its status and which was an efficient adjunct to the governing power. Its failure to achieve these ends does not mean that it was without an influence on the attitudes, ideas, and knowledge of the people who experienced it. Nor does that failure imply that the education provided in colonial days is automatically relevant for the purposes of a free people committed to the principle of equality.

The independent state of Tanzania in fact inherited a system of education which was in many respects both inadequate and inappropriate for the new state. It was, however, its inadequacy which was most immediately obvious. So little education had been provided that in December, 1961, we had too few people with the necessary educational qualifications even to man the administration of government as it was then, much less undertake the big economic and social development work which was essential. Neither was the school population in 1961 large enough to allow for any expectation that this situation would be speedily corrected. On top of that, education was based upon race, whereas the whole moral case of the independence movement had been based upon a rejection of racial distinctions.

What kind of Society are we trying to build ?

Only when we are clear about the kind of society we are trying to build can we design our educational service to serve our goals. But this is not now a problem in Tanzania. Although we do not claim to have drawn up a blueprint of the future, the values and objectives of our society have been stated many times.

We have set out these ideas clearly in the National Ethic ! and in the Arusha Declaration and earlier documents we have outlined the principles and policies we intend to follow. We have also said on many occasions that our objective is greater African unity, and that we shall work for this objective while in the meantime defending the absolute

We want to create a socialist society which is based on three principles : equality and respect for human dignity ; sharing of the resources which are produced by our efforts ; work by everyone and exploitation by none.

integrity and sovereignty of the United Republic. Most often of all, our Government and people have stressed the equality of all citizens, and our determination that economic, political, and social policies shall be deliberately designed to make a reality of that equality in all spheres of life. We are, in other words, committed to a socialist future and one in which the people will themselves determine the policies pursued by a Government which is responsible to them.

It is obvious, however, that if we are to make progress towards these goals, we in Tanzania must accept the realities of our present position, internally and externally, and then work to change these realities into something more in accord with our desires. And the truth is that our United Republic has at present a poor, undeveloped, and agricultural economy. We have very little capital to invest in big factories or modern machines; we are short of people with skill and experience. What we do have is land in abundance and people who are willing to work hard for their own improvement. It is the use of these latter resources which will decide whether we reach our total goals or not. If we use these resources in a spirit of self-reliance as the basis for development, then we shall make progress slowly but surely. And it will then be real progress, affecting the lives of the masses, not just having spectacular show-pieces in the towns while the rest of the people of Tanzania live in their present poverty.

Pursuing this path means that Tanzania will continue to have a predominantly rural economy for a long time to come. And as it is in the rural areas that people live and work, so it is in the rural areas that life must be improved. This is not to say that we shall have no industries and factories in the near future. We have some now and they will continue to expand. But it would be grossly unrealistic to imagine that in the near future more than a small proportion of our people will live in towns and work in modern industrial enterprises. It is therefore the villages which must be made into places where people live a good life; *it is in the rural areas that people must be able to find their material well-being and their satisfaction.*

The improvement in village life will not, however, come automatically. It will come only if we pursue a deliberate policy of using the resources we have—our man-power and our land—to the best advantage. This means people working hard, intelligently, and together; in other words, working in co-operation. Our people in the rural areas, as well as their Government, must organize themselves co-operatively and work for themselves through working for the community of which they are members. Our village life, as well as our state organization, must be based on the

principles of socialism and that equality in work and return which is part of it.

This is what our educational system has to encourage. It has to foster the social goals of living together, and working together, for the common good. It has to prepare our young people to play a dynamic and constructive part in the development of a society in which all members share fairly in the good or bad fortune of the group, and in which progress is measured in terms of human well-being, not prestige buildings, cars, or other such things, whether privately or publicly owned. Our education must therefore inculcate a sense of commitment to the total community, and help the pupils to accept the values appropriate to our kind of future, not those appropriate to our colonial past.

This means that the educational system of Tanzania must emphasize co-operative endeavour, not individual advancement; it must stress concepts of equality and the responsibility to give service which goes with any special ability, whether it be in carpentry, in animal husbandry, or in academic pursuits. And, in particular, our education must counteract the temptation to intellectual arrogance; for this leads to the well-educated despising those whose abilities are non-academic or who have no special abilities but are just human beings. Such arrogance has no place in a society of equal citizens.

It is, however, not only in relation to social values that our educational system has a task to do. It must also prepare young people for the work they will be called upon to do in the society which exists in Tanzania—a rural society where improvement will depend largely upon the efforts of the people in agriculture and in village development. This does not mean that education in Tanzania should be designed just to produce passive agricultural workers of different levels of skill who simply carry out plans or directions received from above. It must produce good farmers; it has also to prepare people for their responsibilities as free workers and citizens in a free and democratic society, albeit a largely rural society. They have to be able to think for themselves, to make judgements on all the issues affecting them; they have to be able to interpret the decisions made through the democratic institutions of our society, and to implement them in the light of the peculiar local circumstances where they happen to live.

It would thus be a gross misinterpretation of our needs to suggest that the educational system should be designed to produce robots, who work hard but never question what the leaders in Government or TANU are doing and saying. For the people are, and must be, Government and TANU. Our Government and our Party must always be responsible to the people, and must always consist of representatives—spokesman and servants of the people. The education provided must therefore encourage the development in each citizen of three things : an enquiring mind ; and ability to learn from what others do, and reject or adapt it to his own needs; and a basic confidence in his own position as a free and equal

member of the society, who values others and is valued by them for what he does and not for what he obtains.

These things are important for both the vocational and the social aspects of education. However much agriculture a young person learns, he will not find a book which will give him all the answers to all the detailed problems he will come across on his own farm. He will have to learn the basic principles of modern knowledge in agriculture and then adapt them to solve his own problems. Similarly, the free citizens of Tanzania will have to judge social issues for themselves; there neither is, nor will be, a political "holy book" which purports to give all the answers to all the social, political and economic problems which will face our country in the future. There will be philosophies and policies approved by our society which citizens should consider and apply in the light of their own thinking and experience. But the educational system of Tanzania would not be serving the interests of a democratic socialist society if it tried to stop people from thinking about the teachings, policies or the beliefs of leaders, either past or present. Only free people conscious of their worth and their equality can build a free society.

Some salient features of the existing Educational System

These are very different purposes from those which are promoted by our existing educational arrangements. For there are four basic elements in the present system which prevent, or at least discourage, the integration of the pupils into the society they will enter, and which do encourage attitudes of inequality, intellectual arrogance and intense individualism among the young people who go through our schools.

First, the most central thing about the education we are at present providing is that it is basically an elitist education designed to meet the interests and needs of a very small proportion of those who enter the school system.

Although only about 13 per cent of our primary school children will get a place in a secondary school, the basis of our primary school education is the preparation of pupils for secondary schools. Thus 87 per cent of the children who finished primary school last year—and a similar proportion of those who will finish this year—do so with a sense of failure, of a legitimate aspiration having been denied them. Indeed we all speak in these terms, by referring to them as those who failed to enter secondary schools, instead of simply as those who have finished their primary education. On the other hand, the other 13 per cent have a feeling of having deserved a prize—and the prize they and their parents now expect is high wages, comfortable employment in towns, and personal status in the society. The same process operates again at the next highest level, when entrance to university is the question at issue.

Equally important is the second point; the fact that Tanzania's education is such as to divorce its participants from the society it is supposed to be preparing them for. This is particularly true of secondary

The education now provided is designed for the few who are intellectually stronger than their fellows; it induces among those who succeed a feeling of superiority, and leaves the majority of the others hankering after something they will never obtain. It induces a feeling of inferiority among the majority, and can thus not produce either the egalitarian society we should build, nor the attitudes of mind which are conducive to an egalitarian society. On the contrary, it induces the growth of a class structure in our country.

schools, which are inevitably almost entirely boarding schools; but to some extent and despite recent modifications in the curriculum, it is true of primary schools too. We take children from their parents at the age of 7 years, and for up to 7 hours a day we teach them certain basic academic skills. In recent years we have tried to relate these skills, at least in theory, to the life which the children see around them. But the school is always separate; it is not part of the society. It is a place children go to and which they and their parents hope will make it unnecessary for them to become farmers and continue living in the village.

The few who go to secondary schools are taken many miles away from their homes; they live in an enclave, having permission to go into the town for recreation, but not relating the work of either town or country to their real life—which is lived in the school compound. Later a few people go to university. If they are lucky enough to enter Dar es Salaam University College they live in comfortable quarters, feed well, and study hard for their Degree. When they have been successful in obtaining it, they know immediately that they will receive a salary of something like £660 per annum. That is what they have been aiming for; it is what they have been encouraged to aim for. They may also have the desire to serve the community, but their idea of service is related to status and the salary which a university education is expected to confer upon its recipient. *The salary and the status have become a right automatically conferred by the Degree.*

It is wrong of us to criticize the young people for these attitudes. The new university graduate has spent the larger part of his life separated and apart from the masses of Tanzania; his parents may be poor, but he has never fully shared that poverty. He does not really know what it is like to live as a poor peasant. He will be more at home in the world of the educated than he is among his own parents. Only during vacations has he spent time at home, and even then he will often find that his parents and relatives support his own conception of his difference, and regard it as wrong that he should live and work as the ordinary person he really is. For the truth is that many of the people in Tanzania have come to regard education as meaning that a man is too precious for the rough and hard life which the masses of our people still live.

The third point is that our present system encourages school pupils

in the idea that all knowledge which is worth while is acquired from books or from "educated people"—meaning those who have been through a formal education. The knowledge and wisdom of other old people is despised, and they themselves regarded as being ignorant and of no account. Indeed it is not only the education system which at present has this effect. Government and Party themselves tend to judge people according to whether they have "passed school certificate"; "have a Degree" etc. If a man has these qualifications we assume he can fill a post; we do not wait to find out about his attitudes, his character, or any other ability except the ability to pass examinations. If a man does not have these qualifications we assume he cannot do a job; we ignore his knowledge and experience. For example, I recently visited a very good tobacco-producing peasant. But if I tried to take him into Government as a Tobacco Extension Officer, I would run up against the system because he has no formal education. Everything we do stresses book learning, and underestimates the value to our society of traditional knowledge and the wisdom which is often acquired by intelligent men and women as they experience life, even without their being able to read at all.

This does not mean that any person can do any job simply because they are old and wise, not that educational qualifications are not necessary. This is a mistake our people sometimes fall into as a reaction against the arrogance of the book-learned. A man is not necessarily wise because he is old; a man cannot necessarily run a factory because he has been working in it as a labourer or store-keeper for 20 years. But equally he may not be able to do so if he has a Doctorate in Commerce. The former may have honesty and ability to weigh up men; the latter may have the ability to initiate a transaction and work out the economics of it. But both qualifications are necessary in one man if the factory is to be a successful and modern enterprise serving our nation. It is as much a mistake to over-value book learning as it is to under-value it.

The same thing applies in relation to agricultural knowledge. Our farmers have been on the land for a long time. The methods they use are the result of long experience in the struggle with nature; even the rules and taboos they honour have a basis in reason. It is not enough to abuse a traditional farmer as old-fashioned; we must try to understand why he is doing certain things, and not just assume he is stupid. But this does not mean that these methods are sufficient for the future. The traditional systems may have been appropriate for the economy which existed when they were worked out and for the technical knowledge then available. But different tools and different land tenure systems are being used now; land should no longer be used for a year or two and then abandoned for up to 20 years to give time for natural regeneration to take place. The introduction of an ox-plough instead of a hoe—and, even more, the introduction of a tractor—means more than just a different way of turning over the land. It requires a change in the organization of work, both to see that the maximum advantage is taken of the new tool, and to see that the new method does not simply lead

to the rapid destruction of our land and the egalitarian basis of our society. Again, therefore, our young people have to learn both a practical respect for the knowledge of the old "uneducated" farmer, and an understanding of new methods and the reason for them.

Yet at present our pupils learnt to despise even their own parents because they are old-fashioned and ignorant; there is nothing in our existing educational system which suggests to the pupil that he can learn important things about farming from his elders. The result is that he absorbs beliefs about witchcraft before he goes to school, but does not learn the properties of local grasses; he absorbs the taboos from his family but does not learn the method of making nutritious traditional foods. And from school he acquires knowledge unrelated to agricultural life. He gets the worst of both systems!

Finally, and in some ways most importantly, our young and poor nation is taking out of productive work some of its healthiest and strongest young men and women. Not only do they fail to contribute to that increase in output which is urgent for our nation; they themselves consume the output of the older and often weaker people. There are almost 25,000 students in secondary schools now; they do not learn as they work, they simply learn. What is more, they take it for granted that this should be so. Whereas in a wealthy country like the United States of America it is common for young people to work their way through high school and college, in Tanzania the structure of our education makes it impossible for them to do so. Even during the holidays we assume that these young men and women should be protected from rough work; neither they nor the community expect them to spend their time on hard physical labour, on jobs which are uncomfortable and unpleasant. This is not simply a reflection of the fact that there are many people looking for unskilled paid employment—pay is not the question at issue. It is a reflection of the attitude we have all adopted.

How many of our students spend their vacations doing a job which could improve people's lives but for which there is no money—jobs like digging an irrigation channel or a drainage ditch for a village, or demonstrating the construction and explaining the benefits of deep-pit latrines, and so on? A small number have done such work in the National Youth Camps or through school-organized, nation-building schemes, but they are the exception rather than the rule. The vast majority do not think of their knowledge or their strength as being related to the needs of the village community.

Can these faults be corrected ?

There are three major aspects which require attention if this situation is to change :—the content of the curriculum itself, the organization of the schools, and the entry age into primary schools. But although these aspects are in some ways separate, they are also inter-locked. We cannot integrate the pupils and students into the future society simply by theoretical teaching, however well designed it is. Neither can the society

fully benefit from an education system which is thoroughly integrated into local life but does not teach people the basic skills—for example, of literacy and arithmetic, or which fails to excite in them a curiosity about ideas. Nor can we expect those finishing primary schools to be useful young citizens if they are still only 12 or 13 years of age.

In considering changes in the present structure it is also essential that we face the facts of our present economic situation. Every penny spent on education is money taken away from some other needed activity—whether it is an investment in the future, better medical services, or just more food, clothing and comfort for our citizens at present. And the truth is that there is no possibility of Tanzania being able to increase the proportion of the national income which is spent on education; it ought to be decreased. Therefore we cannot solve our present problems by any solution which costs more than is at present spent; in particular we cannot solve the “problem of primary school leavers” by increasing the number of secondary school places.

The “problem of primary school leavers” is in fact a product of the present system. Increasingly children are starting school at six or even five years of age, so that they finish primary school when they are still too young to become responsible young workers and citizens. On top of that is the fact that the society and type of education they have received both led them to expect wages employment—probably in an office. In other words, their education was not sufficiently related to the tasks which have to be done in our society. This problem therefore calls for a major change in the content of our primary education and for the raising of the primary school entry age so that the child is older when he leaves, and also able to learn more quickly while he is at school.

There is no other way in which this problem of primary school leavers can be solved. Unpleasant though it may be, the fact is that it is going to be a long time before we can provide universal primary education in Tanzania; for the vast majority of those who do get this opportunity, it will be only the equivalent of the present seven years' education. It is only a few who will have the chance of going on to secondary schools, and quite soon only a proportion of these who will have an opportunity of going on to university, even if they can benefit from doing so. These are the economic facts of life for our country. They are the practical meaning of our poverty. The only choice before us is how we allocate the educational opportunities, and whether we emphasize the individual interests of the few or whether we design our educational system to serve the community as a whole. And for a socialist state only the latter is really possible.

The implication of this is that the education given in our primary schools must be a complete education in itself. It must not continue to be simply a preparation for secondary school. Instead of the primary school activities being geared to the competitive examination which will select the few who go on to secondary school, they must be a preparation for the life which the majority of the children will lead. Similarly, secon-

dary schools must not be simply a selection process for the university, teachers' colleges, and so on. They must prepare people for life and service in the villages and rural areas of this country. For in Tanzania the only true justification for secondary education is that it is needed by the few for service to the many. The teacher in a seven-year primary school system needs an education which goes beyond seven years; the extension officer who will help a population with a seven year's education needs a lot more himself. Other essential services need higher education—for example, doctors and engineers need long and careful training. But publicly provided "education for education's sake" must be general education for the masses. Further education for a selected few must be education for service to the many. There can be no other justification for taxing the many to give education to only a few.

Yet it is easy to say that our primary and secondary school must prepare young people for the realities and needs of Tanzania; to do it requires a radical change, not only in the education system but also in many existing community attitudes. In particular, it requires that examinations should be down-graded in Government and public esteem. We have to recognize that although they have certain advantages—for example, in reducing the dangers of nepotism and tribalism in a selection process—they also disadvantages too. As a general rule they assess a person's ability to learn have severe facts and present them on demand within a time period. They do not always succeed in assessing a power to reason, and they certainly do not assess character or willingness to serve.

Further, at the present time our curriculum and syllabus are geared to the examinations set—only to a very limited extent does the reverse situation apply. A teacher who is trying to help his pupils often studies the examination papers for past years and judges what questions are most likely to be asked next time; he then concentrates his teaching on those matters knowing that by doing so he is giving his children the best chance of getting through to secondary school or university. And the examinations our children at present sit are themselves geared to an international standards, and practice which has developed regardless of our particular problems and needs. What we need to do now is think first about the education we want to provide, and when that thinking is completed think about whether some form of examination is an appropriate way of closing an education phase. Then such an examination should be designed to fit the education which has been provided.

Most important of all is that we should change the things we demand of our schools. We should not determine the type of things children are taught in primary schools by the things a doctor, engineer, teacher, economist, or administrator need to know. Most of our pupils will never be any of these things. We should determine the type of things taught in the primary schools by the things which the boy or girl ought to know—that is, the skills he ought to acquire and the values he ought to cherish if he, or she, is to live happily and well in a socialist and predominantly rural society, and contribute to the improvement of life there. Our sights must

be on the majority; it is they we must be aiming at in determining the curriculum and syllabus. Those most suitable for further education will still become obvious, and they will not suffer. For the purpose is not to provide an inferior education to that given at present. The purpose is to provide a different education—one realistically designed to fulfil the common purposes of education in the particular society of Tanzania. The same thing must be true at post-primary schools. The object of the teaching must be the provision of knowledge, skills and attitudes which will serve the student when he or she lives and works in a developing and changing socialist state; it must not be aimed at university entrance.

Alongside this change in the approach to the curriculum there must be a parallel and integrated change in the way our schools are run, so as to make them and their inhabitants a real part of our society and our economy. Schools must, in fact, become communities—and communities which practise the precept of self-reliance. The teachers, workers, and pupils together must be the members of a social unit in the same way as parents, relatives and children are the family social unit. There must be the same kind of relationship between pupils and teachers within the school community as there is between children and parents in the village. And the former community must realize, just as the latter do, that their life and well-being depend upon the production of wealth—by farming or other activities. This means that all schools, but especially secondary schools and other forms of higher education, must contribute to their own upkeep; they must be economic communities as well as social and educational communities. Each school should have, as an integral part of it, a farm or workshop which provides the food eaten by the community, and makes some contribution to the total national income.

This is not a suggestion that a school farm or workshop should be attached to every school for training purposes. It is a suggestion that every school should also be a farm; that the school community should consist of people who are both teachers and farmers, and pupils and farmers.

Obviously if there is a school farm, the pupils working on it should be learning the techniques and tasks of farming. But the farm would be an integral part of the school—and the welfare of the pupils would depend on its out-put, just as the welfare of a farmer depends on the output of his land. Thus, when this scheme is in operation, the revenue side of school accounts would not just read as at present—"Grant from Government...; Grant from voluntary agency or other charity..." They would read—"Income from sale of cotton (or whatever other cash crop was appropriate for the area)...; Value of the food grown and consumed...; Value of labour done by pupils on new building, repairs, equipment, etc...; Government subvention.....; Grant from..."

This is a break with our educational tradition, and unless its purpose and its possibilities are fully understood by teachers and parents, it may be

resented at the beginning. But the truth is that it is not a regressive measure, nor a punishment either for teachers or pupils. *It is a recognition that we in Tanzania have to work our way out of poverty, and that we are all members of the one society, depending upon each other.* There will be difficulties of implementation, especially at first. For example, we do not now have a host of experienced farm managers who could be used as planners and teachers on the new school farms. But this is not an insuperable difficulty; and certainly life will not halt in Tanzania until we get experienced farm managers. Life and farming will go on as we train. Indeed, by using good local farmers as supervisors and teachers of particular aspects of the work, and using the services of the agricultural officers and assistants we shall be helping to break down the notion that only book learning is worthy of respect. This is an important element in our socialist development.

Neither does this concept of schools contributing to their own upkeep simply mean using our children as labourers who follow traditional methods. On the contrary, on a school farm pupils can learn by doing. The important place of the hoe and of other simple tools can be demonstrated, the advantages of improved seeds, of simple ox-ploughs, and of proper methods of animal husbandry can become obvious; and the pupils can learn by practice how to use these things to the best advantage. The farm work and products should be integrated into the school life; thus the properties of fertilizers can be explained in the science classes, and their use and limitations experienced by the pupils as they see them in use. The possibilities of proper grazing practices, and of terracing and soil conservation methods can all be taught theoretically, at the same time as they are put into practice; the students will then understand what they are doing and why, and will be able to analyse any failures and consider possibilities for greater improvement.

But the school farms must not be, and indeed could not be, highly mechanized demonstration farms. We do not have the capital which would be necessary for this to happen, and neither would it teach the pupils anything about the life they will be leading. The school farms must be created by the school community clearing their own bush, and so on—but doing it together. They must be used with no more capital assistance than is available to an ordinary, established, co-operative farm where the work can be supervised. By such means the students can learn the advantages of co-operative endeavour, even when outside capital is not available in any significant quantities. Again, the advantages of co-operation could be studied in the classroom, as well as being demonstrated on the farm.

The most important thing is that the school members should learn that it is their farm, and that their living standards depend on it. Pupils should be given an opportunity to make many of the decisions necessary—for example, whether to spend money they have earned on hiring a tractor to get land ready for planting, or whether to use that money for other purposes on the farm or in the school, and doing the hard work themselves by sheer physical labour. By this sort of practice and by this combination

of classroom work and farm work, our educated young people will learn to realize that if they farm well they can eat well and have better facilities in the dormitories, recreation rooms, and so on. If they work badly, then they themselves will suffer. In this process Government should avoid laying down detailed and rigid rules; each school must have considerable flexibility. Only then can the potential of that particular area be utilized, and only then can the participants practice—and learn to value—direct democracy.

By such means our students will relate work to comfort. They will learn the meaning of living together and working together for the good of all, and also the value of working together with the local non-school community. For they will learn that many things require more than school effort—that irrigation may be possible if they work with neighbouring farmers, that development requires a choice between present and future satisfaction, both for themselves and their village.

At the beginning it is probable that a good number of mistakes will be made, and it would certainly be wrong to give complete untrammelled choice to young pupils right from the start. But although guidance must be given by the school authorities and a certain amount of discipline exerted the pupils must be able to participate in decisions and learn by mistakes. For example, they can learn to keep a school farm log in which proper records are kept of the work done, the fertilizers applied, or food given to the animals, etc., and the results from different parts of the farm. Then they can be helped to see where changes are required, and why. For it is also important that the idea of planning be taught in the classroom and related to the farm; the whole school should join in the programming of a year's work, and the breakdown of responsibility and timing within that overall programme. Extra benefits to particular groups within the school might then well be related to the proper fulfilment of the tasks set, once all the members of the school have received the necessary minimum for healthy development. Again, this sort of planning can be part of the teaching of socialism.

Where schools are situated in the rural areas, and in relation to new schools built in the future, it should be possible for the school farm to be part of the school site. But in towns, and in some of the old-established schools in heavily populated areas, this will not be possible. In such cases a school might put more emphasis on other productive activities, or it may be that in boarding schools the pupils can spend part of the school year in the classroom and another part in camp on the school farm some distance away. The plan for each school will have to be worked out; it would certainly be wrong to exclude urban schools, even when they are day schools, from this new approach.

Many other activities now undertaken for pupils, especially in secondary schools, should be undertaken by the pupils themselves. After all, a child who starts school at 7 years of age is already 14 before he enters secondary school, and may be 20 or 21 when he leaves. Yet in many of our schools now we employ cleaners and gardeners, not just to supervise

and teach but to do all that work. The pupils get used to the idea of having their food prepared by servants, their plates washed up for them, their rooms cleaned, and the school garden kept attractive. If they are asked to participate in these tasks, they even feel aggrieved and do as little as possible, depending on the strictness of the teacher's supervision. This is because they have not learned to take a pride in having clean rooms and nice gardens, in the way that they have learned to take a pride in a good essay or a good mathematics paper. But is it impossible for these tasks to be incorporated into the total teaching task of the school? Is it necessary for head teachers and their secretaries to spend hours working out travel warrants for school holidays, and so on? Can none of these things be incorporated into classroom teaching so that pupils learn how to do these things for themselves by doing them? Is it impossible, in other words, for secondary schools at least to become reasonably self-sufficient communities, where the teaching and supervisory skills are imported from outside, but where other tasks are either done by the community or paid for by its productive efforts? It is true that, to the pupils, the school is only a temporary community, but for up to seven years this is the group to which they really belong.

Obviously such a position could not be reached overnight. It requires a basic change in both organization and teaching, and will therefore have to be introduced gradually, with the schools taking an increasing responsibility for their own well-being as the months pass. Neither would primary schools be able to do as much for themselves—although it should be remembered that the older pupils will be thirteen and fourteen years of age, at which time children in many European countries are already at work.

But, although primary schools cannot accept the same responsibility for their own well-being as secondary schools, it is absolutely vital that they, and their pupils, should be thoroughly integrated into the village life. The pupils must remain an integral part of the family (or community) economic unit. The children must be made part of the community by having responsibilities to the community, and having the community involved in school activities. The school work-terms, times, and so on—must be so arranged that the children can participate, as members of the family, in the family farms, or as junior members of the community on community farms. At present children who do not go to school work on the family or community farm, or look after cattle, as a matter of course. It must be equally a matter of course that the children who do attend school should participate in the family work—not as a favour when they feel like it, but as a normal part of their up-bringing. The present attitudes whereby the school is regarded as something separate, and the pupils as people who do not have to contribute to the work, must be abandoned. In this, of course, parents have a special duty; but the schools can contribute a great deal to the development of this attitude.

There are many different ways in which this integration can be achi-

eved. But it will have to be done deliberately, and with the conscious intention of making the children realize that they are being educated by the community in order that they shall become intelligent and active members of the community. One possible way of achieving this would combine for primary school pupils the same advantages of learning by doing as the secondary school pupils will have. If the primary school children work on a village communal farm—perhaps having special responsibility for a given number of acres—they can learn new techniques and take a pride in a school community achievement. If there is no communal farm, then the school can start a small one of their own, by appealing to the older members to help in the bush-clearing in return for a school contribution in labour to some existing community project.

Again, if development work—new buildings or other things—are needed in the school, then the children and the local villagers should work on it together, allocating responsibility according to comparative health and strength. The children should certainly do their own cleaning (boys as well as girls should be involved in this), and should learn the value of working together and of planning for the future. Thus for example, if they have their own *shamba* the children should be involved not only in the work, but also in the allocation of any food or cash crop produced. They should participate in the choice between benefit to the school directly, or to the village as a whole; and between present or future benefit. By these and other appropriate means the children must learn from the beginning to the end of their school life that education does not set them apart, but is designed to help them be effective members of the community—for their own benefit as well as that of their country and their neighbours.

One difficulty in the way of this kind of re-organization is the present examination system; if pupils spend more of their time on learning to do practical work, and on contributing to their own upkeep in the development of the community, they will not be able to take the present kind of examinations—at least within the same time period. It is, however, difficult to see why the present examination system should be regarded as sacrosanct. Other countries are moving away from this method of selection, and their abandoning examinations altogether at the lowest levels, or combining them with other assessments. *There is no reason why Tanzania should not combine an examination, which is based on the things we teach, with a teacher and pupil assessment of work done for the school and community.* This would be a more appropriate method of selecting entrants for secondary schools and for university, teacher training colleges, and so on, than the present purely academic procedure. Once a more detailed outline of this new approach to education is worked out, the question of selection procedure should be looked at again.

This new form of working in our schools will require some considerable organizational change. It may be also that the present division of the school year into rigid terms with long holidays would have to be re-examined; animals cannot be left alone for part of the year, nor can a

school farm support the students if everyone is on holiday when the crops need planting, weeding or harvesting. But it should not be impossible for school holidays to be staggered so that different forms go at different periods or, in double-stream secondary schools, for part of a form to go at one time and the rest at another. It would take a considerable amount of organization and administration, but there is no reason why it could not be done if we once make up our minds to it.

It will probably be suggested that if the children are working as well as learning they will therefore be able to learn less academically, and that this will affect standards of administration, in the professions and so on, throughout our nation in time to come. In fact it is doubtful whether this is necessarily so; the recent tendency to admit children to primary schools at ages of five and six years has almost certainly meant that less can be taught at the early stages. The reversion to seven or eight years entrance will allow the pace to be increased somewhat; the older children inevitably learn a little faster. A child is unlikely to learn less academically if his studies are related to the life he sees around him.

But even if this suggestion were based on provable fact, it could not be allowed to over-ride the need for change in the direction of educational integration with our national life. For the majority of our people the thing which matters is that they should be able to read and write fluently in Swahili, that they should have an ability to do arithmetic, and that they should know something of the history, values, and workings of their country and their Government, and that they should acquire the skills necessary to earn their living. (It is important to stress that in Tanzania most people will earn their living by working on their own or on a communal *shamba*, and only a few will do so by working for wages which they have to spend on buying things the farmer produces for himself). Things like health science, geography, and the beginning of English, are also important, especially so that the people who wish may be able to learn more by themselves in later life. But most important of all is that our primary school graduates should be able to fit into, and to serve the communities from which they come.

The same principles of integration into the community, and applicability to its needs, must also be followed at post-secondary levels, but young people who have been through such an integrated system of education as that outlined are unlikely to forget their debt to the community by an intense period of study at the end of their formal educational life. Yet even at University, Medical School, or other post-secondary levels, there is no reason why students should continue to have all their washing up and cleaning done for them. Nor is there any reason why students at such institutions should not be required as part of their degree or professional training, to spend at least part of their vacations contributing to the society in a manner related to their studies. At present some undergraduates spend their vacations working in Government offices—getting paid at normal employee rates for doing so. It would be more appropriate

(once the organization had been set up efficiently) for them to undertake projects needed by the community, even if there is insufficient money for them to constitute paid employment. For example, the collection of local history, work on the census, participation in adult education activities, work in dispensaries, etc., would give the students practical experience in their own fields. For this they could receive the equivalent of the minimum wage, and any balance of money due for work which would otherwise have been done for higher wages could be paid to the College or Institution and go towards welfare or sports equipment. Such work should earn credits for the student which count towards his examination result; a student who shirks such work—or fails to do it properly—would then find that two things follow. First, his fellow students might be blaming him for shortfalls in proposed welfare or other improvements; and second, his degree would be down-graded accordingly.

Conclusion

The education provided by Tanzania for the students of Tanzania must serve the purposes of Tanzania. It must encourage the growth of the socialist values we aspire to. It must encourage the development of a proud, independent, and free citizenry which relies upon itself for its own development, and which knows the advantages and the problems of co-operation. It must ensure that the educated know themselves to be an integral part of the nation and recognize the responsibility to give greater service the greater the opportunities they have had.

This is not only a matter of school organization and curriculum. Social values are formed by family, school, and society—by the total environment in which a child develops. But it is no use our educational system stressing values and knowledge appropriate to the past or to the citizens in other countries; it is wrong if it even contributes to the continuation of those inequalities and privileges which still exist in our society because of our inheritance. Let our students be educated to be members and servants of the kind of just and egalitarian future to which this country aspires. □

TRUE ECONOMICS :

An economics that inculcates mammon worship, and enables the strong to amass wealth at the expense of the weak, is a false and dismal science. It spells death. True economics on the other hand, stands for social justice, it promotes the good of all equally including the weakest and is indispensable for decent life.

—Gandhi