The CHANGES Programme:

Quarterly Report: October - December 2003

The CHANGES PROGRAMME

Basic Education and Policy Support (BEPS) Activity

Creative Associates International

In collaboration with

CARE, The George Washington University, and GroundWork

USAID

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The CHANGES Programme

Quarterly Report No. 11: October – December 2003

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I. SUMMARY

The CHANGES Programme closed out 2003 in good form. As the programme nears the completion of its first three-year phase on 31 March 2004, every component of the programme is exceeding its original mandate and targets and, as such, is delivering more in terms of outputs than was anticipated at the outset. This section of the present report summarizes the highlights of what was achieved during October through December 2003; the details are contained in the subsequent body of the report.

The **Community Sensitization and Mobilization Campaign (CSMC)** to improve access to primary education for girls and other vulnerable children and to mitigate the effects of the HIV/AIDS epidemic, which is being implemented in Southern Province (hereafter SP), is now operational in all 11 districts of the province. This exceeds the original expectation to implement the campaign in only 9 of 11 districts during the first phase of the programme. During the reporting period, research and verification were completed in Siavonga and Monze Districts, and the Livingstone District Profile was printed and disseminated, while the Sinazongwe District Profile was sent to the printer. The profiles summarize the findings from the research and verification and are used at the district and provincial levels for policy review and development.

Also during the quarter, Zonal-level Community Facilitators (ZCFs)—who are zonal-level government officers from the Ministry of Education (MOE), Ministry of Health (MOH), and Ministry of Community Development and Social Services (MCDSS)—were trained in Siavonga (15) and Monze (36) Districts, bringing to 324 the total number of ZCFs trained throughout SP. Also during the reporting period, regular stakeholder and programme review meetings were held in Kalomo, Mazabuka, Sinazongwe, Choma, and Gwembe Districts to fine-tune the programme at the district and zonal levels and to problem-solve with line ministry counterparts as appropriate. While there continue to be ongoing issues and challenges that need to be addressed, overall the CSMC is running well in SP and is meeting—in fact, exceeding—expectations.

Likewise, the **School Health and Nutrition (SHN)** component of the CHANGES programme, which is being implemented in Eastern Province (hereafter EP), continues to move ahead and is exceeding original targets and deliverables. Early in the reporting period, the third biomedical and cognitive assessment surveys were completed, which, when the final results are submitted, will conclude the research phase of the programme. After the third survey was completed, mass treatment of intervention schools started and, at the time of writing, approximately 48,000 pupils had been dewormed and had received micronutrient supplements. Although delayed for an unfortunately long period of time, the analysis of the blood samples from the Year Two survey was completed by TDRC (Tropical Disease and Research Centre) in Ndola during the quarter and were sent to the Partnership for Child Development (PCD) in London for compilation and inclusion in a final Year Two report.

Other activities conducted during the quarter by the SHN component included completion of the SHN Competition, which had been conducted over several months and included 50 schools. Based on a number of criteria resembling the previously established criteria for a health promoting school, Dzoole Basic School was named the winner and received a trophy and cash prize. Also during the quarter, the SHN/MIS (Management Information System) pilot continued in eight schools in Chadiza and Chipata Districts; training of the district-level officials continued and the process of collecting SHN data in schools and entering the data into the district and provincial MIS continued. A further activity, which represents a departure from past practice, was the delivery of the first in a series of training workshops for teachers and pupils in Theatre for Community Action. In the past, professional drama troupes had

been hired to sensitize communities about SHN and HIV/AIDS issues. Because this was costly and unsustainable, the SHN component is now building the capacity at the school and community levels to carry out the required sensitization on an ongoing basis with teachers and pupils as the primary actors. Finally, near the end of the quarter, considerable planning for the CHANGES extension was conducted, including planning the interface of the CHANGES SHN component with the soon to be launched Schistosomiasis Control Initiative (SCI), which will be implemented jointly by the MOE and MOH.

As noted in previous quarterly reports, **HIV/AIDS** is a crosscutting dimension of the CHANGES programme rather than a component in its own right. Still, considerable progress was achieved with regard to HIV/AIDS interventions during the quarter. The HIV/AIDS impact assessment, which has been jointly implemented by SIAPAC (Social Impact Assessment and Policy Analysis Corporation), the MOE, and CHANGES, neared completion by the end of December. During the reporting period, the data collection was completed, a two-day workshop was held to report and discuss the major assessment findings with MOE top management and other key stakeholders, the MOE Permanent Secretary was briefed on the major findings, and the draft Final Report was submitted to the MOE, the Working Group, and the Steering Committee for review and comment. The complete Final Report will be submitted by the end of January 2004.

Additional HIV/AIDS activities during the reporting period included both the SHN and CSMC teams being selected to participate in UNAIDS "Best Practices" workshops (one in Chingola and the other in Chipata) in which they presented the approach to tackling HIV/AIDS they are pursuing in their respective components of the CHANGES programme. Further, the SHN team conducted the first in a planned series of workshops on HIV/AIDS peer education; in the first workshop, 20 teachers and 20 pupils were trained in how to support Anti-AIDS clubs and how to mentor their peers on issues related to HIV/AIDS. Finally, both the SHN and CSMC teams were active supporters of and participants in World AIDS Day celebrations in Chipata and Livingstone. The CSMC team in Livingstone gave direct financial support to the event organizers and also staffed a booth where they distributed literature about what the CSMC and the MOE are doing in SP to combat the HIV/AIDS epidemic.

The **Small Grants Mechanism** is also a crosscutting dimension of the CHANGES programme rather than a component that stands on its own. During the quarter both of the provincial Small Grants Coordinators moved on to other opportunities and, therefore, new people needed to be recruited and trained to manage the grant awarding process in EP and SP. In spite of the change in personnel, in SP, 112 new grant proposals were received and reviewed, 18 of which were approved. Moreover, nine existing projects received new tranches of funds while 13 new grantees received their first tranche of funds. Beyond this, six existing grants were closed out, and 24 existing projects were monitored. In EP, progress in awarding grants was a bit slower. Twelve proposals for new grants were received and reviewed, and four were approved. In addition, two new grants were awarded during the reporting period and 10 existing grants were monitored.

Finally, with regard to **Programme Administration**, while the delay in receiving the final Statement of Work from USAID continued until late December, the CHANGES team carried out considerable planning for the extension in a weeklong planning workshop in Lusaka. The main tasks and deliverables for the extension were identified, illustrative activities were conceptualized, and draft budgets were developed. In addition, work plans and budgets for 2004 were developed. Unfortunately, however, these planning activities were carried out in isolation, apart from the MOE, because, for the second year running, CHANGES was not invited to work with the MOE when it was developing its annual work plan and budget for 2004. This is regrettable because the only way CHANGES activities can be mainstreamed is if the development of annual work plans and budgets is conducted in a collaborative manner.

II. PROGRESS DURING THE QUARTER

In this section, the progress and achievements attained during the October-December 2003 quarter will be highlighted for both of the major components of the CHANGES programme and their corresponding USAID Intermediate Results (IRs) from Strategic Objective 2 as well as IR 6.1 from the new Strategic Objective 6. The two major components are the Community Sensitization and Mobilization Campaign (CSMC) and School Health and Nutrition (SHN); progress on the two cross-cutting components—HIV/AIDS and the Small Grants Mechanism—will be updated as well.

A. Community Sensitization and Mobilization Campaign (CSMC): Improved Quality of Learning Environments in Targeted Areas (IR 2.1); Improved Quality of Basic Education Delivery Systems (IR 6.1)

1. Progress on Indicators

Priority/Cate	Indicator	Means of verifi	Tar	Actual as o
1.Participation of girls a vulnerable children i education	Increase in % of enrolment and girls and other vulnerable child education	Yearly school records (*D from five selected schools district)*	Enrolment: 22% Retention: 30%	Enrolment Baselin from 2000 to 2001 Retention Baseline
Indicator 1. The enrolment baseline of 16% increase in girls' enrolment from 2000 to 2001 was obtained from provincial re same period, the enrolment increase was 22%for boys. The target for girls has been set at 22% in an effort to see girls' enro to be at par with boys' enrolment. The retention rate target has been set at 30%. Although no baseline information is availal indicator, it was felt that the USAID target of 87% would be more attainable if the programme was working in urban areas. number of rural schools selected as research sites has influenced the CSMC to set the retention target at a lower rate.				
2. Sensitization and Mob	Number of schools, community P.T.A. members and pupils sen mobilized (to take action) conc HIV/AIDS and girls/vulnerable education	Zonal-level Community I action plans and field rep	82,000	133,263
Indicator 2. There are 82 zones in the nine selected CSMC districts. Five schools and catchment areas are selected per zon anticipated that at least 200 individuals within each school catchment area will be sensitized and mobilized as a result of the programme. (This figure will most likely be dramatically higher when the remaining catchment areas in each zone, which community meetings and IEC inputs rather than receive all the inputs of the full CSMC model, are included.)				
3.Gender and Equity	Number of provincial, district a officials and community-based sensitized and trained in gende issues in education	Workshop attendance fig	365	2,934
Indicator 3. There will be approximately three participants from each zone, and five district-level officials from each distri workshops in each district. Issues pertaining to gender and equity will be part of that training curriculum. Therefore, a targ been set (including 74 community mobilizers trained in Kazungula and Kalomo) from the nine selected districts.				
4. Action Research	Number of communities partici research	Researchers' field reports	299	312
Indicator 4. Six villages are selected in each of the five selected school catchment areas in a district. Therefore, 30 villages expected to participate in action research. As such, according to the current work plan, a total of 270 villages will participat research from the 9 selected districts. (The additional 29 villages were from Kazungula and Kalomo Districts in which all v participated in action research rather than only 60).				
5. Research and Verifica	Number of community membe	Head-count by researcher		

Priority/Cate	Indicator	Means of verifi	Tar	Actual as o
	verify the research		18,000	21,092
	Number of Theatre for Develop performances for verification a	Researchers' field reports	90	86
Indicator 5. There are a total of 45 school catchment area research sites in the nine districts. Two drama presentations will t each catchment area to verify research findings, for a total of 90 drama performances. It is anticipated that approximately 2 members will attend each of the performances.				
6. Participatory Monitorin	Number of community activitie action plan) monitored	Monitoring plans and rep	1,230	2,529
	Number of communities monit progress	Monitoring plans and rep	820	696
Indicator 6. With 410 school catchment areas in nine districts, it is anticipated that ZCF teams, district officials, and/or the members will monitor at least three community activities in each catchment area. At the same time, at least two communitie catchment area will have action plans that will be self-monitored by the communities.				
7.Life Skills	Number of zonal-level action p training on the use of life skills	Zonal-level action plans	41	63
Indicator 7. 82 Zonal-level action plans will be developed; half of those are expected to include material on life skills.				
8. Information, Educatio Communication (IEC)	Use of a variety of communicat focused in promoting girls' and vulnerable children's education sensitizing community membe teachers, children) about HIV/A proliferation and its mitigation	Actual media products	7	11
Indicator 8. The target for media products is a total of eight, comprised of two radio programmes for HIV/AIDS, two radio girls' education, two illustrated annual reports for stakeholders, and one CSMC newsletter.				
9. Action Plans	Number of action plans develop and zones (ZCFs)	Actual count of action pla	82	130
	Number of communities develo community action plans	district, zonal and CSMC	820	696
Indicator 9. 82 ZCF teams will be established in the nine districts, and each will develop an action plan for sensitization an in their zone. It is anticipated that two communities in each of 410-school catchment areas will develop community action p				
10.Capacity-building at	Number of provincial, district, officials and community based to facilitate community-based a participatory ways.	Workshop participant list	365	2,985
Indicator 10. There will be approximately 246 participants from the nine districts (82 zones x 3 persons) trained as ZCFs a district and provincial officials. Therefore, a target total of 365 has been set (which includes 74 community mobilizers trai Kazungula and Kalomo Districts) in the nine districts in Southern Province.				
11. Small Grant Proposa	Number of provincial, district a officials, and Community based sensitized and trained in propos for small grant awards.	Workshop attendance fig	365	2,934
Indicator 11. There will be approximately 246 participants from the nine districts trained as ZCFs and about 45 district and officials. Proposal development for small grants awards will be a part of that training curriculum. Therefore, a target total o set (which Includes 74 community mobilizers trained from Kazungula and Kalomo) in nine districts in southern province.				

Priority/Cate	Indicator	Means of verifi	Tar	Actual as o
12. Small Grant Awards	Number of communities develc for small grant awards to suppc community-based action plans	Review and count of cor action plans	820	696
Indicator 12. At least two communities in each catchment area preparing community-based action plans will develop propo grants to support activities in their action plans.				

2. Highlights

Research and Verification in Siavonga District:

The research and verification in five school catchment areas of Siavonga District that was started in mid-September was completed on 23 October. This brought to ten the number of districts in SP in which research and verification have been completed.

Entry and Research and Verification in Monze District:

During the previous quarter, the CSMC entered Monze, the eleventh (11th) and final district of SP; the district management team was formed and oriented to the CSMC at that time. In the present reporting period, during 26-31 October, site selection for the research and verification took place, and the five catchment areas were visited. The five schools (and their catchment areas) that were selected were the following:

Banakaila Basic School
Bwengwa Basic School
Monze Basic School
Namateba Basic School
Sichiyanda Basic School

The research and verification in Monze District started on 4 November and concluded on the 27th of the same month. In all, 1,553 people (community members and pupils) participated in the verification drama performances at the end of the research, as follows: Banakaila (401 participants), Bwengwa (234), Monze (39), Namateba (447), and Sichiyanda (432).

Programme Implementation and Monitoring:

An increasingly demanding task that needs to be undertaken on an ongoing basis by the CSMC team as the programme continues to roll out in SP is monitoring and supporting the programme at the different levels at which it operates. This includes holding provincial and district stakeholders' meetings, district review meetings, and supporting the work the Zonal-level Community Facilitators (ZCFs) are doing in schools and communities with School Focal Point Persons (SFPPs) and Community Focal Point Persons (CFPPs). This important monitoring and support function during the present quarter included the following:

- *Kalomo District Monitoring:*

The CSMC Field Coordinator went to Kalomo District in October to work with the district management team, which had been encountering some difficulties pursuing the desired multi-sectoral approach the CSMC embodies. Not only had the district team not been functioning well as a team, reports were not being submitted, and funds had been slow in being reconciled. The Field Coordinator met with the DEBS (District Education Board Secretary—formally called the DEO: District Education Officer) and

several other team members and, after lengthy discussions, the following decisions were made: the DEBS will strengthen his leadership of the programme in the district and the Planning Officer will become the CSMC Focal Point at the district level, taking over from the uncommitted and ineffective District In-Service Provider (DIP). It is hoped that these changes will help Kalomo District to more faithfully implement the CSMC.

➢ *Mazabuka Stakeholders' Meeting:*

The CSMC Assistant Coordinator, Field Coordinator, and Provincial CSMC Focal Point, Mr. Trust Hanguwa, visited Mazabuka District in October for a Stakeholder's Meeting and a three-day ZCF review workshop. Seven district officers attended the Stakeholder's Meeting, and the CSMC team was pleased to learn that the district team had held several meetings on their own to problem-solve and fine-tune implementation of the CSMC. During the meeting the following issues were raised:

- Transportation for ZCFs continues to be a difficulty.
- Some ZCFs are not performing well due to their perception of a lack of incentive. The CSMC team advised the district team to do their best to support the ZCFs and to recommend that non-performing ZCFs be replaced.
- The ZCFs, SFPPs, and CFPPs desire some form of visible identity, for example T-shirts and caps marked with CSMC messages. The CSMC team explained that plans are underway to provide all ZCFs, SFPPs, and CFPPs with T-shirts and *chitenges*.
- In Chief Mwanachingwala's area the programme is apparently identified with the World Wildlife Fund, which has been accused of grabbing traditional land from the local people; as a result, the local people do not want any involvement by NGOs in their area.
- Some NGOs in the district provide food to entice communities to attend their meetings, which is something the CSMC does not do. The CSMC team asked the district team to hold a meeting with the District Development Coordinating Committee (DDCC) and the office of the District Administrator in order to harmonize the district's activities.

The meeting was successfully conducted and considerable progress was made in resolving the issues that were raised.

➢ *Mazabuka District Review Meeting:*

The Mazabuka District Review Meeting for ZCFs was held in conjunction with the Stakeholder's Meeting (above) during 21-23 October. In attendance were the district team and the ZCFs from the 15 zones. The meeting focused on discussing progress reports from the zones, successes, challenges, recommendations, and the way forward. During the meeting, further capacity building in proposal writing was also conducted so that the ZCFs can better assist the SFPPs and CFPPs in their work with communities and schools. The ZCF teams also drew up new zonal plans and budgets for the next six months.

➢ *Kalomo Stakeholders' Meeting:*

The Kalomo Stakeholders' Meeting was held on 10 November, chaired by the DEBS. Since the DEBS was new to his post, he knew little about the CHANGES programme and, therefore, the CHANGES Assistant Coordinator and Field Coordinator briefed him on the programme. All departments were well represented in the meeting; however, the district team had not produced a report of activities, which normally constitutes the main agenda in stakeholders' meetings. In discussions, it became clear that essentially the District Focal Point Person is a "one man show" in terms of managing the CHANGES

programme at the district level. The CHANGES team stressed the importance of having a genuine team functioning at the district level, which was accepted by the participants at the meeting.

- *Kalomo Planning Meeting:*

A special one-day planning meeting of ZCFs was held on the day after the Stakeholder's Meeting. Out of the anticipated 39 ZCFs, only 28 attended; however, every zone was represented. Planning for the next six months was conducted and, during the workshop, a number of success stories were produced. The stories will be sent to the Lusaka office once they are typed.

- *Sinazongwe Stakeholders' Meeting:*

The Sinazongwe Stakeholders' Meeting was held on 24 November in the office of the District Director of Health (DDH). The DDH himself was not in the district at the time of the meeting but he was informed about the meeting and therefore asked someone to stand in for him. Six people from the three cooperating line ministries attended the meeting, and the successes outlined in the district report were as follows:

- Budget lines are being strictly adhered to
- The district team visited and sensitized Chief Sinazongwe to the programme
- Anti-AIDS Clubs had been formed in schools in the district
- A sensitization drama group, Youth Alive, had been formed
- Some songs about the CHANGES programme had been composed by a local musician

- *Choma Stakeholder's Meeting:*

On 3 December the Choma District Stakeholders' Meeting was held. As before, the meeting was problematic in the sense that members were not informed about the meeting, no agenda had been set, and no written progress report had been prepared. Moreover, the CSMC team learned that the district-level stakeholders do not meet on their own to deal with programme issues. A further problem continues to be the non-reconciliation of funds, going back as far as August, which has meant that no new funds were released since then to conduct new activities. In general, the programme appeared to have run aground in the district and, as a way forward, it was decided that a new District Focal Point Person needed to be named because the current one was ineffective in that role.

A planning meeting was held the following day for Choma ZCFs. Due to communication difficulties, only 24 of the 39 ZCFs turned up for the meeting. However, only one zone (Hamaundu) was not represented by any ZCFs, and the planning went forward for the next six months in the 12 zones that were represented.

- *Gwembe Stakeholders' Meeting:*

On 5 December the Gwembe District Stakeholders' Meeting was held in the office of the District Education Board Secretary to report on progress in implementing the CSMC in that district and to problem-solve as needed. The meeting was attended by two CSMC staff and five district personnel, representing the three cooperating line ministries.

Training of Siavonga District ZCFs and District Officers:

The training of 15 ZCFs and six district officers was conducted during 17-22 November at the Leisure Bay Lodge. In a departure from the usual practice, the sessions on small grants were excluded from the training in order to encourage participants to focus on the broader goals of the CSMC without being distracted by expectations of receiving grant funds from CHANGES. Training on the small grants aspect of the programme will be introduced at the district review meeting next year.

Training of Monze District ZCFs and District Officers:

The training of ZCFs from Monze District was conducted during 15-20 December at the Sunset Lodge. A total of 51 government officers were trained: 10 district officers (two from MCDSS, two from MOH, and six from MOE) and 36 ZCFs, three from each of the 12 zones. Also trained at the same workshop were three ZCFs from Choma District and two from Gwembe to replace ZCFs who had been lost to the programme for various reasons. As in the Siavonga ZCF training, sessions on the small grants mechanism were omitted so that attention to the core elements of the CSMC would not be diverted by focus on the small grants. The small grants mechanism will be introduced later at the appropriate juncture.

Information, Education, and Communication (IEC) Materials Production and Distribution:

Mazabuka Radio aired the four CSMC radio programmes (two on girls' education and two on HIV/AIDS) that had been aired on Radio Chikuni during the last reporting period. The Livingstone District Profile was completed and plans were made in November to distribute the nearly 2,000 copies the CSMC team received from the Lusaka office. In November the first CSMC Newsletter was completed and sent to Lusaka for final editing, formatting, and printing; it was sent to the printer in late December. Finally, in December the first batch of 1,000 CSMC and HIV/AIDS T-shirts were delivered to the CSMC team for distribution to provincial and district officers, ZCFs, FPPs, and school and community stakeholders.

Production of District Profiles:

As noted previously, during the reporting period the Livingstone District Profile was completed and disseminated and a draft version of the Sinazongwe District Profile was completed and sent for printing. The Gwembe District Profile was drafted during the early part of the quarter, and work on the Mazabuka and Namwala/Itezhi Tezhi District profiles was started during November.

B. School Health and Nutrition (SHN): Improved Delivery of School-based Health and Nutrition Interventions to Support Pupil Learning (IR 2.2); Improved Quality of Basic Education Delivery Systems (IR 6.1)

1. Progress on Indicators

Category/I	Indica	Means of Verif	Target Nu	Actual Numb
Child Quality				
Education	Increase in cognitive scores	Scores from Cognitive A Instrument (CAI)	To be provided by S is complete	Third Year baseline follow conducted in 60 schools in S 2,017 pupils assessed on co assessment and new reading Dissemination of results in
Health	Reduction in worm i prevalence	Preliminary results indica reduction in infection	Complete analysis t PCD.	1,950 pupils tested for Bilha continued evidence of subst in bilharzia and worm infest 2nd year intervention school

				Currently 47,000+ pupils ar deworming drugs and micro districts
Nutrition	Increase in haemogl	Semi-annual biomedical		Pin prick done on 1,754 pup anemia status. Preliminary r reduction in levels of anemi results due from PCD soon.
Community Sensi Mobiliza				
PTA/Community mee (Area Development Committee)/Neighbor committees	# of meetings to disc problems-analyzed a	Survey reports; field mon of meetings	By end 4rd quarter meetings held by P Neighborhood Hea	Approximately 500 meeting SHN promoting committees 4th quarter 2003. SHN orie sensitization training schedu quarter
PTA/Community acti development and impl	Increase of PTAs/co supporting SHN inte specific action plans	Survey reports; field mon	Cumulative total of received 2001-31 2002-60 2003-80	80 community action plans submitted for small grant fu grant projects have been aw 4th quarter 2003.
IEC				
Media strategy	Media strategy deve implemented includi adverts, newsletters,	Strategy available	Media strategy (regional and natio	Media strategy developed.
IEC materials	IEC materials develo advocacy and Traini	Observation/monitoring o	2003: 150 teachers; teachers.	240 teachers trained using local action manual and bro flipchart being used by heal Support for organization an assistance provided for Wo activities. Dec 1, 2003.
Teachers/pupils	# teachers using IEC SHN teaching-includ	Observations and monitor	2002-150 teachers 2003-150 trained; 2004-50 trained.	240 teachers using worm H action manual and brochure flipcharts being used by hea
Training				
Teachers and administ	# of teachers trained health and nutrition i	Reports	2002 –250 2003-350 cumulative total tea administrators 2002=50 2003=100 2004=200	New management training c management manual to beg
Pupils	# of pupils who have number of health edu	Reports	By end 2002 15,000 pupils receiv By end 2003 25,000	Health education lessons fo worms, bilharzia and impro received in all SHN schools pupils by end 4th quarter of include Mambwe and Lund health workers in some sch flipcharts distributed to 40 Another 20 pupils trained in related to HIV/AIDS

Health workers, comm PTA members.	# PTA exec.membe in collaborative meth participation techniq advocacy, and mana # Health workers tra advocacy and SHN i	Reports and field monito	By end of 2003, 25 workers and commu trained; by March 2004, a fu trained.	Management skills training including basic financial ma conducted by CARE Interna executive members training 4th quarter. Small grants pr Lundazi and Mambwe to be new small grants awarded w CBOs

2. Highlights

Training in Theatre for Community Action (TCA):

In the early stage of the SHN programme, community sensitization was conducted through hiring so-called professional drama troupes. While this was an effective approach for the most part, it was also costly and unsustainable. As a result, it was decided that the SHN component of CHANGES should try to build local capacity in schools and communities to sensitize and mobilize their constituents. To this end, during 20-23 October the SHN team conducted a training in TCA for 12 teachers and community members from six schools and catchment areas: Halumbe, Chiparamba, Cronje, Hllside, Mabwero, and Mnoro Basic Schools. One drama patron and one community member from each school participated in the training (total: 12).

Phase 1 of the training programme involved four days of initial training. Then the participants, as part of Phase 2, were given assignments to complete in their schools and communities. For example, they were given a camera and asked to document issues related to health, nutrition, and HIV/AIDS. Phase 3, conducted four weeks later, involved reconvening the group for experience sharing. Should this three-phase training experience prove successful, it will be implemented again with participants from other SHN schools.

Eastern Province NGO Forum:

On 27 October the first Executive Meeting of the EP NGO Forum was convened. Since CHANGES had previously been selected to be part of the executive membership, the SHN Technical Officer represented the programme. The meeting focused on preparations for World AIDS Day, which was observed on 1 December.

Ongoing Monitoring of SHN Schools:

During the present reporting period, ongoing monitoring and technical support visits of SHN schools continued. In October, Kapatamoyo Middle Basic School, Mshawa Middle Basic School, and Kalunga Basic Schools were visited. The SHN programme is being implemented relatively well in all three schools. In some cases, however, it was noted that the GRZ's pre-payment health scheme is encountering some difficulties and is being abused. Kapita, Sisinje, Mshawa, Singo, Maguya, Makwe, Chikoka, Mtaya, Dzoole, Mnoro, and Tamanda Schools were also visited during October.

Also during October, the SHN team embarked on a monitoring trip to Chama, one of the more outlying districts. While in Chama, the team learned that de-worming drugs had been delivered to the hospital

pharmacy, although only 21,000 of the 35,000 tablets of Praziquantel that had been ordered had been actually delivered. (The shortfall will be investigated.) Unfortunately, the MOE had not yet delivered tablet height poles to Chama, and the SHN team agreed to follow-up on this. In most cases, the SHN team found that the programme is being implemented effectively in most schools, although regular monitoring by the district SHN team continues to be a challenge. *(For details on the monitoring that was done during November, see Appendix A.)*

Completion of the SHN School Competition:

The SHN School Competition, which was started earlier this year, concluded near the end of the quarter. The following schools participated in the competition, and their scores reflect their rating according to a checklist the SHN team developed:

	SCHOOL	Score %
1	Kalovya	
2	Kapalkhonje	
3	Mwalala	
4	Kambombo	
5	Katete	
6	Kaphemba	
7	Mabinga	
8	Chitemba	
9	Mudalanga	
10	Chama Basic	
	Mtizwa	
	Mwita	
	Mnoro	
	Magwero	
	Kasenegwa	58
	Sisinje	
	Kapita	
	Chiparamba	34
	Kapara	
	Mtaya	
	Mshawa	
	Chipata	
	Mpezeni	
	Hillside	
	Lutembwe	
	Sairi	
	Chanjowe	
	Taferasoni	
	Kalemba	
	Bwanukha	
	Cronje	
	Katawa	
	Chipangali	
	Nkhoto	
	Chamanda	
	Kapatamoyo	
	Kawambe	
	Dzoole	
	Tamanda	
	Vizenga	
	Nyaviombo	

	SCHOOL	Score %
	Mnukwa	
	Lukhalo	
	Chikoka	
	Maguya	
	Makwe	
	Langa	
	Kanzuthu	
	Nsandzu	
	Vubwi	

The winning schools received trophies and other prizes, which were awarded during World AIDS Day celebrations on 1 December. Dzoole Basic School of Chipata scored 79% and won the competition, receiving a large trophy and K1 million cash. Kalovya Basic School of Chama, with a score of 64% won second price, and third prize went to Bwanunkha Basoc School of Chadiza, with a score of 53%. One explanation for why some schools lag behind others in implementing the SHN programme is that those schools have high turnover amongst their SHN-trained teaching staff. Teacher attrition due to transfer, resignation, retirement, and death continues to negatively affect the overall SHN programme.

In any event, the SHN school competition was successfully conducted and a standard checklist, which will now be used for ongoing monitoring of schools, was tested and revised as a result of its use in the competition.

Drug Administration in Schools:

During November the SHN team oversaw the mass de-worming of pupils in two schools. 317 pupils from Nhalikali Basic School were treated for bilharzia and intestinal worms on 14 November. Teachers, parents, and rural health center workers participated effectively in the process, and community members expressed their appreciation for the SHN programme and the work that is being done in their school. Later in the month, a total of 328 pupils from Chingazi Basic School were similarly treated and, once again, participation on the part of teachers, parents, and health workers was commendable.

Provincial SHN Coordinating Committee Meeting:

On 21 November, the quarterly SHN Coordinating Committee met, attended by representatives of the five districts currently participating in the programme. Each district presented a report of its activities, and it was apparent that all districts are, for the most part, effectively implementing the SHN programme according to accepted guidelines, although Chipata District is lagging due to the transfer of Mrs. Musonda, the SHN Focal Point Person. During the meeting it was learned that the second consignment of de-worming drugs had arrived in Chama District.

Continuation of the SHN/MIS (Management Information System) Pilot:

During 11-20 November, Ms. Wendy Heard of the University of Natal (South Africa) traveled to EP to continue work on setting up the SHN/MIS, including installing the SHN ACCESS data base and training relevant government staff at the provincial and district levels in its use. The specific objectives of this visit by Ms. Heard were to provide training in data processing; to put in place steps to ensure data capture and data quality; to install and review the SHN/MIS data capture and analysis tool in the provincial and district offices, and to provide training in its application; to provide training in MS Access to designated provincial and district representatives; and to meet with MOE and CHANGES personnel in Lusaka to report on

progress and to discuss issues related to implementing the SHN/MIS. *(For further details on Ms. Heard's work, see her Trip Report in Appendix B.)*

Completion of Vitamin A and Iron Store Analysis from Year 2 SHN Survey:

After lengthy delays (which, unfortunately, have resulted in delays in disseminating Year 2 survey results), the analysis of Vitamin A and iron levels from the second SHN survey was completed. To ensure quality control, the Partnership for Child Development (PCD) sent Dr. Kate Wheatcroft to the Tropical Disease Research Centre (TDRC) in Ndola in late September of last quarter. The focus of her work with TDRC was to ensure good laboratory practice was being carried out, to ensure that assay protocols were being strictly adhered to, and to check on the reliability and reproducibility of the results that were emerging. Because Dr. Wheatcroft's report was received in early October, it is included in the present quarter's report. *(See Appendix C for Dr.Wheatcroft's Trip Report.)*

Cognitive Assessment Data Entry and Cleaning from Year 3 Survey:

After the completion of the third annual survey in EP in early October, work began on compiling, entering, and cleaning the cognitive assessment data. Mr. Bestern Kaani, a secondary school teacher who has been working with CHANGES on the cognitive assessment from the start of the programme, coordinated this work in the Lusaka office, working with Mr. Sampa from UNZA (University of Zambia) who was hired to conduct data entry. By the end of the reporting period, data from all but 12 schools that participated in the third survey were entered.

Planning for the CHANGES Extension and the Launch of the Schistosomiasis Control Initiative (SCI):

During 13-20 December, Dr. Michael Beasley of PCD, one of CHANGES' SHN implementing partners, traveled to Zambia to finalize plans for PCD's inputs in the CHANGES extension as well as to participate in discussions pertaining to the launch of the SCI. He spent his first few days in Chipata conferring with the EP SHN team and then traveled to Lusaka where he met with the CHANGES Senior Technical Advisor and a representative from SCI. Considerable clarity was achieved about PCD's role in the CHANGES extension and about the interface of CHANGES and SCI as a result of Dr. Beasley's involvement. *(For more details on the planning that was conducted, see Dr. Beasley's Trip Report in Appendix D.)*

C. HIV/AIDS (Cross-Cutting Component): Mitigated Impact of HIV/AIDS on Education (IR 6.4)

1. Progress on Indicators

Southern Province:

Category/L	Indicator	Means of Veri	Targ	Current
1. HIV/AIDS	Number of provincial, district a officials and community based sensitized and trained in HIV/A	Workshop attendance fi	365	2,985
Indicator 1.There will be approximately 246 participants from the nine districts trained as ZCFs and about 45 district and pr officials. HIV/AIDS sensitization will be a part of that training curriculum. Therefore, a target total of 365 has been set (wl community mobilizers trained from Kazungula and Kalomo Districts) in nine districts in Southern Province.				
2. HIV/AIDS Peer Educ	Number of zonal –level action p the training of peer educators fo	Zonal –level action plan	41	63
Indicator 2. Of the approximate 82 zonal-level action plans, 50%(41) of those are expected to include the training of peer e				

Eastern Province:

Category/Lev	Indicat	Means of Ve	Targ	Current Status
Teachers	# teachers using life s Modules/lesson plans teaching	Field monitoring		Collaboration with Provincial H activities in teacher sensitizatior Sensitisation meeting for teache Chipata schools. 27 teachers trained in Peer and I education CHANGES staff member partic international conferences in Sen Swaziland, and delivered papers based HIV/AIDS activities. CHANGES participated in UNA "Best Practices" regional works result in the development of a m Collaborated with MOE on prop strengthening Anti-AIDS clubs conducted next quarter in select Linguistic aspects of counseling workshop to be held in Chipata
School/Communities; Pupils and village communit	# schools engaged in debate competitions, choirs, essay writing, and va innovative activities	Field monitoring Reports		Locally developed materials on to CDC. SHN competitions operational i monitoring of HIV/AIDS activit AIDS clubs, 60 SHN schools in activities include quizzes, plays. Assessment conducted during th winners determined and awarde cash on World AIDS Day Dec 1 Community Action using popul training for key Zonal schools s October, includes training on H and training on sensitizing scho communities in HIV/AIDS issu

2. Highlights

HIV/AIDS Impact Assessment on the Education Sector:

Progress continued toward completing the HIV/AIDS impact assessment on the education sector that has been spearheaded by SIAPAC (Social Impact Assessment and Policy Analysis Corporation), a Namibian consulting firm, in collaboration with the MOE and CHANGES. The data collection was completed during the reporting period and the focus of the work shifted to data analysis and writing the final report. In early December the preliminary findings were presented to the Permanent Secretary and top management of the MOE, and in late December a draft Final Report was submitted to the MOE. Early in the next reporting period, comments on the draft report will be incorporated and the report will be finalized and submitted to

the MOE for its own final internal review. *(For a copy of the draft Executive Summary of the Impact Assessment Final Report, see Appendix E.)*

Participation in UNAIDS Best Practices Workshops:

After responding to an advert in the newspaper to submit abstracts of proposed presentations on approaches to dealing with HIV/AIDS, both the SHN and CSMC teams' abstracts were approved and representatives of the teams were asked to give presentations. The CSMC Assistant Coordinator presented the CSMC's approach to dealing with HIV/AIDS in the regional meeting held in Chingola during 8-10 December. Representatives of the SHN team gave their presentation of the CHANGES SHN programme's sustainable, multi-sectoral approach during the other regional meeting held in Chipata on 17-18 December. Both presentations were well received and further placed CHANGES "on the map" in terms of HIV/AIDS work in Zambia.

Participation in an International HIV/AIDS Conference:

Mr. Josias Zulu, SHN Technical Officer, participated in an international HIV/AIDS conference in Dakar, Senegal, attended by more than 2,000 delegates. The conference theme was "Home-Based Care and Support" and Mr. Zulu was part of a panel discussion in which he discussed HIV/AIDS work in Zambia.

World AIDS Day Activities in SP:

The CSMC took part in the preparations for the Livingstone World AIDS Day commemoration. The SP Coordinator, Finance Officer, and Administrative Assistant represented the CSMC on the Livingstone DATF (District AIDS Task Force) during in the preparatory meetings. Specific activities during the event on 1 December included the following:

- The CSMC provided funds to a local NGO, Contact Trust Youth Association, for their activities on AIDS Day, including funds for an inter-school debate competition on HIV/AIDS, an essay writing competition, road shows, and theatre arts presentations on HIV/AIDS. A total of 2.607 million *kwacha* in funds was provided.
- The CSMC team took part in a candlelight memorial held during the night of 30 November. NGOs, churches, government, and Members of Parliament attended the memorial from the province.
- Team members took part in a march on AIDS Day from the Civic Center to Mukuni Park. US Secretary of Health Tommy Thompson, who was the World AIDS Day Guest of Honor, flagged off the march.
- The CSMC staffed a booth along with other NGOs in Mukuni Park where photos from the field and publications by the CSMC were displayed. The US Secretary of Health inspected the stands, accompanied by the Zambian Minister for Health, Brigadier General Brian Chituwo, several other US Congressmen/women, and other dignitaries.

World AIDS Day Activities in EP:

Throughout November, staff on the SHN team participated in a number of planning meetings for World AIDS Day. The team, as a member of the Eastern Province NGO Forum, assisted with the logistics of the event. In addition, the CHANGES SHN team contributed 850,000 *kwacha* for T-shirts and a donation to assist OVCs (orphans and vulnerable children). The commemoration was a success.

HIV/AIDS Peer Educator Workshop (EP):

The SHN component of the CHANGES programme supported and helped to facilitate a workshop for 20 teachers and 20 pupils during 30 November-3 December. The workshop was the first peer educator workshop designed to give teachers and pupils skills so they can provide basic information to Anti-AIDS clubs in their schools; a further aim of the workshop was to enable pupils to sensitize and inform their peers about HIV/AIDS issues in their schools.

Distribution of "HIV/AIDS Guidelines for Educators" (SP):

Earlier in the year, the CHANGES programme had printed 10,000 copies of the MOE's document, "HIV/AIDS Guidelines for Educators." During the reporting period, the CSMC team distributed the following numbers of copies in each district according to the number of primary teachers in the district:

District	Number of Copies Distribut
Siavonga	223
Kazungula	298
Kalomo	889
Livingstone	756
Sinazongwe	299
Mazabuka	709
Monze	838
Gwembe	139
Choma	1,013
Itezhi Tezhi	144
Namwala	283

D. Small Grants Mechanism (Cross-Cutting Component)

1. Highlights

Progress in Southern Province (SP):

Considerable progress was achieved in SP with regard to the small grants mechanism despite a change in personnel taking place: Ms. Saboi replaced Ms. Rose Chibbonta as Small Grants Coordinator. In all, 112 new proposals for grants were reviewed, and 18 were recommended for funding. Also during the quarter, additional tranches of funds were released to nine existing projects while 13 new grants were awarded to first-time recipients. While the new grants were being made, six existing grants—those awarded during the earlier period of the CHANGES programme—were closed down because the work had been completed. Also during the quarter, the Small Grants Coordinator and CHANGES staff monitored 24 existing projects/grants. *(For more detail on the small grants mechanism in SP, see Appendix F.)*

Progress in Eastern Province (EP):

Turnover was also experienced in EP with regard to the position of the Small Grants Coordinator: Colin Zulu replaced Julius Kampamba. This transition slowed the pace of work to some extent but progress was nevertheless achieved. Twelve (12) proposals for new grants were received, of which four were approved. Two new grants were approved and funded during the reporting period, and 10 existing grants/projects were monitored. *(For more detail on the small grants mechanism in EP, see also Appendix F.)*

III. PROGRAMME ADMINISTRATION

On the level of programme administration, there were several notable developments during the present reporting period. These are summarized below.

Planning for Programme Extension and 2004 Work Plan and Budgets:

In late October, senior management from the SHN and CSMC components met with the Senior Technical Advisor in Lusaka to revise the CHANGES extension proposal and, at the end of that process, to develop work plans and budgets for 2004. During the course of the first three days, the main tasks and deliverables for the extension for each major component of the CHANGES programme (SHN, CSMC, girls' bursaries, HIV/AIDS, small grants mechanism) were revised, illustrative activities were outlined, and the budget for each section was revised from what the consultant design team had done during June. On the fourth day, the annual work plans and budgets for 2004 were developed.

Participation in Capacity Building Workshop (SP):

During 27-29 October, the SP Coordinator attended the "Human Capacity Development Workshop," which was organized by the SEPO Center in association with the National Facilitation Team-Support and Learning Team (SALT). The workshop assisted in creating a clearer way forward for the Livingstone District AIDS Task Force (DATF) in order to reach consensus on who the DATF is, how they should network, and how they will coordinate the activities they are engaged in as well as the implementation time frame.

Hosting Visit by the US Ambassador to Zambia (EP):

On 13 November, the SHN team in Chipata hosted a half-day site visit by the US Ambassador to Zambia, Mr. Martin Brennan, to Magwero Standard School and the nearby school of the blind. In addition to visiting the fish ponds and rehabilitated classroom block (both funded through a CHANGES small grant), the Ambassador listened to poems and watched drama performances on HIV/AIDS and girls' education that were put on by pupils from the school. More than 250 community members were also on hand, and the Ambassador expressed his approval of the SHN initiatives undertaken by the school; he encouraged the pupils to work even harder if they are to achieve their educational goals. In all, it was a good visit. His Excellency Mr. Brennan has now met personally with both the SHN and CSMC teams as well as with the CHANGES Senior Technical Advisor in Lusaka.

IV. CHALLENGES/LESSONS LEARNED

Considerable progress was achieved during the present reporting period in the face of several constraints and challenges. These constraints and challenges (and the lessons learned from dealing with them) are briefly summarized below.

Exclusion from MOE Planning for 2004:

Considerable efforts have been expended since the inception of the CHANGES programme to manage and implement activities in as much a programme mode as possible, rather than in a project mode. This was done not only because it represented a sound approach from a development point of view, but also because the MOE rightly insisted that CHANGES operate in that manner as much as possible. However, since then, in October 2002, and again this year in 2003, when the MOE was conducting its workshops to develop its work plan and budget for 2004, the CHANGES programme was not informed or invited. This is regrettable because, unless the CHANGES programme has a "seat at the table" at such important planning events and

can work closely with MOE colleagues to ensure its activities are included in the MOE's work plan and budget, it is virtually assured that the programme will become disengaged from the MOE (especially at headquarters) and will have little choice but to operate as a project. Hopefully this unfortunate trend will be reversed in the future.

Uneven Support for the Programme in the Field:

Both the CSMC and SHN components continued to experience uneven support for their work at the district and school levels. In some districts where support is strong, the CSMC is being implemented faithfully and effectively; in less supportive districts, the programme is moving only in fits and starts. Likewise, in schools where there is committed management, the SHN programme is being implemented effectively, while in more poorly managed schools, the programme is not being implemented according to expectations. This is not an unusual development scenario, and the CHANGES field teams will continue to problem-solve with and to motivate laggard districts, zones, and schools so that overall implementation is enhanced.

V. ANTICIPATED ACTIVITIES (JANUARY-MARCH 2004)

During the next reporting period, the extension of the CHANGES programme will be finalized. In addition, the following activities will be started, continued or completed:

CSMC:

- IEC materials will continue to be produced throughout the quarter: district profiles, success stories, CSMC Newsletter (Volume 2).
- Kazungula and Livingstone district review and planning meetings will be held in late January.
- The Kalomo Stakeholders' Meeting and Review Meeting will be held in early February.
- The Choma Stakeholders' Meeting and Review Meeting will be held in early February.
- The Kazungula and Livingstone Stakeholders' Meetings will be held in early February.
- The Provincial Stakeholders' Meeting will be held in mid-February.
- In Sinazongwe District, the Stakeholders' and Review Meetings will be conducted in mid-February; the same will be held in Gwembe District immediately following.
- Kazungula and Livingstone zonal training will be implemented in late February.
- The SHN training for research and verification (as part of the programme extension) will be held in early March for the CSMC Field Researchers.
- Mazabuka Stakeholders' and Review Meetings will be held in early March, and the same for Namwala and Itezhi-Tezhi Districts will be conducted in mid-March.
- In Siavonga District, the Stakeholders' and Review Meetings will be held in late March, and the SHN research and verification will also be conducted about the same time.
- The Monze District Stakeholders' and Review Meetings will be held at the end of March.

SHN:

- The EP Coordinator will hand over the responsibility for managing the EP SHN component to the current team as he shifts to Lusaka to spearhead the new SHN work in SP.
- The Schistosomiasis Control Initiative (SCI) will be launched and the EP Coordinator, having moved to Lusaka, will start the SHN expansion into SP.
- Teachers and health workers from the last 20 controls schools (of the original 80 school in the SHN pilot) will be trained in SHN administration.
- Expansion of the SHN programme into the three remaining districts (20 schools each) will commence with the delivery of management/administration and technical training to district staff, teachers, and health workers.
- Piloting of the SHN/MIS will continue with a follow-up visit by the EMIS consultant, Ms. Wendy Heard.
- IEC materials will continue to be developed, including a second series of radio programmes.
- Follow-up Theatre for Community Action workshops will be conducted.
- Ongoing monitoring of the implementation of the SHN programme in schools will continue.

HIV/AIDS:

- The HIV/AIDS Impact Assessment will be completed and the Final Report will be submitted. Efforts will begin to plan and implement at least one activity that follows-on from the impact assessment.
- An HIV/AIDS situational assessment of selected schools will be carried out (EP).
- The wrap-up workshop to discuss findings from the operational research on the linguistic aspects of HIV/AIDS counseling will be held (EP).
- Additional HIV/AIDS peer education workshops will be conducted (EP).
- Work started on locally produced HIV/AIDS teaching materials will be completed (EP).
- HIV/AIDS inputs, as integrated throughout the CSMC, will continue in all 11 districts of SP.

Small Grants Mechanism:

- The training of community groups, CBOs and NGOs in proposal writing will continue; proposals will continue to be assessed; and the awarding of small grants in both EP and SP will resume when the CHANGES programme extension is finalized (anticipated: late February).

* * *

Appendix A

SHN Team's Monitoring Report

Appendix A

FEEDBACK REPORT ON MONITORING AND TECHNICAL SUPPORT TO SHN SCHOOLS IN CHIPATA AND ASSESSMENT FOR THE SCHOOL HEALTH AND NUTRITION COMPETITION IN CHIPATA AND KATETE DISTRICT.

1.0 Introduction.

The SHN/CHANGES Team Eastern province conducted Technical support visits to……in the reporting period.

2.0 Specific objectives of the visits were;

- Administer SHN Competition Checklist to the remaining Chipata and Chadiza schools.
- Track the drug flow from DHMT to Health centres.
- Monitor school based SHN activities.
- up date enrolment data and Teachers trained in SHN drug administration.

Although remarkable improvements were evident in almost all SHN schools this report highlights some areas that need follow up action.

3.0 Chipata

4.1 District Education office.

Observations	Recommendations
▪ Continuance movement of staff at DEO's of difficult to monitor SHN activities. ▪ It is doubtful weather the monitoring checkli the last provincial SHN coordinating commit being used. The District coordinating committee has not met in th months.	▪ SHN is a component of BESSIP. It must be monitored each time the district team visits SHN schoo monitoring or SHN competition check list as a guide. A Chapter on Characteristics of a Health Pro high lighted in the Drug Administration Manual would be useful too! ▪ Facilitate meetings of the District coordination committee to draw technical support and resolve iss program implementation. ▪ Consider appointing less busy person to assist the DIS in SHN program implementation. ▪ Orient all technical Staff at DEOs in SHN. This will ease monitoring and support the schools on iss SHN. Make special follow ups on weak schools ie Chamanda, Mwita etc.

4.2 Chipata SHN schools.

No	School	Observations	Recommendations
1	Mpezeni	• Health promoting team is weak and does regularly. • Poor record keeping. • SHN resource corner not well organised. utilising facility.	• Ensure that the SHN promoting team meet regularly, at least once monthly are implemented. Proceedings of all meetings in the school must be docum • Health Education is a very important component of SHN programme. Pupi surrounding communities, must be aware of prevention of disease- Make u charts provided. • Develop a school health policy which teachers and pupils must follow. • Ensure that all the characteristic of a health promoting school are establish your drug administration manual. • All teachers must be involved in SHN implementation.
2.	Mnoro	• School cards not well completed. Perforn Hygiene assessment column not filled in. • School yard is unkempt. • Latrines are unkempt. • No serious community involvement in SH • Record keeping is poor.	• Refer to Drug Administration Manual; ensure that pupils and surroundings Establish the characteristics of a SHN school according to guidelines provi manual. • Health prefects to assist monitor cleanness around the school and latrines. I health hazard if not kept clean. • Strengthen the SHN promoting team by involving the community and othe
3.	Nkhoto	• School cards not well completed, Perforn left blank. • No serious community involvement in SH • No. SHN team. Failure to distinguish the Production unit and SHN team. • Difficulties in completing the drug reques • SHN drugs stored at health centre linked scheme.	• Make consultations with near by school or DEO's if still having problems i the School Health cards. • Establish the SHN team and exploit it composition to mobilise communitie SHN activities. Refer to Drug Administration Manual. . • The Production unit Committee's composition can not meet the aspiration promoting team. • If still having problems in completing the drug request form consult the D. • SHN drugs (Albendanzole,,Praziquantel,Vit A and Iron tablets) are purcha distributed and stored by MOH at corresponding health centres on behalf drugs must be requested and administered by teachers. There is no relation these drugs and the Pre-payment scheme for pupils. In pre-payment scheme user fees for pupils to respective Health centres through DHMTs, to allow pupils for sick. Health centre staff diagnose and determine type of treatmer for the school to understand this arrangement and inform all concerned. • Organise in house training for all teachers on SHN concept and Drug Adm Use the DA manual as a teaching guide.

			• Start administering drugs according to SHN protocol.
4.	Mwita	• Health promoting team and other charact established. • Treatment not done. • The school management not conversant v activities.	• Provide a drainage system to allow smooth floe of water in one direction. • Refer to Drug Administration Manual, ensure that pupils and surroundings Establish the characteristics of a SHN school according to guidelines provi manual. • Appoint health prefects to assist monitor cleanness around the school and l • Conduct in house training in drug administration for teachers and other stal
5.	NKhali-Nkhali	• Health education not adequately given to surrounding communities. • Treatment forms were not enough to cate treatment exercise. • Surrounding around the well was filthy d drainage. • Children were not encouraged to bring fo eat at school. • Hand washing after use of toilet was not hand washing facilities were provided.	• Create awareness among pupils about hygiene and prevention of diseases. • Stock adequate treatment forms and ensure, all logistics required are in pla treatment starts. • Keep the School and Well surroundings clean. Unblock the drainage and k dirty and grass, as it will provide a breeding site for mosquitoes. • Facilitate the formation of WASHE committee that will take charge of WE maintenance. • Encourage parents to provide snacks to pupils with snacks to eat at school. awareness of advantage of proving snacks to pupils to eat at school. • Refer to your Drug Administration Manual and Health competition check l activities to establish at the school. • Conduct in house training to all staff.
6.	Tamanda	• No SHN promoting Team. • No Health policy • No production/PU garden • No feeding program • No SHN action plan • Drugs not accessed, so not administered. • No provision of Hand washing.	• In house training for all teachers to be conducted. • Develop SHN action plan. • Strengthen the characteristics of a Health Promoting School-School healthy resource corner, CBO supporting SHN activities etc. • Refer to Drug administration manual for guidelines in establishing a Health school
7.	Dzoole	• Public Health inspection not conducted a • Drinking water not periodically checked	• Request health authority to conduct professional public health inspection c collect water samples from drinking point for analysis.
8.	Vizenge	• Health promoting team not active. • No School Health policy. • SHN resource corner not established	• Refer to Drug administration manual for guidelines in establishing a Health school.
9.	Sairi	• Health promoting team not active. • School Health policy not yet developed. • SHN resource corner not established	• Strengthen the characteristics of a Health promoting school-School healthy resource corner, CBO supporting SHN activities etc. • Refer to you Drug Administration Manual and Health competition check li activities to established at the school

10.	Chikoka	• Health promoting team not active. • No school Health policy.	• Ensure that the Health promoting team meets regularly. • Refer to your Drug Administration Manual and Health competition check l activities to established at the school • Conduct in house training to all staff.
11.	HillSide	• Health Promoting Team not active. • No School health policy. • Other characteristics of a Health promoti established.	. • Ensure that the Health promoting team meets regularly. • Refer to you Drug Administration Manual and Health competition check li activities to established at the school • Conduct in house training to all staff.
12.	Mnukwa	• Characteristics of Health promoting scho established. • No provision for hand washing facility b water • Drugs administered not recorded on treat	• Strengthen the characteristics of a Health promoting school-School healthy resource corner, CBO supporting SHN activities etc. • Improve hand washing facility to include a provision for running water. • Ensure that all treatments are recorded on treatment forms.

13.	Kawambe	• Well abandoned after sinking a bor • Health promoting team still not acti • Established characteristics of health team but needs strengthening.	• Strengthen the characteristics of a Health promoting school-School healthy policy corner, CBO supporting SHN activities etc. • Refer to you Drug Administration Manual and Health competition check list for t to establish at the school • Consider maintaining the well in case of break down of the borehole.
14.	Sisinje	• Health Promoting Team not active.	• Refer to you Drug Administration Manual and Health competition check list for t to be establish at the school
15.	Lukhalo	• SHN promoting team not active. • Other characteristics not yet in place	• Health promoting team not active. • Improve sanitary facilities. • Strengthen the characteristics of a Health promoting school-School healthy policy corner, CBO supporting SHN activities etc. • Refer to you Drug Administration Manual and Health competition check list for t to establish at the school • Establish Red Cross club to provide first Aid treatment.
16.	Chamanda	• No SHN promoting Team • No Health policy displayed • Orchard over grown with grass- On • Well surrounding unkept. • No feeding program • Drugs not accessed, so not administ • No provision of Hand washing faci running water. • SHN drug administration protocol n • SHN file misplaced	• Establish the SHN promoting team • Strengthen the characteristics of a Health promoting school-School healthy policy corner , • Maintain the orchard. • Order drugs from a local Health centre • Refer to you Drug Administration Manual and Health competition check list for t to establish at the school • Improve on record keeping.

17.	Mwita	• No SHN promoting Team. • No Health policy • No production/PU garden • No feeding program • No Anti AIDS club	• In house training for all teachers to be conducted. • Establish Anti AIDS club. • Strengthen the characteristics of a Health Promoting Schoo policy, SHN resource corner, CBO supporting SHN activiti

		• Drugs not accessed, so not administered. • No provision of Hand washing. • No staff latrine. • Community and teachers misinformed about S • Head teacher only one trained. • Bolthole broken down and out of use.	
18.	Mtaya	• SHN team not active. • No Health policy • No evidence of pupils being fed on foods from unit.	• Refer to your Drug Administration Manual and Health com list for basic activities to establish at the school. • Provide hand washing facilities for teachers and staff. • Feeding program must benefit all pupils.

Appendix B

Ms. Heard's SHN/MIS Trip Report

REPUBLIC OF ZAMBIA
MINISTRY OF EDUCATION
School Health and Nutrition Programme

SHN EMIS Pilot
Trip Report 4

Country : Zambia

Consultant : Ms Wendy Heard

Programme : Developing a School Health and Nutrition (SHN) Education Management Information System, as part of the broader Ministry of Education SHN/CHANGES programme under sub-contract to Partnership for Childhood Development (PCD)

Duration : November 10, 2003 through to November 21, 2003

Objective/s of visit :

- To provide training in data processing, steps to ensuring data quality and data capture
- To install and review the SHN EMIS data capture and analysis tool in the provincial and district offices and provide training in its application
- To provide training in MS Access to nominated provincial and district representatives.
- Meet with MoE and CHANGES representatives to report on and discuss issues of implementation of the SHN EMIS pilot.
- To discuss project matters and follow up activities with members of the team.

Monday, 10 November 2003

Arrived in Lusaka. Briefly met with Dr Edward Graybill, COP, to confirm arrangements and discuss the proposed programme for the trip. Learnt that a meeting had been confirmed with Mr Christopher Malupi (SHN MOE Planner) for the afternoon and that Ms Hilda Chisala was not in the country.

Went across to the MoE. Met up briefly with Mr Alfred Sikazwe, Ms Catherine Phiri and Dr Drake Warrick. Attended a meeting with Mr Christopher Malupi and Mr Maketo Mulele. The meeting provided an opportunity to inform members of the Planning unit of the progress made thus far in terms of the SHN EMIS and also discuss the programme of activities for this trip. Concerns were raised that, to-date, the District and Provincial Offices have engaged with the proposed SHN EMIS far more than the SHN representatives at Head Quarters. The Head Quarters representatives have not been involved with any of the training and yet they have a critical role to play in the implementation of the SHN EMIS if it is to be successful, sustainable and meet the Ministries requirements.

At this meeting Mr Mulele used the opportunity to update Wendy Heard on progress made with the proposed DEMMIS[1] (District Education management and Monitoring Information System) pilot. Forms required have been printed and training for school heads is being planned for later in the month.

Tuesday, 11 November 2003

Caught the early morning flight to Chipata. Attended a meeting at the CHANGES office with Dr Paul Freund, Mr Josias Zulu, Mr Benedicto Phiri and Ms Catherine Chirwa. Arrangements for the week were confirmed and finalised.

Wednesday, 12 November 2003

Conducted a training session in the Eastern Province's MOE offices for representatives of the Province and Chipata District. The training focused on the following areas:

- Steps to ensure data quality
- Data processing checklist
- Checking returned survey forms
- Interface of the SHN EMIS data capture and analysis tool
- Capture of returned forms
- Making backups of the system

The training session also provided those present with the opportunity to review the SHN EMIS data capture and analysis tool. Those who attended the course, (refer to registration list provided under annexure A) where relevant, brought along their own computers and the system was therefore installed onto these units. The opportunity was also used to confirm attendance at the database skills training session proposed for the next week.

All who attended the course were provided with a SHN EMIS file, which contains the following:

- SHN EMIS guide for principals and district managers
- Copy of the SHN EMIS survey form (used in the pilot)
- Guide to the SHN EMIS data capture and analysis tool
- Guide to ensuring data quality
- MS Access training guide (level 1)

At the end of the workshop, participants were requested to complete a structured questionnaire as part of the workshop evaluation. Responses received are captured as Annexure B to this report.

Thursday, 13 November 2003

Mr Benedicto Phiri and Wendy Heard travelled to the district of Chadiza, where the training provided to the Chipata District was repeated. Mr Phiri also volunteered, given his experience of the previous day, to assist with some of the training. Training is the Chipata District was offered to the statistics officer (DEO) and the

[1] DEMMIS forms part of the USAID Mobile Task Team supported activities planned for Zambia MOE

District Health Information Officer. This represented the first involvement of the District Health Team in the development of the SHN EMIS.

Again a post-workshop evaluation questionnaire was provided – responses are summarised in Annexure B.

Friday, 14 November 2003

Since the Chipata District SHN FPP and District Resource Centre co-ordinator were unable to attend the training conducted on Wednesday, a separate session was organized for them. While the session covered all aspects of the training provided on Wednesday, this training session focussed on the application of the system rather than entering the data, since it was felt that the district level statistics officer would be directly involved in the data entry processes.

Arrangements were then made with Mr Benedicto Phiri to prepare for the training courses to be held the following week.

Sunday, 16 November 2003

All met at the CHANGES office at 14h30 to transfer across to Sinda, where a workshop is training in database skills using MS Access, had been scheduled.

Monday, 17 November 2003 to Wednesday 19 November 2003

Conducted a three-day training session in MS Access to a group of 10 people, (refer to Annexure A providing details of participants) representing the Eastern Province and the Districts of Chipata and Chadiza. The training programme made use of data drawn from the 2003 Annual Census Returns for the Southern and Eastern Provinces provided from the EMIS project. The skills taught focussed on those considered to be of greatest value to the database administrators. These skills will enable this critical group to interact with the data captured in the SHN EMIS and not be totally dependent on the front end which is provided as part of the SHN EMIS data capture and analysis tool.
The training material focussed on the transfer of the following skills:

- Familiarisation of the MS Access interface and various database objects
- Opening a database and data table
- Finding, editing, adding and deleting a record
- Sorting and filtering data
- Creating select, make table and group queries
- Creating aliases for field names
- Building expression
- Joining tables and adjusting join properties
- Creating reports – using the wizard

Participants coped well with the material and comments provided on the post-workshop evaluation conducted, are provided under Annexure B.

The training session concluded on Wednesday afternoon and all travelled back to Chipata.

Thursday, 20 November 2003

The morning was spent working with the CHANGES office to develop a database that captures the details of all who attend training courses conducted as part of the CHANGES programme. Messrs Zulu and Phiri had other information that they also required to be converted to MS Access formats.

Transferred to Lusaka on the late afternoon flight out of Chipata.

Friday, 21 November 2003

Dr Graybill had set up a debriefing meeting by inviting representatives of the Ministry and partners. Invitations were extended to the following representatives: SHN FPP, Head of Planning, Planning SHN FPPs, EMIS and statistics officers, representatives of the EMIS review programme, USAID representatives. Despite every effort to ensure their attendance at the meting, unfortunately again none of the SHN officials attended the meeting. The only MOE official present at the meeting was Mr Bupe Masonda (statistician). This is a great cause of concern in terms of the success of this aspect of the programme.

Ms Heard was requested to provide a brief report on progress made and the current status of the SHN EMIS in the Eastern Province. The following points were highlighted:

- The SHN EMIS data capture and analysis tool had been installed in the Eastern Province, the Districts of Chipata and Chadiza and the CHANGES office, Chipata.
- Training had been provided in the SHN EMIS data capture and analysis tool, steps to ensure data quality and MS Access (Phase 1). The training had been very well received.
- The survey forms that had been returned as part of the EMIS pilot had been entered into the system.

In her report, Ms Heard raised the following concerns, which led onto some detailed discussion:

- Only eight schools had been included in the pilot. The suggestion that additional "control" schools be included in the pilot had not been followed through. The small data sample of only eight data entry records, does impact on highlighting the value of an MIS. When this was raised with the EP CHANGES office, it was agreed that additional schools would be requested to complete the form in the new year.
    - Following some discussion at the meeting it was agreed that as part of the CHANGES programme extension, the SHN EMIS survey form should be extended to other schools and districts in the Eastern Province. After some negotiation with the Ministry consideration should be given to extending the forms to the Central Province schools targeted by the MOE.
- With schools commencing and completing their drug administration programmes at different times within the year, the quality of the data is being compromised. Ideally the SHN EMIS survey form should be completed a fortnight after the school has completed their drug administration programme in full.
    - Following some discussion at the meeting it was agreed that this would be difficult to control, but consideration could be given to schools completing the form in the following school year and reporting retrospectively on the previous year. This system is very dependent on effective school record keeping – an aspect being addressed through the SHN/CHANGES programme.
- It was noted that several schools had completed an earlier version of the SHN EMIS survey form. Ms Heard indicated that she would prepare a report on data quality issues and lessons, with regard to form design and question structure, based on the pilot schools returns..

- Of great concern is the lack of involvement of the SHN Head Quarters personnel. Despite every effort made, to include the Head Quarters SHN representatives in the SHN EMIS training, no one from Lusaka had to date been involved in any of the SHN EMIS training programmes. Representation at the debriefing meetings could also not be secured.
    - Following extensive discussion at the meeting, it was agreed that this matter needs to be highlighted in reports to the Ministry. It was also agreed that a communiqué for the Ministries of Health and Education on the SHN programme in broad terms should be prepared and amongst others two issues should be included:
        - Concerns regarding the involvement of Head Quarters officials
        - The inclusion of schools in Lusaka and Central Province of the SHN programme undertaken by the MOE

Dr Graybill invited discussions on two issues:

- Issues of data flows at each level – school, district, province and national and persons responsible at each levels
    - It was agreed that as part of the SHN EMIS pilot the issue had been addressed at provincial, district and school level. Within the Eastern Province the identified officers had shown a great deal of commitment and the programme included programmes of capacity building for these targeted persons. In terms of Head Quarters, the matter had been discussed previously. However, it was stressed that the SHN EMIS was designed around strengthening District Level interventions and the programme of decentralisation. It was felt that, in terms of EMIS, there would be greater benefit for the Head Quarters team once the base of data collection was broadened to include other districts and provinces. Throughout the design of the system, national aggregation of the system was being considered and catered for.

- Linking the SHN EMIS with the broader EMIS.
    - Ms Heard confirmed that the same software, data structure (and more importantly primary key) and similar approaches were being adopted and that linkages between the two systems will not be problematic. Drs Warrick and Caldwell confirmed this. Furthermore, Ms Heard highlighted that fact that the EMIS data, received from the MOE EMIS had been used in the database training session concluded earlier in the week.
    - Dr Caldwell congratulated CHANGES on the quality of the training material and the thoroughness of he proposed SHN EMIS return. He suggested that as part of the pilot consideration could be given to including some open ended questions, such as: what problems has the school encountered in implementing the SHN programme?
- An electronic copy of the database and training material was provided to Dr Graybill.
- Copies of the SHN EMIS file were provided to Dr Henning, Dr Warrick and Mr Masonda.

Next (in country) steps of implementation of SHN EMIS programme:

- Second level of MS Access Training to District and Provincial officers
- Installation of revised SHN EMIS data capture and analysis tool

It was suggested, subject to confirmation by Dr Freund and others, that the next visit is planned for February or March 2004.

The meeting was closed with thanks extended to all and confirmation that the implementation of the SHN EMIS pilot appeared to be on track.

Follow up required:

- **Wendy Heard** to prepare a report on the quality of the data provided by the 8 pilot schools
- **Wendy Heard** to work suggested changes to the SHN EMIS data capture and analysis tool.
- **CHANGES** (Chipata) to consider the inclusion of additional schools in 2004.

Prepared by: Wendy Heard
December 2003, Durban

REPUBLIC OF ZAMBIA
MINISTRY OF EDUCATION
School Health and Nutrition Programme

I. Participants List

II. SHN EMIS Activities November 2003

III. SHN EMIS Database Orientation Programme

IV. Chipata, 12 November 2003

	Name	School/Off	Position
1	David Lungu	Chipata PEO	Statistician
2	Catherine S. Chirwa	PEO	SESO SHN FPP
3	Irene Jere	Chipata PEO	CO Data Entry
4	Alick Jere	Chipata DEO	Statistical Officer
5	Josias E Zulu	CHANGES	Technical Advisor
6	Benedicto Phiri	CHANGES	Training Officer
7	Dr Paul Freund	CHANGES	Co-ordinator
8	Rhoda Sinda	CHANGES	Secretary
9	Wendy Heard		Facilitator

V. Chadiza, 13 November 2003

	Name	School/Off	Position
1	Patson Kanyama Tembo	DEO	Statistical Officer
2	Chama Mabuluki	District Health Office	District Health Information Officer
3	Benedicto Phiri	CHANGES	Training Officer
4	Wendy Heard		Facilitator

VI. Chipata, 14 November 2003

	Name	School/Off	Position
1	Ms Malingose Phiri Musonda	Chipata DEO	SHN FPP
2	Ms Magdaline T Zimba	Chadiza DEO	District Resource C C
3	Wendy Heard		Facilitator

VII. SHN EMIS MS Access Database Training

VIII. Sinda, 17 - 19 November 2003

	Name	School/Off	Position
1	David Lungu	Chipata PEO	Statistician
2	Catherine S. Chirwa	PEO	SESO SHN FPP
3	Irene Jere	Chipata PEO	CO Data Entry
4	Alick Jere	Chipata DEO	Statistician
5	Josias Enos Zulu	CHANGES	Technical Advisor
6	Benedicto Phiri	CHANGES	Training Officer
7	Dr Paul J Freund	CHANGES	Co-ordinator
8	Patson Kanyama Tembo	DEO	Statistical Officer
9	Pilila GM Jere	PEO	PESO
10	Captain Anania KZ Banda	Chadiza DEO	DESO
11	Wendy Heard		Trainer

SHN EMIS Pilot
Analysis of Post-Workshop/Training evaluations

IX. As part of the closure of the training sessions, participants were provided an opportunity to evaluate their experiences. A structured post-workshop evaluation questionnaire was provided and each participant was invited to submit his/her personal evaluation of the workshop proceedings, yet maintain their anonymity. Comments in this analysis are reported as respondents provided them. This report is provided in two parts:

- SHN EMIS database orientation programme
- MS Access Level 1 training

X. SHN EMIS Database Orientation Programme :

XI. 12 and 13 November 2003. Participants were not requested to complete an evaluation on 14 November 2003, since this was a briefer session

Chipata	8 participants 1 facilitator	7 evaluations receiv
Chadiza	2 participants 2 facilitators	2 evaluations receiv

XII. Rate the following statements by marking off the choice that best describes your assessment of it:

		Assessment				
		No resp	Excell	Goc	Avera	
XIII.	The objectives of the works achieved		9 (100			
XIV.	My own expectations were		9 (100			
XV.	The content of the worksho my workplace		8 (89%	1 (11%		
XVI.	The facilitation of the work		8 (89%	1 (11%		

The **most** valuable part of the workshop was:

- Database installation.
- All
- All were valuable, though I would put entering SHN EMIS Data tops.
- The new skills I have learnt.
- Filtering of data.
- MS Access 2000 and WinZip and data capturing.
- Good skills transfer and presentation in a clear concise manner.
- In general the activities were valuable – use the filter option and use the vertical and horizontal scroll bars.
- Ensuring data quality and orientation to the SHN EMIS interface of the capture and analysis tool.

The **least** valuable part of the workshop was:

- None (6 additional) – "There were no least activities"

- How to use the database
- The skills on working with the computer

Future workshops would be better if:

- None
- More time. (4 additional) -"More days should be planned for the workshop for more practical activities" and "More time is given with practical experiences"
- If we shall be practicing every year
- Workshop venue.
- Were held away from the office – it was hot.
- A larger data set available that will add in understanding possibilities and value of the SHN EMIS.

Areas that were not covered that are of interest and/or whether there is future assistance required:

- None (4 additional) – All were adequately covered in the time available
- Creating a database – Analysis of data and presentation.
- Opening an Access file
- More practice
- Head Teachers and Teachers are to be trained so that they understand the importance of data collection and others.

XVII. **MS Access Level 1 training:** 17 - 19 November 2003.

Held in Sinda	9 participants 1 trainer	9 evaluations recei

XVIII. Rate the following statements by marking off the choice that best describes your assessment of it:

		Assessment				
		No re	Exc	G	Ave	P
XIX.	The objectives of th were achieved		(8	(1		
XX.	My own expectation		(7	(2		
XXI.	The content of the w suited to my workpl		(10			
XXII.	The facilitation of th sessions		(10			

The **most** valuable part of the workshop was:

- The whole MS Access training
- The practical hands on activities/exercises
- All the areas covered
- All parts were valuable – the training was excellent. I wish it must continue to be like that
- The exercises that went with the lessons
- Being able to access, create and work on challenges given
- Sorting and filtering of data

- Doing the tasks and challenges

The **least** valuable part of the workshop was:

- None (6 additional)
- Drinking soft drinks
- Only when we were not in the computer lab
- There weren't any least part of the workshop

Future workshops would be better if:

- the training days were increased
- duration could be extended
- more time to practice
- the duration of the workshop could be increased to 10 days
- more time is allocated
- they are held close to the sleeping quarters
- the period slightly longer for participants to synchronize the different ways of accessing and creating information they require
- training should be more that three days. I propose 10 days due to understand the context through practice
- the duration of the workshop is extended to two weeks. Better location for lodging is considered

Areas that were not covered that are of interest and/or whether there is future assistance required:

- creating a table and a form
- the PowerPoint would make it easy to train others (not clear on point made?)
- at the moment not applicable
- computer maintenance and simple repairs
- making the actual Access programme (designing) should be looked into in future
- other similar software which are simpler
- creating and entering data – creating of fields
- how to programme data capture and analysis tool and other graphical diagrams of analysing data
- designing of the table/query using wizard.

Appendix C

Dr. Kate Wheatcroft's (PCD) Trip Report

Trip Report

School Health and Nutrition Programme

Bio-medical assays

at

Tropical Disease Research Centre,

Ndola 18-24th September 2003

Kate Wheatcroft
Partnership for Child Development

CONTENTS

I. Purpose of trip

Serum samples had been collected from school children for the School Health and Nutrition Program run by the Partnership for Child Development (PCD) in collaboration with the Ministry of Education, Zambia and USAID. Staff at the Tropical Disease Research Centre (TDRC), Ndola had completed the following assays on all samples between 22nd August and 9th of September 2003.

- Serum Ferritin (sF) Assay
  An enzyme immunoassay procedure for the quantitative analysis of serum ferritin (Ramco Laboratories Inc- Catalogue number: S-22).
- Soluble Transferrin Receptor (sTfR) Assay
  An *in vitro* enzyme immunoassay for quantifying human transferrin receptor in serum or plasma. It is used as an aid in the diagnosis of iron deficiency anaemia, particularly in the presence of other disease states (Ramco Laboratories Inc- Catalogue number: TF-94). (Adapted from D Nolder Trip report 2002.)

The purpose of the trip was to ensure good laboratory practice had been carried out, to ensure that assay protocols had been strictly adhered to and to check on the reliability and reproducibility of results.

II. Discussion of laboratory practice and equipment relevant to both the Serum Ferritin Assay and the Soluble Transferrin Receptor Assay

a. Collection and storage of samples and kits

Serum samples were collected September to October 2002. Most were collected in 1.5 ml Eppendorf tubes whilst some were collected in 2 ml polypropylene screw top tubes. They had been placed in cool boxes for approximately one day before being stored in the -20ºC freezer at the TDRC. Serum samples had been well labelled. The storage freezer was seen to be in good condition and a log book of daily temperature recordings had been kept which did not show any adverse fluctuations in temperature. I was assured that as the hospital has back up generators the samples, except when used, have remained frozen since they were delivered to TDRC.

According to the manufacturer of the test kits, samples can be frozen for four months at -20ºC without change to their sF content and for up to six months without change to their TfR measurements although the degradation is relatively slow. They can be stored for 2 years at -70ºC with out change to their TfR measurements. The samples have been stored for about one year and ideally the assays should have been carried out earlier.

The ELISA test kits (Ramco Ltd) were stored in the cold room as suggested by the manufacturers. The temperature of the cold room is also monitored. All reagents in the kits were within their 'best before use by' dates and their condition was judged to be excellent.

b. Equipment not provided in the kits

i. Precision pipettes

Some of the Gilson pipettes were purchased this year, others were purchased in 1997. They had been well looked after. Although they had not been calibrated recently they gave reproducible volumes. There were not enough pipettes for each staff member to have a set each whilst carrying out the assay. Only one multi-channel pipette was reliable. More pipettes are requested should more assays be carried out. The staff insisted that the lack of pipettes did not result in incubation times being affected.

ii. Shaker

A Bibby Stuart platform rocker was used which was adequate for the requirements.

iii. Deionised or distilled water

The distilled water used for washing and diluting serum samples was freshly prepared and collected in a polypropylene container. The water purifier system was in good condition and the product had minimum opportunity to become contaminated.

iv. Glassware and plastics

Glass measuring cylinders were used for diluting buffer. These and the polypropylene wash bottles were washed in distilled water before use. The 1N HCl or sulphuric acid suggested by the manufacturer for washing was not used. Disposable Eppendorf tubes were correctly used for sample dilution in the TfR assay.

v. ELISA reader

A SUNRISE TECAN ELISA plate reader belonging to the Immunology Laboratory was made available, was in good condition and the staff knew how to use it. Dr Nolder in her 2002 report stated that the ELISA reader was in regular use by the Immunology department and that as their work took priority this could result in a delay in reading our ELISA plates and therefore affecting the results. However, during the period of work the plate reader was available when necessary so incubation times were adhered to. If however future work were to be carried out it may be necessary to purchase a machine especially for the project.

c. Staff

Four staff members conducted the assays: Eric Njuru (Senior in the group), Boston Mbewe, Justin Chileshe and Sydney Mwarriza. All group members were competent; their laboratory practice was good in terms of keeping to protocols and incubation times. Pippeting tasks were done with care and from my observations, accuracy of sample volumes was maintained. Good laboratory practice in terms of safety was adhered to as far as local conditions allowed; there were inadequate arrangements for safe disposal of contaminated waste and also interruptions to the pumped water supply.

Each staff member carried out the assays as efficiently as possible with all wells being used in each plate.

d. Safety

The staff were aware of the hazards involved in working with human serum. Some steps were taken to minimize the risks but additional precautions are recommended. Lab coats and latex gloves were used when carrying out the assays and handling sera. Although the lab coats have elasticated cuffs to protect sleeves they do not provide sufficient cover to protect the collar area. In addition, no eye protection or face masks were available for procedures where there is risk of splashing e.g. when washing plates.

Serum washed from the plates was tipped into the hand washing sink- a practice which is prohibited in most laboratories. More often than not (at least at September-October period) water cannot be obtained from the taps. Traces of serum may remain in the sink for long periods and may contaminate other users when the sink is used for hand washing. It is suggested that the plates should be emptied into a bucket and the

contents autoclaved. If the bucket supplied was not autoclavable the alternative is to soak it in JIK (disinfectant solution) after use.

Small sheets of bench coat were placed on the work stations of each staff member. Drying the plates was carried out by tapping the plates on tissue placed on the bench coat. This resulted in small splashes covering the bench coat and also some non-protected work surface. The bench coat is not replaced daily because it is expensive and splash trays are hereby recommended for the work. These would contain any spills and splashes and can be decontaminated with JIK after each assay.

e. Quantity control implemented before my arrival

Assay optical density (OD) results were checked visually. Serum was applied to wells in pairs. Any pair that differed by an OD of 0.01 or more or that had one well with twice the OD of the other was considered invalid and that serum was tested in a repeat plate. It was noted that some pairs which differed by more than 0.01 were not noticed and therefore not repeated. Entering data into a spread sheet would prevent variable pairs being missed. No attempt was made to check differences between plates.

III. Serum Ferritin Assay- quality control

All samples had been tested in this assay before my arrival. Eight plates were left available for quality control.

a. First day quality control for Serum Ferritin Assay

Description of test

Initially one plate was run with at least four samples tested by each staff member in previous assays. As usual each serum sample was run in two adjacent wells. Some samples were repeated to test the within plate variability and also the affect of its position in the plate on the result. Edge effects are common in ELISA plates and in addition, wells filled towards the end of a run often give lower than expected readings.

b. Determining the ferritin concentration from the optical density values

Two different methods were used to determine the ferritin concentration from the optical density values.

i) Standard curves were drawn on the log log graph paper provided in the kit. The line was drawn point to point as stated in the protocol. These standard curves were then used to determine the ferritin concentration from the mean OD value minus the blank.
ii) The data was also inserted into the Excel worksheet 'SSlogitlog2.xls' provided by Ramco Laboratories and the equation produced by the worksheet was used to determine the concentrations.

The concentrations obtained using the different methods of calculation varied as shown in Table 1. The average difference between the determinations was 12.3ng. The task of plotting the standard curve and reading off the values was extremely time-consuming and prone to human error therefore the worksheet was believed to give the more accurate results. The worksheet method will be used to calculate ferritin concentrations in future analysis.

Table 1. Comparison of calculating ferritin concentrations by two different methods

ROW	WELL	SAMPLE	ferritin concent graph (ng)	ferritin concent regression equ	Mean (r	Difference (	difference as mean
C	5+6	F					
H	9+10	F					

F	5+6						
F	11+12						
C	7+8						
D	11+12						
H	3+4						
E	9+10						
A	3+4						
D	7+8						
B	11+12						
H	11+12						
C	3+4						
F	9+10						
H	1+2						
G	11+12						
E	3+4						
E	11+12						
D	5+6						
A	11+12						
B	5+6						
C	11+12						
mean							

c. Within plate variability

Table 2 shows the within plate variability. The concentration determined from the two wells in each pair differed from each other on average by just 2.8ng (8% of the mean). The difference in OD between wells containing the same serum in different parts of the plate was greater; on average the mean difference between the highest OD value and the lowest of a sample being 4.7ng (16.6% of the mean). This within plate variation was deemed to be acceptable.

Ferritin values from wells at the edges of the plates were not consistently different from those in the centre. Wells filled at the start of filling (left side) did not consistently show higher concentrations than those with the same serum sample placed at the end of the plate. Therefore it can be concluded that variation in the position of the samples in the plate does not detrimentally affect the results.

Table 2. Within plate variability and sample position

Row	Well	Sample	OD-blan	ferritin concentration equation (ng)	difference in predicted fe concentration within the the mean	difference in predicted fe concentration between w plate as a % of the mean
C		F				
H		F				
F						
F						
C						
D						

H				
E				
B				
C				
F				
H				
G				
E				
D				
B				
C				
mean				

d. Plate to plate variability

Table 3 compares the ferritin concentration (determined from the mean OD of repeat wells) from the QC plate of each sample with the ferritin concentration determined from previous assays carried out before my visit. With some samples, the difference between the ferritin concentrations was high e.g. 29ng in the QC plate and 64ng in the original assay. This variation between plates prompted the completion of more quality control assays.

Table 3. Comparing concentrations found from QC plate with concentrations recorded in previous assay

SAMPLE	mean ferritin cor from QC plate (n	concentration f previous assay	mean	SD	differenc	differenc the mean

e. Second day quality control for Serum Ferritin Assay

i. Description of test

Forty-one serum samples were selected some of which had previously been assayed by each staff member. This set of serum was run in four plates run on the same day each by a different person. In each of the plates the position of each serum in the plate was altered to check for variation resulting from the position of a sample on a plate.

f. Plate to plate variation

The ferritin concentration determined from each of the four quality control plates and the original assay plate are compared in Table 4. Variation was seen between the plates; fourteen out of forty one samples had standard deviations of greater than 10. No pattern appeared in the results. No one plate consistently gave the concentration most different from the mean. This suggested that the differences were not a result of error by any one individual because odd results appeared to be random.

Box 1

One-way repeated measures using the ANOVA analysis package was conducted to compare ferritin concentrations determined by each of the four members of staff in their QC plates (these plates were labelled 1-4 for the purpose of the statistical tests). A significant effect of plate number was found (Wilk's Lambda=0.513, F(3,37) =11.71 p=<0.0005). This statistically demonstrated the variation between the plates. The multivariate eta squared = 0.497, according to Cohen (1988) this suggests a very large effect size, i.e. the difference between the plates is large as well as significant. As expected there was also a significant effect of serum sample, the effect of serum sample gave a multivariate eta squared of 0.646. This showed that the effect of sample is greater than the effect of plate number.

A statistical test was carried out to determine whether the difference found in concentration between the plates was significant (see Box 1). This test showed that the values for each sample varied significantly between the plates, however the variation between each sample is greater than the variation in values found for the same sample in the different plates. Therefore due to the lack of reproducibility, values must only be regarded as approximate.

Table 4. Comparison of ferritin concentrations between four QC plates and previous assays

	JUSTIN	BOSTON	SYDNEY	ERIC	Previous as				
Sample	Ferritin	Ferritin	Ferritin	Ferritin	Ferritin	MEAN	SD	difference	difference as

mean									
SD									

IV. Soluble Transferrin Receptor Assay- quality control

Prior to the consultant's arrival all serum had been tested in the TfR assay and all these kits had been used up. The protocol was discussed in detail with the group to check that it had been followed precisely. Good laboratory practice appeared to have been maintained, see general comments in section 2.

However there were samples of control sera left over from the assays and an exercise was conducted to test for reproducibility of results from these samples. Two control sera were run on each plate; a sample with a concentration of transferrin receptor (HC) of between 12.9 and 17.9µg/ml was used as the high control (HC), and a serum sample with a range of 4.9-7.3µg/ml was used as the normal control (NC).

The OD results are directly proportional to the transferrin receptor concentration and a Microsoft Excel programme was used to produce standard curves. In four of the 45 plates the standard curves appeared visually unsatisfactory. These four plates ideally should be repeated.

The linear regression equation was not used to calculate the TfR concentrations for the samples on advice from Dr J Grubb at Ramco Laboratories. Instead TfR concentrations for the control sera were determined using the Excel work sheet 'TfR_calc.xl.'. The results are shown in Table5.

The mean concentration of the HC serum was 13.7μg/ml (SD2.4). The mean concentration of the NC serum was 6.3μg/ml (SD1.2).

Fourteen out of forty five of the HC serum concentration determinations were outside of the range stated on the bottle. Ten out of forty five of the NC serum samples were outside of the range stated on the bottle. No pattern was found. Plates that had NC concentrations out side the expected range did not usually have HC serum concentrations outside the range.

Table 5. The apparent TfR concentration of the control sera determined in each assay. Values highlighted are out side of the expected range.

plate	NC	HC
2	5.8	11.3
3	6.0	15.4
4	5.8	11.3
5		
6	7.2	13.9
7	9.0	
8	6.9	16.2
9	9.2	16.7
10	5.1	13.8
11	4.6	13.3
12	5.6	13.2
13	6.8	13.7
14	8.8	15.4
15	5.2	11.9
16	8.6	16.2
17	5.4	15.4
18	5.0	6.4
19	5.7	11.2
20	5.6	14.8
21	6.6	21.9
22	5.8	11.3
23	6.5	10.8
24	6.0	14.2
25	5.8	13.9
26	6.5	14.7
27	6.7	14.8
28	7.0	14.0
29	6.9	14.2
30	7.4	12.6
31	5.6	11.6
32	6.1	14.6
33	7.3	13.6
34	6.8	12.4
35	6.1	
36	6.1	14.7
37	5.4	14.1
38	5.4	14.2
39	6.3	13.6
40	4.4	11.0
41	6.5	10.8
42	7.0	14.3
43	4.4	12.9
44	8.2	18.2
45	7.3	14.8
mean	**6.4**	**13.7**
SD	**1.2**	**2.4**
Difference	**4.8**	**15.5**
difference as a % of the	**75.0**	**112.6**

V. Conclusions

The staff were proficient, good laboratory practice was maintained and protocols were strictly adhered to. Equipment and conditions in the lab were adequate. Despite this in both assays considerable variation as noted when samples were repeated on different plates. I believe this variation would have been apparent whether the samples were tested in Zambia or in any lab in the UK. A commercial kit used according to the manufacturer's instructions should give reproducible results. Therefore the variation found should be a cause for concern for the kit manufacturer, Ramco Laboratories.

The importance of the variation will depend on how the data is used. If approximate values are required the results may be adequate. It may be useful to run a pilot study on these samples to examine levels of inflammatory proteins (CRPs) and to see if the results from these new assays could be used to determine additional parameters for interpreting the transferrin data.

A draft report has been sent to Dr. Jeff Grubb at Ramco Laboratories. He has discussed it with his staff and has carried out tests to simulate the conditions in Zambia in the hope to discover the reason for the plate to plate variation. Based on the problems demonstrated when similar samples run by the four lab technicians in Zambia Dr. Grubb made some recommendations, see Box 2.

Box 2 Recommendations from Dr. Grubb from Ramco Laboratories

For the data that you have obtained from the TfR assay runs:

1) those runs in which controls were performed and the controls were within +/- 2 standard deviations (4.9 - 7.3 or 12.9 - 17.9ng/ul), the results for the patient samples should be fine. We would feel very comfortable using the assay data to draw conclusions about the patient population;

2) those runs in which 1 control was within +/- 2 standard deviations and 1 was within +/- 3 (4.3 - 7.9 or 11.7 - 19.1ng/ul) standard deviations, we would feel comfortable using the assay results in the general population data;

3) those runs in which both controls were within +/- 3 standard deviations, we would argue that the assay results could be used in the general population data; and

4) those runs in which both controls are outside of +/- 3 standard deviations, we would only feel comfortable if the assay results were disregarded.

References

Cohen, J. (1988). Statistical power analysis for the behavioural sciences. Hillsdale, NJ:Erlbaum.

Appendix D

Dr. Michael Beasley's (PCD) Trip Report

The Partnership for Child Development
Visit of Michael Beasley to the CHANGES Program 13th-20th December, 2003
Trip Report

Aims of the visit

This visit had two aims:

1. To discuss with members of the MoE CHANGES program, the potential technical support to be provided by PCD to the CHANGES program extension.
2. To participate in discussions about the Schistosomiasis Control Initiative (SCI) program for control of schistosomiasis and geohelminth control in Zambia. The visit of Michael Beasley to Zambia coincided with a visit by Miss Cara Kamenka of SCI.

PCD Support to the CHANGES Program Extension

During the visit a number of discussions were held with members of the CHANGES team, members of the MoE SHN unit and with Rick Hennings, Education Specialist at USAID. As a result of these discussions, a proposal for PCD support of the CHANGES extension was agreed for inclusion in the CHANGES extension proposal that is about to go to USAID. The final draft of this proposal, agreed by Ed Graybill and Paul Freund is given in Appendix 1.

SCI Funding of Schistosomiasis and Geohelminth Control in Zambia

The Zambian Government is undoubtedly delighted to have been awarded SCI funding and is eager to commence control activities as soon as possible. During discussions, a number of issues became apparent.

The need to commence activities quickly

The Government of Zambia has now been in discussion with SCI for around 9 months. During this period it has invested a great deal of time and effort in putting forward a bid for SCI funding. To date this has not led to any tangible activity in Zambia. This, combined with a current lack of commitment and leadership for control activities in both MoE and MoH, is beginning to present a danger that those associated with the SCI program may feel uncertain and pessimistic about its future. It should be emphasised that this is not to say that anyone is somehow to blame for these circumstances. It is saying that these circumstances need to be recognised and acted upon.

To reverse this situation there is a strong need to disburse funds enabling activities to start quickly. During the visit discussions occurred about what could happen during the next two or three months. The following activities (in no particular order) were proposed:

- Establishment of an SCI office
- Purchase of a vehicle
- Decision making about how drugs are to be purchased
- Planning of baseline data collection
- Development of a Tonga (Southern Province) language schistosomiasis questionnaire
- Situation analysis of control activities occurring across Zambia
- Purchase of height poles for praziquantel administration
- Piloting of community treatment of adults and out of school children in one ward of Eastern province

- Planning of a prevalence survey of Southern Province

Fortunately the period of January to March is that of the long rains and therefore there is an appreciation that very little work in the field can be undertaken until late March/April. This does give the program a period of grace to get organised.

Scientific Monitoring and Evaluation

All involved in the SCI program appreciate that it has two aims: firstly to control schistosomiasis in Zambia and secondly to demonstrate the impact that treatment has on people's health and wellbeing. The interest of everyone in Zambia is in the former and not at all in the latter. (In fact, due to the perception that the CHANGES program in Eastern Province has been over monitored when compared to its rollout on the ground. Words such as further research, survey, impact assessment and scientific study are anathema to many members of government, particularly in the MoE).

For this reason, and for the reasons mentioned in the section above it is important that the onset of control activities should not be delayed by protracted discussions about how and when necessary (to SCI) scientific monitoring and evaluation should occur. It is also important that sensitivity be displayed in choice of monitoring sites. In particular there is a perception that Chadiza and Chipata Districts in Eastern Province and Siavonga District in Southern Province have been surveyed to excess. It is recommended that these districts should not be used for monitoring and should also be amongst the first to receive full scale treatment.

It should be emphasised that any resistance to monitoring is only to that involving any extensive impact assessment. Monitoring that demonstrates that drugs have been distributed, administered and worked is considered welcome and important.

Budget and location of funds

There is an urgent need for SCI to confirm to the Government of Zambia the sum of the award that it will be making. The uncertainty about this during the visit sapped confidence considerably. It would also be preferable if SCI could explain to the Zambian Government why the sum awarded is rather less than the Zambian bid requested.

Considerable discussion occurred as to where funds in Zambia should be located; either in an SCI bank account or in the sector pools of the ministries of health and education. There are arguments for and against both.

Locating the money in an SCI bank account has the benefits that it can be used immediately when required and its disbursement is not dependent on the sector work plans of the ministries. It does though increase the probability of increasing the perception that SCI is a vertical external program and therefore reduces the likelihood of its long term sustainability.

Locating the money in the sector pools has the advantage of enabling the ministries to 'own' the program and also significantly increases the probability that they will commit their own resources to its activities, thus enhancing sustainability considerably. The down side of using the sector pool is that money can only be used for activities that are included in the annual sector plan and thus reducing to an extent freedom of manoeuvre.

An additional dimension to this dilemma is that deadlines for the 2004 sector plans of the ministries of both health and education fall during December. That for health has already passed while that for education is due on the 31st of the month. This presents a dilemma. On the one hand, Dr Musonda, Chief Planning Officer of the MoE was of the view that a 'broad brush' outline of SCI's activity could quickly and easily be inserted into the Sector Work Plan. On the other hand, given the need mentioned above quickly to get on with activities it could be that the best way forward would be to locate funds in a bank account during year one of the program with the understanding that in subsequent years, SCI would wish to consider placing its funds in the sector pool.

Co-ordination of activities

There exists a plethora of organisations in Zambia involved in schistosomiasis and geohelminth control. There is a strong awareness of the need carefully to co-ordinate activities; to produce a national control plan and to establish and agreement of understanding between all those involved. A workshop that will lead to the production of a national control plan will be funded by the CHANGES program in March (see Appendix 1). This could form an excellent basis for an agreement of understanding between all those committed to control of the infections.

In the shorter term, an understanding between CHANGES and SCI of their respective responsibilities and commitments is urgently needed. The current SCI work plan contains several references to CHANGES which have not been agreed by the staff of the CHANGES program. For example, the present SCI work plan assumes that CHANGES will be responsible for certain items of training. As this has not been negotiated with CHANGES such items do not appear in the CHANGES extension work plan or budget. It cannot simply be assumed that CHANGES will somehow 'fit these in'. There is therefore a need quickly to clarify precisely who is responsible for different activities and how these will be funded. A draft note of how this might work is shown in Appendix 2.

Conclusion

The visit to Zambia led to considerable progress in determining the nature and scope of the the potential technical support to be provided by PCD to the CHANGES program extension. It is hoped very much that the measures proposed will be accepted by USAID.

The visit also enabled some clarification of the future progress of the SCI program. This presents an enormous opportunity for the people of Zambia. The challenge is get activities going as soon as possible before enthusiasm flags.

Appendix 1

CHANGES Program Extension
Proposed Technical Assistance by the Partnership for Child Development

Introduction

The Partnership for Child Development (PCD), alongside its collaborator Successful Intelligence (SI) has provided extensive technical advice and support to the first phase of the CHANGES program. This has been in the areas of program design, operational research and the conduct of an impact assessment. Following the success of phase I activities it is suggested that PCD should also provide appropriate technical assistance to the CHANGES program extension. The aim of this document is to outline the assistance needed and to suggest a timeline and budget required for this to come about.

What assistance is required?

The first phase of the CHANGES program has resulted in the building of large amounts of very able human capacity in the Republic of Zambia. Zambia now has a complement of master trainers in a wide range of school health and nutrition (SHN) activities and people skilled in leading and conducting both biomedical and cognitive surveys. These skills will enable most aspects of the CHANGES extension to be led and delivered by local personnel.

There remain however some areas in which additional capacity is required. These are:

- Program design
- Monitoring and evaluation
- Data analysis and reporting

It is suggested that during the CHANGES extension, PCD should provide technical assistance to help build capacity in these areas. In order to achieve this it is proposed that during the extension, PCD should undertake two major training workshops and three minor supervision visits. The aim of the first workshop would be to train personnel in program design, monitoring and evaluation. The aim of the second would be to train personnel in data analysis and reporting. Two of the minor supervision visits would be to support the ongoing implementation of the School Health and Nutrition Management Information System (SHNMIS) that has been piloted during Phase I of CHANGES. The aim of the other minor supervision visit would be to support the ongoing rollout of the program design and monitoring of biomedical and cognitive indicators to be used during the extension.

The skills learned during the extension would be applicable not only to the activities of the CHANGES extension but also to the activities of other partners such as the BESSIP funded work of the Ministry of Education and the Schistosomiasis Control Initiative (SCI)

Workshop1: program design, monitoring and evaluation

The first phase of the CHANGES program has developed most aspects of a 'generic' SHN program design for use in Zambia. Effective protocols have been planned, implemented and revised to enable activities such as training of teachers, distribution of drugs to schools and the implementation of IEC. Capacity is however lacking with respect to understanding the epidemiological principles underlying good program design i.e.

how to design programs that are effective (meet children's real needs), efficient (treat only those children in need) and ethical (follow international guidelines for treatment).

The first aim of this workshop would therefore be to address this shortfall. Issues covered would include how to implement rapid, low cost situation analyses, how to make decisions about suitable drug choice, and how to ensure that drugs are targeted properly.

As for program design, the first phase of CHANGES has made considerable advances in building capacity in monitoring and evaluation. As has already been mentioned, much skill has been built up in the conduct of cognitive and biomedical surveying. Also, the SHNMIS has been developed and piloted in Eastern Province and training is ongoing in activities such as data entry and manipulation. Capacity continues to be lacking in a number of areas: principally in how to design and plan a monitoring and evaluation system that capitalises on the advances made in conduct of simple surveys, in the use, purpose and institutionalisation of the SHNMIS at the national ministry and provincial levels and in the measurement of cost-effectiveness.

The second aim of this workshop would be to increase capacity in the design and implementation of methods of monitoring and evaluation including the choice of appropriate indicators that reflect the needs and priorities of the Ministry of Education. In addition, building capacity in estimation of cost effectiveness would do much to facilitate the planned cost-effectiveness studies outlined elsewhere in the Extension Proposal.

<u>What would the content of the workshop be?</u>

The workshop should combine both *learning* and *doing*. Participants would first be introduced to the principles of program design, monitoring and evaluation and then be required to work together to produce a program design and monitoring and evaluation plan for implementation.

The topics covered in the workshop would be:

- Epidemiological principles of program planning (targeting, drug choice, frequency of treatment etc).
- Use of simple, rapid low cost biomedical situation analyses for monitoring and evaluation
- Use of the Zambian Cognitive Assessment Instrument for monitoring and evaluation
- Use of the SHNMIS for monitoring and evaluation
- Using monitoring and evaluation to estimate the program's cost-effectiveness.
- Practical issues such as logistics and budgeting
- Ensuring the sustainability of the program beyond the CHANGES extension

The lessons learned would be applied to develop

- A program design plan for use in Southern and Eastern Provinces
- A monitoring and evaluation plan for Southern and Eastern Provinces

The workshop would occur for a period of two weeks. Its first two days would enable both policy makers and those with technical responsibility to learn more about the issues to be addressed during the workshop. Those with technical responsibility would then spend the next seven days learning more about these issues and using the lessons learned to develop a program design, monitoring and evaluation plan. The last day of the workshop would again be for both policy makers and those with technical responsibility to discuss and approve the plans made.

<u>Who would attend?</u>

The workshop would be attended by

- Members of the MoE Headquarters SHN team
- Members of the University Teaching Hospital Staff (Department of Parasitology) with responsibility for control of helminth diseases
- Members of the Department of Psychology of the University of Zambia
- Members of the Zambian Examinations Council
- Provincial and district members of Southern Province MoE, MoH and MoCD with responsibility for technical aspects of the implementation of program design, monitoring and evaluation.
- Members of the Eastern province CHANGES team with expertise to be shared.
- The workshop could also be attended by representatives of districts and provinces other than those to be included in the CHANGES extension. It should be emphasised that participants from these places would not be budgeted for by CHANGES.

The workshop would be implemented by four staff from PCD

- an epidemiologist
- a statistician
- an expert in educational testing
- an expert in management information systems

Outputs and deliverables

The ***output*** from this component would be staff skilled in project design, monitoring and evaluation enabled to produce a ***deliverable*** that would be a fully documented program design, monitoring and evaluation plan that would include a component enabling the measurement of cost effectiveness. At the end of the workshop, PCD would provide CHANGES with a report of progress made, lessons learned, participation etc.

Timeline

It is proposed that this workshop should occur during March/April 2004.

Budget for Workshop 1

Budget lines included in this proposal are for the time, travel and subsistence of outside consultants only. They do not contain budgeting for per diem payments to Zambian colleagues, transport within Zambia, hire of venues etc. These should be budgeted for by the CHANGES program.

Travel of consultants to Zambia (2 from UK, 1 from USA, 1 from SA)		
Subsistence costs of consultants in Zambia (2 weeks)	16d x $170	
Consultancy costs (4 staff for two weeks)	$310/day for 16d	
Total		

Supervisory visits

It is suggested that during the course of the CHANGES extension, members of PCD should make three minor supervisory visits to Zambia.

The aim of two of these visits would be to provide ongoing support to the implementation of the SHNMIS in Eastern and Southern provinces. Such support is necessary if SHNMIS is going to go from pilot to scale.

The third supervisory visit would be to provide ongoing support for the implementation of the program and its monitoring and evaluation. This will enable all participants to reflect on the progress of the design and systems agreed during the design, monitoring and evaluation workshop to ensure that the conduct of the extension remains within the principles agreed.

The ***deliverables*** from this component would be three progress reports: two detailing the ongoing implementation of SHNMIS in Eastern and Southern Provinces and one detailing implementation of the program design, monitoring and evaluation plan and containing recommendations for keeping 'on track' for the end of the extension period.

Timeline

It is suggested that the supervisory visits should occur as follows:

Eastern Province SHNMIS visit: June 2004
Southern Province SHNMIS visit: September 2004
Program implementation, monitoring and evaluation visit: September 2004

Budget for supervisory visits

Travel of consultants to Zambia (1 from UK, 2 from SA)	
Subsistence costs of consultants in Zambia (6 weeks)	
Consultancy cost (3 staff x two weeks)	
Total	

Workshop2: data analysis and report writing

During the first phase of the CHANGES program, much of the data analysis and report writing that has occurred has taken place outside Zambia through the work of external technical consultants. The aim of the second workshop would be to build capacity in these areas within Zambian institutions.

What would the content of the workshop be?

As for the first workshop, this second activity should combine both *learning* and *doing*. Participants would first be introduced to the principles of data analysis and report writing and would then be required to work together to produce a program report.

In more detail, the topics covered in the workshop would be:

- Manipulation of data from simple management information systems at National, Provincial and District levels.
- Using statistical models to analyse biomedical and cognitive data purposes
- Development of cost effectiveness estimates
- Understanding principles of report writing and production.

The lessons learned would be applied to develop

- Cost effectiveness estimates for the work of the CHANGES program in Southern province
- A detailed report of the achievements of the CHANGES program in Southern Province

The workshop would occur for a period of two weeks. During the first nine days, those with technical responsibility would learn about data analysis and report writing and then use the lessons learned to produce a full extension report that would be presented to policy makers on the tenth day.

Who would attend?

The workshop would ideally be attended by those who had attended the first workshop and would be facilitated by the same team of four consultants mentioned above.

Outputs and deliverables

The ***output*** from this component would be staff skilled in data analysis, estimation of cost-effectiveness and reporting enabled to produce a ***deliverable*** that would be a fully documented extension monitoring and evaluation report. At the end of the workshop, PCD would provide CHANGES with a report of progress made, lessons learned, participation etc.

Timeline

It is proposed that this workshop should occur during the last month of the extension – March 2005.

Budget for Workshop 2

Travel of consultants to Zambia (2 from UK, 1 from USA, 1 from SA)		
Subsistence costs of consultants in Zambia (2 weeks)	16d x $170	
Consultancy costs (4 staff for two weeks)	$310/day	
Total		

Budget summary

Under the terms set out in this proposal, the total budget requested for the survey is as follows:

Item	Deliverable	
Cost of Workshop 1	Program design, monitoring and evaluation p	
Cost of Workshop 2	Report on extension monitoring and evaluati	
Cost of supervisory visits	Progress reports and recommendations	
Sub total		
Overheads @ 20%		
Total budget		

Conclusion

During recent years PCD has been delighted to be associated with the design, delivery and success of the first phase of the CHANGES program's work in SHN in Eastern Province. It is proposed that the organisation's long held experience of mass delivery of SHN interventions to large populations of children in different parts of the world could do much to enable the extension of CHANGES activities from a relatively small and centralised base in Eastern Province to the much more devolved structure of SHN management, training, delivery, cost-effectiveness estimation and monitoring and evaluation required if this flagship program is to be implemented much more widely around the country.

Appendix 2

CHANGES and SCI
- a possible way forward for co-ordination of activities

Introduction

During the year, 2003, the Government of Zambia was successful in making a bid for funding from the Schistosomiasis Control Initiative (SCI). In large part, this success was due to Zambia's intersectoral approach to the control of parasitic helminths, principally through the joint approach of the Ministries of Education (MoE) and Health (MoH). A key part of this approach has been Zambia's school health and nutrition (SHN) program which has been led by the MoE with support from MoH. Within the MoE much of the work undertaken has been led by the CHANGES Program, an MoE program that is funded by the United States of America Aid Agency (USAID).

In 2004, the first phase of the CHANGES program is due to come to an end. It is expected that the program will be extended for a further 18 months. The year 2004 will also see SCI funds become available to Zambia. The aim of this document is to discuss how these two activities, the extension of CHANGES and the commencement of SCI can be co-ordinated together within the strategy and practice of the MoE and the MoH and of the whole Government of Zambia.

The Strengths of CHANGES and SCI

CHANGES and SCI bring different strengths to the control of parasitic helminths in Zambia. It is perhaps helpful to begin by reviewing these strengths so that any co-ordination between the two bodies can be synergistic and avoid any duplication of activities or establishment of parallel structures.

CHANGES has led the way in establishing SHN activities in Zambia through its program in Eastern province where it has established activities in 110 schools reaching 45000 children. In the course of this work, CHANGES has acquired extensive experience in school health programming, drug distribution, monitoring and evaluation, development of training materials, IEC and community sensitization. Operating in a proportion of the schools of each district, CHANGES has operated as a 'trail blazer', leading research and development of SHN programming, increasing capacity to implement activities and creating demand for more extensive coverage across the country.

In Southern Province, CHANGES has acquired extensive experience of prevention of HIV/AIDS. This work has occurred through a community approach to programming and has generated considerable expertise in enabling communities to identify problems that face them and to frame appropriate responses.

SCI has now announced its intention to fund control of schistosomiasis in five African countries: Zambia, Tanzania, Mali, Burkina Faso and Niger. SCI is committed to reducing infection amongst all members of society, both those at school and those in the community and hence will work both with MoEs and MoHs. One of SCI's key strengths is its remit to buy drugs as inexpensively as possible from any source available. As one of the few funding agencies in schistosmiasis control blessed with such freedom of purchasing, SCI is keen to devote as much of its funds as possible to the purchase and distribution of tablets. (By contrast at present CHANGES receives drugs from SHN MOE bought using limited BESSIP pool sector funds. As a USAID funded program CHANGES does not buy drugs itself as by USAID rules it could only buy prohibitively priced drugs from USA).

What is already planned for the future

CHANGES

The CHANGES program will be extended in 2004. With respect to SHN it is expected that this will result in the expansion of SHN activities to 20 schools in each of three districts in Southern Province: Siavonga, Gwembe and Sinyazongwe. In the course of this activity it is expected that CHANGES will continue to act as 'trail blazer', leading SHN research and development, increasing SHN programming capacity at national, provincial and district levels and creating even more demand for provision of SHN services.

SCI

SCI is due to commence activity in Zambia during 2004. At a meeting held at the Pamodzi Hotel on 1st August, 2003, Alan Fenwick, director of SCI indicated its willingness to undertake the following:

- Rapid, low cost, situation analyses of schistosome and geohelminth infection in all parts of Zambia
- Provision of drugs to the CHANGES program (ie to CHANGES SHN schools in Eastern Province and Southern Province).
- Through MoE, the expansion of drug provision, with its associated costs of training and provision of materials, to all non CHANGES schools in Eastern and Southern Provinces.
- Through MoH, the development and expansion of drug provision with all its associated costs to all high risk communities in Eastern and Southern Provinces.

Some Concerns

The current SCI work plan contains several references to CHANGES which have not been agreed by the staff of the CHANGES program. For example, the present SCI work plan assumes that CHANGES will be responsible for certain items of training. As this has not been negotiated with CHANGES such items do not appear in the CHANGES extension work plan or budget. It cannot simply be assumed that CHANGES will somehow 'fit these in'. There is therefore a need quickly to clarify precisely who is responsible for the workplan's different activities and how these will be funded.

The Way Forward

A possible way forward for CHANGES and SCI might be as follows:

CHANGES will support its planned expansion into Southern Province and will continue to build on its proven record in capacity building, research and development. It will not fund any further expansion initiated by SCI.

SCI will provide CHANGES with all drugs necessary to its ongoing and planned activities and will benefit from CHANGES activities in capacity building, research and development. It will fund all costs of expansion of SHN activities additional to those to be implemented by CHANGES and all costs of community based outreach to high risk groups led by MoH.

A table of responsibilities might look like this:

	CHANGES	SCI
Training	CHANGES schools	Non CHANGES schools and

		communities
Material design	School materials	Community materials
Purchase materials	CHANGES schools	Non CHANGES schools and communities
Planning workshops	CHANGES schools	Non CHANGES schools and communities
Control activities	CHANGES schools	Non CHANGES schools and communities

It is of course the case that this table could be extended to include the activities of others involved in control activities such as MoE, MoH, WFP, UNICEF, World Vision and others.

Outstanding Questions

1. What is the role of the MoE SHN unit, particularly with respect to its BESSIP funded activities in Central and Lusaka Provinces?
2. How can MoE and MoH best work together. Eg there must be considerable scope for work in joint activities such as community sensitization, training in drug delivery.
3. What is the role of other agencies e.g are WFP providing deworming alongside school feeding?

Appendix 3

Itinerary

13th December

Arrival in Chipata.

14th December

Initial meetings with Paul Freund (CHANGES Eastern Province).

15th December

Meeting with Paul Freund, Catherine Chirwa, Benedicto Phiri to discuss proposed technical assistance of PCD to the CHANGES extension.

16th December

Travel to Lusaka. Initial meeting with Ed Graybill (CHANGES Lusaka office)

17th December

a.m. Meeting Ed with Ed Graybill
p.m. Meeting to discuss the progress of the SCI program with Cara Kamenka (SCI), James Mwansa (University Teaching Hospital (UTH)), Faith Nchito (UTH), Christopher Milupi (MoE), William Kwambwili (MoE), Kennedy Sinutame (MoE) and Ed Graybill (CHANGES).

18th December

a.m. Meeting with Rick Hennings USAID. Meeting with Hilda Chishala (SHN Co-ordinator MoE).
p.m. Meeting to discuss initial steps of SCI program and possible methodology for community treatment by MoH with James Mwansa, Faith Nchito, Cara Kamenka and Ed Graybill.

19th December

a.m. Meeting with Paul Frend and Ed Graybill
p.m. Meeting with Lawrence Musonda (Chief Planning Officer MoE), Catherine Phiri (Chief Educational Standards Officer MoE), Faith Nchito, Christopher Milupi, James Mwansa, Paul Freund and Cara Kamenka.

Appendix E

SIAPAC's Draft Executive Summary of the HIV/AIDS Impact Assessment

Executive Summary

Overview

In 2003 an Impact Assessment of HIV/AIDS on the Education Sector in Zambia was commissioned by the Ministry of Education. The Impact Assessment was designed to assist the Ministry in refin Deleted: in Lesotho **expanding its HIV/AIDS response towards protecting education sector personnel and the children and young people they serve.**

In 2003 the Zambian Ministry of Education (MOE) commissioned an Impact Assessment of HIV/AIDS on the Education Sector, with financial support from USAID through the CHANGES Programme, with technical and administrative support being provided by CHANGES as well. The tender was awarded to SIAPAC, a SADC-based consultancy firm with experience in HIV/AIDS impact assessments, working with a local consultancy firm JUDAI-Zambia and Health and Development Africa, a South African firm with impact assessment experience.

The aim of the Impact Assessment was to influence a process of expanded, mainstreamed sectoral response to HIV/AIDS to effectively prevent infection among educators and the populations they serve and mitigate negative impacts among these same groups. A related aim was to consider an enhanced role for the education sector, as a central actor, in responding to HIV/AIDS in communities and neighbourhoods.

The objectives of the Impact Assessment were to:

1) engage the education sector in considering the most effective way forward in responding to HIV/AIDS;
2) provide evidence-based information appropriated for an expanded, effective sectoral response to HIV/AIDS, both within the sector and within the communities they serve; and
3) provide findings, conclusions and recommendations in a fashion that encourages the use of information by policy makers, programme officers and others.

Sectoral impacts were considered in terms of the following:

- Impacts on the supply of education.
- Impacts on the demand for education.
- Impacts on the costs of providing education, and consideration of the costs of protecting educators and responding to infection.
- Education process and quality impacts.
- Consideration of the role of education in responding to HIV/AIDS.

For each, gender, location and poverty dimensions were considered.

This extended Executive Summary is designed to provide the bulk of the findings arising from the Impact Assessment. The first finding below gives an overview of key opportunities and constraints facing an MOE response, and makes broad recommendations in this regard. Thereafter, findings are organised into the following: demand; supply; costs; gender, location and social class; and the role of the sector in responding to the epidemic. These findings are structured as follows: a) findings; b) conclusions arising from the findings; and c) recommendations. Supporting information can be found in Chapters 2-6 of the main report. For policy makers with insufficient time to consider the full report, a review of the executive summary and a quick skim of chapters 2-6 should be sufficient. For implementers and advisors who want to use the Impact Assessment as a reference tool, consideration of findings in chapters 2-6 will be of particular importance. For those who need further background information on Zambia and on the Zambian education sector, relevant information has been provided in annexes.

HIV/AIDS in Zambia

Zambia, like many of its neighbours, is one of the world's worst affected countries in terms of HIV/AIDS. The HIV prevalence rate appears to have leveled at 16%, with urban rates significantly higher than rural rates, and rates for women significantly higher than rates for men. Women are also infected at a younger age, and die at a younger age.

Despite the prevalence rate having leveled, the risk of a 15-year old dying from AIDS at some point in her/his life in Zambia is estimated at one-in-two, and most of these young people will die by the age of 35. Given the established nature of the epidemic, and in the absence of historical behavioural change, Zambia is entering a phase where many are falling sick and dying of AIDS-related illnesses.

Fortunately, Zambia is also one of the countries that has committed itself to an effective response, and taken a number of actions in this regard. The response has been characterised by high levels of political commitment and an aggressive cross-sectoral response. Limitations in response are generally associated with missed opportunities from not exploiting comparative advantages, inconsistent cross-sectoral political commitment, lack of support for effective local initiatives, and severe resource constraints.

Zambia has an established HIV/AIDS epidemic with persistent high rates of HIV infection. While it has managed to level the trend in HIV prevalence well below that of a number of its neighbours (notably Zimbabwe and Botswana, where rates are twice as high), the percentage of the sexually active population becoming infected has not dropped significantly. This means that HIV prevalence should continue at a steady level for some time, with the actual number of those HIV positive increasing over time. Some 1.1 million Zambians are currently estimated to be living with HIV (with most not knowing their status), and this is projected to rise to between 1.4 and 1.5 million by 2015. As of 2003, over half a million Zambians have died of AIDS, and this is projected to rise to over two million by 2015. Annual AIDS deaths rose from approximately 10,000 in 1990 to some 100,00 as of 2003, and is expected to rise to approximately 140,000 by 2015.

Rates of infection are significantly higher for women than men (18% compared to 13%), and women are infected at a younger age than men (with an approximate age gap of five years). Urban Zambian women aged 15-19 (school-going age) are three times as likely to be HIV positive than men the same age. Rates of infection are significantly higher in urban areas than in rural areas, at some 2.5 times the rate. Of concern, HIV prevalence rates are higher for those with *higher* levels of education, even when controlling for higher number of educated people living in urban areas. In both urban and rural areas, prevalence rates for those with less than primary education was less than one-half of the rate for those with a junior secondary

education. Of additional concern, those in employment were significantly more likely to be HIV positive than those who stay at home or are farmers.

As of 2001, some 60% of all orphans in Zambia were projected to be AIDS orphans. For 7-14 year olds, between 27-33% will have lost one or both parents due to AIDS. For 0-6 year olds, the figure was estimated at between 17-21%. As of 2003, there are an estimated 800,000 children who have lost one or both parents due to AIDS. This is projected to rise to over 1.2 million children by 2010.

Zambia responded to the epidemic earlier and more substantively than many other countries in the same situation, and this is likely to be one reason why the prevalence rate has leveled at a lower rate than in other countries. Policies have been put into place and a number of programmes are underway, including a limited number of sectoral responses. However, the response has by no means been sufficient to turn the tide, and it is anticipated that rates of infection will remain high for the foreseeable future. A renewed commitment to combating the epidemic has been in place since the late 1990s, and there are promising signs of efficient resource mobilisation and inter-sectoral collaboration -- hallmarks of an effective response. Key gaps in the response include insufficient attention devoted to attitudinal and behavioural chance (in particular attitudes about the role of women in sexual decision-making), a serious shortage in the availability of voluntary counselling and testing services, lack of attention to behavioural change communication approaches to learning and action, inconsistent access to and use of condoms, and extremely limited provision of anti-retroviral drugs.

In the face of these problems, the Ministry of Education has a particularly important role to play in terms of protecting their own employees, and helping young Zambians who fall under their mandate (the 'generation of hope') to maintain their HIV negative status. In particular, the Ministry has obligations towards young women, who are significantly more likely to be infected before the age of twenty.

As has been pointed out, most notably by Professor Kelly of the University of Zambia, the Ministry of Education is especially well-placed to respond to the HIV/AIDS epidemic. It employs well-educated, motivated and accessible employees, and has at its disposal a number of policy tools and resources that could help reduce impacts on the sector itself and on the young Zambians they serve. No other ministry is better placed to reach these young people than the Ministry of Education.

Impacts on Demand for Education

HIV/AIDS will weaken the demand for education as fewer children are born, and as HIV/AIDS undermines the ability of households to continue to keep their children in school. However, factors aside from HIV/AIDS are more likely to determine demand than HIV/AIDS itself. In particular, demand has been positively affected by the provision of free education, but undermined by costs and shortfalls in the supply of education at the higher education levels, and by other system inefficiencies. In this respect, HIV/AIDS impacts need to be considered within the context of broader determinants of demand.

HIV/AIDS will depress the demand for education as fertility rates decline and fewer children are born, but this is not currently affecting demand at the basic education level. For 7-13 year olds, demand was projected at some 1.8 million children in school with and without HIV/AIDS for 2003. The trend will diverge from around 2005, and by 2015 the expected 3.2 million pupils will be considerably lower (between 2.4 and 2.65 million, depending on the HIV/AIDS scenario).

For 14-15 year olds (upper basic education), enrolment numbers are expected to diverge from approximately 2003, with a gap emerging between the different scenarios from 2011. By 2015, without HIV/AIDS there would be an estimated 925,000 pupils, compared to approximately 735,000 under the HIV/AIDS scenarios. Demographic impacts on the demand for high school education are expected to start showing from around 2006 onwards. By 2015, instead of 1.3 million children in high school, HIV/AIDS will reduce demand to below 1.1 million.

Despite these demographic projections, it is likely that demographic trends arising from HIV/AIDS impacts will only affect demand for the foreseeable future at the lower primary level (grades 1-7). This is expected to take place within the context of high levels of enrolment due to the provision of free primary education. With attention to the needs of orphans and other vulnerable children, direct HIV/AIDS impacts on access to education can be at least partially mitigated. Impacts will remain, but will likely be focused less on initial enrolment and more on attendance, repetition and drop-out. Key informants note that HIV/AIDS impacts on attendance are particularly severe, and have significantly undermined the quality of education received by affected children. As the system opened itself up to higher levels of enrolment with the provision of free education, directly affected households were more likely to send children to school. In this respect, the system is more severely impacted now due to its making itself more accessible to these affected households. This makes projections of enrolment more difficult.

At other education levels, supply constraints are more important in determining education demand than demographic factors. This is because demand is largely constrained by the unavailability of sufficient education infrastructure. Coming to terms with these supply constraints is the key issue, and here HIV/AIDS impacts on the supply of educators must be considered. The projections included enrolment trends associated with overcoming basic supply constraints, and suggest that enrolment can be doubled regardless of HIV/AIDS.

As field findings suggest, HIV/AIDS will nevertheless affect who is accessing higher levels of education, with children coming from directly and indirectly affected households least likely to be able to attend; particular problems arise for older youth in child-headed households.

Overall, the findings have highlighted the need for MOE to begin to model various HIV/AIDS scenarios as time goes on, testing various policy ideas and considering changes in the information base and assumptions

made. If, for example, the Ministry decides to focus attention on expanding access to grades 8-9, new demand scenarios can be considered within the context of varied supply options. This also applies for supply projections.

Impacts on the Supply of Educators

HIV prevalence levels were estimated at between 19-28%, depending on scenario. For basic and primary teachers, who make up the bulk of all educators, the medium-variant scenario suggests a prevalence rate of almost one-in-four. These rates are higher than for the population of 15-49 year old Zambians because educators tended to fall into higher risk age groups. AIDS deaths rates for MOE personnel were estimated at between 1.6-2% for the medium-variant scenario, and 2.2-2.6% for the high variant scenario. Non-AIDS deaths comprise less than 2%, meaning that AIDS deaths will comprise at least half of all deaths in the system.

Based on an assessment of HIV/AIDS impacts, sufficient teachers are currently being trained to cover losses, and this should hold until 2010. However, from 2010, the Ministry will need to increase the number of teachers trained to accommodate HIV/AIDS impacts.

Impacts on absenteeism will likely be felt more than overall shortages of educators, given the complex and time-consuming systemic response to initially short-term, and later longer-term, absenteeism.

Levels of HIV infection within the education sector were estimated based on consideration of the age, sex and locational profile of educators. Findings suggest that educators were at higher risk of infection due to their being younger and more urban than the 'average' Zambian. Secondary school teachers would appear to be at particular risk because they are younger and female, and are concentrated in urban areas, where HIV prevalence rates are higher.

As no information is available on actual rates of HIV prevalence among educators, and as insufficient information is available on the risk profile of these educators, it is uncertain how realistic these estimates are. A disturbing finding comes from seroprevalence surveys that have been carried out among pregnant women and among the population at large that have found that HIV prevalence rates are higher for those with higher levels of education. If this holds for educators as well, then the projections contained in the report are underestimates of actual impacts.

In terms of trends, projections suggest that levels of HIV infection will not increase over time but will rather remain steady, meaning that the total *number* of educators HIV positive will continue to rise, but that the proportion of infected educators will remain the same; again, the same proviso as above holds regarding expected levels of infection and the likelihood of infection.

Projected AIDS death rates suggest that half of all educator deaths in the system will be due to AIDS. Death rates will continue to rise throughout the projection period, as HIV infections occurring since the 1990s turn to AIDS.

Between now and 2010, it appears that MOE will be training sufficient teachers to accommodate HIV/AIDS impacts. From 2011, teacher shortages due to HIV/AIDS impacts can be expected. However, as noted in the demand discussion, HIV/AIDS impacts will simply worsen shortages that already apply at the upper primary and high school levels. With improved service delivery at these levels, shortfalls will become an increasing problem. The system will therefore have to accommodate the need to expand teacher numbers within the context of teacher illness and death due to HIV/AIDS.

Negative impacts on the quality of education are already reported to be severe, with absenteeism due to illness resulting in doubled-up classes, untended classes, and classes that are only taught for a few hours a day -- effectively classes where little learning takes place. Curriculum interruptions were noted, which were stated to have an impact on testing. This will worsen as time goes on.

It is with regard to the quality of education as well as the quantity of educators that ARVs should be considered. Projections based on 40% initial coverage and 75% later coverage suggest that some 300-400 educators would need to be on ARVs during 2004, doubling to 700 by 2005, and ultimately growing to over 5,000 by 2015. This means that, by 2014, 1-in-10 educators would be on ARVs. This would halve AIDS death rates, and would result in no teacher shortfalls during the projection period.

Cost Impacts

Over the period 2003-2015, AIDS impacts could cost the Ministry as much as K172 billion (approximately US$375 million). Costs of providing ARVs would be offset by lower costs associated with teacher training, payouts and benefits. Additional direct costs would also arise, associated with prevention and response activities (other than ARVs). Considerable costs would be associated with implementation of a comprehensive workplace programme and providing support to community-based responses.

To the extent possible, it would be wise for MOE to consider accessing financing from donor monies for prevention and response activities, and cost-sharing of key workplace interventions.

Cost estimates suggest that HIV/AIDS-related costs to the education sector will be significant but not overwhelming. Total direct costs would range from K107 billion to K172 billion (constant Kwacha using 2003 estimates), depending on the scenario considered.

Importantly, the provision of ARVs appears to be cost effective, and would result in the offsetting of other costs associated with the need to provide for, and eventually replace, educators. Additional teacher training costs would be almost halved, as would direct costs associated with pension pay outs, sick leave and other costs. Importantly, absenteeism costs would be significantly lower with the provision of ARVs, from K64.8 billion to K38.2 billion (high HIV/AIDS impact estimate). ARV costs as a component of overall MOE salary costs is projected to rise from 0.2% in 2004 to almost 2% by 2015, from K0.5 billion in 2004 to some K8 billion in 2014.

Costs associated with increased student repetition appear to be affordable, costing an estimated K9 billion over the period 2003-2015 (an increase of some 5.5% on total costs under the high HIV/AIDS impact scenario). With increased community-based initiatives, it is hoped that repetition rates would decline.

Other costs were not measured because of data limitations and the uncertainty around estimates. This included costs associated with drop-outs and non-attendance. The cost to the country of increased drop-outs, for example, was not estimated in part because of difficulties facing such estimates (and their unreliability), but also because these were not direct costs to MOE. They are, nevertheless, opportunity costs facing the country, and from a policy point of view HIV/AIDS impacts that raise drop-out rates should be considered not as a cost issue, but rather as an education impact issue.

Key Findings, Conclusions, and Recommendations

Findings: **The environment within the education sector is conducive to an effective sectoral response, and much has been accomplished in recent years in this regard. However, the HIV/AIDS response is taking place within a sector that faces numerous challenges that undermine overall education service delivery, HIV/AIDS included. Further, the over-reliance of the Ministry on the HIV/AIDS Unit to respond to the epidemic has been at the expense of developing an effective mainstreamed response. The development and implementation of an effective mainstreaming approach to the epidemic and support for community-based responses represent *the key challenges* to the sectoral response.**

Conclusions: The Impact Assessment was implemented within the context of an extended sectoral response, especially in the past six years. Indeed, Zambia's education sector response has been among the most active in southern Africa, the region worst hit by the HIV/AIDS epidemic. Recognition of the importance of a sectoral response was signalled by increased resource allocation and programme interventions from the late 1990s and the establishment and provisioning of an HIV/AIDS Unit. Activities have focused on improving knowledge about HIV/AIDS among educators and pupils, enhancing an understanding of how HIV 'works' and how to prevent infection, and to a lesser extent direct prevention actions. More recently, funds have been put aside for the provision of anti-retroviral drugs for teachers. A comprehensive workplace programme is expected to be developed in 2004. Through this, educators will be encouraged to make enquiries about HIV/AIDS, to consider school-based responses, and to go for testing and, for those who need it, access to antiretroviral drugs. Overall, the environment within the Ministry of Education for an effective response to HIV/AIDS is quite positive, and clear progress has been made.

In terms of mitigating the impacts of HIV/AIDS on the demand for education, perhaps most important has been the introduction of free primary education. Liberalisation of education provision has meant that substantially more places are available through community schools. This has enabled children from poorer households who would otherwise not have been able to go to school to attend, and to remain in school. The major impact of HIV/AIDS on education -- that of reducing the ability of poorer affected households to continue to send their children to school -- has effectively been overcome for the early years of basic education. This is a major achievement, and is an achievement that can be built on with the provision of free upper primary education, particularly when considered within the context of automatic advancement through upper primary education.

Further, many young people are reasonably well informed about HIV/AIDS and have some progressive attitudes (yet tend to be fatalistic and continue to display problematic practices), as illustrated by national sexual knowledge, attitudes and practices surveys, and as found in the fieldwork for the Impact Assessment. They have relatively compassionate views and an informed understanding of what those HIV positive are facing. In many respects, findings suggest that the broader environment for effective programme interventions with young people is quite positive. The aim now is to help young people understand HIV more fully, so that they overcome their fatalistic attitudes, and so that they begin to employ more positive practices (specifically, delayed onset of sexual activity, improving women's power over sexual decision-making including within marriage, consistent condom use, reducing the number of sexual partners, and accessing testing before beginning sexual activity with a partner).

Within the context of this positive operating environment, there are four key challenges facing the sectoral response, ranked in order of importance:

Priority Response 1: A Need to Focus on Mainstreaming

With the establishment of the HIV/AIDS Unit, there has been a tendency to place responsibility for the sectoral HIV/AIDS response with that Unit, rather than supporting the Unit to guide a mainstreamed response. This has significantly narrowed the sectoral response, and undermined the impacts of interventions.

Priority Response 2: A Need to Learn and Scale From, and Provide Support to, Local Interventions

Without a mainstreamed response to HIV/AIDS, it has not been possible to properly support or build on the varied schools-based and community-based responses. Communities have been coping with HIV/AIDS impacts for many years, and have much to teach the rest of us. Effectively, there is a disconnect between what is going on at the local level and potential support infrastructure at the district, provincial, and headquarters levels. Central government responses have tended to focus on getting structures in place rather than encouraging and supporting local initiatives. Field findings suggest that there is much to learn from these local initiatives, aimed at 'scaling across' what works within a resource poor environment.

However, this will require that the Ministry of Education begin to view itself more as an *enabling agency* in encouraging local responses and helping to link these local responses with support services, *rather than the implementation agency* for local initiatives. Local partners, often linked vertically to national partners (in particular NGOs), will be key to effecting such a bottom up response. Building on effective local responses will also be key to drawing on national, non-sectoral resources.

Priority Response 3: HIV/AIDS Response in a Sector Facing Considerable Operating Constraints

The education sector is facing considerable operational constraints that have made it difficult to effect a sound response to HIV/AIDS. The sector is under-resourced and staff are underpaid, inefficiencies remain and there are management constraints, and many actors in the system are demoralised and worried about their future.

Within the context of such severe problems, focusing sustained attention on a crisis such as HIV/AIDS, regardless of its importance, is ambitious, and requires thinking about the problem more broadly, coping with internal impacts while facilitating responses, rather than leading responses.

Priority Response 4: Funding

Consistent with the above, with HIV/AIDS as a special programme, resource allocation is open to severe budget cuts and the deletion or reduction of directorate budget line items focused on HIV/AIDS, especially under Zambia's current budgetary processes and financial limitations. Further, the education sector has not been able to effectively tap into monies made available for HIV/AIDS via the national response infrastructure, yet these monies are central to an effective sectoral response.

In this respect, key to building an effective response is to access these additional monies for a direct response within the Ministry, and to contract the services of non-governmental organisations and private service providers to assist at school and district levels. This will of course require giving up control over direct delivery,

shifting instead to oversight, but within the context of constrained institutional capacity and the need to focus on the Ministry's core mandate of education service delivery, direct delivery of community-based HIV/AIDS response activities is not the best way forward. It should be noted that this approach is fully consistent with the partnership approach identified in the sector policy.

Beyond these key constraints, the following are also important to consider:

- While there is a natural tendency to rely on teachers to reach young people about HIV/AIDS, it is important to remember that they are often poorly informed and insecure in their understanding of HIV/AIDS, not to mention other sexual diseases and sexual and reproductive matters. And they are not always good role models in the community.
- Reaching out to pupils through non-testable curricula, special programme activities, and through booklets and educative brochures/magazines is important to an effective response, but so is the integration of HIV/AIDS into the *testable* curriculum. Unless they are tested on the subject matter, it is difficult to see how it will be treated with the seriousness it deserves (by teachers and by pupils).
- The extent to which schools represent protective environments is not clear, and the extent to which they empower young people to make the right decisions and protect themselves from infection is not certain. The DHS findings that higher education coincides with *higher* rates of HIV infection is extremely disturbing, and suggests that education is not, at this point in time, serving its role as a means of protecting the youth. As schools appear not to be playing such a role, an important opportunity is being missed.
- The majority of children who need to be informed about HIV/AIDS, and who need to have an understanding of what they can do to protect themselves, are not reached by the formal education system. Indeed, most of those who are coming of age and are beginning to be sexually active are not in school. Effectively reaching them will require that the Ministry consider alternative means of doing so. In many respects, a schools-based response that reaches out to the community is of particular importance.
- A workplace programme as traditionally defined often focuses on the protection of personnel within a sector, and responding to the needs of those who are HIV positive. What is regularly lacking from such a programme is building beneficiary understanding of the impacts of HIV/AIDS on the sector and those it serves. If such an understanding improves, local responses come naturally, and are built on a clear understanding of local conditions and local ways of doing things. The key is to develop mechanisms to support these local initiatives in a resourced and financially responsible manner, with schools playing a central role.
- There has been considerable controversy about the actual impacts of HIV/AIDS on educators in particular. It is difficult to establish the actual impacts of the epidemic on the numbers of educators affected, whether educators are at lower or higher levels of risk compared to others in the same age groups, whether the impacts of infection on educators are as severe as, or more severe than, impacts on others with the same demographic profile, etc. Yet without this information, estimates about the number of educators that will be lost, the number of educators that will need to be trained, and the impacts of these losses on education quantity and quality can be quite inaccurate. Given the resource allocation decisions at stake, such inaccuracies should be overcome where possible.

Recommendations: Based on the above findings and conclusions, the following key recommendations should be considered:

Broaden the Workplace Programme to Effect Mainstreaming

The design of a workplace programme represents an excellent opportunity to develop a mainstreamed response to HIV/AIDS within the education sector, but only if the terms of reference for technical support for programme development are broadened.

The aim should be to establish systems within MOE that will allow policy makers and programme implementers to be able to speak in an informed manner about HIV/AIDS activities being undertaken by the Ministry at any time, and to actively influence the direction of Ministry HIV/AIDS activities.

In this respect, HIV/AIDS will come to be perceived as less of a 'special issue' (regardless of how it is programmatically classified) and more as one part of a broader set of issues that the sector needs to consider at each stage of planning and implementation. In short, it becomes part of how those involved in the sector look at the sector and consider its needs.

Specifically, it is recommended that mainstreaming a response to HIV/AIDS be led by the workplace programme development team (it is believed that at least three officers are required for this), and that they cover two sets of activities: 1) workplace programme development; and 2) diagnostic skills and response development among MOE personnel. The former is consistent with the terms of reference for the workplace programme, but the latter would need to be added. Yet the latter is the key link between protecting MOE personnel and improving the ability of these MOE personnel to internalise an understanding of HIV/AIDS and how to respond to it, help build programmes to protect those they serve, and help to serve the communities/neighbourhoods they live in.

Diagnostic skills and response development focuses on helping MOE personnel consider how HIV/AIDS is affecting their ministry, their pupils, their schools, and their communities. It is not directive in approach, and indeed relies specifically on giving MOE personnel forums to think about these issues and discuss matters with their colleagues. It is not overly ambitious, and takes into account the resource constraints facing the sector.

Link to Effective Local Responses, Build on Them

The potential of schools to support effective community/neighbourhood responses to HIV/AIDS should not be underestimated. Field findings suggest that, in some cases, schools have been active in supporting community initiatives, usually when there is a supportive school manager and a motivated and active teacher committed to such a response. However, far more commonly, school managers and teachers are aware of the needs of their communities/neighbourhoods but overwhelmed by the magnitude of the problem and disempowered by not knowing how to respond. They are also often affected by uncertainties about their own knowledge, and concerned about their own behaviours.

This sense of helplessness and uncertainty is not unique to educators. Many community members report feelings of being overwhelmed by the epidemic, and uncertain how to proceed. Those that have

been involved in past responses report that access to resources and the technical skills required for an effective response were major constraints, and led to the collapse of community-based interventions.

What is therefore needed is to take the not insignificant human and physical resources of the Ministry of Education, and the presence of the Ministry in communities and neighbourhoods, and use these comparative advantages to build and support local initiatives.

Basically, this will require two things from the Ministry of Education:

- Within the context of the Workplace Programme, the Ministry needs to solicit information and insights from school personnel about local problems and local initiatives, and what role the Ministry might play (and in some cases is playing) in these initiatives. In this respect ideas for the design of community-based initiatives can be considered. However, the aim of this is to provide ideas to schools throughout the country, *not* to dictate initiatives from the centre, and *not* to have schools dictate initiatives in their communities. Through such an approach, they can offer suggestions and give school officials, school boards, and community-based organisations the opportunity to consider possible ideas coming from elsewhere. This will require that the Ministry systematically solicit, process, and communicate ideas of relevance for community initiatives. This activity would help to strengthen the Workplace Programme, but it would also support local initiatives.
- A second stream of responses would need to come from the HIV/AIDS Unit working with the Procurements Department, preferably with technical assistance offered from outside. This would comprise establishing mechanisms to solicit funds to support community-based initiatives, to be disbursed through an HIV/AIDS Development Fund set up specifically for this purpose. Ideally, it would be best to consider out-sourcing technical support for these disparate initiatives to non-governmental organisations or private firms involved in implementing development projects, perhaps out-sourced by province. It would be best to begin with pilot initiatives in a subset of districts that seem most promising, and expand the response thereafter.

Consider the Response Within the Context of Sectoral Constraints

While one of the better resourced ministries because of Government's commitment to education, the Ministry of Education nevertheless suffers from considerable human, financial and physical resource constraints. Even if it made sense for the Ministry to directly involve itself in the design and management of nationwide initiatives responding to HIV/AIDS -- which it does not, as noted above -- it would not be practical to expect the Ministry to do so. Instead, Ministry personnel need to concentrate on building a Workplace Programme and establishing mechanisms to support community initiatives.

This will mean giving up control over the direction of initiatives, acting instead in an advisory manner, but the Ministry has to ask itself how many successful initiatives it could manage, without outsourcing, within the context of sectoral constraints. As building such partnerships is consistent with the 1996 Education Policy, the Ministry should consider aggressive out-sourcing to support these initiatives.

Access Multi-Sectoral Funding and Solicit Financial and Technical Support From Partners

The seriousness of the HIV/AIDS epidemic has attracted significant donor funding, particularly in recent years. With the scaling up of the response internationally, there are now opportunities for

sectoral initiatives to solicit financial and technical support. This requires the preparation of well thought out proposals and the establishment of effective financial control mechanisms. For both of these, technical assistance will be required, and should be solicited from existing partners who are willing to assist.

Thereafter regular funding will need to be obtained to support contractors managing support for community-based initiatives, and for the initiatives themselves.

Treat the Impact Assessment as a Planning Tool, Not as a Final Document

The Impact Assessment should be viewed as a *starting point* for the implementation of an informed response to the HIV/AIDS epidemic. This Impact Assessment presents scenarios which are regarded as reflecting likely situations, but the scenarios developed are based on existing policies and make certain assumptions that are subject to change. While it is unlikely that new scenarios would reverse key recommendations, they would certainly change the way in which the Ministry implements its response to the epidemic. In this regard, it is especially important that the Ministry continue modelling to test various assumptions and to test the impacts of policy initiatives. For example, the number of teachers needing to be trained, the number of substitute teachers required, the number of teachers teaching outside of their subject areas, and other teacher training issues are dependent on policy decisions associated with, for example, free upper primary education or automatic progression from grade 7. HIV/AIDS impacts would then be considered within the context of these policy initiatives. Over time, the Impact Assessment would be seen more and more as a 'living' planning tool, rather than a report whose findings are the only issues to consider and the only way to look at HIV/AIDS impacts on the sector.

In this respect it is recommended that MOE establish how it intends to take the Impact Assessment and use it as a planning tool to effectively respond to HIV/AIDS. It is believed that MOE will require technical support to be able to fully accomplish this. One possible means of support is the Mobile Task Team that has been providing support to MOE for some years. However, this would require that MOE dramatically scale up the inputs of the Team. If the Team is not available for the requisite inputs, an alternative would be consultancy support. Further, the Ministry should consider contracting a short-term consultant to be situated within the Directorate of Planning and Information, working with a counterpart who is keen to take on the responsibility, to initiate active planning around HIV/AIDS within MOE.

Specific recommendations for different sections of the Ministry are as follows:

- *Office of the Permanent Secretary:* Issue a directive regarding mainstreaming, identifying the objectives of mainstreaming activities and asking personnel to commit themselves to the struggle against HIV/AIDS. As far as possible, attempt to overcome the misunderstanding that the HIV/AIDS Unit should 'handle the HIV/AIDS problem' for the Ministry.
- *Office of the Permanent Secretary:* Continue the high profile commitment to an HIV/AIDS response. Use the results of the Impact Assessment as a tool in this regard.
- *Office of the Permanent Secretary:* Investigate funding alternatives for an HIV/AIDS response.
- *Office of the Permanent Secretary:* Actively combat stigmatisation, secrecy and denial associated with HIV/AIDS.
- *Office of the Permanent Secretary:* Actively engage in inter-sectoral bodies targeting HIV/AIDS.

- *Office of the Permanent Secretary:* Free early primary education has dramatically increased enrolment. At this level, there is now a need to consider the implementation of school-feeding programmes to encourage consistent attendance.
- *Office of the Permanent Secretary:* Consider expanding free education to higher grades.
- *Office of the Permanent Secretary:* Clarify overall policies and guidelines on OVCs and education. Consider programmatic responses.
- *Office of the Permanent Secretary:* Consider expanding the school health and nutrition pilot schemes underway in a subset of provinces, incorporating these as central elements of a broader wellness approach.
- *HIV/AIDS Unit:* Reconsider the roles of officers in the HIV/AIDS Unit, focusing their activities more on advocacy and alliance building, as well as policy reform and programme development. To the extent possible, outsource materials development and production activities, outsource training, outsource HIV/AIDS outreach and outsource research, to the extent possible to NGOs, social marketing agencies, private companies involved in development and similar organisations. This includes out-sourcing, where possible, aspects of Workplace Programme implementation, and full out-sourcing of a direct HIV/AIDS response through support to community-based initiatives.
- *HIV/AIDS Unit:* Strengthen the Workplace Programme development team by securing additional technical assistance.
- *Budgeting:* Allocate sufficient funds to cover projected ARV needs. Consider mechanisms to share ARV costs with MOE personnel.
- *Budgeting:* Establish an HIV/AIDS Development Fund.
- *Procurements:* Establish mechanisms to out-source management of HIV/AIDS Development Fund resources.
- *Curriculum:* Using external financing, appoint a long-term consultant responsible for the development and dissemination of HIV/AIDS materials. Should include curriculum for teacher training as well. Consider how to integrate HIV/AIDS across multiple subjects.
- *Curriculum:* There is an urgent need to go beyond knowledge creation to focus on attitudinal and behavioural change. There is a particular need to focus on how to overcome the pervasive sense of fatalism.
- *Testing:* Using external financing, appoint a consultant to revise testing materials so that HIV/AIDS is integrated into testable subjects.
- *Teacher Training:* Expand pre-service curriculum covering HIV/AIDS.
- *Teacher Training:* Expand in-service training modules covering HIV/AIDS as part of curriculum revision.
- *Teacher Training:* Using the worst-case scenario, consider teacher training needs, within the context of policy reform and supply issues associated with these policies.
- *Distance Education:* As noted in the main report, most of those under the Ministry's mandate are not actually in school. If the Ministry decides that it needs to assist in reaching out-of-school youth in terms of an HIV/AIDS response, it will need to do this principally through support to community-based initiatives, as noted above. However, it also needs to respond in the same way that it will respond to the needs of in-school youth, including curriculum development, testing, etc. As with the case of in-school youth, to the extent necessary materials development should be out-sourced.
- *Distance Education:* Recent radio learning initiatives have illustrated the possibilities of reaching difficult to reach populations with education services. Distance Education should consider what role radio could play in helping young people respond to the HIV/AIDS epidemic.
- *Human Resources:* Review the Ministry's pension fund and how it is administered.
- *Human Resources:* Enforce zero tolerance for sexual misconduct by education personnel.
- *Human Resources:* Pursue current policy on substitute teachers, including accommodating the impacts of HIV/AIDS.

- *Specialised Services:* Improve security at hostels to reduce the incidence of sexual misconduct. At the same time, recognise that young people may choose to be sexually active. Therefore, help make available the means for them to protect themselves.
- *Planning and Information:* Establish mechanisms to monitor and evaluate interventions, with the latter focusing both on outputs and outcomes.
- *Planning and Information:* Use the proposed 2004 sexual KAP study as a baseline from which to measure intervention impacts and changes over time.

Specific recommendations around the Workplace Programme are as follows:

- Develop a clear workplace policy on HIV/AIDS and detail the programme. Consistent with behavioural change communication approaches, ensure that the programme is sensitive to differences across gender, social class and locational variables.
- Actively involve MOE employees in the design and implementation of the Workplace Programme. Include teacher unions in these activities.
- Expand the programme to incorporate diagnostic skills building and development activities.
- Shift the orientation in HIV/AIDS outreach away from a strong focus on knowledge and understanding towards a more balanced focus on knowledge, understanding, attitudes, practices and behavioural change.
- Develop a Code on Conduct on confidentiality. Disseminate the code, and enforce.
- Provide the direct means for educators to protect themselves from HIV infection. This includes direct means of prevention from transmission via heterosexual sex, but also includes the following: proper information so that educators understand how HIV is spread and how it is not spread; active encouragement of educators to seek testing; access to advisory and counselling services; protection from accidental infection through contact with contaminated blood; and importantly advice and the means for married educators to protect themselves from HIV infection within their marriages. Place this within the context of a broader wellness programme that meets the varied needs of those who are concerned about their HIV status, or who are dealing with the implications of finding that they are HIV positive or, alternatively, HIV negative but with varied risk profiles.
- Scale-up the ARV programme as rapidly as possible, within the context of expanded access to HIV testing services. Do this within the context of a broader wellness programme that meets the non-medical needs of those who are beginning to show signs of AIDS.
- Unfortunately few programmes are established with a means to quantitatively assess intervention impacts, even when logframes include such measures. Ideally this should not happen to the Workplace Programme. The proposed 2004 sexual knowledge, attitudes and practices survey would provide an excellent baseline from which to measure the effects of interventions, identify weak points in programme activities, and consider needed actions. It can also be used to establish the effectiveness of diagnostic skills building activities. The survey should therefore serve as the core mechanism to evaluate Workplace Programme activities. However, it should not be seen as the *only* mechanism to evaluate these activities. Therefore, a series of special studies should be considered which will arise on an as-needed basis (some of which can be identified in advance at programme start-up, but others of which will only be identified during programme implementation).
- Sound reporting systems already exist for monitoring HIV/AIDS activities underway by MOE, and can be adapted for the HIV/AIDS Workplace Programme. The EMIS system should monitor key aspects of school-based activities, but these should not over-whelm the EMIS system.

In addition to the general recommendations noted above, specific recommendations for support to local interventions are indicated below. It is important to note at the outset, however, that it is not possible, nor

desirable, to identify means of responding to the needs of communities and schools and offer specific recommendations in this regard. Instead, these need to emerge from the initiatives themselves. The following are therefore intended to help create an environment conducive to these local responses, or to help inform these responses. At all times, MOE needs to emphasise to all actors that the Ministry is there to support well-thought-out community-identified initiatives, and that it is not there to design these initiatives themselves. A commitment towards the motto 'ownership is the key to success and sustainability' would be key.

- Develop 'Circles of Support' initiatives. Circles of Support initiatives are based on the establishment of networks to link community initiatives with school-based support, something which is central to MOE's ability to support a broad-based response to HIV/AIDS. Circles of Support is a particular approach towards community-based initiatives that has worked elsewhere in the education sector. Materials developed and lessons learned from these other countries could be considered when implementing the project in Zambia.
- Establish the roles of provincial and district education actors in facilitating implementation of community-based responses.
- Establish protocols for cross-sectoral co-ordination at the national, provincial, district and local levels.
- Incorporate HIV/AIDS response activities into the job descriptions of educators at the national, provincial, district and local levels.
- Consider an incentive scheme for educators to help communities respond to HIV/AIDS. Incentives need not always be monetary, and should not be expected in all cases in all responses. Rather, it should be a system of rewards for excellence in performance, and can be accommodated within programme interventions that are out-sourced to NGOs or the private sector.
- Where guidance and counselling services exist in schools, incorporate these services into the local response as required.
- There are clear support needs for orphans and other vulnerable children. These will likely be at the core of many local interventions. While the pervasive poverty characteristic of much of Zambia makes it important to consider orphans *and* other vulnerable children, this does not mean that the specific needs of orphans should be neglected.
- It should also be remembered that most orphan children undergo significant trauma before becoming orphans. Responding to their needs before orphanhood is as important as responding to their needs thereafter (if not more important).
- Recognise variation in support needs based on sex and location.
- Central to responding to the needs of orphans and, to a lesser extent, other vulnerable children includes helping them overcome sporadic attendance. This cannot just comprise means to encourage regular attendance, but also needs to include the implementation of mechanisms to help students make up for the lessons missed through other means.
- Given the complex impacts of HIV/AIDS on OVCs, there is a tendency to want to try and do everything at once, overwhelming those who are trying to help. There is therefore a need to tackle basic needs first before considering broader responses incorporating more complex needs. In many respects national policies such as free education and school feeding would overcome many basic needs, but of course there are others, such as clothing and access to medical care. Focusing on these first, where necessary, would help communities and schools to take the first steps towards a broader response.
- Where felt to be important by local actors, consider the role of school boards and other representative institutions in designing, implementing, monitoring and evaluating local initiatives.
- There is evidence that caregivers and communities are disengaging with schools in Zambia. Support to local initiatives would encourage re-engagement, but at the same time would rely on the involvement of community members and caregivers. In this respect, participatory action and

learning approaches towards engaging people and communities will be especially important in building a local coalition behind responses. Contracts with NGOs/private agencies to support community-based initiatives should stipulate the participatory and non-directive nature of their support.

- Some schools are proximate to high-risk environments, whether due to their proximity to major roads, truck stops, bars, barracks, etc. These schools will need special attention.
- There is a tendency to create committees and/or clubs to respond to felt needs. This is fine, if the felt needs are based on local demand. But, when created centrally, they tend to serve as substitutes for actual responses to the problem. Centrally-created anti-AIDS clubs are a clear example of this problem. This underlines the need to build a programme around local initiatives, rather than fitting local initiatives into a centrally-identified set of activities. There are nevertheless ways in which broader initiatives can fit into locally-identified programme needs. Circles of Support is one example, anti-AIDS clubs are another. If effectively incorporated into a programme that is designed locally, they can be quite effective.

Appendix F

CARE International's Quarterly Report

CARE INTERNATIONAL

October-December 2003 Quarterly Report

CHANGES PROGRAMME SUB-GRANT COMPONENT

SOUTHERN PROVINCE

1.0 INTRODUCTION

Task No 3. Sub-grant mechanism that provides support to schools and surrounding communities, NGOs and other non-profit making organizations to undertake innovative interventions that:

a. Increase participation for girls and other vulnerable children in education.
b. Integrate HIV/AIDS awareness and prevention messages to promote life skills and appropriate behaviour into on going community and district based basic education.

2.0 ACTIVITIES

The activities that were successfully implemented during the period under review are as follows:

- Review of new Proposals
- Disbursements
- Review meetings
- Establish steering committees.
- Reconciliation/Closure of grants
- Monitoring of projects and utilization of sub grants
- Assist grant recipients set up financial and administrative systems.

3.0 REVIEW OF NEW PROPOSALS

Mazabuka, Livivngstone, Kalomo, Gwembe and Sinazongwe held review meetings. A
Total of 112 proposals were received in the under the period review. Five districts held steering meetings to review proposals. Out of total proposals received and reviewed, 18 were approved. Unfortunately 40 proposals could not be approved because the major activates proposed were in construction, boreholes and hammer mills. The approved were as follows:
Kalomo – 2 approved
Sinazongwe – 1 approved
Gwembe – 5 approved
Livingtone – 6 approved
Gwembe – 4 approved

4.0 DISBURSEMENTS

The diagram below shows the organizations that were funded during the quarter
Table 1.

ORGANIZATION	DISTRICT	AMOUNT	ACTIVITIES	STATUS
1.Nakowa School	Kalomo	8,000,000	Construction of toilet education training	Completed Toilets
2. Mabwa School	Kazungula	13,014,750	H.E and Industrial A	H.E rehabilitation alr
3. Nyawa B. School	Kazungula	7,009,000	Completion of girl's	Almost complete
4. Maunga School	Kazungula	4,398,000	Completion of teache	Almost complete
5. Sinde B. School	Kazungula	9,962,562	Rehabilitation of Gir Gardening, Toilet co Practical skills and R	Girl's dormitory is al complete, Gardening
6. Simango School	Kazungula	2nd tranche 10,307,375	Toilet construction, F of classroom block, V psychosocial counsel	Classroom is being rc toilets are being paint
7. Ngoma School	Sinazongwe	Total: 31,200,000 Disbursed: 15,600,000	Solar power, Toilet c and purchase of desk	Just been funded
8. New Kachenje School	Choma	Total approved: 31,505,000 Disbursed: 15,752,000	Rehabilitation of girl Construction of toilet HIV/AIDS	Just been funded
9. Chawila B. School	Kalomo	Total: 28,104,960 Disbursed: 14,052,480	Rehabilitation of 1x3 block and Peer educa	Just been funded

The following are new disbursements made in the month of November and December 2003 and are yet to be monitored for the utilization of the funds.

10. Organization	District	Total approved	Funded	STATUS
11. Lets build together.	Kalomo	K7,265,000	K7,265,000	1st tranche
Siamankuli school.	Kalomo	39,032,120	K9,758,030	Funded 2nd tranche
12. St. Mulumba School.				Funded

	Choma	20,397,500	K5,009,375	2nd tranche
14.Jembo Basic sch.	Choma	35,100,000	K17,550,000	1st tranche
15. Batoka school	Choma	29,974,000	K14,987,000	1st tranche
16. Siachidinta sch.	Choma	34,572,200	K17,286,100	1st tranche
17. Cheelo school	Choma	26,895,000	K13,447,500	1st tranche
18. Pemba school	Choma	21,852,500	K10,926,250	1st tranche
19.Nalituwe school	Livingstone	25,361,376	K12,680,688	1st tranche
20.Youth Alive	Sinazongwe	49, 367,000	K24,683,500	1st tranche
21. Musokotwane sc	Kazungula	49,315,000	K12,328,750	2nd tranche
22. Nakeempa sch.	Choma	24,749,000	K12,374,500	2nd tranche

5.0 PROJECT CLOSURE

A total of six organizations were finalized and proposed for closure since they have completed their projects. The final reports and reconciliation documents were submitted to Lusaka. These are as follows:

- Makoli School
- Mukuni School
- Mubanga School
- Chooma School
- Moonde School
- Siamasimbi School

6.0 DISTRICT STEERING COMMITTEES

The Mazabuka District Steering Committee was formed on 3rd October 2003. A total of 9 members were present representing three line ministries and two NGOs. NGOs that were identified to sit on the committee are Plan International, World Vision and MUMUNI. During the meeting, a brief background of CHANGES, CSMC and details of the grants component was explained.

In Namwala and Itezhi-itezhi was done in November on 13/11/03 and 14/11/03 respectively. A total of four representatives, one female and three males from the three line ministries attended the meeting. However, there was no representation from NGOs as there was poor communication between CHANGES office and the MOE. This is because Namwala has no communication channels except through radio, which had broken down. In Gwembe, nine representatives, 4 females and 5 males, from three line ministries, churches, PPAZ and FAWEZA attended the Itezhi-itezhi meeting.

Among other things discussed were:

- Briefing on CHANGES (CSMC)
- Su-grants
- Proposal format
- Grant mechanism
- Unfunded and some projects that can be funded.
- Documents used in grant award.

During the meetings it was emphasized that grants are only a smaller component of CHANGES, and only those that are participating in CSMC will qualify to receive a grant after writing a proposal. This has been one issue that has caused problems in other districts, as Schools and Community members are only applying for grants without participating in CSMC.

These two districts might not receive grants as they were still conducting their zonal workshops.

6.0 MONITORING

Monitoring was conducted with the aim of building capacity on grant utilization, project management and checking overall progress of projects. Organizations were visited and are generally doing well. Out of those some organizations have since completed the projects others were in the process of finalizing reconciliation and reports. The projects visited are Kalomo, Choma, Gwembe,Sinazongwe, Kazungula and Livingstone districts.

Table 2.

Organizations	District	Amount	Activities	Remarks
Mubanga basic sch	Kalomo	K6,442,000	Completion of toilets and peer training	Projects completed
Moonde Basic sch	Kalomo	K2,106,000	School Production unit	Project completed
Makoli basic schoo	Kazungula	K5,883,000	Feeding programme and Peer education training	Project completed
Siamasimbi basic s	Kazungula	K17,017,000	Completion of teacher's house unit and Peer education trainin	Projects completed
Mukuni school	Kazungula	K15,970,500	Construction of toilets and wat reticulation	Project Completed.
Chooma river scho	Kazungula	K3,110,000	School production unit	Project closed.
Nakowa School	Kalomo	8,000,000	Construction of toilets, Peer ed training	Completed Toilets
Mabwa School	Kazungula	13,014,750	H.E and Industrial Arts.	H.E rehabilitation a complete
Nyawa B. School	Kazungula	7,009,000	Completion of girl's dormitory	Almost complete
Maunga School	Kazungula	4,398,000	Completion of teacher's house	Almost complete
Sinde B. School	Kazungula	9,962,562	Rehabilitation of Girl's dormit Gardening, Toilet construction skills and Recreation	Girl's dormitory is complete, Gardenin fine.
Simango School	Kazungula	2nd tranche 10,307,375	Toilet construction, Rehabilita classroom block, VCT, psycho counseling	Classroom is being toilets are being pai
Ngoma School	Sinazongwe	Total: 31,200,000 Disbursed: 15,600,000	Solar power, Toilet constructio purchase of desks	Just been funded
New Kachenje Sc	Choma	Total approved: 31,505,000	Rehabilitation of girl's dormito Construction of toilets and HIV	

		Disbursed: 15,752,000		Just been funded
Chawila B. School	Kalomo	Total: 28,104,960 Disbursed: 14,052,480	Rehabilitation of 1x3 classroo Peer education	Just been funded
Nzilongo	Kalomo	Approved: K15,593,	Construction of toilets and batl Skills training in tailoring and	Construction of bat completed
Nakeempa		Approved: K24,749, Funded: K12,374,50	HIV/AIDS information center. Rehabilitation of 1x2 classroo	Purchased the all m started implementir
		Approved: K36,500, Funded; K18,250,00	Activities: Rehabilitation of H.E block. Painting the school Completion of toilets Electrification of school HIV /AIDS activities	Activities are near c awaiting 2nd tranche
Chawila basic		Approved:K28,104,9 Funded: K14,052,48	Rehabilitation of 1x3 classroo Peer education training	Purchasing the mate started the work
Ngoma Basic		Approved; 31,200,0(Funded: 15,600,000	Construction of toilets. Solar power HIV/AIDS activities	Purchasing the mate started the work
Chili Basic		Approved: 26,443,0(Funded: 13,221,500	Rehabilitation of a girl's dorm Construction of toilet and bath dormitory. Solar power HIV/AIDS sensitization	Dormitory is at roo
Ngandu Basic		Approved:K15,681,(Funded: K15,681,00	Construction of toilets Peer education	Reconciling for clo
Mawomadi		Approved: 10,300,0(Funded: 10,300,000	Tailoring and Poultry	Activities on course
Anglican Parish		Approved: K48,755, Funded: 24,377,500	Rehabilitation of HIV/AIDS in and Skills center. Recreation facilities Psychosocial support to orphar vulnerable children Adult literacy education	Activities are being
Lets build together		To hand over cheque To build capacity on	Amount funded: 7,265,000	

		administrative mana;		

8.0 ASSIST RECIPIENT ORGANISATIONS SET UP FINANCIAL AND ADMINISTRATIVE SYSTEMS.

The SGC conducted financial and administrative meetings with PTA, Teachers and community members in various schools and organizations that, received grants in the month under review. The main objective for building their capacity was to familiarize the Recipient Organizations with the CHANGES financial requirements and help them establish financial and administrative systems to avoid malpractices once they start implementing the projects. The attendance at all the meetings is tabulated in table 3.

Table 3.

Organization	Male	Female	Attendance
Simango basic school.	5	6	11
Nakowa basic school.	3	1	4
Sinde basic school	7	5	12
Lets build Together	3	4	7
Siamankuli B. School	2	2	4
St. Mulumba School	2	1	3
Siachidinta School	2	2	4
Pemba Basic school	3	11	14
Jembo Basic school	4	3	7
Batoka Basic school	13	10	23
Cheelo Basic school	3	2	5
TOTAL	47	47	94

9.0 CHALLENGES

There are a number of challenges that have been encountered in the last months. Some of them have been listed below:

- Some community members are not participating in school based projects, resulting in either delays to complete the projects or skilled people providing labour requesting for more funding.
- Some ZCFs are not monitoring progress on projects and not able to give adequate guidance to schools and communities on project implementation.
- Community projects need constant monitoring and guidance, and some of those that were funded have not performed as expected. e.g. Mukuni YWCA
- Schools and community members have not been sensitized long enough to appreciate the importance of working together in order to achieve the objectives of CHANGES.
- MOE has been affected by restructuring and some members of the Steering Committee have been redeployed. This has caused some Districts not to meet to review proposals. e.g. L/stone
- Most organizations that are being funded were not able to demonstrate if they have been actively involved in CSMC.
- Extra effort should be put in multi-sectoral-type of programs to succeed, as
- Different partners might not be on the same level and with the same interests.

XXIII. 10.0 WAY FORWARD

- Only organizations that show evidence of what they have done in CSMC without funding should receive grants.
- Consider employing an extra member of staff, as it is not possible for one person to coordinate the grants and monitor impact in the whole Province.

11.0 LESSONS LEARNT

- Sensitization and capacity building should be done over a long period to enable communities fully understand CSMC's objectives and manage grants properly.
- Projects done in groups are difficult to accomplish as members do not see personal benefits and quickly lose interest.

EASTERN PROVINCE

Activity Task No. 3: Sub-grant mechanism that provides support to schools and surrounding communities, NGOs and other non- profit making organizations to undertake innovative interventions that:

- ✓ Increase the participation of girls and other vulnerable children in education
- ✓ Support innovative interventions in SHN to improve learning, health and nutritional status of school-age children and
- ✓ Integrate HIV/AIDS awareness and prevention messages to promote life skills and appropriate behavior into on going community and district based basic education

1.0 ACTIVITIES

The activities undertaken during the quarter were as follows:

- Review of Proposals
- New Disbursement
- Monitoring of sub grants
- Capacity Building

2.0 REVIEW OF PROPOSALS

The committee comprising of 8 members and the sub grants coordinator sat from 9th to 11th of October 2003 to appraise the project proposals received and a total number of 12 proposals were recommended for funding. Out of 12 project proposals, which were recommended by the Lundazi steering committee, the CHANGES PROJECT coordinator, eastern province, approved only 4. The project proposals disapproved by the CHANGES PROJECT Coordinator were mostly OVC oriented. Prior to the desk appraisal, CHANGES' selection criteria and the purpose of the grants were discussed in order to consider projects that would meet CHANGES' goal /objectives. Emphasis was also put on areas not to be funded by CHANGES PROJECT.

The following table below shows prospective recipient organizations, their respective project titles, activities, beneficiaries and total project costs;

Table 4

Name of organiza	Title of Project	**Activities**	Beneficiaries	Cost/kwacha
Chasef basic scho	Construction of VI	▪ Construction of 5 ▪ Rehabilitation of centre ▪ Rehabilitation of classroom block	402 pupils, 25 girls	38,221,000
Chikondi home b	HIV/AIDS	▪ HIV/AIDS aware ▪ Psychosocial sup	Community	11,082,500
Kanyanga basic s	Rehabilitation of HIV/AIDS/SHN ce	▪ Construction of 1 latrines ▪ Rehabilitation of centre	407 pupils, 23 173 girls	40,989,000

		▪ Rehabilitation of classroom .block		
Mphamba basic s	Livestock keeping	▪ Feeding program ▪ Construction of V ▪ HIV/AIDS aware ▪ Rehabilitation of	746pupils, 376 girls	26,952,800

2.1 GRANTS DISBURSED IN THE QUARTER

The following are the grants disbursed in the quarter:

XXIV. Table 5

Chadiza Youth Programme	Chadiza	▪ Rehabilalitation ▪ of hall ▪ Peer education w ▪ Sporting activities	K24,725,000	New disbursement
Tisungane Nei Health Commi XXV.	Chama	▪ Create HIV/AIDS aw ▪ Train peer educators health and nutrition ▪ OVC support at kamp school ▪ Income generating a	K 19,525,000	

2.0 Monitoring of sub grants

The table below shows the grants monitored

Table 6

Name of Recipient	District	Activity	Amount Approv	Status of the project
Magwero school	Chipata	Rehabilitation of 5 fish ponds Construct 10 VIP latrines HIV/AIDS awareness and he education School feeding Cro Rehabilitation of 1x3 classroo Support towards the Anti AII Purchasing of recreation item netball and football teams,	K35, 344,800	All planned activities have st been conducted are going on the HIV/AIDS drama campa the community has not seen t importance of the programm the team is doing everything the activity to be a success.

Dzoole School	Chipata	Rehabilitation of 1X3 classro Construction of SHN/HIV/A Crop production Nutrition Cattle rearing	K 35,717,000.	All activities were completec a) Girl child The rehabilitated classroom provides a conducive enviro girls and has increased their B) Enrolment Currently the total number o 336, 166 boys and 170 girls. programme has further reduc absenteeism ra**te**
Zambia Student Ch Movement	Chipata	Create Awareness on girl chi Production of training materi Production of local language HIV/AIDS awareness	K7,026,550	So far 3 workshops have suc been conducted.
I. II. YWCA	Chipata	Urban and Peri Urban School Reproductive Health Debate in schools within Chipata	K 5,00(	The debates were successfull
J.M Cronje School	Chipata	Rehabilitation of 1x2 classro School Cattle rearing Crop production	K33,115,800	The project management tea final disbursement amountin 16,557,900 and the activities remained have been impleme

Chipanali School	Chipata	Rehabilitate the bridge Rehab community hall into an HIV/ Crop production and School program	K 67,510,000	The project has completed th
Chama Schoo	Chama	Create HIV/AIDS awareness Construct a counseling center Promote girl child education Crop production Feeding program	K15,852,850	Kanjiki counseling centre is construction
Taferansoni	Chadiza	HIV/AIDS Awareness and c latrines	K 36, 240,000	The school is currently estab child friendly centre HIV awareness is ongoing. T activity to be done is the esta a tuck shop
Zemba Basic	Chadiza	Rehabilitation of 1x2 classroo gardening	K33,755,000	Construction of the HIV/AI been completed
Women Against A Poverty	Chadiza	Production of chewa leaflets HIV/AIDS. Formation of anti-AIDS in sc Sensitization meetings. Strengthen/form Anti AIDS Clubs in schools HIV/AIDS workshops	K38,202,000	The activities are being impl

3.0 CAPACITY BUILDING

3.1 CHADIZA

On 14th November 2003, the district steering committee was trained on how to appraise proposals. This was done because three organizations namely world vision, Lutheran world federation pulled out of the committee. These organizations were replaced by Africare, Reformed Church in Zambia, and Tigwilizane home based care.

The SGC on 29th October attended a workshop organized by Zambia national AIDS Network. The aim of the workshop was to form a district committee to recommend and help community based organizations access HIV/AIDS global fund. A number of issues were discussed and committee was formed.

3.2 MAMBWE DISTRICT

On 28th November, the sub grants coordinator conducted a one-day projects proposal development workshop in Mambwe where 33 teachers from 22 SHN Schools were trained in project proposal writing to access funding from CHANGES PROJECT. The aim of the workshop was share to ideas on the project proposal development and to orient SHN schools on CHANGES sub grants component.

A number of questions were asked especially on the areas that may not be funded during the workshop. Mambwe district being a typical rural area has a very big problem with water as most people drink water from the same source with animals. This is the case of Pendwe basic school in msoro's area. The

participants believed that clean water could greatly improve the health status of school going pupils and they asked what method was used to choose construction of VIP latrines, and left out digging of wells and sinking of boreholes. They believed these two activities could equally help improve the health status of pupils. The participants were informed that these guidelines are in the sub grants policy/manual and for now there is nothing we can do but follow them when applying for grants. However, it was indicated that their views would be presented to the grants manager.
The office is still expecting Project proposals from the district and appraisal will be done sometime in March 2004 after receiving enough project proposals.

3.3 LUNDAZI

FIELD VISITS

From Monday 13th to Tuesday 14th of October, the sub grants coordinator together with some members of the steering committee conducted field visits to verify needs of each particular organization. Visits were first conducted to schools and then to other organizations. A screening questionnaire was also administered to CBOs and NGOs to establish the ability to manage their respective projects. The purpose and objectives of the grants were further explained to applicants/ project management teams and they had their questions were answered regarding same.

4.0 OBSERVATIONS

The following were observed in Lundazi

- There were few project proposals from Schools as compared to CBOs and NGOs [altogether]. This could be due to the fact that the district orphans and vulnerable children committee [DOVCC] concentrated on CBOs and NGOs when urging eligible organizations to apply for the grants. Thus, there will be need to make a follow-up orientation to schools under the School Health and Nutrition [SHN] programme in the district.
- Most organizations and individuals were happy when CHANGES PROJECT was introduced in the district are looking forward to working with it.
- There will be need to train project management teams on project proposal writing skills as well as financial management.