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Technical Assistance to the Zambian School Health and Nutrition Program

Trip Report

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Technical Assistance to the Zambian School Health and Nutrition Program
Basic Education and Policy Support (BEPS) Activity
Creative Associates International, Inc.
September 5 - December 1, 2000

Trip Report
Submitted by
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The USAID/Zambia Task Order to BEPS for *Technical Assistance to the Zambian School Health and Nutrition Program* specified three key objectives:

A. To provide short-term technical assistance to the SHN Focal Point within the Ministry of Education;

B. To initiate the first stage of development of the cognitive assessment instrument; and

C. To build the essentials of partnership among and between MOE, USAID/Zambia and BEPS, required for future BESSIP support and collaboration.

As a technical area specialist in community mobilization and the BEPS representative from Creative Associates International, Inc., I was responsible for facilitating the achievement of Objective C, listed above, and for providing the deliverables associated with that objective:

> Report describing the essentials of partnership among and between MOE, USAID/Zambia and BEPS, required for future BESSIP support and collaboration. In addition to the main context of school health and nutrition, the report may suggest a way to proceed with the development of a concept document describing a strategy to help the Ministry of Education increase community participation in basic education in Southern Province.

I was in Zambia from September 11 - 30, 2000 to achieve the requirements of Objective C. This report details the activities that took place during that in-country visit.

Partnerships. The team designed to support the Ministry of Education's SHN program consists of technical experts from Creative Associates International, Inc, the Partnership for Child Development, and Successful Intelligence. Creative Associates International, Inc. (CAII) is the contractor responsible for implementing the BEPS Activity, an IQC-type contract designed to be responsive to USAID's overall goal of "human capacity built through education and training." In addition to managing the overall SHN program activity, CAII is providing the SHN Technical Advisor (Dr. Paul Freund) who will be working directly with the MOE SHN Focal Point. The Partnership for Child

Development will serve as the group responsible for specific health training and pharmaceutical interventions and for facilitating the efforts of Successful Intelligence, the organization responsible for the development and implementation of the cognitive assessment instrument.

For this SHN program effort to be successful it is imperative that all concerned partners know their roles and responsibilities in relationship to the overall program goals, in relationship to the Ministry of Education, and in relationship to one another. The key technical advisors from each of these groups were in Lusaka together from September 11 through September 15, 2000. It was during that time that working relationships and protocols were established. Trip reports submitted by Dr. Lesley Drake, Partnership for Child Development, and Dr. Elena Grigorenko, Successful Intelligence, are included in Appendix A and B, respectively.

In addition to the Partnership for Child Development and Successful Intelligence, SmithKline Beecham also will play a key role in the overall SHN program. SmithKline Beecham (SB) has graciously agreed to provide an Information, Education and Communication Specialist to the MOE to support their SHN efforts. SB is working cooperatively with MOE and BEPS to identify the right candidate for this position. Mike Murray, SB representative, Dr. Freund, and I, sat together with the MOE SHN Focal Point, BESSIP Manager and the MOE Procurement Officer to review the initial slate of applicants for this position and to select a short list of candidates to be interviewed. Jointly, we established the interview evaluation criteria (see Appendix C). During the interview process I served as the representative from SB. SB will conduct a final interview of the selected candidate in order to confirm the selection. SB and BEPS have established the beginnings of a collaborative partnership, together with MOE, to effectively support MOE's SHN program.

As with any successful partnership, the essentials of open and consistent communication will help to keep everyone an equal and effective contributor.

Meetings were held with:

- Mrs. Catherine Phiri, SHN Focal Point, MOE
- Mrs. Marian Thembo, SHN Focal Point Assistant, MOE
- Dr. Lesley Drake, Partnership for Child Development
- Dr. Elena Grigorenko, Successful Intelligence
- Mr. Mike Murray, SmithKline Beecham
- Dr. Paul Freund, SHN Technical Advisor, BEPS
- Ms. Winnie Chilala, Education Specialist, USAID/Zambia
- Dr. Kent Noel, Education Program Officer, USAID/Zambia
- Mr. S. Halakima, Procurement Specialist, MOE
- Mr. A. Chengo, BESSIP Manager, MOE

Community Participation. In order to facilitate a better understanding of the community participation needs in support of basic education for girls and other

vulnerable children, I accompanied a MOE/UNICEF field trip to Siavonga District, Southern Province. A complete trip report of that visit is included in Appendix D.

In addition, I had discussions with:

Mrs. Esther Sinkala, Equity and Gender Focal Point, MOE
Mrs. Matilda Mwamba, Assistant Equity and Gender Focal Point, MOE
Prof. Dickson Mwansa, University of Zambia
Dr. Paul Freund, SHN Technical Advisor
Ms. Winnie Chilala, Education Specialist, USAID/Zambia
Dr. Kent Noel, Education Program Officer, USAID/Zambia

As a result of the field trip and the various discussions, I prepared a brief description of a Community Sensitization and Mobilization Campaign for Southern Province and an even briefer document on a Community Sensitization and Mobilization Campaign Methodology (see Appendix E and F, respectively).

Miscellaneous. Also during my time in Zambia, I had the opportunity to attend the SO2 meeting in which Ms. Chilala provided a briefing on our field trip to Siavonga District. As a result of this meeting, arrangements were made for a future meeting with Mr. Likando Mukumbuta, Program Economist to discuss the SO2 performance indicators. That meeting was held on Tuesday, September 26 and was attended by Mr. Mukumbuta, Ms. Chilala, Mr. Kennedy Musonda, and Ms. Gail Spence.

After a lengthy discussion of the USAID/Zambia's R4 indicators for SO2, it was agreed that I would provide some feedback regarding modifications to the indicator forms, in particular with regard to the comments. In addition, I would provide comments on the draft specific performance indicator forms. Comments, as submitted, are included in Appendix G.

Dr. Noel also requested to additional items from me during my time in Zambia: 1) a modified SHN Concept Document that reflected more ownership on the part of the Ministry of Education, and 2) a brief statement on how pupil educational achievement would be measured and analyzed (see Appendix H and I, respectively).

Appendix A

Trip Report - Dr. Lesley Drake

Trip Report - Visit to Ministry of Education (SHN Program), Zambia

Objectives

- To continue collaborative meetings with the SHN program team and other members of Creative Associates (BEPS) team to assist in SHN pilot program design;
- As part of the team, to meet with all stakeholders, agencies and other interested parties to ensure continued collaboration, inclusion and transparency;
- To assist in the recruitment process of a research assistant for the cognitive assessment tool development team and identify other individuals/organizations to collaborate on SHN interventions;
- To assist in the school recruitment process.

Core Team Members

Mrs Catherine Phiri (SHN focal point)
Mrs Marian Tembo (SHN focal point assistant)
Dr Janet Robb (CAII Project Manager)
Dr Paul Freund (Consultant to the Ministry of Education (SHN))
Dr Elena Grigorenko (Cognitive assessment consultant)
Dr Lesley Drake (School health consultant)

Meetings were held in the MOE between the core team members. Progress and future planning issues were discussed. Priority issues were defined. A meeting was also held with Barbara Chilangwa to inform her of the current status of program design.

Meetings were held in the MOH with both Vincent Musowe and Mr Chikwenda. The progress of the program design in general, and the MOU specifically were discussed. Both agreed to prioritise this issue with the MOH.

Meetings were also held with USAID officials, including Dr Kent Noel, Mrs Winnie Chilala and Dr Peggy Chibuye. An update of progress was given and advice on certain issues sought.

Productive meetings were held with JICA, WFP and NFNC. All expressed a willingness to collaborate on the program. Details of these collaborations to be defined at a later date. Certain issues w.r.t. NFC involvement need to be addressed urgently. Peggy Chibuye (USAID) volunteered to intervene.

Team members visited the offices of MedOff on several occasions in order to collect the Situation Analysis Report from Eastern Province. By the end of the trip, an Executive Summary had been delivered to SHN-MOE with a promise of the full report.

A visit to the University Training Hospital identified a team of clinical nutritionists, lead by Dr Bhat, who expressed a willingness to collaborate on issues regarding the supervision of health/growth monitoring. My impression was that this team had an expert capacity in this area and would be an ideal collaborator, especially during periods of survey, training and monitoring. To be discussed with Mrs Phiri.

Meetings with the education/psychology team at UNZA confirmed a willingness to collaborate on the program and identified a preferred candidate for the position of research assistant to the cognitive assessment team. To be discussed with Mrs Phiri. Further details of this collaboration will be given in Dr Grigorenko's trip report.

A meeting was held with the Examination Council w.r.t. the possibility of using the Grade 5 National Assessment Tool in our program. The Council agreed. Collaboration in the design and implementation of the SHN-MIS was also discussed. Further details to be given in Dr Elena Grigorenko's trip report.

Data was collected on school enrolment in the study districts through the MOE, planning department.

Data was collected on health clinics, health workers in the study districts through the CboH. This facilitated the selection of the schools to be involved in the pilot program (see attached file).

Appendix B

Trip Report - Dr. Elena Grigorenko

Trip Report - Visit to the Ministry of Education (SHN Program), Zambia

Trip Objectives

- To continue collaborative meetings with the SHN program team [Mrs. Catherine Phiri (SHN focal point, Ministry of Education) and Mrs. Marian Tembo (SHN focal point assistant, Ministry of Education)];
- To establish collaboration with the Creative Associates (BEPS) team [Dr. Janet Robb (CA Project Manager) and Dr. Paul Freund (Consultant to the Ministry of Education, SHN)];
- To assist in SHN pilot program design;
- To understand the scope of the latest version of the SHN proposal to gain familiarity with documents and to obtain a complete set of documents;
- To meet with all stakeholders, agencies and other interested parties to ensure continued collaboration, inclusion and transparency;
- To finalize the recruitment process of a research assistant for the cognitive assessment tool development team and identify other individuals/organizations who will collaborate on the cognitive/educational achievement components of the SHN interventions;
- To develop the SHN-pilot work plan with the Partnership for Child Development (as represented by Dr. Lesley Drake, SHN consultant);
- To assist in the school recruitment process.

Means

The following meetings, presentations, and consultations were held:

- Meetings between the core team members (Drs. Drake, Freund, Grigorenko, and Robb);
- Meetings between the team members and USAID personnel (the core team and Dr. Kent Noel, Mrs. Winnie Chilala and Dr. Peggy Chibuye);
- Meetings between the team members and UNZA staff (Mr. Phiri, and Drs. Kalabula and Luangala);
- Presentation of the SHN project to UNZA faculty members who expressed interest in collaboration [Imed Mumba (Lecturer, Home Economics), Anitha Menon (Lecturer, Psychology Department), Gertrude Hwape (Lecturer, Psychology Department), Ignatio Bwalya (Lecturer, Education), Oswell Chakulimba (Lecturer, Educaton), Kelly Mulenga (Lecturer, Education), Nambula Changala (Lecturer, Home Economics), Michael Chilala (Lecturer, Psychology), Irene Senyangwe (Lecturer, Psychology)];
- Meetings between Dr. Grigorenko and the staff of the Assessment Centre, UNZA School of Education [Mr. Kelly Mulenga (M.A.), Mr. Michael Chilala (M.A.), Mr Kalima Kalima (B.A.), Ms. Paula Kapungulya (M.A.-all, but diploma), and Ms. Beatrice Matafwali (4th-year student at UNZA];

- Presentation at the Examinations Council of Zambia (Drs. Drake, Freund, and Grigorenko, Mr. Machona, Mr. Sakala, Mr. Joe Kanyika, Ms. Teza Makazwe, and Ms. Banji Shakubaza);
- Meetings and a job interview with Ms. Paula Kapungulya, a staff member at UNZA;
- Meetings with Joe Kanyika, a staff member at the Examinations Council of Zambia;
- Meeting with Irene Senyangwe (Lecturer, Psychology);
- Meeting with Mr. George Nkhowane from the UNZA Press;
- Consultation (via e-mail) with Dr. Michael Kelly (Professor, UNZA).

Outcomes

The trip resulted in the following outcomes:

- Responsibilities were clearly divided between different organizations involved in the project. Drs. Drake (Partnership for Child Development) and Grigorenko (Successful Intelligence) are to work together on a number of organizational and procedural issues (i.e. sampling and piloting), consulting as much as possible with Dr. Freund and Robb (Creative Associates).
- Financially, Successful Intelligence will have a subcontract from the Partnership for Child Development; the Partnership will have an inclusive subcontract from Creative Associates;
- Drs. Drake, Freund, Grigorenko and Robb interviewed Ms. Paula Kapungulya.
- Ms. Paula Kapungulya was hired for two months at the rate of 4,494,00 Kwacha per month (the rate was established with the help of Winnie Chilala based on the UN rates for Zambia; Ms. Kapungulya was informed that her salary will be adjusted at a lower rate if she is to be employed after the period of two months). Paula was also promised a sum of $50 for transportation expenses and a sum of $100 for Xeroxing expenses. We have planned a visit for Paula to New Haven, where she will participate in the first pilot of the Cognitive Assessment Instrument (CAI) and will initiate translation via e-mail (a candidate was identified for immediate translation work-Mr. George Nkhowane, UNZA Press). Travel and accommodation expenses for Paula are to be covered jointly by the Partnership and Successful Intelligence from the first two-month installation from USAID.
- An initial commitment from the Examinations Council of Zambia to assist in the administration of the education achievement indicators (the 5th grade National Assessment in Reading and Mathematics) has been obtained. The following rates were provided by the Council:
    - Printing costs ($1 per booklet, $.33 per answer sheet);
    - Administration costs (accommodation is $28 per day per person; rates are established per school, independent of the number of students at school);
    - Training costs ($28 per day per person; rates are established for each day of training, independent of number of trainees);
    - Approximate salary rates for a person at Joe's position ($1,500 per month).
- Initial estimates suggest that the test will be administered to approximately 9,000 students over a period of three years. The minimum project budget will include

printing (approximately $25,000, this figure covers extra costs resulting from defective copies and accidents). The remaining cost will depend on the number of Council staff involved in training and data collection;

- Prof. Michael Kelly expressed his support regarding the utilization of the 5th Grade National Assessment Test in the SHN program, but expressed his reservations with regard to psychometric properties of the instrument (they are mostly unknown). He is sending additional materials with Paula to Yale, so that the Successful Intelligence team can investigate the properties of the instrument and report back to the SHN team. Dr. Kelly expressed his willingness to consult on the SHN program informally, but said that he could not commit formally due to previous engagements;
- An initial commitment from the UNZA Assessment Centre to participate in the pilot study of the CAI has been obtained. The Centre has the staff (5-7 people) and the expertise to collaborate with Successful Intelligence on the pilot study of the CAI. The pilot study will consist of (1) reliability tests (both content and criterion). The staff of the Centre is currently working on the draft budget for the proposal. The budget will be sent to Dr. Grigorenko ASAP, and she will forward it to all team members;
- The pilot has been tentatively planned for February 2001. The responsibility for the design is assumed by Drs. Drake and Grigorenko. The pilot is to be conducted in the greater Lusaka area (mimicking the distribution of rural and urban schools in the Eastern Province). Both Dr.s Drake and Grigorenko have copies of the dataset that depict the distribution of the schools (including the data of the number of pupils per grade) in the Lusaka district. Paula Kapungulya is to obtain the Lusaka school district map, labeling urban and rural schools before her arrival at Yale. It is planned that the pilot study will be designed in October, when Dr. Drake will visit Washington, D.C. (Creative Associates) and New Haven, CT (Successful Intelligence).

Appendix C

IEC Interview Evaluation Form

MINISTRY OF EDUCATION

APPOINTMENT OF INFORMATION, EDUCAITON AND COMMUNICATION SPECIALIST FOR SCHOOL HEALTH AND NUTRITION COMPONENT OF BESSIP

SCORING FORM

Name of Candidate:_____

Date:_____

SN.	ITEM	POSSIBLE POINTS	POINTS AWARDED
1.	Experience		
	▪ IEC materials design and development	10	
	▪ Understanding of communication cycle	10	
	▪ Knowledge of layout and design standards	10	
	▪ Knowledge of IEC procurement needs and process	10	
	▪ Evidence of IEC products	10	
2.	Computer Literacy/Application		
	▪ Desk top publishing	5	
	▪ Word processing	5	
	▪ Graphics	5	
	▪ Internet	5	
3.	Knowledge of Function of Post/Role of the organization	5	
4.	Interpersonal Communication Skills/Team Work	10	
5.	Personality and self-expression	10	
6.	Willingness to adjust to a flexible work schedule due to programme demands	5	
	TOTAL		
	COMMITTEE AVERAGE TOTAL		

Name of Interviewer:_____

Signature:_____

Date:_____

Appendix D

Field Trip to Siavonga District Report

Field Trip to Siavonga District
September 18 - 19, 2000

Report Submitted by: Dr. Janet Robb

Field Visit Team:
Ms. Winnie Chilala, Education Specialist, USAID/Zambia
Dr. Janet Robb, Consultant, BEPS/CAII
Dr. Sham Matur, Director WASHE, UNICEF/Zambia
Mr. Peter De Vries, Learning Instruction Advisor, UNICEF/Zambia
Ms. Esther Sinkala, Equity Gender Focal Point, MOE

Purpose of the Trip

To accompany UNICEF and MOE officials as they visited PAGE and WASHE projects sites in Siavonga District in order to:

- gain a better understanding of the PAGE activity;
- to assess the level and type of community participation in both projects; and
- to ascertain the level of support and leadership provided by MOE district-level officials.

Monday, September 18, 2000

Prior to the arrival of the UNICEF/Zambia and MOE representatives, Ms. Chilala and Dr. Robb conducted an informal interview with the DEO, Mr. C.P. Chamoto and his Assistant, Mrs. R.J. Matyola, a seconded senior teacher. The purpose of this interview was two-fold:

1. To determine the existing MOE structure at the district level, and
2. To gain a better understanding of the PAGE activities in Siavonga District.

It was determined that at the district level a full cohort of MOE officials would consist of the following: District Education Officer (DEO)
District Inspector of Schools (DIS)
Education Officer (EO)
Education Assistant (EA)
District Inset Provider (DIP) [formerly District Resource Center Coordinator]
Zonal Resource Center Coordinators

Currently in Siavonga District there is a DEO, DIP, EA, and five Zonal Resource Center Coordinators. A DIS and EO have been assigned but are awaiting accommodation to be vacated by the widows of their predecessors before reporting to duty.

Equivalent counterparts in the Ministry of Community Development and Social Services (MCDSS) were also discussed. It was believed that a Community Development Officer (CDO) would be the direct counterpart to a DEO, and a Community Development Assistant (CDA) and a Social Welfare Assistant (SWA) would be direct counterparts to the DIS. Mr. Chamoto expressed that, to his knowledge, the officials from MOE and MCDSS had not worked together on any of the existing education projects. However, he went on to state that the MOE has recently started talking about working more collaboratively with the officials from the Ministry of Health (MOH), due to the BESSIP focus on school health and nutrition. In fact, he reported that the Environmental Health Technicians from MOH were already involved in the borehole and latrine projects.

District records show that 10 schools were selected on 19 November 1996 as participating PAGE schools. To date, that number has risen to 17, but it is unclear if these additional 7 are recorded on the UNICEF roster. Schools actively participating in the PAGE project are:

	Original PAGE Schools	**Chief**
1.	Matuwa Primary School	Simamba
2.	Lusitu Basic School	Chipepo
3.	Syakalyabanyama Primary School	Chipepo
4.	Sitinkwi Primary School	Chipepo
5.	Nabbanda Primary School	Chipepo
6.	Chaanga Basic School	Sikoongo
7.	Syanyoolo Primary School	Sinandambwe
8.	Munyama Primary School	Simamba
9.	Simaundu Primary School	Chipepo
10.	Kapululira Primary School	Chipepo
	Additional PAGE Schools	
11.	Chisamu Primary School	Chipepo
12.	Manchamvwa Lake Shore School	Sinandambwe
13.	Syangweemu Primary School	Sikoongo
14.	Ibbwemunyama Primary School	Sinandambwe
15.	Pambazana Primary School	Chipepo
16.	Bbakasa Primary School	Sikoongo
17.	Kariba Primary School	Simamba

In each of the ten originally selected PAGE schools, officials from the DEO's office in Siavonga, along with PAGE, sensitized teachers and taught PTA executives on the status of girls' enrollment, the re-entry policy for pregnant girls, pupils' health, and hygiene in their school. These same officials also talked with parents in surrounding communities on these same issues. Parents were called to a central meeting point by the local headmen for this sensitization meeting. In total, it is planned that each community will have at least three visits from these district officials. In addition, the Ngoma Theatre Troupe was used to disseminate messages to the PAGE schools and communities regarding the importance of educating girls.

To date, the Siavonga DEO reports that, through WASHE, boreholes have been sunk in 9 of the 10 originally selected schools. In addition, it is planned that each of the schools will have 12 pit latrines constructed, six for girls and six for boys. Most of the 10 schools already have action plans to support the latrine construction effort but have not yet started work.

It was reported that at one of the PAGE schools, the NGO *Harvest for Zambia* has assisted in constructing a new classroom block and teachers' accommodation. It was also noted that the Ngoma Theatre Troupe was used to demonstrate to communities the use of latrines and the proper way to achieve good hygiene. The DEO expressed his belief that the messages presented by the drama troupe were well portrayed and well received.

A brief discussion took place regarding the value of using local drama techniques for not only message dissemination but also as a research verification tool. The district officials were asked if they felt a team of researchers/drama troupe members, who lived in each community for a 7-10 day period, would be accepted by the villagers. The idea of using students from the University of Zambia was suggested and it was felt that these students might also prove to be good role models for the children of the various communities in which they worked. One of the key obstacles to community mobilization in Siavonga District is the scattered nature of the villages. Unlike villages in the Eastern Province, which are made up of many homes located closely together, villages in Southern Province are made up of many distant clusters of only a few homes.

When the UNICEF and MOE team arrived from Lusaka the entire team, joined by Mr. Zimba and Dr. Puma from the D/WASHE committee, traveled to visit two schools--one original PAGE school, Matuwa Primary and one new PAGE school, Bbakasa Primary.

Matuwa Primary School. The team met with Mr. E.C. Shapooli, Head Teacher and the school's PAGE Coordinator. Matuwa Primary School has an approximate enrollment of 500 pupils and seven teachers, six men and one woman. As a result of sensitization by PAGE, the school initiated single sex classes in Grade 4 this year, with all subjects being taught separately to boys and to girls. The reaction from the Head Teacher and from the PAGE Coordinator was that their experiment in teaching to single sex classes has been very successful. They reported that the girls are much more comfortable participating when only girls are in the classroom, and this is true with boys, as well. They also reported that the single sex classes have resulted in an increase in enrollment. However, a check of the monthly enrollment register indicated that the enrollment had remained stable from third grade last year to fourth grade this year. In addition, enrollment has remained relatively stable over the course of the year. The school hopes to continue single sex classes with this cohort of pupils into the next academic year.

Part of the team had the opportunity to sit in on the girls' section of Grade 4, where a reading lesson was being taught. The girls were actively involved in the learning process--raising their hands to respond to questions and calling out responses when

prompted by their teacher. However, it was also noted that the pupils were unable to read the passages found in their schoolbooks.

Matuwa Primary has a PAGE Committee and a Borehole Committee. The main role of the PAGE Committee has been to sensitize the people of the communities served by Matuwa Primary on the need for good sanitation and the benefits of pit latrines and to inform them on the "importance of educating the girl child." Communities have been mobilized to dig the holes for twelve VIP pit latrines, one community being responsible for one latrine. Work has already begun on these holes, cement has been delivered to the school for the latrines, and the community is in the process of securing a contractor to construct the latrine structures.

A major concern of the Head Teacher at Matuwa Primary is that parents are not paying the required school fees for their children. Only approximately 150 pupils have paid fees of the 500 pupils enrolled. The current fees are ZK3000 per year--ZK500 for the PTA, ZK500 for sports, ZK500 for the production unit, ZK1000 for school administration, and ZK500 as required by policy. It was unclear how the school dealt with pupils who had not paid their fees.

Bbakasa Primary School. The second school visited was Bbakasa Primary School where the team met with Mr. C. Hamunjebwa, Head Teacher and Mr. F.S. Mutabali, Deputy Head. Bbakasa is a new PAGE school and the Head Teacher and Deputy have yet to be sensitized by PAGE. There is only one other teacher at Bbakasa in addition to the Head and Deputy Head.

It was reported that Bbakasa Primary was a former multigrade school. However, due to an insufficient number of teachers, some classes still remain as multigrade. It appears that enrollment is somewhat sporadic, with troublesome elephants being sited as one of the main reasons children do not attend school. The school has a recorded Term 3 enrollment of 132, down 14 pupils from Term 2. Of the current 132 pupils only 6 have paid the required ZK4000 school fees--ZK1000 each for PTA, sports, projects, and self-help projects.

A D/WASHE borehole, supported by UNICEF, was started in November 1999 and completed in 2000. The community also has been mobilized to construct VIP pit latrines at the school. Distribution of cement has begun to up to 10 community members for latrines at their homes. Priority was intended to be given to female-headed households and households with orphans. However, there seemed to be some confusion around this point and at one time it was stated that the cement would be distributed to those who dug their pits first.

D/WASHE Committee Meeting. An informal meeting of the Siavonga District WASHE Committee was held at the Machinchi Bay Lodge where the visiting team was putting up. Three members of the DWASHE Committee were in attendance. The meeting was primarily to provide UNICEF with an update of their activities. A more

informal discussion was held around design and potential use and/or non-use of the VIP pit latrines being constructed at PAGE school sites and throughout surrounding districts.

Tuesday, September 19, 2000

Lusitu Basic School. When the team arrived at Lusitu Basic School a meeting of Village Heads and the PTA Executive Committee was in session. The team joined the meeting to find that the main topic of business was the urgent need for the planned latrines to be constructed before the cement, which had already arrived at the school, goes bad. Also participating in the meeting were the Head Teacher, PAGE Coordinator, and teacher representatives.

Dr. Puma, head of the D/WASHE Committee, addressed the meeting and told them that D/WASHE's goal was for clean water and hygienic conditions. He stated that DWASHE wants fenced water points and that the Village Heads should encourage that request in addition to the need for more latrines.

Mrs. Sinkala address the group and told them that she was there to emphasize the girl child's need for education. She said it was time that everyone begin to view their girls as more important than their animals. She challenged the group to please consider their girls when supporting the education of their children. The meeting participants seemed to agree with Mrs. Sinkala's request but stated that lack of finances were preventing them from acting on such a request. Mrs. Sinkala responded by informing the group of a bursary scheme available through the Ministry of Community Development and Social Services and another limited bursary available through the PEO. However, she did warn the participants that often when one says they have no money for school fees they are still able to buy beer. She again urged the group to "support education so our children can look after us when we are old."

Ms. Chilala and Dr. Robb then excused themselves from the meeting so that they could meet separately with the PAGE Coordinator. They were also joined by a community representative from the group who was also a former PTA member. It was in this session that it was learned that in order for the communities to become sensitized on the PAGE project, the school had requested that all Village Heads attend a sensitization meeting. It was at that meeting that they were first sensitized to the need for latrines and clean water, and also on the importance of sending their girls to school. Further such sensitization meetings were held with the general community and a local drama troupe also was used to perform dramas on proper sanitation and good hygiene. The community representative had not seen the dramas.

It was also during this informal interview that the team learned of the concern of the community on the required school fees. Currently the school fees are at ZK8000/year--ZK3000/Term 1, ZK2500/Term 2, and ZK2500/Term 3. The community representative said that he had accepted the suggestion to send his daughter to school, but in doing so had to force his son to drop out. When their formal meeting ended, the other Village

Heads joined in the informal discussion. They reinforced the feeling that school fees were just too high for them to manage for more than one child. When asked what the school fees were used for, the teachers told us that ZK500 was for sports, ZK1000 for the PTA, and ZK1000 for the general projects fund.

Members of the PTA felt that the money allocated to them had been used wisely and for essential needs of the school. They indicated a level of pride in what they have been able to accomplish. The also acknowledged that the PTA was involved in the discussion that set the amount for school fees, however that discussion last took place two years ago.

Kayuni Primary School. Kayuni Primary is not a PAGE school so the visit was exclusively to check on the progress of the borehole and pit latrine construction being supported by D/WASHE. The team found community members busy constructing the concrete base for one of the latrines.

Pambazana Primary School. The team arrived at Pambazana Primary School after the children had already been dismissed for the day. The main focus of this visit was also to check on the progress of latrine and borehole construction.

General Observations and Recommendations (in no specific order)

1. The DEO and his assistant were well sensitized to the key issues of concern to the overall PAGE project--girls' education, sanitation, and hygiene. They had both received training and appeared well qualified to, in turn, train others in their district. In particular, Mrs. Matyola was an extremely valuable source of historical and current information on PAGE activities in Siavonga District. She was well informed, clear in her explanations, and enthusiastic about her work. Given her invaluable contribution to the DEO's office and her current status of secondment, it is the recommendation of this consultant that she be retained at the district offices and not returned to the school environment.

2. Community mobilization efforts are most impressive with regard to their involvement in the construction of latrines and boreholes and the molding of bricks for other school projects. In addition, community members do seem to have heard the message that they should be providing education for their daughters, as well as for their sons. However, hearing and acting on the messages they have heard seems far removed from understanding the "why" behind these initiatives. There was little evidence that the communities themselves had surfaced the constraints and barriers to girls' education or that they had come up with their own strategies to overcome these.

   Mobilizing the communities to take part in the construction projects may well be the first step to their future involvement and deeper understanding of the issues and needs. This should be followed up closely with a well-designed, systematic, and continuously monitored community sensitization and mobilization campaign. The main focus of this campaign should not be the construction of a pre-conceived "product", but should be flexible enough to embrace and support a variety of

interventions determined by community members through community dialogue and input.

It is recommended that this sensitization and mobilization effort be a multi-sectoral effort, combining the efforts of field officials from MOE with those from the Ministry of Community Development and Social Welfare and the Ministry of Health.

3. Considerable concern was expressed by the female members of the team on the "keyhole" design for the opening in the pit latrine. Much discussion took place regarding this design and the choice of the design was well defended with research activities that took place before the design was accepted. However, it was still felt that the opening was not large enough to ensure that the females would not "miss" when urinating. There was also concern that the footpads were placed too far forward to be effective when a man was urinating, as the footpads were placed forward of the keyhole. When a man is standing to urinate he, more likely than not, urinates forward.

   Additional concerns were expressed about:
   - the lack of appropriate materials nearby to be used to clean oneself after defecating;
   - the keyhole cover that requires reaching down to lift it off before using, possibly when it has not been kept clean and sanitary;
   - the need to possibly enter with bare feet onto a surface that may be quite soiled through use;
   - the continued need for sanitation supplies for girls and women when they are menstruating; and
   - potential "fears" or phobias that may exist that could prevent individuals from using the latrines (e.g. worry that a snake or animal might be trapped inside the latrine or that someone might trap them inside the latrine in order to attack or harm them).

   Having the latrines and the initial sensitization of the community on the need and use of latrines was an essential first step. This should now be followed up with some research activities that might explore the cost effectiveness of a variety of solutions to how to clean oneself after defecating and how to ensure cleanliness and appropriate up-keep of the latrines. There should also be strategies put in place that might alleviate the fears some may have about using the latrine (e.g. allowing pupils to leave the class in pairs to use the latrines). In addition, this consultant thinks it might be helpful to conduct some follow-up research on the most effective design now that latrines actually exist on school sites and within communities. Follow-up also needs to be conducted on if, in fact, those most in need of assistance have been the first to receive the cement for latrine construction--female headed households and families with a high number of orphans--instead of those who prepared their pits first.

4. The UNICEF proposal to USAID for PAGE support to the Southern Province indicates that each participating school would have FamilyPac materials to be used

with parents to help support their children's learning achievement. However, of the schools visited, the teachers at only one were knowledgeable that such materials existed. Yet, even that school did not have the materials and the teacher we talked with only remembered what they had been told in initial PAGE training workshops. As a result, parents have not been engaged in assisting with their children's education in the way in which it was initially envisioned.

It is recommended that these materials be revisited for appropriateness and practicality and, if necessary, revised accordingly. If the materials meet these criteria they should be made widely available to the schools, with the proper training to support their use.

5. The implementation of single sex classes was only observed in one school, Matuwa. And, as stated previously, the teachers and Head Teacher at that school were pleased with the results. However, they readily admitted that the teacher responsible for the single sex classes was the "keenest" teacher in the school. In addition, it was widely recognized that teachers of single sex classes would receive additional training in order to effectively teach in a single sex environment. This leaves one wondering whether or not participation in even mixed sex classes would increase if the teachers of those pupils were the "keenest" and had undergone additional training.

6. Many of the communities supported by the schools we visited were part of the Gwembe Valley Tonga Project that supported the relocation of families. Along with this relocation came the promise that all of their needs would be taken care of by the government. This was widely interpreted to include school fees for children, as well. As a result, community members expressed their frustration at not having been provided what was promised, leaving it extremely difficult to persuade parents to want to contribute to their children's schooling. A strong community mobilization campaign could possibly be used to provide the necessary forum for communities to air these concerns and begin to strategize ways to overcome their needs.

In conclusion, it is apparent that many significant interventions have begun in support of girls' basic education and the overall sanitation and hygiene of schools and communities in the Southern Province. In order to achieve significant results and a lasting change in social behavior, the implementation of such interventions should not be the end. Instead, they should trigger further community sensitization, dialogue, and collaboration. Change will begin to take on a greater level of significance when it is the community members themselves who begin to initiate the change and surface their own strategies and interventions to support that change.

Appendix E

Community Sensitization and Mobilization Campaign for Southern Province, Zambia

Community Sensitization & Mobilization Campaign for Southern Province
In support of
Equity and Gender Component
Basic Education Subsector Investment Program
Ministry of Education, Zambia

Prepared by:
Dr. Janet L. Robb, Director Education, Mobilization and Communication Division
Creative Associates International, Inc.

Funding to be Provided by: USAID/Zambia
To be Implemented in Collaboration/Cooperation With:
Basic Education and Policy Support (BEPS) Activity, Creative Associates International, Inc.

I. Context and Rationale

As Zambia's Ministry of Education (MOE) cornerstone plan for educational reform, the Basic Education Subsector Investment Program (BESSIP) is organized to achieve the goal of improving access, quality and relevance of education in eight key, mutually reinforcing areas of intervention: program management, infrastructure, teacher development, educational materials, equity and gender, curriculum development, capacity building, and school health and nutrition. Further, BESSIP is intended to optimize the use of resources and reinforce the decentralization of education system management to local delivery points.

The government of Zambia's stated objectives for basic education include increasing the participation in education of girls and of children who are poor, rural, orphaned, have special education needs, or are simply out of school. These targeted populations represent the children who are considered to be vulnerable. The number of children in Zambia who can be considered vulnerable increases daily as the impacts of poverty and HIV/AIDS grow. About 80 percent of the country's rural population are considered to be living below the poverty line and, at the end of 1997, nine percent of children under 15 were orphaned because of AIDS. While girls' enrollment may be equal to boys' in many parts of Zambia, girls drop out sooner and in greater numbers and their achievement is lower than that of boys.

The main objectives of BESSIP's Equity and Gender component focus on issues that will be addressed by USAID/Zambia's IR2.1, "improved participation of girls and other vulnerable children." These include: "increase access to and participation in education especially for girls, poor, rural, orphans, special education needs children and out of school children; improve learning performance and achievement of these children; and remove all barriers that hinder their full participation." Some of the activities of IR2.1 are designed to directly support these BESSIP priorities, with additional emphasis on

strategies to combat the proliferation of HIV/AIDS among school-age children and their families.

Given the current stress in the educational system of Zambia, communities may increasingly have to take on new roles if their children are to have access to and participate in a quality education. Research has shown the powerful impact that community awareness and involvement can have on providing a quality education. For real, lasting change to take place, community members need the skills and motivation to play a decision-making role in education and to be able to pass on that understanding to others - other community members, other communities, and new generations. IR 2.1 supports activities designed to strengthen community capacity to assess the constraints faced by their children, build consensus, propose plans for addressing those constraints, and secure support for implementing their plans.

To that end, a Community Sensitization & Mobilization Campaign (CSMC) for Zambia's Southern Province has been designed and is being presented here.

II. The Campaign Goal

The ultimate goal for this CSMC is improved participation of girls and other vulnerable children. Specifically, that goal will be reached through the achievement of two key objectives:

1. To sensitize and mobilize communities to surface issues and design and implement interventions to combat the constraints to girls' education, and that of other vulnerable children; and

2. To sensitize and mobilize communities to identify factors contributing to the proliferation of HIV/AIDS and to develop and implement strategies to eliminate those risks to their children and themselves.

III. Strategic Approach

As a strategic approach, the CSMC will infuse four core principles throughout all campaign activities--participation, communication, partnership, and capacity building.

Participation is both a means and an end to any successful mobilization campaign. Success and sustainability require the continuous active involvement and commitment at all levels of planning, implementation, management and monitoring. As such, active participation will permeate all aspects of the CSMC--across key public and private stakeholders, spanning all levels of government management (national, provincial, district, and community), and including facilitators, planners, implementers, and beneficiaries.

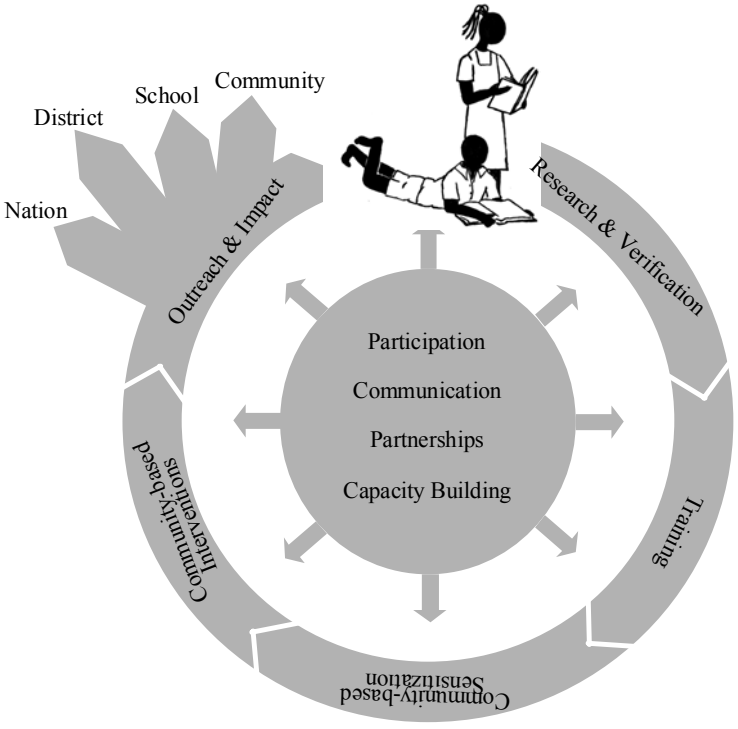
Clear, dynamic, efficient, and transparent *communication* will sustain and characterize all levels of the CSMC. Through the employment of a variety of media and culturally appropriate communication styles, goals, objectives, roles and responsibilities will remain sharply focused. Community strategies will most likely include, but will not be limited to, radio programs, newsletters, public fora, and school-based supplementary learning materials.

Cooperation, collaboration and joint ownership will be best promoted, established, and maintained, across ministries, sectors, and levels of program planning, management and implementation through established *partnerships*. Different modes of partnering will be pursued in order to establish the most effective and sustainable modes of collaboration. These partnerships will be continually monitored and refined so as to keep them vibrant, dynamic, and achieving maximum performance goals and standards. Key partnerships will be between and among various line ministries (MOE, MCDSS, MOH), central authorities and schools, teachers and students, and teachers, parents, and communities.

Capacity building--improved knowledge, skills, and competencies--will be continually generated throughout the CSMC. Ministries will explore ways of strengthening their collaboration and cooperation. District-level officials will increase their skills and abilities to coordinate, manage and facilitate community-based activities and community members will increase their capacity to identify and solve problems and overcome social, cultural, and economic constraints. In addition, the capacity of a variety of community groups and NGOs will be strengthened to offer continued support in the promotion of girls' education and the alleviation of factors contributing to the spread of HIV/AIDS.

IV. Conceptual Framework

The CSMC conceptual framework contains five successive reinforcing developmental stages--research & verification, training, community-based sensitization, community-based interventions, and outreach and impact.



The CSMC is an iterative process with each action contributing to further actions which collectively and synergistically contribute to ever increasing improvements in the participation of girls' and vulnerable children in basic education and in the decline of practices that contribute to the proliferation of HIV/AIDS.

Each of these aforementioned stages is described in more details below:

Research and Verification. The research for the CSMC will be carried out in a dynamic and participatory fashion, facilitated by a team of skilled action researchers and dramatists. Research will be conducted at selected sites and achieved by having the research team live among the community members for 7-10 days, talking, observing, and sharing in order to ascertain the main constraints to education for girls and other vulnerable children and the key contributing factors to the proliferation of HIV/AIDS in the community. As key issues emerge, they are woven into a drama script that will be performed before the community on the team's last day on site. The drama performance is participatory in nature, allowing the community to take part in the dialogue and in some cases, modify the course of the script. In this way, the drama is used not only as a "mirror" of community behavior, but also as a means of verifying the reality of what is portrayed. This method, often referred to as *Theatre for Development*, has proven to be an effective and inclusive means of community-level research and verification.

Training. Within the CSMC, training will surface as the critical pathway to building awareness, participation, capacity, and action. Training is understood to be broadly inclusive of a diverse range of educational strategies and methods which lead to positive changes in knowledge, behaviors, and skills in support of the CSMC goals and activities. Illustrative training methods include workshops, mentoring, coaching, meetings, focus groups, training classes, media, and communications. Training will occur continuously at all levels of the CSMC. However, the key training event will take place at the conclusion of the research and verification phase in each district, with the knowledge gained during that phase providing the basis for the training of district-level officials from the three line ministries.

Community-based Sensitization. Experience has shown that for any mobilization campaign of this nature to succeed the participation and commitment of parents/guardians, teachers, local leaders, and the community as a whole are imperative. Achieving this level of commitment requires community sensitization, dialogue and involvement. This component of the conceptual framework will be facilitated by the trained district-level officials in teams. Each team will consist of at least one member from each of the line ministries--Education, Health, and Community Development and Social Services. Having been trained in community participation methodologies and the relevant issues that surfaced as a result of the research and verification phase, these officials will facilitate activities that help to support the overall CSMC goal.

It is important to note that the community-based sensitization component of this CSMC is intentionally collaborative. It is anticipated that no single field worker will initiate or implement the process without the presence of their colleagues from both the other key

ministries. This is intended to demonstrate and model a behavior of joint collaboration and cooperation and to illustrate that issues surrounding education for all and the impact of HIV/AIDS are not isolated concerns, but are closely linked across sectors.

Community-based Interventions. Due to the diverse nature of communities and the variety of circumstances that contribute to constraints to girls' education and the spread of HIV/AIDS, community-based interventions will often be as diverse as the communities themselves. This component of the CSMC is where the communities actually prove their commitment to change. Sometimes the commitment is demonstrated in what appear to be small ways--sending their girls to school instead of to the market--and sometimes it will be demonstrated through apparently larger efforts--assisting in the installation of sufficient pit latrines at the school site. Regardless of the effort, it is a demonstration of awareness, concern, and change and every effort should be respected and praised. Community-based interventions are the real core of this dynamic process. They will most likely be incremental and create the basis out of which will arise new challenges and opportunities.

Outreach and Impact. First and foremost, the CSMC is designed to have a positive impact on the education of girls and other vulnerable children and to help recognize the causes and stop the proliferation of HIV/AIDS. The CSMC reaches out to the school-age children, but through its dynamic methodology also achieves outreach to the school, the community, the district, and the nation. Each level cannot help but feel the impact of the change created by a successful CMSC. In addition, measurable change should ultimately occur to support such performance indicators as: decrease in girls' and orphans' drop out rates and increase in girls' and orphans' attendance, ultimately contributing to the increase in pupil assessment scores, increase in net admission rate, and increase in retention rates.

V. Specific CSMC Activities

The CSMC for Southern Province, Zambia is designed to ultimately reach every one of the eleven districts in the province. In addition, it is anticipated that some aspect of the CSMC will "touch" every school and every community within every district in the province. The same set of activities will be implemented in each district in a phased-in approach, with start-up and follow-up activities taking place prior to and following the district-level activities:

Phase I	6 months	Start-up Activities
Phase II	12 months	CSMC in 3 Districts
Phase III	12 months	CSMC in 4 Districts
Phase IV	12 months	CSMC in 4 Districts
Phase V	18 months	Follow-up Activities

Start-up Activities. It is anticipated that this phase of the program will take approximately six months. Activities in this phase will include, but will not be limited to:

- Work with Gender and Equity and HIV/AIDS Focal Points to establish working/logistical details of the entire CSMC.

- Establish a group of interested and collaborating stakeholders to serve as an advisory committee for this campaign.

- Prepare scope of work, advertise, and select a research and performance team.

- Participate in a Zambia/Malawi exchange activity for Ministry officials and CSMC advisors to learn from Malawi's successful SMC efforts and for Malawi to gain knowledge of Zambia's CSMC efforts.

- Train the research and performance team in action research methodologies and on the critical facts surrounding the participation of girls and vulnerable children in primary schools and the facts regarding the devastating nature of HIV/AIDS.

In each of the next three phases, the CSMC will include the following activities in each district of Southern Province:

1. **District briefing meetings and site selection (1 meeting per district).** These meetings will be conducted by the Gender & Equity Focal Point and the HIV/AIDS Focal Point, together with CSMC Technical Advisors. Participating in this briefing will be the District Administrator (DA), District Education Officer (DEO), District Community Development Officer (CDO), District Health Officer (DHO), District Inspector of Schools (DIS), Education Officer (EO), Education Advisor (EA), District Inset Provider (DIP), and Traditional Authorities. The briefing is a day-long meeting to introduce the CSMC to the district and to select the research sites (5 school sites and surrounding villages). This meeting will be immediately followed by site visitations to meet the Village Headmen and school Head Teacher for each selected area.

2. **Research, verification and motivation** (5 school sites and surrounding villages per district). This component of the campaign is actually made up of two distinct activities. One activity involves the use of Theatre for Development (TFD) troupe members who will conduct action research at selected locations. In turn, they will verify their research findings and motivate the communities to dialogue and action through participatory drama performances. Five schools will be selected from each district as the focal point for the action research activities. Research will be conducted in villages serviced by those schools (approximately 6-8 villages per school) and research findings will be verified through two drama performances at each school location.

   Collection of baseline data is the second activity that falls under this component. This activity involves the collection of school- and community-based data from each of the selected schools and school-based data from a random sampling of 30% of all primary schools in each district. The CSMC TFD troupe will be utilized to collect the

data from the selected sites. The EMIS component of the MOE will the utilized to provide the data from a 30% sampling of the district's schools.

3. **Training of district-level officials** (approximately 30 participants per district). Ten-day training workshops will be conducted for district-level officials from each of the three key ministries involved in this activity--MOE, MCDSS, MOH. These workshops will be facilitated by central ministry officials with their counterpart CSMC technical advisors and the research/drama troupe members. The workshops will focus on the sharing of the action research findings and baseline data and will explore the strategies for mobilizing communities in which they work. Officials from each of the three ministries will be teamed to cover common work areas and will develop joint plans of action. After the team of ministry officials have approximately three-four months to begin implementation of their action plans, a three-day follow-up workshop will be held to assess their progress and to adjust and expand their plans of action accordingly.

4. **Community-based sensitization** (facilitated by district-level officials). The activities that make up this component are essentially the implementation of the action plans developed by the district-level teams. These activities will include sensitization workshops, focus group discussions, and other PRA-type activities designed to sensitize the participants to the issues surrounding girls' education and the proliferation of HIV/AIDS, provide the community with a forum for discussion of the issues and their contributing and confounding factors, and to facilitate the development of plans of action that will be implemented by the various community groups and individuals. It is through the development of these plans of action that potential activities needing additional funding will be identified. If an activity meets a set of pre-determined criteria, an agreement will be established with the community to provide the necessary financial support. Approximately US $1 Million have been set aside to support such activities (to be distributed among all districts).

5. **Community-based interventions.** This will be on-going activities detailed in the plans of action developed by each community. It is anticipated that these activities will be as diverse as the communities themselves. Community-based interventions will likely be supported by other established community committees and structures and, when possible, will be encouraged to leverage support for continuation or expansion.

6. **Support activities.** It is anticipated that a variety of support activities will be developed to supplement the community-based interventions. These support activities will be designed to motivate communities, schools, and children to embrace the changes in behavior that are being discussed as a result of the CSMC and which are critical if the campaign hopes to be a success. These support activities might include, but would not be limited to:

    - A weekly radio program that includes broadcast interviews, testimonials, drama performances, quiz competitions, etc.

- Supplementary school reading material featuring Zambian female role models, interesting community activities, etc.
- Quarterly newsletters
- Newspaper articles
- School incentive packages that might include such items as school bells, sports equipment, pupil awards, etc.

7. **Stakeholder involvement.** At a minimum, quarterly meetings will be held with USAID, the MOE, MOH, and MCDSS to update them on the progress of the CSMC and to seek their guidance and support for future activities. In addition, at least one meeting per year will be held for a larger forum of government officials, donor representatives, and others concerned with the issues surrounding girls' education and HIV/AIDS. Key stakeholders will receive regular updates through newsletters and progress report summaries throughout the life of the campaign. Issues arising from community-based initiatives that have a broader implication to government policy will be highlighted to stakeholders and nurtured through the system for ultimate policy impact.

8. **Monitoring and assessment.** Formative evaluation measures will be used to assure that all activities described above are kept on track throughout the life of the campaign. Program personnel from Ministry headquarters and the district offices will be deployed to observe scheduled activities as they take place and to assess their effectiveness. These visits should result in reports highlighting the successful and not so successful interventions in each community or district and will be used for replanning and assessment. In addition, a select number of unique interventions will be tracked from inception for the development of case studies illustrative of the diverse nature of community-based interventions. Those interventions that are deemed directly related to government policy issues will be noted and tracked specifically for influencing development, implementation, and/or change in policy dialogue and action.

   In addition, throughout the life of the CSMC, community- and school-based data will be collected in the same way in which the original baseline data was collected (as described previously). This data collection will serve to track changes in enrollment and retention. In addition, results from the Grade 5 National Assessment will be used to monitor pupils' school achievement.

Follow-up Activities. These activities will take on a variety of formats, from visits back to each community and school to monitor progress toward achievement of plans of action to conducting follow-up workshops with district-level officials to strengthen their capacity and to review their progress. In addition, this phase will be devoted to documenting changes that have taken place over time, based on earlier identified "unique" interventions, in order to complete case studies and report success stories. It is also anticipated that it will be during this phase of the CSMC that plans will be developed to ensure an expansion of the CSMC into other districts in the country.

VI. Outcomes and Products

Two main outcomes of the CSMC in Southern Province, Zambia will be achieved as a means to ensure the "improved participation of girls and other vulnerable children:"

1. Parents, local leaders, teachers, pupils, and PTAs from every school catchment area in every district in Southern Province will be sensitized, motivated, and mobilized to be actively involved in the promotion of education for girls and other vulnerable children and in actions to halt the proliferation of HIV/AIDS.
2. The capacity of district-level officials from the MOE, MOH, and MCDSS will be strengthened to work cooperatively and collaboratively as a team, and to facilitate a successful mobilization campaign.

Specifically, this campaign will result in:

- all 11 districts of the Southern Province actively involved in the CSMC,
- 55 schools and approximately 440 villages involved in action research & verification activities,
- approximately 330 district officials from the MOE, MOH, and MCDSS trained on community participation methodologies and mobilization strategies,
- approximately 110 district-level plans of action developed as a framework for community sensitization and mobilization,
- community-level plans of action developed and implemented in nearly every community, in every district, throughout the Southern Province, and
- a variety of support activities designed and in place.

VI. Personnel

The CSMC is one of two major components of USAID/Zambia's program to support Basic Education in Zambia. The CSMC will be supported by existing personnel from with MOE--the Equity and Gender Focal Point and the HIV/AIDS Focal Point--along with counterparts from MOH and MCDSS. In addition, this effort will require the following:

CSMC Technical Advisor. This advisor will serve as a counterpart to both the Equity and Gender and HIV/AIDS Focal Points. They will be responsible for the overall management and implementation of the CSMC in Southern Province and they will be located in the same. It is highly recommended that this advisor be a specialist in girls' education and/or community mobilization. It is anticipated that the CSMC Technical Advisor would be required for a three-year commitment, after which time the CSMC will continue entirely under local management.

Field Activity Assistant. This assistant will be responsible for the planning, management, and monitoring all field-based activities. This would include, but is not limited to, research and verification, community-based sensitization, and community-based interventions. The Field Activity Assistant should have experience in community

mobilization and PLA/PRA techniques and strategies. Important for this position will be a good command of the local languages prominent in the Southern Province.

Training Assistant. Responsibilities for this position will require the planning and facilitating of all training activities required for the CSMC. They will be supported by the Field Activity Assistant and the Research/Drama team members. The Training Assistant should have a working knowledge of participatory training techniques and be an experienced trainer.

Research/Drama Troupe. A team of ten individuals will be required to perform the responsibilities of action researchers and Theatre for Development performers. Ideally this team will be made up of an equal number of men and women. They should demonstrate good performing skills, understand and embrace the concept of participatory theatre, collectively speak the various local languages of the Southern Province, and exhibit a high degree of enthusiasm and self-motivation. They must be willing to live in the various communities in which they will be working and be willing to be in the field for extended periods of time.

Short-term Technical Assistance. On an intermittent basis, short-term technical assistance will be required to train and monitor the research/drama team. Ideal candidates to provide this type of assistance would be Professors Dickson Mwansa and Mapopa Mtonga, University of Zambia. Both have been actively involved for many years in the development and implementation of Theatre for Development as a tool for community mobilization.

Appendix F

Community Sensitization and Mobilization Campaign Methodology

Community Sensitization & Mobilization Campaign Methodology

Prepared by:
Dr. Janet L. Robb, Director Education, Mobilization and Communication Division
Creative Associates International, Inc.

Strategic Approach

As a strategic approach, an effective CSMC will infuse four core principles throughout all campaign activities--participation, communication, partnership, and capacity building.

Participation is both a means and an end to any successful mobilization campaign. Success and sustainability require the continuous active involvement and commitment at all levels of planning, implementation, management and monitoring. As such, active participation should permeate all aspects of a CSMC--across key public and private stakeholders, spanning all levels of government management (national, provincial, district, and community), and including facilitators, planners, implementers, and beneficiaries.

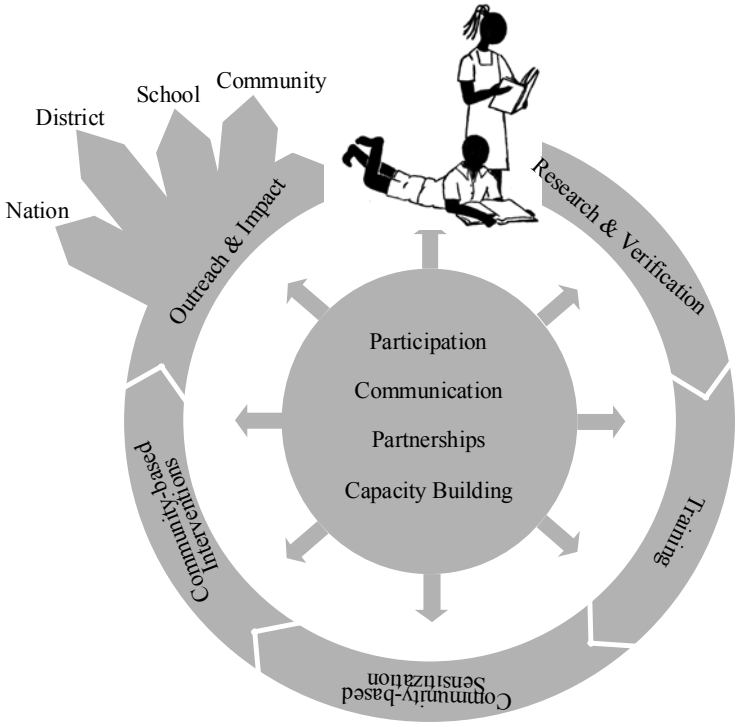
Clear, dynamic, efficient, and transparent *communication* should sustain and characterize all levels of the CSMC. Through the employment of a variety of media and culturally appropriate communication styles, goals, objectives, roles and responsibilities will remain sharply focused. Community strategies might include, but should not be limited to, radio programs, newsletters, public fora, and school-based supplementary learning materials.

Cooperation, collaboration and joint ownership should be promoted, established, and maintained, across ministries, sectors, and levels of program planning, management and implementation through established *partnerships*. Different modes of partnering should be pursued in order to establish the most effective and sustainable modes of collaboration. These partnerships should be continually monitored and refined so as to keep them vibrant, dynamic, and achieving maximum performance goals and standards.

Capacity building--improved knowledge, skills, and competencies--should be continually generated throughout the CSMC. Ministries will explore ways of strengthening their collaboration and cooperation. District-level officials will increase their skills and abilities to coordinate, manage and facilitate community-based activities and community members will increase their capacity to identify and solve problems and overcome social, cultural, and economic constraints. In addition, the capacity of a variety of community groups and NGOs could be strengthened.

Conceptual Framework

The CSMC conceptual framework contains five successive reinforcing developmental stages--research & verification, training, community-based sensitization, community-based interventions, and outreach and impact.



A CSMC is an iterative process with each action contributing to further actions which collectively and synergistically contribute to ever increasing improvements in an area of critical need; i.e. the participation of girls' and vulnerable children in basic education or the decline of practices that contribute to the proliferation of HIV/AIDS.

Each of these aforementioned stages is described in more details below:

Research and Verification. The research for the CSMC should be carried out in a dynamic and participatory fashion, facilitated by a team of skilled action researchers and dramatists. Research will be conducted at selected sites and achieved by having the research team live among the community members for 7-10 days, talking, observing, and sharing in order to ascertain the main constraints to, for example, education for girls and other vulnerable children or the key contributing factors to the proliferation of HIV/AIDS in the community. As key issues emerge, they are woven into a drama script that will be performed before the community on the team's last day on site. The drama performance is participatory in nature, allowing the community to take part in the dialogue and in some cases, modify the course of the script. In this way, the drama is used not only as a "mirror" of community behavior, but also as a means of verifying the reality of what is portrayed. This method, often referred to as *Theatre for Development*, has proven to be an effective and inclusive means of community-level research and verification.

Training. Within the CSMC, training should surface as the critical pathway to building awareness, participation, capacity, and action. Training should be understood to be broadly inclusive of a diverse range of educational strategies and methods which lead to positive changes in knowledge, behaviors, and skills in support of the CSMC goals and activities. Illustrative training methods include workshops, mentoring, coaching, meetings, focus groups, training classes, media, and communications. Training will occur continuously at all levels of an effective CSMC. However, the key training event should take place at the conclusion of the research and verification phase, with the knowledge gained during that phase providing the basis for the training of district-level officials who will then serve as key facilitators of change for the various communities within their work areas.

Community-based Sensitization. Experience has shown that for any mobilization campaign of this nature to succeed the participation and commitment of parents/guardians, teachers, local leaders, and the community as a whole are imperative. Achieving this level of commitment requires community sensitization, dialogue and involvement. This component of the conceptual framework will be facilitated by the trained district-level officials, usually in teams. Each team should consist of at least one member from each key Ministry involved in the issue. Take for example the issue of HIV/AIDS or girls' education. The Ministries of Education, Health, and Community Development and Social Services should all be equally involved in sensitizing and mobilizing communities around these issues. After all, they are issues that directly affect all three sectors. Having been trained in community participation methodologies and the relevant issues that surfaced as a result of the research and verification phase, these officials will facilitate activities that help to support the overall CSMC goal.

It is important to note that the community-based sensitization component of this CSMC is intentionally collaborative. It is anticipated that no single field worker will initiate or implement the process without the presence of their colleagues from both the other key ministries. This is intended to demonstrate and model a behavior of joint collaboration and cooperation and to illustrate that the issues surfaced are not isolated concerns, but are closely linked across sectors.

Community-based Interventions. Due to the diverse nature of, community-based interventions will often be as diverse as the communities themselves. This component of the CSMC is where the communities actually prove their commitment to change. Sometimes the commitment is demonstrated in what appear to be small ways--sending their girls to school instead of to the market--and sometimes it will be demonstrated through apparently larger efforts--assisting in the installation of sufficient pit latrines at the school site. Regardless of the effort, it is a demonstration of awareness, concern, and change and every effort should be respected and praised. Community-based interventions are the real core of this dynamic process. They will most likely be incremental and create the basis out of which will arise new challenges and opportunities.

Outreach and Impact. First and foremost, a CSMC is designed to have a positive impact on whatever is the critical area of concern--the education of girls and other

vulnerable children or to recognize the causes and stop the proliferation of HIV/AIDS. An effective CSMC reaches out to a specific target group, but through its dynamic methodology also achieves outreach to a much broader audience--the school, the community, the district, and the nation. Each level cannot help but feel the impact of changes created by a successful CMSC.

Appendix G

Comments on SO2 R4 Indicators

Notes on SO2 R4 Indicators

After reviewing the R4 indicators for SO2, the following comments are provided:

1. Two indicators--increase in pupil assessment scores and net admissions rate--need to be measured for both Eastern and Southern Provinces. Both provinces will be receiving interventions that should positively affect assessment scores and admission. A change in the wording of the "comments" of each indicator form has been included in the attached documents.

2. For the indicator "increase in pupil assessment scores" data will only be available every other year--1999, 2001, 2003, etc. This should be reflected in the form.

3. Again for the same indicator, the planned scores listed, I believe are those for Southern Province, only. Planned scores for Eastern Province need to be determined and indicated on the form, as well.

After reviewing the SO2 Results Framework and the drafted performance indicator forms, the following comments are provided:

1. I would expect to find the wording of each performance indicator to be the same as those on the summary page.

2. It would be clearer if there was one performance indicator form for each of the individual performance indicators under each IR.

Appendix H

Modified SHN Concept Document

Concept Paper for a Program to Improve Learning Through School-based Health and Nutrition Interventions

Catherine Phiri, MOE SHN Focal Point

In collaboration with:

The Ministry of Education
The Ministry of Health
The Ministry of Community Development and Social Services

September 2000

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Program to Improve Learning Through
School-based Health and Nutrition Interventions

I. BACKGROUND

Government of Zambia School Health and Nutrition Initiative

As the Ministry of Education's (MOE) cornerstone plan for educational reform, the Basic Education Subsector Investment Program (BESSIP) is organized to achieve the goal of improving access, quality and relevance of education in eight key, mutually reinforcing areas of intervention: program management, infrastructure, teacher development, educational materials, equity and gender, curriculum development, capacity building, and school health and nutrition (SHN). Further, BESSIP is intended to optimize the use of resources and reinforce the decentralization of education system management to local delivery points.

Within Zambia, SHN research has been scarce, interventions localized, and coordination lacking. Limited available data suggest that school age children are burdened with chronic micronutrient deficiencies, protein-energy malnutrition, helminth infection, malaria and HIV infections which, in turn, are associated with low academic achievement. Confidence that cost-effective interventions such as deworming and delivery of micronutrients to children through schools could reverse current trends has resulted in increasingly higher levels of governmental attention to development and implementation of an MOE/SHN strategic plan.

The five year (2000-2005) MOE/SHN Draft Strategic Plan[1] is based on solid research that links improvements in health and nutritional status to improvements in cognitive function and school achievement. Within this plan, the MOE/SHN overall program goals are to improve pupil learning and equity through implementation of targeted health and nutrition interventions that:

(a) result from and are delivered through inter-sectoral collaboration and community involvement;
(b) are holistic and systemic in approaches and methods, treating the pupil through multiple and reinforcing activities both within the school and broader family and community environments; and
(c) directly improve and maintain health and nutritional status.

The BESSIP SHN Focal Point serves to direct and manage all MOE activities related to SHN. As part of the SHN strategic plan, an SHN Cross-sectoral Steering Committee is organized to represent, facilitate and mobilize expertise, resources and synergy across key SHN stakeholders, including government ministries, NGOs and international donor organizations. An SHN Implementation Committee, representative of key government

[1] MOE School Health and Nutrition Strategic Plan: Improved Learning, Health and Nutrition of School Children, May 2000. Draft.

implementing agencies, is, in turn, organized to coordinate and facilitate planning and execution of SHN activities through appropriate governmental programs.

Since inception, the MOE SHN program has developed a strategic plan and raised SHN to a high level of collaborative interest, with support and motivation among key stakeholders. However, BESSIP/SHN has lacked sufficient human and financial resources required to launch solidly conceived and well-planned pilot initiatives in this area which would serve as a clear pathway to scaling up and impact at district, provincial and national levels.

Within the consortium of supportive donors, USAID/Zambia has taken the leadership in responding to the need for technical assistance and seed capital required to support the MOE SHN agenda. The MOE has selected the Eastern Province as the initial target area within which to initiate pilot SHN activities.

USAID/Zambia Support for SHN

Since BESSIP's inception in 1998, USAID/Zambia has been working as an active member among partners collaborating with the MOE to discern the highest levels of need, and correspondingly most appropriate strategies to support the MOE to attain its reform agenda set forth in BESSIP. As a result of insights gained through ongoing dialogues with the MOE and key stakeholders, USAID/Zambia reformulated its Basic Education Results Package[2] to include a new Strategic Objective #2: "Improved quality of basic education for more school aged children." The three corresponding Intermediate Results (IRs) that have been developed to contribute towards achieving SO2 are:

IR 2.1 improved participation of girls and other vulnerable children.
IR 2.2 improved school-based health and nutrition (SHN) interventions to support pupil learning.
IR 2.3 improved information for education decision-making processes.

Thus, IR 2.2 forms the core platform through which USAID/ZAMBIA is targeting its support to the MOE BESSIP initiative. USAID/ZAMBIA has identified the Basic Education and Policy Support (BEPS) Activity, a technical assistance and support mechanism funded through the USAID Global Human Capacity Development (G/HCD) Bureau, as a potentially ideal strategic pathway for rapid mobilization and deployment of USAID/ZAMBIA technical assistance to the MOE SHN component. BEPS is designed as a technical mechanism through which a wide range of assistance to USAID missions may be provided in support of USAID's Strategic Objective for Education "Improved and Expanded Basic Education, especially for Girls, Women and Other Underserved Populations." USAID/Zambia's Basic Education Results Package falls within the domain of two (out of three) overall BEPS goals:

- Support educational policy dialogue and reform.

[2] USAID/Zambia's Strategic Objective 2 (SO2): Basic Education Results Package in Support of BESSIP, DRAFT: 30 June 2000.

- Improve the quality, efficiency, access and equity of education, particularly basic education.

A BEPS team was fielded to Zambia to work with the MOE SHN focal point and other key stakeholders to design a SHN interventions activity which would address the needs and desires of MOE, and at the same time, support the overall goals and efforts of USAID/Zambia. During this design activity:

- the team visited and consulted with an extensive array of key stakeholders within government ministries, donor groups and NGOs (see Appendix A);

- participated in a field trip to Eastern Province both for purposes of discussions with key stakeholders and visits to communities and schools to gain insight into local conditions for the pilot initiative (see Appendix B);

- convened special meetings of key international donors and the SHN Steering Committee for purposes of presentation and discussion of the developing strategic approach and conceptual framework; and

- at each stage of presentation and consultation, the design team utilized feedback to further refine the programming approach and model.

The results of this design effort are presented here as the Program to Improve Learning through School-based Health and Nutrition Interventions, herein referred to as the SHN Program. Succeeding subsections of this report will present a summary overview of the rationale, strategic approach, conceptual framework, and supporting management systems and budget proposed for the SHN Program.

II. THE RATIONALE

Ensuring that children are healthy and able to learn is an essential component of an effective education system. This is especially relevant to efforts to achieve "Education For All" in the most deprived areas, as now more of the poorest and most disadvantaged children have access to school, many of whom are girls. It is these children, who are often the least healthy and most malnourished, who have the most to gain educationally from improved health.

Good health and nutrition are not only essential inputs but also important outcomes of basic education of good quality. On the one hand, children must be healthy and well-nourished in order to fully participate in education and gain its maximum benefits. Thus, programs which improve health and nutrition can enhance the learning and educational outcomes of school children. On the other hand, quality education, including education about health, can lead to better health and nutrition outcomes for children and, especially through the education of girls, for the next generation of children as well.

Major Health Problems of School-Age Children

Much of the disease burden derives from the poor environmental conditions in which children live, including exposure to biological, chemical and physical hazards in the environment and a lack of resources essential for human health. As is common across most of sub-Saharan Africa, parasitic infections and disease are highly prevalent amongst the school-age population in Zambia.

School-age children are heavily infected with *parasitic worms*[3]. Infections are estimated to account for over 12% of the total disease burden in girls aged 5 to 14 years and over 11% of the burden in boys making this the single largest contributor to the disease burden of this group. These infections have been shown to cause iron deficiency anemia (particularly hookworm infection), reduce growth and may negatively affect cognition[4] (Stoltzfus et al., 1997).

Malaria is estimated to account for between 10-20% of mortality and is an important cause of morbidity in school-age children in sub-Saharan Africa. Malaria is also an important cause of absenteeism from school and accounts for between 13-50% of all school days missed because of preventable medical causes. There is also evidence that brain insult, as a consequence of cerebral malaria in early childhood, may have an effect on a child's cognitive and learning ability[5] (Brooker, et al, 2000).

The World Health Organization (WHO) estimates that 3.3 million children die from intestinal infections such as cholera, typhoid or infectious hepatitis every year. Approximately 90% of the *diarrhoeal disease* burden is related to environmental factors of poor sanitation and lack of access to clean water and safe food.

Although *human immunodeficiency virus* (HIV) and *acquired immunodeficiency syndrome* (AIDS) and other *sexually transmitted diseases* (STDs) constitute a relatively modest portion of the burden of disease in school-age children, there is growing evidence that HIV/AIDS constitute a severe threat to the future health and well-being of sexually active school-age children. Studies of HIV/AIDS in youth in Uganda estimate that the prevalence of HIV in children aged 13-18 years is relatively low at 2.5% in females and .4% in males. These rates increase rapidly, however, to 19.4% in females and 2.7% in males in the 20-24 year age group. Data suggests a similar profile in Zambia. This amply demonstrates the need to focus HIV/AIDS education programs at school-age children to reduce the very high risk of mortality associated with HIV-related diseases[6] (Kinsman et. al., 1999).

[3] Helminth infections are classified as soil borne: Ascariasis, Trichuriasis, hookworm and strongyloidiasis (also referred to as geohelminth infections and intestinal nematodes) or water-based: schistosomiasis haemotobium and schistosomiasis mansoni.
[4] Stolzfus, R.J., et.al (1997). J. Nutrition, vol. 1-7, pg. 1099.
[5] Brooker, et. al. (2000). Parasitology Today, 16, pg. 183.
[6] Kinsman, et. al. (1999). AIDS CARE, 11, pg. 591.

Major Nutritional Problems of School-Age Children

As a result of food insecurity and high levels of poverty in Zambia, malnutrition has increased among school-aged children and is manifested as *protein energy malnutrition* (PEM) and *micronutrient deficiencies*. The 1996 Demographic Health Survey (1997) states that malnutrition contributes to over 50% of infants and child deaths in Zambia.

Stunting (low height-for-age) *and underweight* (low weight-for-age)[7] can reflect a broad range of insults such as prenatal under-nutrition and deficiencies of macronutrients and micronutrients. The cause of stunting is widely believed to occur mainly in early childhood, but an area of debate is whether stunted children can 'catch-up' growth in later years if their health and diet improve. These conditions are common in the school-age population throughout most of sub-Saharan Africa.

Inadequate intake of nutrients and a high incidence of infectious diseases are the major contributory factors to micronutrient deficiencies in Zambia and other developing countries (ACC/SCN, 2000). The most common are: (i) Vitamin A deficiency (VAD) which can lead to various forms of eye damage, ranging from night blindness to full blindness. It also contributes to retarded physical growth and impaired resistance to infection; (ii) iodine deficiency disorders (IDD) which can lead to mental retardation, and in severe cases, cretinism and impaired development and; (iii) iron deficiency anaemia (IDA) which can lead to impaired cognitive function, lethargy and reduced resistance to disease[8] [9] (Pollitt, 1993, Drake, 2000).

There is a lack of information of the magnitude of the problem regarding school-age children in Zambia. However, it is well known that iron deficiency affects almost all children (Ministry of Education (Zambia), 1999). A recent survey of 1427 Zambian children showed that 14.5% were severely anemic and 22.2% had malarial parasitaemia. It is also estimated that IDD affect between 50% and 80% of the general population and Vitamin A deficiency is endemic in most children (Ministry of Education, Zambia, 1999).

School-based Health and Nutrition Programs

Opportunities to reduce the burden of disease and nutritional deficiencies may be provided by school-based health programs, which have been shown to rank amongst the most cost-effective of all public health strategies[10] (World Bank, 1993). Positive experiences by WHO, UNICEF, UNESCO and the World Bank suggest that there is a basic framework that could form the basis for an effective school health and nutrition program upon which to build - the *FRESH* Start approach. This includes four basic

[7] Stunting and underweight refers to <-2 z.scores of the NCHS reference median for height-for-age and weight-for-age respectively.
[8] Pollitt E, Gorman KS, Engle PL, et al: Early supplementary feeding and cognition. Monographs of the Society for Child Development 58, 1993.
[9] Drake, et al (2000). CRC Press (in press).
[10] World Bank, 1993. Oxford University Press.

interventions: school-based health policies, provision of safe water and adequate sanitation; skills-based health education and; school-based health and nutrition services. These interventions are delivered within an interactive framework of partnerships.

Indeed, the success of a school health program demands an effective partnership between Ministries of Education and Health, and between teachers and health workers. The health sector retains the responsibility for the health of children, but the education sector is responsible for implementing, and often funding, the school based programs. These sectors need to identify responsibilities and present a coordinated action to improve health and learning outcomes for children.

Promoting a positive interaction between the school and the community is fundamental to the success and sustainability of any school improvement process. Community partnerships engender a sense of collaboration, commitment and communal ownership. Such partnerships also build public awareness and strengthen demand. Within the school health component of such improvement processes, parental support and cooperation allows health messages to be reinforced at home. The involvement of the broader community (the private sector, community organizations and women's groups) broadens and reinforces school health promotion and resources. These partnerships, which should work together to make schools more child-friendly, can jointly identify health issues that need to be addressed through the school and then help design and manage activities to achieve this.

Children must also be important participants in this process, and not simply the beneficiaries. Children communicate with their parents, with other children, with their peers, and with their siblings, promoting a community wide impact of the school health message.

Interventions and Impact

Mass delivery of anthelmintics (deworming medication) and micronutrients are the most cost-effective, simple and safe school-based health and nutrition services that can be delivered by trained teachers. Evaluation of large-scale demonstration school health programs in both Ghana and Tanzania has shown that school-based health services can have an impact on a broad range of health and education outcomes. In Tanzania, a significant increase in height (1.5cm over 16months) and haemoglobin levels (4.8g/l) was observed in treated children, leaving, however, still a large margin for further improvement. Similar effects were observed in Ghana[11] (Partnership for Child Development, 1999).

Health education is also an effective and cost-effective intervention--and may even serve to reinforce the effects of specific interventions. There is increasing recognition of the importance of promoting safe hygiene behavior among school children not simply because of its importance in the immediate school environment but also because of the communication opportunities and potential influence on the family. There is evidence

[11] Partnership for Child Development (1999). Parasitology Supplement (in press).

that children with appropriate knowledge and motivation can be effective motivators of change in the home. As well as assisting with the construction, maintenance and cleaning of facilities in the school environment, studies reveal that promoting latrine construction through school children can be a successful medium for promoting construction in the wider community[12] (Hubley, 1998).

School malaria prevention programs are a good example of how schools can make a contribution to community health. It is suggested that children can be important agents for change in malaria control programs. Skills-based health education through schools can help promote a community wide understanding of malaria with particular emphasis on the need for community based control measures.

In Tanzania the impact of a school-based HIV/AIDS prevention program has been evaluated one year after implementation. The aim was to increase communication about AIDS, provide information on how students can protect themselves from AIDS and foster restrictive attitudes towards early sexual activity. It was found that the program had substantially increased students knowledge of HIV/AIDS and that students were disseminating this information outside the school environment to their parents, other relatives and to religious leaders. It was concluded that it is both feasible and effective to implement culturally specific HIV/AIDS education to primary school children through trained teachers receiving support from local health personnel[13] (Klepp et al., 1997).

Experience in community involvement and mobilization has emphasized the importance of this practice in creating ownership, acceptance, and involvement of parents and communities in school-based programs. Likewise, experience in implementing school-based programs has confirmed the practical benefits of the school-based approach. The main conclusions that have been reached are: (i) simple, safe and effective health services can be provided by schools; (ii) with minimal training, teachers can feel positive about providing health care to children, as long as the task does not take up too much of their time, and (iii) parents are willing to accept and support school-based interventions if they are aware of them and understand their need and anticipated outcome.

Based on the evidence discussed, the core framework for the Zambian SHN Program will focus on the following strategy.

III. STRATEGIC APPROACH

As a strategic approach, the SHN Program will infuse four core principles throughout all program strategies and activities--participation, communication, partnership, and capacity building.

Participation is both a means and end to creating ownership, channeling resources, and targeting interventions that result in improved child health, nutritional status and learning achievement. Success and sustainability require the continuous active involvement and

[12] Hubley (1998). Personal communication.
[13] Klepp, et al (1997). American Journal of Public Health, 87, pg. 1931.

commitment at all levels of planning, implementation, management and monitoring of the SHN Program. As such, active participation will permeate SHN Program activities – across key public and private stakeholders, spanning all levels of planning, implementation and management (national, provincial, district, and community), including managers, implementers and beneficiaries. Participatory strategies and methodologies will secure ever-deepening levels of commitment and decentralization in SHN management and implementing capacity.

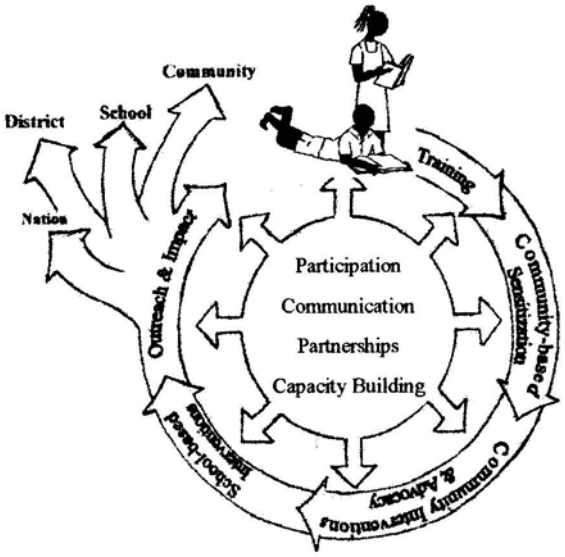
In addition, clear, dynamic, efficient, and transparent **communication** will sustain and characterize all levels of SHN Program activities. Effective communication systems, strategies and methods will build understanding and promote action throughout the SHN Program. Feedback loops at all levels will be established to ensure that communications remain clear, updated and assure continuous learning and coordination. Through the employment of a variety of media and culturally appropriate communication styles, goals, objectives, roles and responsibilities will remain sharply focused. To this end, the SHN Program will support the agreement brokered among SmithKline Beecham (Glaxo SmithKline), the World Bank, and the MOE for the development of a comprehensive IEC SHN scheme. It is hoped that communication, tackled in this way, will create the synergy required for success and will ripple and cascade throughout the project.

Cooperation, collaboration and joint ownership will be best promoted, established, and maintained, across ministries, sectors, and levels of program planning, management and implementation through established **partnerships**. Different modes of partnering will be pursued in order to establish the most effective and sustainable modes of collaboration. These partnerships will be continually monitored and refined so as to keep them vibrant, dynamic and achieving maximum performance goals and standards.

Capacity building--improved knowledge, skills and competencies--will be continually generated throughout the various SHN Program levels and within all developmental phases so that key SHN competencies become embedded within appropriate planning, management and implementation systems and personnel. Education and training strategies will emphasize utilization of active learning methodologies, competency-based planning and instruction, and performance monitoring as an integrated and reinforcing human resource development system. The SHN Program will utilize organizational learning approaches so that capacity permanently resides within the MOE and with key governmental stakeholders.

IV. CONCEPTUAL FRAMEWORK

The SHN Program conceptual framework contains five successive reinforcing developmental stages--training, community-based sensitization, community interventions and advocacy, school-based interventions, and outreach and impact.



The SHN program process is iterative with each action contributing to further actions which collectively and synergistically contribute to ever increasing improvements and maintenance of child health. While illustrated in a cyclical format, these stages are, however, not necessarily sequential in their development and implementation, often overlapping in occurrence.

Each of these aforementioned stages is described in more detail below:

Training

Within the SHN Program, training is viewed as the critical pathway to building awareness, participation, capacity and action. Training is understood as broadly inclusive of a diverse range of educational strategies and methods which lead to positive changes in knowledge, attitudes and behaviors in support of SHN Program goals and activities. Illustrative training methods include workshops, mentoring, coaching, meetings, focus groups, training classes, media and communications. Training will occur continuously and at all levels of the SHN Program.

- At the *national/central level*, training will include special meetings and training workshops of ministry officials and other key stakeholders to build awareness, knowledge, skills and commitment to SHN Program activities;

- At the *provincial level*, teachers at teacher training colleges will be instructed in SHN issues, health education methodologies, learning materials development and effective utilization. Teacher trainers and community development worker trainers will be trained in appropriate skills and methodologies so as to enhance their capacity. The

end result being a sustainable way to continue both pre- and inservice training for future teachers and field workers.

- At the *district level*, district managers and field workers (school inspectors, resource center coordinators, community development workers, and community health workers) will be trained in collaboration methodologies, community education and mobilization strategies, group participation techniques, rapid assessment tools, health and nutrition education methods, advocacy and management skills;

- At the *community level*, training will include meetings of formal and informal community leaders, community members and government field workers to discuss, analyze and respond to child health issues and problems;

- At the *school level* teachers will be training children in proper health and nutrition knowledge and practices; and

- At the *child level*, children will be sharing information and training their peers and families in appropriate health and nutrition practices.

Community-based Sensitization

Experience has shown that for a school health program to succeed the participation and commitment of parents/guardians, teachers and the community as a whole are imperative. Achieving this level of commitment requires community sensitization and advocacy--sensitization to understand the health status of their children and the circumstances and practices that contribute to such, and advocacy to facilitate their understanding of activities they can undertake and promote in order to increase the health status of their children. Through regular contact with communities, field workers can facilitate the process to identify key groups and subgroups within the community and identify possible social/cultural barriers to good health and nutrition interventions. While this process requires personnel and time, it is a necessary first step to assuring community acceptance, eventual ownership and sustainability of identified interventions. Moreover, the process is intended to be ongoing and self-reinforcing, which ultimately will be internalized by the community without the necessity for further outside initiation or direction.

The various steps in the community-based sensitization process will be carried out by teams of field workers consisting of representatives from the three key SHN Program ministries--Education, Health, and Community Development and Social Welfare. Having been trained in community participation methodologies and relevant health and nutrition concerns, these field workers will facilitate activities that help to support the overall SHN Program goals. Initially the community-based activities will take place in all communities being serviced by the selected pilot schools.

It is important to note that the community-based sensitization component of this SHN Program is intentionally collaborative. It is anticipated that no single field worker will initiate or implement the process without the presence of their colleagues from both of

the other key ministries. This is intended to demonstrate and model a behavior of joint collaboration and cooperation and to illustrate that school health and community issues are not isolated concerns, but are closely linked.

Activities facilitated by the field worker teams might include: focus group discussions, informal meetings, household visits, mapping, etc. The community will, in turn, identify situations which they have the capacity to alter using their own resources or some that will require outside assistance and support. For example, establishing a school garden might be well within their capacity. On the other hand, obtaining spare parts for broken hand pumps might require linkages with district officials (e.g. water resources) or NGOs who may assist. Facilitating communities to understand what they can accomplish on their own, as well as linking them to outside resources and information serves to empower them to facilitate change.

Emphasis is placed on working through existing committees within communities such as PTAs, neighborhood health committees, women's groups, and area development committees to develop plans of action that will identify key health and nutrition interventions to be undertaken by the community. The development of these action plans will ensure that the community, as a whole, has a plan to follow, target dates to meet, and recognition of who is responsible.

Community Interventions and Advocacy

Due to the diversity of communities and the variety of circumstances that contribute to a child's health status, the range of activities identified in the action plans will vary. The activities and interventions will be implemented by community members themselves and may include such activities as:

- School feeding programs
- Food production units
- Building or maintaining latrines
- School cleanliness programs
- Personal and home cleanliness regiments
- Organization of health/youth clubs
- Local newsletters
- School open days
- National immunization days
- Community peer counseling
- Formation of, or participation in, inter-sectoral committees (i.e. DWASHE, PAGE, etc.)
- Activities in promotion of school health interventions
- Popular theater
- Local radio broadcasts

An understanding of the community, building trust and transparency through a community sensitization process, and a community intervention plan of action are essential for program success. Parents need to be advocates of the program by getting

their children to school and by supporting teachers. Opinion leaders, health workers, religious leaders and traditional leaders also need to support the program and recognize the value of school-based interventions. The approach described takes into account community diversity by involving subgroups and interest groups within the community (i.e. opinion leaders, traditional leaders, women, vulnerable groups, youth, etc.). Moreover, the approach puts decision-making in the hands of the communities by allowing them to set priorities and develop their own solutions. Equally important to ensuring program acceptance and eventual ownership by the community are the partnerships developed through the field outreach team and with the community.

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The interventions identified and carried out by the community will be incremental and will form part of the dynamic process out of which will arise new challenges and opportunities. The community mobilization and community interventions lead to capacity building and empowerment. The community sensitization and interventions should be regarded as the real start of a school health program and are a vital phase of the sequence of events that set the stage for school-based interventions.

School-Based Interventions

The SHN program will embrace interventions that, if delivered within an interactive and supportive framework of government and community partnerships, are considered to form the basis of an effective school health and nutrition program. Indeed, the international inter-agency initiative, *FRESH Start* approach, cites: (i) school-based health and nutrition services; (ii) skills-based health education and; (iii) the provision of safe water and adequate sanitation, as three of the four basic cornerstones of effective programs. The fourth cornerstone--the implementation of school-based health policies--is currently being addressed by the Zambian Ministry of Education.

To effectively monitor and evaluate these school-based interventions, a management information system will be implemented. The revitalisation of the school health card will be the action taken at school level to aid in this implementation process.

School-based health and nutrition services. As is common across most of sub-Saharan Africa, parasitic infections and disease are highly prevalent amongst the school age population in Zambia. The mass delivery of anthelmintics (deworming medication) and micronutrients are the most cost-effective, simple and safe school-based health and nutrition services that can be delivered by trained teachers (PCD, 1998). In addition, exhaustive operations research has identified cost-effective procedures for implementing all the above interventions (PCD, 1998, 1999). In addition, teachers can be taught simple *illness recognition* skills. The ability to recognize simple physical signs of disease (e.g. overt signs of malnutrition) will help identify children with specific problems who can be referred to the local health center for specialist treatment.

Skills-based health education. This approach to health education focuses upon the development of knowledge, values, and life skills needed to make and act on the most appropriate and positive health-related decisions. Health in this context extends beyond

physical health to include psycho-social and environmental health issues. Changes in social and behavioural factors have given greater prominence to such health-related issues as HIV/AIDS, malaria prevention, early pregnancy, accidents, violence and substance abuse. These are factors that not only influence lifestyles, but also hinder education opportunities for a growing number of school-age children and adolescents. The development of attitudes related to gender equity and respect between girls and boys, and the development of specific skills, such as dealing with peer pressure, are central to effective skills-based health education and positive psycho-social environments. When individuals have such skills they are more likely to adopt and sustain a healthy lifestyle during schooling and for the rest of their lives. The development of *peer counselling skills* facilitates communication between children, peers, siblings and parents. This can lead to a promotion of a community-wide impact of the school health message. Peers also identify and respond to each other. This can lead to productive, informed counselling discussions.

Provision of safe water and adequate sanitation. The school environment may damage the health and nutritional status of schoolchildren, particularly if it increases their exposure to hazards such as infectious disease carried by the water supply. Hygiene education is meaningless without clean water and adequate sanitation facilities. It is a realistic goal to ensure that all schools have access to clean water and sanitation. By providing these facilities, schools can reinforce the health and hygiene messages, and act as an example to both students and the wider community. This in turn can lead to a demand for similar facilities from the community. The SHN Program will coordinate actions with other actions. For example, in Eastern Province WASHE activities supported by UNICEF, and other donor activities (JICA, GZT, Africare).

Outreach and Impact

First and foremost, the SHN Program is designed to have a positive impact on the health and nutrition of school-aged children, which will, in turn, contribute to improved pupil learning. Efforts to achieve this goal will focus on improvements in the child's physical wellbeing and immediate environmental conditions. The actions designed to support this goal, however, will require contributive actions across the many spheres of organizational and individual support. The SHN Project will be a catalyst for change and, through advocacy and interventions, achieve both direct and indirect impact across the chain of individual lives, management structures and policy environments which shape and determine the quality of the child's life. Both the channels and strategies of outreach, as well as the anticipated impact of SHN Project interventions are described below for each discrete level of action.

Child-level. The child is at the center of thought and action. Outreach to the child will extend through multiple complementary and reinforcing channels. Children will be recipients of beneficial pharmaceuticals that will directly improve their health status. Children will be beneficiaries of health education information which will raise awareness, create positive attitudes, and motivate change and action. Children will be challenged to

join with teachers, parents, and community members in activities that promote improved health for themselves, their families, their friends and their community.

Illustrative examples of child participation and outreach might include: student health committees to monitor and assist in improving health conditions in the classroom and immediate school environments; drama groups formed which create plays focused on health needs; and peer outreach groups to engage out-of-school youth.

Anticipated impacts will cut across child knowledge, attitudes and behaviors. Health and nutritional status of children will improve which, in turn, will increase child cognitive capabilities. This, in turn, will lead to increased child attention, engagement, participation and learning. Children will gain new knowledge about health and nutrition needs, problem solving, and critical thinking. As participants and leaders of interventions, children build capacities in leadership, community organization, and group management. Further, children will improve their abilities to be peer and family educators and counselors. Children will be empowered agents of change, building confidence, self-esteem and motivation to lead and guide interventions which benefit themselves, their peers, their families and communities.

School-level. Within the school, teachers' will conduct a wide range of SHN activities. Teachers will be resilient educators of children, imparting key SHN information, knowledge and skills through improved school curricula, innovative and participatory teaching methods utilizing creative, customized communication tools, materials and visual aids to reinforce instruction. By forming partnerships with key student, parent and community groups, SHN knowledge and behaviors will be reinforced. Teachers will also dispense deworming medicine and nutritional supplements to pupils, monitoring health status and making appropriate referrals as necessary.

The school itself will be an improved, healthy learning environment. Proper sanitation techniques will be practiced by students resulting in a clean school which will minimize health risks. Monitoring systems by teacher and children alike will reinforce the importance of positive health-related behaviors and attitudes. Reinforcing SHN activities will be constant and ongoing, reflected in curriculum, visuals and activities ranging from classroom-based instruction to possible food production and maintenance of sanitary conditions.

Community level. Communities will similarly be used as a target of SHN outreach in seeking acceptance and active support of SHN activities. Community-level field workers from the MOH, MOE and MCDSS will form strategic alliances among and across teachers, key formal, traditional and informal leaders, parent-teacher associations, NGOs, community groups and local businesses, to convene meetings and forums that lead to action focused on improving the conditions within which children live and grow. Local media will be used to impart reinforcing health and nutritional messages. Action plans will be developed and implemented with specific goals, targeted actions and identified persons responsible for achievement. These action plans will be shared and thereby become fora for building awareness and accountability.

Impacts will be diverse and far ranging. Community-based projects that contribute to improving child and community health status will be initiated and maintained. These may range from improved trash collection and water system maintenance to initiation of community campaigns or building key SHN messages and practices within local initiation practices. Community structures will be strengthened through active involvement and leadership on child health problems and issues. Capacity will be built within local leaders, community members and community groups as problems are tackled and responsive projects implemented. This will, in turn, build confidence, empowerment and forward momentum as other related, and perhaps more complex problems, are confronted.

District/provincial level. District and provincial level activities will be organized and managed, or pre-existing ones revitalized, to contribute to the SHN Program. Inter-sectoral strategic alliances will be formed among MOE, MOH and MCDSS representatives, provincial/district level government officials, and local community development NGOs engaged in current or potential related SHN activities.

Outreach will begin with senior government officials and managers to build awareness, "buy-in," and support for the SHN initiative. In turn, these senior officials will identify appropriate government personnel and district/provincial committees who will be mobilized to support of and will participate in joint SHN-related training, sensitization and planning activities. These alliances will catalyze and forge synergy and commitment through joint sharing of local resources such as offices and vehicles, and implementation of activities within which responsibilities are shared. Through these committees, accountabilities for SHN outreach and support will be established, roles and responsibilities defined and assigned, structures and systems established, and appropriate supportive policies forged and refined.

Further outreach will occur through use of district/provincial level media to introduce key SHN messages, build awareness, and reinforce support for SHN target interventions and activities.

In terms of impact, SHN capacity will be built within associated MOE, MOH and MCDSS management systems, structures and personnel. MIS systems will be established that inform better planning and decision-making. Inter-sectoral committees will be strengthened and, through them, key alliances fortified with district and provincial level NGOs working in related development areas. As field workers work and partner successfully with local schools and communities, their capacity to serve as effective change agents and advocates will, in turn, increase as a platform upon which future initiatives can be initiated. Further, the decentralized management of education and SHN initiatives will be reinforced and actualized.

National/central level. Outreach at the national/central level will mirror and parallel those undertaken at the provincial/district levels. The SHN Program will be fully integrated within the planning and operational structure of the MOE. As such, meetings will be called with key MOE stakeholders and officials for purposes of building

awareness and aligning roles, responsibilities and resources to support the SHN initiative. Under MOE leadership, outreach will continue through the established SHN Steering and Implementation Committees and the participating government, donor and NGO representatives to further organization collaboration, coordinate resources, develop and align policies, establish structures and generate other actions required to achieve SHN goals.

Positive impacts will similarly be registered across a wide range of associated areas. Most importantly, the government will have a piloted and proven SHN model for scaling up to national levels, leading to potential dramatic improvements in child health and academic achievement nationwide. Key stakeholder personnel will have increased SHN management and implementation knowledge and abilities. Cooperative management systems will be reinforced and institutionalized. National SHN information systems will be established and utilized as a strategic resource for shaping policies and directing resources to support the SHN program. A model of collaborative action will be operational within the government, suggesting the possibility for successful collaboration in pursuit of addressing other national development problems and issues. The credibility and influence of the MOE as a leader in solving problems of national importance through a decentralized management and delivery system will be reinforced.

V. MONITORING AND EVALUATION

Monitoring and Evaluation Framework

A more detailed M & E framework will be developed at the start of the program. For the purposes of the concept paper the major activities and indicators of success for the proposed interventions are detailed below and in an accompanying chart (see Appendix C).

To monitor the impact of the SHN program on developmental and educational outcomes, we will employ two types of indicators, cognitive/developmental indicators and educational indicators. Both types of indicators are going to be followed at the group and individual level.

Cognitive Development Indicators. Work beginning in the early part of this century has shown an association between parasitic infection, under-nutrition and poor mental development resulting in low school achievement. Multiple research studies have indicated that children with heavy infections and severely undernourished children display marked improvement in cognitive development following treatment. To monitor the impact of the SHN intervention on the children's cognitive development (and, subsequently, educational achievement) of the children, the Cognitive Assessment Instrument (CAI) will be developed.

The CAI will be characterized by construct validity, face validity, ease of administration, technological simplicity, low cost, noninvasiveness, ease and objectivity of scoring, short duration, cultural appropriateness, acceptability to the community, ease of creating parallel forms, flexibility across grade levels, and efficiency of measurement.

The CAI will provide indicators of most child-proximal dynamics in cognitive performance. In other words, indicators of educational achievement are susceptible to the influence of many factors (e.g., quality of teaching, availability of textbooks, quality of school building, availability of teachers, number of children in a classroom), so that the child's health is only one of these factors (overpowering the influence of other factors when the child is in very poor health, contributing to the impact of other factors when the child is in poor health, and having no impact when the child is in good health). To separate the variance in educational performance that is attributable to the health status of the child, the outcome indicators should be much more proximal to the child's individuality than measures of educational achievement (i.e., those assessed by the CAI).

The CAI is curriculum and competencies-free. In other words, the CAI will be designed to be sensitive to changes in basic psychological functions relevant to learning (e.g., memory scan, attention). The SHN interventions will strengthen these functions (e.g., expand memory span and improve attention), and that will result in gradual accumulation of knowledge and rising achievement scores. The SHN, however, will not override teaching as a factor contributing to educational achievement. Even when the child is in perfect health, high-quality teaching is necessary to result in educational improvements.

Educational Assessment Scores. Students' school achievement is one of the main indicators of the long-term effectiveness of the BESSIP program. To monitor students' school achievement, we will utilize batteries from the National Assessment of Education that is currently implemented by the Zambian Ministry of Education. Specifically, we will use the Grade 5 National Assessment (G5NA).

This assessment was selected as a monitoring indicator for students' school achievement due to the following:

(a) This instrument is developed by the Examinations Council of Zambia, who possess expertise in developing educational achievement tools; it was tested in a large-scale field trial in 1999 and produced large quantities of interpretable data.
(b) Based on the Final Report on Zambia's National Assessment Project of 1999, the assessment produced no ceiling effect and the average scores were much lower than expected. Therefore, to explore the assessment's full potential, to investigate its psychometric properties on a large spectrum of performance, and to include higher-performing students, it is advisable to use the assessment at higher-grade levels (grades 6 and 7).

The following design is proposed to be implemented:

Year 2001

G5NA is administered to all BEPS/BESSIP program participants in grades 5, 6, and 7 (both in the treatment and control groups).

Year 2003

G5NA is administered to all BEPS/BESSIP program participants in grades 5, 6, and 7 (both in the treatment and control groups).

This design is depicted in the following diagram:

Grades (2001)	Grades (2003)	2001		2003	
		T	C	T	C
3rd	5th				
4th	6th				
5th	7th				
6th					
7th					

Note:
T-treatment group, C-control group.

Thus, the assessments in the year 2001 will serve as the baseline assessments. The assessments in the year 2003 will serve as the outcome educational achievement assessments. The comparisons will be carried out at two levels: (1) the group level (e.g., 5th graders' scores in 2001 will be compared to 5th graders' scores in 2003, for both treatment and control groups); and (2) individual levels (e.g., the children who are in grade 5 in 2001 will be followed up throughout the year of 2003, when they are in grade 7).

Therefore, the utilization of this instrument will result in the production of the data that are (1) comparable to the previously collected educational data; (2) of significant interest to the Ministry of Education (i.e., it provides indicators of educational changes are a result of intervention); (3) of significant interest to the Examinations Council of Zambia (i.e., it provides an opportunity to further explore the psychometric properties of the G5NA (a) on a larger group of children drawn from different grade levels, and (b) by assessing the test-retest reliability of the assessment); and (4) of significant interest to USAID in meeting their strategic objective of monitoring increases in pupils' assessment scores.

Areas of Monitoring and Evaluation

Cognitive and Achievement Tests & Health Assessment. A study will be conducted to assess the impact of the SHN program on the health and nutritional status of the children and on their learning capabilities. The research will be conducted during the first three years of the program targeting a total of 80 schools. In the first year, pupils from 20 schools will serve as the intervention group that will receive SHN treatment, while those from another 20 will be used as a control group. In the second year, the pupils from 20 schools that constituted the control group will become part of the intervention group, thus receiving SHN interventions. Meanwhile, an additional cohort of pupils from 20 new schools will constitute the new control group. In the third year, the latest control group will join the main intervention group and another 20 school will be added as control.

Information on the two key variables (health and nutritional status; and learning capabilities) will be collected from a sub-sample of pupils from grades 1 – 7 in both control and intervention groups at the beginning of each year, prior to interventions.

The instruments and tools to be used include some that already have been developed, such as those used to monitor and evaluate the school-based interventions (anthropometric and biochemical) which will provide a means to measure improvements in child health and nutrition status.

A cognitive assessment tool is in the process of development and will be tested and validated. This tool will provide data on the cognitive ability of students administered before and after the school health interventions and will enable the program to assess the relative success of the interventions on pupils' learning ability. Data from the National Assessment exam (grade 5) will also be used for measures related to net admission rates by gender and increase in pupil assessment scores by gender.

Program Monitoring. Throughout program implementation, a participatory monitoring system will be used to ensure that the program is on track. Key variables that will be closely monitored will relate to the six major components as described earlier. Specific emphasis will be on the success and difficulties encountered in implementing each of those components. Information collected, and insights gained through the monitoring system will be fed back to major stakeholders to improve project management and influence policy formulation at the national and district levels.

Program Evaluation. A mid-term evaluation will be conducted to assess the processes, systems and achievements of the first three years of the program. The lessons learned will serve as a springboard for scaling up in the remaining two years. The final evaluation will be conducted at the end of the five-year period. Lessons learned through the program will be used to inform policies at the national level. As will be the case with the monitoring function, all evaluations will be participatory.

Impact Assessment. The ultimate goal of the proposed SHN program is to improve health and nutritional status of the pupils to improve their learning capability. These variables will provide the basis for impact measurement.

The monitoring and evaluation framework proposed include indicators to measure expected outcomes for both education and health at each level of program intervention (Central, District, school, community and child). The framework includes indicators designed to capture key elements of the proposed interventions including training, health education, capacity building, data management systems and community involvement.

VI. MANAGEMENT SYSTEMS AND STAFFING

The management and staffing of the Program to Improve Learning Through School-based Health and Nutrition Interventions (the SHN Program) are integrated within the existing management structure of the SHN Component, one of the eight components

within the Ministry of Education's Basic Education Sub-Sector Investment Program (BESSIP). For an illustrative representation of the organization chart see Appendix D.

A Technical Advisor will be hired to work along side the SHN Focal Point within the Ministry of Education. Key responsibilities of the Technical Advisor will be to support the overall development, supervision, and administration of the SHN Pilot Program being conducted in Eastern Province. The Technical Advisor will be housed at the Ministry of Education and will serve as an advisor to the SHN Focal Point, the SHN Steering Committee, and others involved in the SHN Pilot Program in order to build capacity within the MOE to design, implement, monitor, and assess the Pilot Program and future MOE directed SHN interventions.

A Provincial Technical Advisor will be hired to be located within Eastern Province and will work hand-in-hand with, and serve as an advisor to, the Eastern Province SHN Focal Point. The overall activity implementation plan of the SHN Pilot Program being conducted within the Eastern Province will be the key responsibility of the Eastern Province SHN Focal Point, together with the Provincial Technical Advisor.

Three Assistants will also be hired to facilitate the SHN Pilot Program along with responsible Provincial and District level officials from the Ministry of Education, the Ministry of Health, and the Ministry of Community Development and Social Services. A Training Assistant will assist in the overall coordination and training required for all levels of the pilot program. A Community Assistant will assist in the overall coordination, collaboration, implementation and monitoring of all community-based activities taking place within the Pilot Program. A School Health Assistant will aid in the training and implementation activities required to achieve better SHN programs in the teaching/learning environment and the capacity to assess the health needs of children and administer health interventions to children. The three Assistant positions will be required as full-time positions for the first year of the program and will serve as short-term consultants to the three Ministries throughout the successive years of the program.

It has been determined that the technical expertise is available within Zambia to meet the requirements of the Provincial Technical Advisor, the Training Assistant, the Community Assistant, and the School Health Assistant. The three key ministries will be involved in developing the terms of reference for each of these positions and recruitment from within the country will take place. An interview and selection committee will be established to make final selections.

At the district and community level there are a variety of individuals who will be responsible for the actual development and implementation of action plans in support of the Program to Improve Learning Through School-based Health and Nutrition Interventions. School inspectors, resource center coordinators, community development officers, and community health workers will be responsible for facilitating activities at the community level in order to mobilize them to action. Local leaders, PTA members, and special target group members, among others, will be responsible for the development of action plans that detail how communities and individuals will support better health and

nutrition practices for themselves and their children. Teachers will be responsible for the actual screening of children with regard to their health status and will administer interventions and adopt new teaching practices.

VII. IMPLEMENTATION PLAN

It is proposed that the SHN Program be implemented from October 1, 2000 through September 30, 2005. The Activity Implementation Schedule in Appendix E provides a detail activity list and timeline for the overall program implementation.

Appendix I

Monitoring Increases in Pupils' Cognitive Development Indicators and Educational Assessment Scores

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