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ANC(SA) MAZIMBU SCHOOL
MOROGORO - TANZANIA

PROBLEMS, PLANS AND THE
PRESENT SITUATION
MAY 1978

Holland Committee for Southern Africa (HCSA)
Da Costastraar 88
Amsterdam
Holland

A handwritten signature in dark ink, appearing to be 'P. van der...' followed by a stylized flourish.

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Summary

The ANC(SA) has asked the Holland Committee for Southern Africa (HCSA), to investigate the possibilities for the execution of a school project in Morogoro, Tanzania. HCSA has asked the Danish National Committee for World University Service (DK-WUS), to take responsibility for this investigation.

In May 1978, DK-WUS has visited ANC(SA) in Tanzania and Zambia, and put together the results of the visit in this report.

DK-WUS are of the opinion, that a definite and reliable structure for the design and execution of the buildings will make the possibilities of carrying out the process easier.

This structure can be made in different ways, but they all have in common, that it will be necessary to have a building direction that can act independently. It should consist of ANC(SA) technicians and be supplemented with an assistant building director and volunteers as instructors.

It has been shown, that there are at the moment complications for the building direction with administration of the present limited construction, because the procedure in relation to the donors and Treasury Department is difficult and time consuming, and this must be changed.

Our visit has brought forth the necessity of planning and technical assistance. Our proposed solution to this problem has been stated in this report.

The necessity of dividing the planning, building and fundraising processes into stages has been put forth and a stage division of capacity for 200 students per stage has been proposed by the Education Committee in Lusaka.

Copenhagen 10.06.1978

Ole Vanggaard

Hilbert Kristiansen

/Danish WUS

1. The background and ideas of the project in Mazimbu, Morogoro.

Tanzania is taking in refugees from South Africa and the government has stated that they will receive any amount of refugees that can possibly come. The only major problem is, that there are almost no facilities available for the refugees, who are primarily from 12 to 19 years of age, with a large part ranging from 15 to 19 years.

It is estimated that there are 4500 youth in exile in Africa and for many of them it is very difficult to adjust to the often totally different environments.

Therefore, it has been the wish of ANC(SA) to establish a school which will provide boarding and educational facilities for this group, at a secure distance from South African military actions.

The site.

In the light of this, the ANC(SA) has received to their disposal, an area of 250 ha. from the Tanzanian government. It lies outside Morogoro approximately 200 km. west of Dar es Salaam. The area is called Mazimbu, and for the most part is a deserted sisal plantage with factory buildings on the ground.

There are 100 workers quarters, which the ANC(SA) will take over after evacuation. The buildings are said to be in bad condition, and restoration will be necessary before they can be used. There are also a few other buildings on the ground where some of the youth connected to Mazimbu (approximately 60) are living at the moment. The others are living in the town of Morogoro.

Two temporary classrooms have been established in one of the buildings, which at the moment functions as "the school". There is only one teacher attached to Mazimbu. The place has taken on the character of a transit camp, because of the lack of facilities for teaching and living.

There are 250 refugees living in Morogoro that will be moving into the workers quarters as soon as possible. Special educational activities have been established for them at Mazimbu, since most of them have received very little schooling in South Africa.

Because of the fact that it is impossible for ANC(SA) to control the number of refugees coming out of South Africa, it is their hope to establish a school with the largest possible teaching facilities. Therefore, the capacity of the school should include a health clinic, kindergarden, as well as primary and secondary teaching facilities.

In connection to the school it is the intention to establish a production unit, that can supply food for daily use and include work shops. ANC(SA) already has a pig farm with 450 pigs outside Morogoro.

2. The ANC(SA) administrative activities in relation to the Mazimbo school.

The ANC(SA) administrative activities, related to the school project, are divided between The Treasury Department in Lusaka, The Educational Committee in Lusaka, The Educational Committee in London, The Educational Committee in Dar es Salaam and the Building Committee in Morogoro.

Treasury Department, Lusaka

All the decisions related to economy, employment procedures and other important matters are taken by The Treasury Department in Lusaka.

The department wishes to have direct contact with the sponsors and for the time being, is in charge of authorizing the distribution of the Norweigen funds.

At the moment it looks as though the Treasury Department is also taking responsibility for the more technical questions, which makes it difficult for the work of the Building Committee. Therefore, we feel that the Treasury Departments role in the building process should be carefully considered, and especially which of these responsibilities can be given to others.

Educational Committee, Lusaka

The Educational Committee in Lusaka is responsible for the educational policy of the ANC(SA) as well as the decision making process related to the structure and educational conditions of the schools.

Because of the current rapid development of the ANC(SA), the conditions for the planning have been changed as the need for more schools has been expressed. The decisions about the educational facilities at the school in Morogoro, have therefore been postponed, but the necessary decisions for the initial start of the project were made by the committee during our stay in Lusaka.

Educational Committee, London

This committee is responsible for assembling and

purchasing suitable educational materials for the ANC(SA) schools.

Educational Committee, Dar es Salaam

As yet this committee has received no independent assignments, as the principal educational guidelines have not yet been drawn up by the Educational Committee in Lusaka.

At the beginning they were hesitant about meeting with us, but were finally willing to come to an orientation meeting where we were able to explain our findings and problems.

Building Committee

The Building Committee is staying in Morogoro, where the only ANC(SA) member we met was, Building Director Dennis Oswald, together with the Danish volunteer, Lars Nordbo. At that time the committee was engaged in drawing up architectural plans, restoring the existing buildings and installing the temporary water supply system, but complications have arisen because of the indirect procedure for releasing funds to the purchasing of materials. For example it has not been possible for the Building Committee to get permission to buy beds and other supplies to set up the buildings. They have also received different supplies than were ordered from Lusaka, f.ex. they ordered a four wheel drive truck and received a two wheel drive truck, which simply doesn't function as well for the job.

It is necessary to find a smoother procedure that gives the Building Committee more responsibility for the technical decisions, this should include purchasing of material and supplies.

The releasing of money from the Dutch Embassy also causes problems for the committee. Before the money can be released, Dennis Oswald must present an invoice of each purchase at the embassy. This takes time, and the supplies are often sold before the process is completed. It is difficult to buy special supplies in Tanzania, such as tools and many of the necessary building materials, because the supplies available are often limited.

3. The present economical and fundraising situation.

Dutch funds.

At the moment there are at least two donors that have donated funds to the school project. The Dutch government has granted 500.000 f., that will be payed by the embassy in Dar es Salaam. There has already been drawn an amount of money from this account to pay for a concrete mixer, various tools, and equipment to a temporary water plant. The procedure for receiving the money is, that the building director must apply at the embassy for the purchase of the materials before they can be bought. This procedure is very time consuming, which is trying to be changed, but the Dutch representative, who is willing and understanding, has limited possibilities. The building director is asking for support to establish a more flexible procedure. Funds for some of the necessary supplies, such as gasoline, can not be drawn from the Dutch account, this also makes the arrangement less valuable for carrying out the project.

Norwegian funds.

The Norwegian Agency for International Development (NORAD), has sponsored ANC(SA) with 2 mill. Norwegian kr. in 1978. It has been agreed that half of this sum should go to the school in Mazimbu. An agreement has not been made concerning how this money is to be payed, nor has ANC(SA) requested it.

The Norwegian aid is not a part of the common development aid, but a special fund where private organizations can apply for support.

Both the Norwegian Embassy in Dar es Salaam and the Dutch Embassy in Lusaka have given a positive statement for an eventual continuation of donations, while also expressing interest in seeing an operations plan and some concrete results. "We will wait and see", was the general attitude.

NORAD, in Dar es Salaam, has expressed the desire for a co-operative Scandinavian contribution.

The treasury General, Nkobi, has asked the Norwegian Embassy in Dar es Salaam, for support to the design of a water supply plant and sewerage system in Mazimbu. The

embassy is now investigating what such a design will cost, but have indicated that there most likely wouldn't be any problems. The problem at the moment is to get the Norweigen engineer to survey the area. But it is said that he is waiting for a permit to come to Mazimbu. The project is supposed to be carried out by professional consulting engineers that work in Tanzania. They will be in charge of drawing up the design as well as tendering and supervision, while the construction will be carried out by Tanzanian contractors, because of the special character of the job.

It still hasn't been decided where the funds for the construction work of this part of the project will be drawn. It is possible they will be taken from the donations already given.

Danish sponsoring.

Lars Nordbo and the other eventual Danish volunteers will be payed by DANIDA, through the Danish Volunteer Service (DVS).

DVS, in Dar es Salaam has received a request for transferring, building constructor Lars Nordbo, to ANC(SA) to work on the architectural design.

4. Teaching and Educational Conditions.

The ANC(SA) still hasn't worked out an exact educational policy. The South African educational policy is directed towards passifying the black population and placing them in a "servants" role. Contrary to this, the ANC(SA) wishes to direct their educational policy towards the masses.

The general idea of the ANC(SA) is to give a qualified theoretical education with a close relation to production. It is important that the school is recognized on an international standard, so that the students will be qualified to participate in the educational systems of other countries.

The Educational Committee in Lusaka, has determined that the school in Mazimbu should give a broad non-specific education with primary and secondary teaching as well as a kindergarden and adult teaching. Vocational training should be arranged in connection to the work shops and a production unit intergrated in the activities at the school. The establishment of a health clinic will also be necessary.

The capacity of the school

The capacity of the school has been estimated at 800 students. Although this is a large amount, the general attitude has been, that it is a necessity.

It has been decided by the educational committees and the building comittee that the process of planning should be divided into several stages. In this way the teaching, planning and construction fases will be able to gain from previous experiences. It is therefore important that the decisions, in the start, are of a general character

to respond to the imediate needs of the school. Hopefully this will help to avoid major mistakes, although considering the size of the plan, both the physical and educational planning are still rather vague.

At a recent meeting (12.05.78), the educational committee drew up a plan for the first phase. It should consist

of approximately 200 students on a primary and secondary school level, general classrooms, and residential facilities including living quarters, toilets, a kitchen and stores. There will also be established a health clinic. The staff will consist of 8 teachers plus administrative personnel.

The class capacity should be 25 students, contrary to that in Tanzania of about 40 students per class. The reason for this is that much greater social problems can be expected here, because of the problems related to the conditions of the refugees.

Contrary to the wishes of the Educational Committee, the planning section in the Ministry of Education in Tanzania has stated, that they would like the school to meet the Tanzanian standard (40 students per class).

The Educational Committee feels that it is important to integrate the students in relation to their origin, and tribal backgrounds. They also want an intergration of the different age groups as much as possible, although they recognize the problems with the small children and realize it may be necessary to establish special facilities for them. The question of seperating the sexes has not been mentioned but we assume it will be decided to seperate them.

The teachers' living quarters will be located at some distance from the students dormitories, although there will be a warden's house near by.

The classes will be based on a rotation system, so that the factor of utilation for the classrooms will be about 0.8.

A production unit is intended to be set up in Mazimbu. It is regarded as a necessity not only to make the school self sufficient, but also to give the students an idea of production processes and an experience of manual work.

At the start it will be necessary to have 8 to 10 teachers employed at the school. It is assumed that there will eventually be need for at least 40.

At the time being there are not enough available teachers in the area, but several solutions to this problem have been discussed. Ethiopis has offered to educate a

number of teachers, but due to the present political situation there, it is not possible right now. The offer remains open.

The Tanzanian government has also made an offer to set up a voluntary teaching staff to fullfill part of the need, but it is doubtful that this can be arranged in time.

While we were staying in Morogoro, the possibility of using teachers from the different volunteer services was discussed. The Danish Volunteer Service has said that they are willing to help find teachers qualified for this type of work.

ANC(SA) has asked DVS if it is possible to send a number of South African refugees living in the Scandinavian Countries as teachers through DVS. Barbra Stenstrup, from DVS in Lusaka, belives it will be possible but the final decision must be taken by the DVS-board in Copenhagen.

In regards to the political screening of the possible Danish candidates, WUS in Denmark has offered to do this work for ANC(SA) with the Danish Candidates sent through DVS.

It was intended that the teachers would not be paid a salery, but rather recieve a monthly allowance. Because of the necessity to attract teachers, especially in the start, it was evident that this method of payment would not be possible.

It was decided by the Treasury Department in Lusaka, that fundraising would also include running costs for 3 years and cover the expences of educational materials as well as facilities for the teachers to produce their own educational materials.

5. The technical and planning conditions.

Permission to build the school in Mazimbu was given verbally to ANC(SA) by the Tanzanian government over a year ago, but the formal written permission has first recently arrived.

The site given to the ANC(SA) is a previous sisal factory with adjacent fields. There are two areas with workers quarters on the site, which at the moment are occupied by Tanzanians who will eventually be moving to other areas. ANC(SA) does not want to survey the ground until they have moved, to avoid giving them the impression that they are pressing them out.

It is planned to utilize the workers quarters for the ANC(SA) refugees, and to use the factory buildings for storage of building materials and workshops for teaching.

Some of the houses on the site have been renovated and are functioning as the school at the moment, but they are relatively small. There is a stream that divides the ground and because of the problem with mosquitos it is necessary to place the school at a reasonable distance from the stream.

The water supply at the moment is very unstable. Mazimbu relies on water transported from Morogoro by trucks free of charge. It is stored in ground tanks at Mazimbu. ^{suitable}

The work in preparation for two 2000 gallon tanks is underway. The water is taken from the stream, cleaned before put into the tanks and then chlorified in the tanks.

The Treasury Department has applied for financial support to NORAD, to design a permanent water supply and sewerage system. It is a possibility to connect it directly to the new water system in Morogoro, but it might be necessary to establish a totally separate system. An evaluation of the alternatives must be considered before the final design is drawn up. The construction work of the system will be carried out by local contractors.

The ground is primarily sand so there are no immediate signs of foundation problems as there is no sign of problems with flooding.

Morogoro lies on the boarder of an earthquake area, where

there has been one tremmer in the past year, but the building committee do not believe that special precautions will be necessary in the design.

The planning Department in the Ministry of Education has set down the guide lines for the calculation of the stability of buildings in this location and we advise that these calculations are closely examined. The department has also made recommendations in regards to wind loads, that should be taken into consideration in the design.

The Danish volunteer Lars Norbo and the ANC(SA) representative Dennis Oswald have already made a number of sketches for the buildings and a proposal for the site plan. The site plan has just recently been given to the Educational Committee in Lusaka, which was otherwise unaware of its existence.

The technical aspects of the site plan were not discussed during our stay, although some problems have been raised. The building committee and we agreed that it would be very useful to get an experienced architect to spend some time in Morogoro, to analyse and discuss the principals of the plan.

WUS in Denmark, has promised to look for a possible candidate for the job. Architect, Bente Beedholm is being considered. She is a teacher at the Institute of Building Technology, at the Architect School in Copenhagen and has earlier worked in Kenya and the Peoples Republic of Angola and at the time being in Nigeria. She has informally stated that she would be interested if ANC(SA) asked her to come. But the Treasury Department in Lusaka made it clear that it was a matter for them to decide.

The building costs in Tansania are higher than in the other countries where we have worked. The Department of Planning in the Ministry of Education in Dar es Salaam gave us the following costs of construction of a school in the area. The capacity of the school is estimated at 640 students.

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Staff houses (2915 m ²)	1750 sh/m ²	5,090,000 sh
Dormitories (3112 m ²)	1750 sh/m ²	5,300,000 sh
Teaching areas (3300 m ²) (inc. kitchen and dining)	1700 sh/m ²	5,597,000 sh
External works		3,988,000 sh
Total approximate		20,000,000 sh

In the National School Program, 10 - 12% of the building cost is allotted to furniture.

⑦ Lars Norbo said that the school he has been supervising in Morogoro cost appr. 2100 T sh. per m² not including furniture. According to him, better planning could have been instrumental to reduce this sum.

The consultant engineers COWICONSULT in Dar es Salaam gave the estimate of the cost of a factory building as 1400 sh. per m².

Information is given to us in Denmark of a school in Tanzania built by direct labor for a cost of 1000 Tsh m² in 1976.

There seems to be a large economical gain if the prices of different materials and layouts are analysed.

It has been decided that the class coefficient shall be low (25 students per class), but it has also been decided that the school should meet the Tanzanian requirements at 40 students per class. A possible solution to this problem is, that the planning could involve the possibility of putting two classrooms together.

6. Plans for the design and execution.

Stages

All those involved in the project have agreed to the necessity of dividing the scheme into stages. There has been a proposal from the building committee for its division into 6 stages. The building committee estimates a building period of 3 years for completion of the school.

The Educational Committee calls for the planning of facilities for 200 students in the first stage.

It is of common opinion that this division into stages should give the possibility for safe planning step by step. The stages will then have to have a certain capacity and it is necessary to give a reasonable amount of time for the projects evaluation and redesign between stages. The first stage for 200 students will require about 3-4000 m² and 150-200 workers if it is to be completed within a 12 month period. (The Africa Hall project in Lesotho was estimated to 130 working hours per m².) It is our opinion that the estimated period of 3 years for the entire building operation is underestimated. NB

Proposal for operational plan, by DK-WUS

The Danish WUS has proposed an operational plan based upon their experiences from the MPLA school in Peoples Republic of Congo and the Africa Hall project in Lesotho.

The design and execution would be the responsibility of WUS and should be lead by a building direction consisting of ANC(SA) technicians and volunteers. The building direction working together with the design group in Europe, should be responsible for the purchasing of materials in Europe. The funds should be canalized in such a way that the building direction has the possibility to draw directly from the accounts, as well as the European offices, for the purchasing of materials and the expences of different services.

The design will be carried out by a non-profit design group in Copenhagen with architects and engineers, who are qualified and have experience with this type of work.

The first stage of the project would be to make a sketch for the main layout based upon the masterplan sketches, made in Morogoro, and the comments from Lusaka. The planning assistants to the masterplan that are described later, will also give advantages in this project.

The sketch plan for the main layout is to be approved by the ANC(SA) before the detailed planning of the first stage begins.

This plan implies that a large part of the project work is to be made by the WUS design group. We feel that it would be difficult for us to take the responsibility in regards to ANC(SA) and the donors, if this is not the case.

We believe that this is the most efficient and economical way to execute the project. The plan also implies that the ANC(SA) craftsmen would be involved in the building process and that ANC(SA) would receive instruction. It is also possible to involve the students in the building process, but if that should be the case on a larger scale, it should be taken into consideration in the design.

This plan would allow the present building direction to concentrate on the building of classrooms and dormitories in immediate need, and thus utilizing the already available funds.

The building direction in Morogoro objected very firmly to the proposal because they felt that the architectural and engineering design should take place in Morogoro by their available technicians. They assumed that the building direction have sufficient capacity to make the overall design and the detailed plans as well as to direct the entire construction process.

We did not feel that this could assure the proper design and pointed out that we had learned from previous errors how insufficient planning could prove very expensive.

Alternative operational plan

An alternative plan for the schools design and execution was worked out between the building direction and us. The plan is based upon a master plan that can be carried out in stages, each stage consisting of facilities to 200 students, in regards to the wishes of the Educational Committee

in Lusaka. The design and execution shall be in the hands of ANC(SA), in regards to the wishes of the Building Committee in Morogoro.

The drawing up of the proposal will be analysed and evaluated together with an architect, sent for a short period.

The planning and execution process will take place in stages so that after each stage is completed, there will be an evaluation of the functional and technical standard as well as the economical factor of the building.

The building direction will be supplemented with an assistant building director and craftsmen in the different fields, who will be working as instructors.

This plan has been discussed with the Building Committee and the following details can be added.

The Building Committee would welcome the assistance from an experienced architect. We proposed the Danish architect Bente Bedholm, who is in Lagos and was known to the chairman of the Educational Committee in Lusaka. Bente Bedholm has informally answered us that she would like to do it if she is asked by the ANC(SA).

The construction of the buildings should be in the hands of a building direction, constituted of an ANC(SA) building director, an assistant building director and a secretary, who could be a volunteer or an experienced engineer supplied by a European organisation (ei. DK-WUS).

It must be realized that the building operation will have to be based upon a large number of unskilled laborers, as large a number as possible should be ANC(SA) people, who could gain much by training. Instructors for the main trades (carpentry, masonry, plumbing etc.) will be in demand. The Danish volunteer service has expressed interest in contributing volunteers from their personnel. Other European solidarity groups may also be interested in recruiting craftsmen for instructor positions.

It is our opinion that it may be possible to organize a building operation of this size in this way, providing the economical situation clears up enough to allow the building directions to operate with reasonably independent responsibility.

We share the Building Committees point of view that it is essential that fundraising be better co-ordinated to avoid the present situation where the building direction has difficulty in gathering the funds needed for rational operation.

We appeal to the Treasury Department to set up a more workable organization that can allow greater responsibility and thus smoother operation of the building direction. This is especially important due to the difficult communication between Europe and Lusaka as well as between Morogoro and Lusaka.

A large amount of the materials (30% of the cost) will have to be imported directly to Tanzania. The supplying of materials will be both safer and easier if importation is directed through the HCSA. It is necessary to obtain an import license, and should then be made possible to import goods dutyfree.

We believe that it is of great importance that fundraising is co-ordinated through one organization, such as HCSA, in order to prevent the present caotic fundraising situation.

The building direction should be able to call for technical assistance during the construction period for design of instalations, special structures, furniture, etc. It would also be advantageous to have a regular visit of a technical advisory group to discuss problems in design and make proposals for the next stages as well as assist in making up lists of items to be imported.

The Danish WUS technical group and others such as Demotech may be able to assist in this way - but allowance in the organization and in the financial agreement will then be necessary.

Students involvement in the building process

The degree in which the students should be involved in the building construction itself has been a point of discussion. This topic has not yet been taken up by the ANC(SA), but it should be stated that it will not be as a source of cheap labor nor to give them a tradesman's training. Still the ANC(SA) has shown an interest in involving them directly

in the construction process. We think, that under good direction this will be a valuable opportunity to create discipline and to give the students a sense of responsibility towards the building.

should not be as a source of cheap labor nor to give them a tradesman's training. Still there is interest in involving them directly in the construction process. We think, that under good direction this will be a valuable opportunity to create discipline and to give the students a sense of responsibility towards the building.

Reduction of the building period

The relatively large amount of workers that will be necessary to execute the building program within a 3 year period, make it necessary, in our opinion, to seriously consider alternative building methods. It is desirable to find the most appropriate building method, both in relation to time and economy.

Prefabricated buildings produced on the site

It must be taken into consideration that most likely, a large part of the workers will be unexperienced and it can not be expected that they can comprehend the total building process, which is necessary on a traditional building site. Uncertainty about the different problems that can arise often results in a loss of enthusiasm.

Therefore, it is obvious to find a certain amount of industrialization that f.ex. is based on elements that are produced by specialized groups.

Imported prefabricated systems

HCSA has investigated the possibilities to find appropriate prefabricated systems, that most likely can be built to the same process as a traditional building system as long as the transport from Holland to Dar es Salaam can be serviced without cost by the ships of friendly nations.

The foundations and installations should also be made locally, just as it would be possible to some extent combine the system with f.ex. traditional masonry walls.

Especially the last combination is reasonable to consider in relation to the construction in the first stage. This will allow for a smoother building organization on the site. The design should be in consistency with the demands of the masterplan and the formal principles should be in accordance with further expansion with traditional technic.

Special conditions in relation to the design

It is our opinion that during the investigation stage, such things as whether or not the dormitories should be built in 2 stories, should be considered. Likewise the possibilities and advantages of f.ex. heating the water with solar energy should be considered. This could possibly help to keep a higher hygienic standard.

It has been said that there are problems with termites in Tanzania. This means that the roof elements must be of impregnated lumber, but the closest saw mill that produces impregnated lumber lies 400 km from Morogoro and the prices are high.

Therefore , the possibilities should be considered for the use of concrete elements.

In relation to the planning of the dormitories it should be pointed out that it is not necessarily cheaper to build rooms for 8 persons than double rooms. It should therefore, be considered structurally and in relation to the conditions of the students before the planning is completed. See plan example in the appendix.