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II.

IEP - Vitamin A Project

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MALAWI VITAMIN A PROJECT

The mid-term evaluation of IEF's Vitamin A Project (Cooperative Agreement OTR-0500-A-00-9159-00) was carried out between 15 and 20 October 1990. A team of seven persons spent several days (15-16 October) visiting villages in which the Vitamin A project was active. Included on that team were representatives of IEF (project director, project coordinator from headquarters, local project coordinator), two officials from the Ministry of Health (nutritionist from Lilongwe, Regional Primary Health Care Coordinator), ADRA's country director and the outside consultant. In addition, other persons participated in the project evaluation and discussions: the Regional Health Officer from the MOH, the UNICEF Social Mobilization Officer for EPI and AIDS, and the Director of USAID/Lilongwe's Health, Population and Nutrition Office.

The evaluation of the IEF project was guided by the Scope of Work as prepared by the IEF and forwarded to HKI which organized the joint evaluation of the ADRA and IEF vitamin A-related projects in Malawi under VITAP (Appendix I). The evaluation team also reviewed the Mid-term Evaluation Guidelines issued by the PVC Office (dated 5 July 1990) - see Appendix II. Prior to coming to Malawi, the outside consultant contacted the concerned officer in PVC to identify particular concerns that should be included in the evaluation. All relevant reports, documents, records and communications were reviewed; a list is provided in Appendix III. The visit to the project site in the Lower Shire Valley consisted of meetings with village leaders, Village Health Committees, Village Health Promoters and a selection of mothers in three villages. The evaluation team also had the opportunity to discuss the project with the District Health Inspector, Ophthalmological Medical Assistants (OMA), and Health Surveillance Assistants (HSA) who are involved in the support and implementation of the Vitamin A Project. Appendix IV gives the names of those participating in the evaluation and as well as those with whom the evaluation team met. Prior to departure from Malawi, debriefings, including presentation of findings and recommendations, were conducted with the IEF project staff (including a representative from IEF headquarters in Bethesda) as well as USAID/Lilongwe.

A. Background

1. Project Development

In December 1988, IEF submitted a proposal for a very large, five-year Child Survival and Blindness Prevention Program for the Lower Shire Valley which was to cover the entire population of the valley, estimated at that time to be 366,000 people. The project was to deliver a comprehensive package of community-based child survival interventions, including ORT, immunization, nutrition/vitamin A, birth spacing, curative care and water/sanitation. The original project had dual objectives: to reduce infant and child morbidity and mortality and to reduce the prevalence of vitamin A deficiency. IEF requested over \$2.6 million as the A.I.D. contribution (out of a total project cost of almost \$3.8 million).

The comprehensive program was not selected for Child Survival funding, but A.I.D. suggested that IEF modify the proposal and resubmit it as a vitamin A project. IEF was informed that \$530,000 was available for programming. In the short time given for this resubmission, IEF prepared a one-page project description. According to this document (Appendix V), the project was to focus on expanding and strengthening their existing vitamin A project in the Lower Shire Valley. A nutrition education package and an information system to track vitamin A activities were also to be included. The entire population of the valley was still to be served. With the IEF contribution, the total budget came to slightly less than \$850,000. IEF remains unclear as to the source of the funding. From the grant agreement it appears that funds were taken from two sources, both originating in the FVA/PVC office. The project has been supervised by the PVC Office.

Not having had time to redesign the project in any detail, IEF spelled out what the Vitamin A Project would consist of in the Detailed Implementation Plan (DIP), submitted in late 1989. It is this document that is currently guiding the implementation of the project.

2. Project Setting

The Lower Shire Valley where the Vitamin A Project is being implemented is the southwestern tip of Malawi. The valley is made up of two districts, Chikwawa toward the north and Nsanje to the south. These lowlands are semi-arid during most of the year, while suffering extensive flooding during the rainy season.

The Valley is plagued by high rates of child malnutrition and has one of the highest infant mortality rates in the country, estimated in the late 1970s as being 205 out of every 1,000 infants born. A survey carried out 1983 found that 22.3% of the under five population suffered from moderate to severe stunting (<90% height for age); 2.8% showed signs of severe wasting (<80% weight for height). Ocular signs of vitamin A deficiency in the Lower Shire Valley were reported to be 4% among the under 6 population; 30% of the same age group had clinical signs of inflammatory trachoma. As pointed out in IEF's original proposal, the rates for active or corneal ulceration vitamin A deficiency in the Valley are 5 to 10 times higher than the WHO criteria for identifying a problem of public health significance. The malnutrition-related problems are exacerbated by a serious water shortage which results in high rates of diarrheal diseases. Malaria is also endemic during parts of the year.

Adding to the Lower Shire Valley's already miserable situation is the influx of refugees from war-torn Mozambique which lays just across the Shire River. Nsanje District is currently host to almost a quarter of a million refugees, nearly 30% of the total in Malawi. A large number of the refugees are said to have moved into the villages of the Lower Shire Valley, increasing pressure on already scarce land resources and adding to the existing heavy health burden.

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The recurrent costs of staff, transport and commodities are minimal. Some things could be done to facilitate a smooth transition. For one, instead of having IEF procure the vitamin A capsules, arrangements should be made to receive them through the government. If they are not available, the reason should be determined. If the project is to continued once IEF is no longer associated with it, a regular supply of vitamin A within Malawi must be identified. This should not present a problem since vitamin A has been classified as an essential drug and should be available at the Medical Stores through the District Health Officer.

Incentives for the VHPs is another concern. At present, the project provides them with very little in the form of incentives: a uniform, soap, a badge, a pair of shoes. But even that would be too much to expect the government to provide if it were to assume control. The possibility of the community providing such incentives in the future should be investigated. It is suggested that IEF conduct a study on what motivates VHPs. During year two of the Vitamin A Project, the PCVs should hold focus group sessions with selected VHPs to determine what non-monetary incentives would stimulate them and the number of drop-outs in the future. If the IEF approach is to be expanded and adopted more broadly, it is essential for the project to know what motivates volunteers within the Malawian context.

The DIP says that the project's activities of vitamin A distribution and nutrition do not offer any scope for cost recovery. While this is true, if activities were added like ORT and simple medicine distribution, possibly some cost recovery could be introduced.

The issue of sustainability will not be answered by the Vitamin A Project. A more serious effort focused on process issues is required. This is discussed a the final section of the report, in terms of what might come next.

7. Finance and Budget

The DIP review raised a question about the project's high cost per beneficiary. It should be noted that IEF responded in a very short time to the request for a revised proposal. They did not have sufficient time to think through how they would change the project from a more broad based Child Survival effort to a more focused vitamin A project. The details were not worked out until they went through the DIP development.

The evaluation team agrees that a total budget of over \$700,000 (combined A.I.D. and IEF) for a two-year project focusing most of its energies on vitamin A supplementation to a population of only 42,000 is too high. Now that the project has been launched and seems to be operating effectively, it is time to consider how the project might be expanded and/or broadened. The project director is interested in considering the best way to do this. Several possibilities exist. One is to expand in areas adjacent to villages already being covered. This would resolve the problem of jealousy referred to above. Another possibility is to add a fourth cluster of another 15 to 20 villages and 25-30 VHPs.

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The project hopes to upgrade the HSAs, the most peripheral health care worker in the Ministry's infrastructure. They staff health centers or posts while periodically visiting the villages in their areas. HSAs are terribly over extended, being responsible for as many as 30 to 40 villages each. The size of their service areas has seriously compromised their effectiveness. The Vitamin A Project will strengthen the HSA's link to the community by providing them with additional training and by adding VHPs who reside and work in the villages.

The villages chosen to participate in the Vitamin A Project had Village Health Committees which were strong enough to assure the potential for community involvement in project activities. The OMAs selected the most capable of their HSAs, those able to assume additional supervisory responsibilities. The villages select a woman to serve as the VHP; the criteria included literacy, and willingness and ability to promote child health/nutrition activities in their community.

According to the plan, one VHP was to cover approximately 50 families having a pregnant woman and/or children under six. Larger villages would have multiple VHPs. The VHPs would be responsible for carrying out the two mechanisms of delivery for project interventions, the village rallies and follow-up home visits. It was expected that the vast majority of the target population would receive their vitamin A supplements at the semi-annual rallies. In addition, quarterly rallies would serve as venues for eye examinations (by the OMAs) and nutrition education/demonstrations for village women. Home visits were to be made to those homes of newly delivered mothers and those children between 6 and 72 months who did not attend the rally. The VHP's roster or population-based register was to enable the village volunteer to manage her operations. The HSAs and OMAs were to supervise and support the VHPs in their community work.

Two Peace Corps Volunteers (PCVs) were to divide the project area and concentrate their energies on the nutrition component, primarily increasing the consumption of energy-dense and vitamin A-rich foods by the vulnerable target group. With their anthropological backgrounds, the PCVs were to conduct qualitative research into local eating and feeding habits.

C. Findings

In terms of the vitamin A distribution objective, IEF's Vitamin A Project has been very successful, reaching and even surpassing its targets within the first year. The project has developed an effective infrastructure through the training of the OMAs, HSAs and, most importantly, the VHPs. The project has been less successful in the nutrition/improved child feeding aspect of the project. The progress to date indicates that more can be done to utilize the community-based capacity that has been developed. This could consist of expanding the services provided and/or expanding the number of villages covered. The basis for a larger, more fully integrated Child Survival effort has been established.

There are a number of aspects of the Vitamin A Project which are of interest and will be reviewed in this section of the report. These consist of manpower development, project coverage, information systems, collaboration, community involvement, sustainability, finance and budget, and, finally, the A.I.D. process.

1. Manpower Development

The Vitamin A Project has trained the target number of HSAs (9) and VHPs (78) that had been planned. The HSA training took place between 23 and 26 October 1989. The course was developed in accordance with the task description for the HSAs (Appendix VII). A set of training materials were prepared for both the HSA and VHP trainings (Appendix VIII).

The training of the 78 VHPs has taken place in four different groups: 30 October-2 November 1989 (19 participants), 13-16 November 1989 (18 participants), 27-30 November 1989 (14 participants) and April 1990 (27 participants). The tasks of the VHPs (Appendix IX) served as the basis for the VHP training objectives (Appendix X). A sample of a VHP training course is provided in Appendix XI. It is important that all the VHPs are women; they are the only ones capable of carrying out the VHPs' job description.

While the quantitative target for training have been achieved, it is very difficult to determine retrospectively the quality of the HSA and VHP training. However, from what the evaluation team was able to determine during its site visits, the project field staff seem to have been adequately prepared for their respective tasks. The quantitative data from the project supports this assessment at least in terms of vitamin A coverage (see section IV.2 below). More problems arise in the nutrition education aspect which is certainly much more difficult given the serious economic and environmental conditions in the Lower Shire Valley.

2. Intervention Coverage

The coverage target of 80% of the children under six and postpartum mothers receiving vitamin A capsules apparently have been exceeded. In the baseline survey, IEF found that less than 16% of the under six children had received vitamin A during the last six months; slightly more than 32% of the recently delivered mothers had received a vitamin A supplement within two months of delivery. The most recent figures from the project indicate that in seven out of the nine project areas¹ 94% of the under sixes and 88% of the new mothers were covered during the latest rallies. There is no doubt that the IEF has succeeded in their vitamin A delivery objectives.

The combination of the rallies with follow-up home visits of those not attending or requiring special attention is unbeatable. Each VHP covers an average of 56 households, ranging from 53 to 90. The evaluation team was

¹ The figures from two of the HSA's contain some inaccuracies and cannot be relied upon, therefore are not included.

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impressed that the VHPs interviewed had intimate knowledge of the situation in all the households in their respective areas of responsibilities (e.g, knew number of current pregnancies and number and causes of under six deaths in the last year). As will be discussed, this capability might be able to be utilized more broadly.

The Vitamin A Project also has done a good job in the eye examination component. A total of 5,287 persons (42.5% under six) were examined in May and June 1990; another 4,160 persons (52.3% under six) were examined between August and October 1990. The largest percentage of the eye problems identified in the under six age group was conjunctivitis (28.9% in the earlier period, 46.7% in the latter). Active trachoma was also common (10.1% in the earlier and 9% in the latter). In the baseline survey, the figure was 12.7%. Xerophthalmia went from 0.62% in the May-June period to 0.18% in the August-October period. It is encouraging to see the sharp drop in the rate of xerophthalmia, but the sample is self-selected, is too small, and it is entirely too early to draw any connection between the IEF intervention and the reduction. Unfortunately, xerophthalmia figures were not collected as part of the baseline survey because the sample (approximately 10% of households) was too small to provide meaningful data.

The Vitamin A Project has included immunizations at the rallies from the start. The HSAs gave a total of almost 2,500 immunizations (evenly split between under and over ones) during the first series of rallies; another 1,153 were provided during the second round. The project only recorded the numbers by antigen; no information was collected as to number of DPT III, for example, which would indicate the completeness of coverage. Nothing was done on tetanus toxoid for women of child bearing age (WCBA) Nor was there any effort to utilize the project's population-based roster system in support of immunization coverage.

The biggest problem is undoubtedly in the nutrition education component of the project. To begin with, the target stated in the DIP is unrealistic; the team is not aware of any project that has been able to achieve 90% success in terms of appropriate feeding habits. The target is all the more inappropriate considering the two-year life of the project. Finally, the baseline findings (e.g., 6.4% of the 6-11 month olds consume energy-dense four times a day) indicate what an impossible target the project had set for itself. The DIP mentions the cultural barriers to increasing consumption of energy-dense and vitamin A-rich foods as well as the frequency of feedings among the infant and weanling population. While cultural constraints undoubtedly exist in the project area, the more serious concern appears to be food availability and the desperate poverty.

The efforts to improve infant and child feeding practices are made during the village rally sessions (in the form of demonstrations). The messages are reiterated and reinforced by the VHP during her monthly home visits. An effort is made to select the most appropriate message based on the age of the child in the particular household. The key nutritional messages delivered by the project can be found in the VHP training tasks (Appendix X).

Scanning the list of topics, one is impressed by its thoroughness. However, experience in successful nutrition education interventions elsewhere tells us that it is not the number of messages that is important. Rather, programs which have made an impact have been able to identify the most serious nutritional behavior problem, develop a limited number of appropriate messages and hammer away with them from several different angles. In the case of the Lower Shire Valley, some of the most pressing nutritional issues which a project might be able to influence include:

- exclusive breastfeeding for three months (baseline data indicates almost half of the mothers give their infants supplementary food before they reach two months);
- continuation of breastfeeding when the mother becomes pregnant (said to be a common problem and with such high birth rates and birth intervals of 2 years or less, this is a serious concern although no data on the problem was collected in the baseline survey);
- a specific weaning food (consisting of protein and energy sources that are readily available and affordable in the area).

Once a topic has been selected, the most effective messages are developed to bring about the desired behavioral change. The messages are presented in a number of different forms - e.g., demonstrations, interpersonally, by local dance, traditional bands, role play, folk theater. As success is achieved in one topic, the second highest priority topic is adopted and the same process is repeated. Some technical assistance in the social marketing approach might be helpful in support of the nutrition education component of the project.

One suggestion that was made to improve the education component of the project is to hire a field education support person to monitor and support the community-level education activities. The person, preferably a female with extensive applied nutrition education experience, would be responsible for working with those VHPs experiencing the greatest difficulties. She could instruct them on education methods and techniques (e.g., role play, folk dance and plays), do in-service training, monitor education sessions and organize local folk plays and music performances in support of the nutrition education component.

3. Information Systems

The IEF has devoted considerable attention to the development and implementation of an effective management information system. Technical assistance provided by the VITAL Project was helpful in this respect. The project has a firm grasp of the need for an effective information system:

- helps structure supervision (identifies where special attention is required);
- provides performance indicators for the field and community workers themselves; and

- gives the community immediate feedback on project impact (thereby increasing understanding and support).

The system that has been developed in the Vitamin A Project can be described as a Monitoring/Built-in Evaluation System. It provides project managers, field staff and community members with timely data on project performance. The indicators being tracked relate directly to the project objectives. For example, it is not difficult at any point in time to know the vitamin A distribution coverage rate as a result of the last series of rallies. Progress is compared to the situation prior to the initiation of project activities as collected in the baseline survey. What makes the IEF's system possible is its population-based data collection approach. The basis of this is the roster which is maintained by the VHP with the support and assistance of the HSA. The roster functions in much the same way that a register does in a number of other community-based child survival efforts.

The basic roster format is presented in Appendix XII. Each household in a VHP's area having a pregnant woman and/or a child(ren) under six is entered in the roster. The date of birth of each child is entered. A space is provided to enter the vitamin A distribution to the recently delivered mother. The crucial information is the check indicating whether the child attended the last rally session; if not, there is a slot to indicate that a follow-up visit was made to the house and vitamin A distributed. This system makes it possible for the supervising HSA to quickly tabulate the coverage figures in a village after a rally.

The HSAs base their monthly supervisory visit to their VHPs on the latter's rosters. The HSAs abstract data from the rosters and enter it on a tally sheet which tracks the most important project indicators (Appendix XIII). Progress in reaching the project's objectives can be easily monitored and shared with the project staff, Village Health Committees and other local authorities. The data engender a spirit of competition as well as a sense of accomplishment and satisfaction, all of which serve as motivating factors for the workers (especially the volunteer VHP). The information system is viewed as a benefit rather than a burden and is obviously a vital management tool.

The roster-based information system also includes information on child deaths. According to VHP guidelines, a death of a child is to be indicated by drawing a line through the name in the roster and noting the date. However, more can be done with this potentially rich source of data. For instance, the number of child deaths should be counted and reported by the HSA at the end of each month. The project should also monitor the causes of infant and child deaths.

In addition, the roster could be utilized to track immunization status. Although Malawi has done a commendable job in achieving high immunization coverage rates, the roster could help to maintain the good record. This could be done by indicating all children who should have been fully immunized (i.e., over the age of 9 months) with a circle in the extreme right hand margin; when fully immunized, the circle would be filled in.

In a similar fashion, women of child bearing age in the household already enrolled in the IEF-supported project could be added to the roster and

signified with a square in the right hand column. When she had received her five tetanus toxoid shots, the square would be filled in. It would not present great problems for the HSA to tally at the end of each month the number of children and WCBA who should be fully immunized (the denominator) and the number that have been (the numerator), giving a fully immunized coverage rate. In addition, all the children with open circles and women with open squares would be reminded of the need to get their remaining immunization(s) at the next opportunity, usually during a home visit. Not utilizing the roster for such purposes is missing a golden opportunity to greatly enhance the immunization effort in the project area.

While the roster system that has been developed has served the project's needs very well, its broader application has yet to be developed. Most importantly, the potential for targeted "at risk" programming is there. By identifying those infants and children with special needs and focusing attention (services and education) on those households, referring to the health centers when required, the project will be able to achieve its objectives as well as have an impact on the infant and child mortality rates.

Despite the attractive features of the information system, a few problems were noted. The VHPs occasionally make incorrect entries (e.g., marking that a mother has attended a session but received a follow-up visit as well). Several of the HSAs continue to report inaccurately, submitting monthly reports that do not make sense (e.g., all mothers attended the rally session but X number were followed up). These problems must be resolved before any further modifications are made to the current system.

Just as the nutrition education component of the project has proved most difficult in terms of implementation, so too has it presented the greatest problems in reporting. How many times a day the mother feeds the child or whether the food served is energy dense is not easy to determine. There are currently no indicators that are being tracked to determine whether any progress is being made. The DIP mentions that another random sample survey will be conducted toward the end of the two-year project to ascertain if any change in the community's nutritional behavior has occurred.

The baseline survey did not collect data on nutritional status. It would have been interesting to know the percentage of under fives according to the Gomez classification² prior to the start of the project. Because the growth of a large portion of the under five age group in the project region is currently being monitored at regular mobile clinics, those "at risk" (i.e., not growing or in third degree malnutrition) would be specially monitored and their mothers given special nutrition education. It is doubtful whether any significant impact of nutritional status could be achieved given the chronic food scarcity in the area and the short duration of the project. However, it

² The Gomez classification is determined by weight for age. Those children falling between 75% and 89% of standard are mildly malnourished (1st degree); from 60% to 74% are moderately malnourished (2nd degree); and below 60% are severely malnourished (3rd degree).

would give an indicator that could be tracked and provide another means by which "at risk" programming could be done.

It is suggested that the development of several very focused messages on such priority topics as presented in the preceding section might make it possible to track behavioral change (e.g., mothers with children under three months who are or are not exclusively breastfeeding; pregnant mothers with children under two who do and do not continue to breastfeed; mothers with weaning age children who do and do not feed them the improved weaning food being promoted).

4. Collaboration

IEF has established close ties with the Ministry of Health structure in the project area and has communicated with the regional level officials as required. The OMAs and HSAs from the government's district health services are an integral part of the project; the Vitamin A Project could not achieve its objectives without their involvement. The project managers have also worked closely with the District Health Officers, Health Inspectors, Public Health Nurses and MCH Coordinators in Chikwawa and Nesanje Districts, keeping them informed and involving them in the training sessions.

The evaluation team noted the need for greater coordination between the Vitamin A Project and the monthly or bi-monthly mobile clinics conducted by the government or collaborating agency (e.g., mission). In one of the villages visited during the review, it was noted that a rally might be conducted several days before a mobile clinic. It would be more convenient for the women of the village if the two could be combined. Disrupting one day instead of two would decrease the time burden for the hard working women.³

Before the integration takes place with the mobile clinics, the IEF project would do well to study how the mobile clinics are done what their coverage is at present. Also, questions relating to antenatal services and tetanus toxoid coverage must be ascertained; can HSAs give TT to WCBA or must it be done by a Health Assistant? Any effort to link more closely with the mobile clinics must be done in close coordination with the Regional Public Health Coordinator.

While combining the rallies and mobile clinics sounds like the reasonable and efficient way of doing things, problems arise that make it difficult. The problem is who should be given vitamin A arises when some of those attending the mobile clinic come from outside the Vitamin A Project sites. In one case, the mobile clinic involved several villages, only one of which was receiving vitamin A. In another case, half (two clusters) of a large village (consisting of four widely scattered clusters) received vitamin A while the mobile clinic covered the entire community. The project management has not

³ Women in one of the villages visited by the evaluation team said that it took them five to six hours a day to fetch water: three hours walk to the source and back plus several hours of waiting.

yet decided on whether the vitamin A can and should be provided to the broader population.

One possible solution to the problem is to expand the project to include the population of the mobile clinics associated with the current project villages. This would reduce the resentment from neighboring villages or parts of villages which have heretofore been excluded from the Vitamin A Project activities. This problem has had a negative impact in one of the villages we visited; the chief of the village resides in one of the clusters not covered by the Vitamin A Project and, as a result, he does not provide the support required to make the IEF effort work properly.

There is also a need to increase collaboration with other non-governmental organizations working in the Lower Shire Valley. Being one of the most depressed and needy areas of Malawi, a great number of development agencies have operations there (including ADRA, World Vision, TALRES, Save the Children-UK, and a number of mission groups). A case of possible overlap was identified during the project review. One of the villages included in the evaluation had been visited a month before by another group also dispensing high dose vitamin A capsules. Fortunately, the IEF project identified the problem and withheld vitamin A from those who had received it from the other source. No one was able to identify the other group. This incident makes it imperative that IEF and district authorities (especially the respective District Development Committee) coordinate more closely with the other agencies involved in child survival efforts in the valley. It must be determined who is doing what, where. This will obviously have to be done through the office of the District Health officer, but it is thought that IEF could initiate and facilitate the matter. If the government and non-governmental resources were properly coordinated and rationalized, it is very possible that the districts in questions could be fully covered with a reasonable quality of health care for the vulnerable target groups.

5. Community Interaction

The success of the Vitamin A Project is heavily dependent on the cooperation of the community, especially its leaders. To begin with, a team consisting of the area Malawi Congress Party or MCP (political party) representative, an official from the district health office, someone from the District Development Committee and an IEF representative explains the community's role and responsibility in the project to the chief and the Village Health Committee members.

If the village's response is positive, the leaders are instructed on how to chose a VHP. The criteria for the VHP include the woman being literate and "being honest and of good character". Once several women are nominated, the entire village votes for the one they deem to be the best candidate. In several of the villages the evaluation team visited, the VHP was one of the four female members of the Village Health Committee.⁴ Three out of the five

⁴ It is mandated that Village Health Committees include four female representatives among its 10 members.

VHPs interviewed during the course of the project review were considered to be very good. The one village, where performance was lagging and the VHPs were not as motivated, had a problem with village leadership that could explain the problems. The chief of the village resided in one of the clusters not included in the Vitamin A Project. As a result, he never gave the effort his support and never encouraged the villagers to participate in the project activities. This helps explain why so few women attended the weekly nutrition education sessions. In other villages where a lack of support was a problem, all that is required is for the local MCP leader to visit the community and urge participation; no further problems are experienced. Traditionally, the villagers of Malawi are very obedient and do as their local leaders instruct.

A very encouraging sign in two of the three villages visited was the involvement of the traditional birth attendants (TBA); both had received training from the government. It was clear that they were considered important members of the village health team. The TBAs enjoy a high level of confidence with the women of the community and can be great assets to the VHPs in effectively carrying out project activities. In the third village, the VHP delivered most of the babies in the village but had not undergone TBA training.

Another positive aspect of the project was the low dropout rate among the VHPs in during the first year of operation. Four of the 78 VHPs (5.1%) trained are no longer functioning as community health workers. One died while two more got paid jobs (one as a school teacher, the other as a PVO worker). The fourth VHP moved from the village with her husband. This augers well for project sustainability, the next point of discussion.

6. Sustainability

Sustainability continues to be a priority issue and consuming topic in all Child Survival projects; IEF's is no exception. There are a number of ways the problem can be addressed. One is in terms of leadership and management. In the Vitamin A Project, Malawians have been given considerable responsibility. The only expatriate involved on an on-going basis is the half-time Project Director. There is a genuine sharing of the technical and management functions so that if required, the local staff could eventually assume responsibility for running the project with little or no decrease in effectiveness.

In terms of field staff, all the supervisory workers are part of the government's health infrastructure. Neither the OMAs or the HSAs receive any incentives from IEF for their involvement. They do receive per diem (standard government rate) for the pre- and in-service training, which amount to approximately six or seven days a year. While some of the HSAs may have concentrated their time and energies on the Vitamin A Project, they continue for the most part to do their normal job. If current national plans are realized, the number of HSAs will be increased 10 fold over the next five years, making it possible for them to do what is expected of them in the Vitamin A Project without neglecting other responsibilities.

The recurrent costs of staff, transport and commodities are minimal. Some things could be done to facilitate a smooth transition. For one, instead of having IEF procure the vitamin A capsules, arrangements should be made to receive them through the government. If they are not available, the reason should be determined. If the project is to continued once IEF is no longer associated with it, a regular supply of vitamin A within Malawi must be identified. This should not present a problem since vitamin A has been classified as an essential drug and should be available at the Medical Stores through the District Health Officer.

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The evaluation team agrees that a total budget of over \$700,000 (combined A.I.D. and IEF) for a two-year project focusing most of its energies on vitamin A supplementation to a population of only 42,000 is too high. Now that the project has been launched and seems to be operating effectively, it is time to consider how the project might be expanded and/or broadened. The project director is interested in considering the best way to do this. Several possibilities exist. One is to expand in areas adjacent to villages already being covered. This would resolve the problem of jealously referred to above. Another possibility is to add a fourth cluster of another 15 to 20 villages and 25-30 VHPs.

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A third possibility is to increase the number of child survival interventions that the VHPs would be responsible for. According to what the VHPs told the evaluation team, they would welcome additional activities since they get "bored" only doing vitamin A distribution and nutrition education. As mentioned, the project has already become increasingly involved in immunization. Discussions with community members pointed to the serious problem of diarrheal diseases in the villages. One approach is to introduce ORT in the project villages. Packets could be provided to the VHPs by the HSAs. The VHPs could hold the supplies and distribute to mothers when their children have episodes of diarrhea.⁵ Such a revision in the project would, of course, require that the VHPs be trained in all aspects of ORT. If the VHPs had ORS and possibly chloroquine and aspirin, they might be able to charge very modest amounts and recover the costs of the medicines, thereby contributing to the sustainability of the effort.

A fourth very pressing need is child spacing. This could greatly enhance the effectiveness of the infection control and nutrition intervention by adding the third vital leg of child survival. The high parity and short birth intervals have a devastating effect on the health/nutrition status of the mothers as well as the infants and children. With support from the health infrastructure (for screening and supplies), the VHPs and their colleagues, the TBAs, could serve as contraceptive depot holders (for pills and condoms), thereby complementing and strengthening the most recent priority effort by the Government of Malawi. The increased acceptance and use of condoms could simultaneously reduce the threat of AIDS.

The issue to be addressed in this discussion is how much can we realistically expect the village volunteer, the VHP, to do? Overloading the person at the bottom of the service delivery system is one of the most common phenomena and mistakes in primary health care. The health volunteer at the community level who is assigned these multifarious tasks has been aptly referred to as a "skinny Hercules". However, in the case of the IEF-assisted Vitamin A Project, the population-based approach which already includes home visits offers opportunities for additional services at minimal increments of additional time and energy. Perhaps the additional responsibilities could be tried with those VHPs who have performed most effectively to date. The additional training and responsibility could be seen as a promotion and provide a means to maintain enthusiasm in the VHP cadre. For example, A VHP I would only do vitamin A capsule distribution and nutrition education; VHP II would do that plus immunization tracking and ORT; VHP III would do all that plus child spacing and maintaining a small stock of medicines.

Another concern raised by A.I.D./Washington was the line item in the budget to cover the relocation expenses of the project director. Because the project director is serving in a half-time capacity, A.I.D. thought that only a portion of the allocation was justified. IEF agrees to reprogram the amount as specified by A.I.D. Exactly how the funds will be reprogrammed will be

⁵ The homemade sugar-salt approach does not seem to make sense for this particular case because of the typical non-availability of sugar in most of the households in the valley.

decided once a decision is made regarding the expansion/broadening of the project.

8. Interaction with A.I.D./Washington

Several issues concerning the Child Survival/vitamin A funding, the project approval process and DIP reviews were raised during the course of the evaluation. First, there was confusion as to the source of the funds. While IEF was notified that their Child Survival proposal had not been funded, they were informed by the PVC Office that vitamin A funds were available and were invited to reorient the project so that it had a vitamin A focus. The grant letter (dated 22 August 1989) mentioned that the funds were part of support under A.I.D.'s Child Survival Program. The PVC Office has provided project oversight to this point, yet the Office of Nutrition has periodically involved itself in the project.

IEF expressed some concern about the DIP review process. To begin with, the DIP comments were not received by IEF until the end of June 1990, six months after the DIP was submitted and approximately nine months after the project was launched. In the case of a two-year project, this represents a significant portion of time available. Some of the DIP review comments have been taken into account by IEF, and the project modified accordingly. Others were found to be inappropriate or not pertinent. For example, it was mentioned that the DIP called for the distribution of vitamin A capsules (200,000 I.U.) to all children under six; the point was made that only half that amount should be given to infants between 6 and 12 months. In fact, the DIP mentioned in at least two places (p. 9 and 19) that this is what IEF planned to do. Another point requested IEF to modify the DIP so that all the mothers receive regular nutrition education. The DIP describes quite clearly that in addition to the quarterly rallies, there will be weekly sessions which all mothers are expected to attend plus visits to all the homes which will include nutrition education as well.

Finally, the hope was expressed that local interests could be involved more intimately in the Child Survival/vitamin A proposal review process. Malawi has one of the biggest A.I.D. health programs in all of Africa; this includes five Child Survival/vitamin A projects with a value in excess of several million dollars. The majority of these schemes are working in close collaboration with the public sector. As such, the Ministry of Health must clear these efforts. Concern is raised when a proposal that has received support from the mission and Ministry is greatly modified. This was the case with the IEF proposal. To facilitate matters, it is suggested that the following actions be taken:

- the mission receive a copy of the proposal review comments as soon as possible (by fax) so that they can have the opportunity to comment;
- the mission receive a copy of the grant agreement between A.I.D. and the PVO; and

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- the mission receive a copy of the DIP (at least 1st draft) so that it can be involved in its development.

If these things were done, USAID/Lilongwe could assure that the PVOs' Child Survival activities were fully integrated and in accordance with national health plans as well as USAID-supported programs.

D. Recommendations

Based on their findings, the evaluation team recommends the following actions be taken by IEF to strengthen and expand the Vitamin A Project. These recommendations represent the most important suggestions derived from the mid-term evaluation and are discussed in greater detail in the body of the report.

Nutrition Education

- nutrition education targets should be revised and made more realistic;
- the nutrition education component should be redesigned to focus on a limited number of priority behaviors that should be changed;
- technical assistance in social marketing approach as applied to nutrition should be procured;
- a limited number of focused, scientifically developed and tested messages should be adopted;
- the nutrition education messages should be repeated in as many different ways as possible (including traditional dance, music, theater);
- a Nutrition Education Field Supervisor should be hired to support the improved nutrition education effort;
- nutrition education should be directed as much as possible to the "at risk" cases as determined by means of growth monitoring (including those in third degree as well as no growth);
- one or two easy to track indicators should be developed to be included in the information system;

Management Information System

- the VHP roster and HSA monthly reporting forms should be modified to include immunization (<1s and women of child bearing age) and deaths (<6);
- greater use should be made of "at risk" identification (using growth monitoring) and reporting;

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Collaboration

- IEF should collaborate more closely with the other PVOs having Child Survival projects in Malawi;
- IEF should work with the district authorities to collaborate and coordinate with all groups delivering primary health care in the Lower Shire Valley;
- Vitamin A Project rallies wherever possible should be held as part of the mobile clinics; and

Expansion

- IEF should finalize plans for broadened (adding Child Survival interventions) and/or expanded population coverage.

E. Future Considerations

IEF has made considerable progress in the vitamin A service delivery component of its Vitamin A Project within the first year of operation. They have developed a population-based approach which appears to lend itself to the delivery of a more comprehensive package of the most important child survival interventions. Assuming that the project is able to implement successfully the modifications that are detailed in this review, IEF will be in a position to consider a more extensive Child Survival effort at the conclusion of the Vitamin A Project.

To begin it might be best to describe in conceptual terms a possible approach that IEF might take in a follow-on project. The Vitamin A Project IEF is carrying out during the two-year period can be described as a "technical pilot project". That is, the current effort is demonstrating that the strategy of using community-based workers in association with the existing health infrastructure can improve the health status of the target population at the village level. In order to determine the efficacy of the approach, it has to work properly. This has resulted in IEF providing intensive management and support of the field activities.

IEF also is interested in "producing numbers" to satisfy A.I.D. which is concerned with presenting to Congress impressive service delivery figures (e.g., percentage of target population covered with vitamin A distribution or immunization, number of ORS packets dispensed). Much less attention is provided to the vital question of sustainability and how the strategy might be integrated into the government system. If the latter is made a priority, tradeoffs with results will inevitably have to be made. It is not possible to achieve spectacular targets and numbers while devoting a high proportion of time to the important organizational development issues which have to be addressed if the approach is to be carried on once the PVO departs.

Once the strategy has been developed to a point that it is ready to be expanded, a more sophisticated type of programming is required. This can be referred to as a "process pilot". This approach must cover a large population, possibly an entire administrative unit such as a district in Malawi. There would be two sets of objectives. One would involve service delivery issues, relating to immunization, ORT, child spacing. The other would involve institutional development and management issues, relating to such vital aspects as supervision, information systems, field support, and community involvement. Attention is focused more on how the services are delivered than on what and how many of the services are delivered. The management-related concerns or the "process" are studied and changes made that will improve service delivery in the future.

Based on this approach, it is suggested that IEF's next Child Survival effort be along the lines of the so-called "process pilot". It is possible to conceive of the organization choosing one of the two districts of the Lower Shire Valley (possibly the one with less NGO activity in the child survival field) and developing a project that would have as its primary goal the development of an effective service delivery capacity utilizing both the public and private resources available. IEF's inputs would involve such things as training (technical as well as management), development of an effective management information/reporting system, establishment of coordination mechanism for all the organizations involved in health in the district, improved logistical systems, and the institutionalization of community involvement. As in the case of the current project, VHPs would be selected and trained along with the HSAs who would support and supervise the VHPs. However, sustainability, instead of being a topic that is just mentioned, would be the primary focus of the effort. Special studies and operations research exercises would be carried out to determine the best way to proceed. Some examples of things that might be done include focus groups with village volunteers regarding incentives (i.e., what non-monetary benefits can be identified to keep drop-out rates low), trials of cost-recovery schemes for simple but essential drugs (e.g., ORS, chloroquine, aspirin, contraceptives), and the testing of a few simple child survival-related indicators that would be tracked monthly to determine program performance.

Such a follow-on project would be implemented through the District Health Office. At present the DHO is fully occupied by the press of every day affairs and crises. He must be made aware of what can be done at the community level. To establish a base for future discussions on what might come next, IEF should waste no time in showing the DHO what is taking place in the Vitamin A Project villages and assure that he understands the implications.

The follow-on project would cover a larger population and be concerned with the delivery of a package of child survival interventions that have the potential for reducing the high infant and child mortality rates in the project area. It would also fit neatly into USAID/Lilongwe's overall objective of strengthening the health system at the periphery. A.I.D. and the World Bank have plans to assist the MOH to increase the number of HSAs by a factor of ten (from approximately 500 to nearly 5,000) over the next five years. This will give the human resources required to carry out a strategy

CPA

similar to the one IEF has developed in the Vitamin A Project. But having the workers is not enough. They must be trained and systems established to ensure that they are effectively managed and supported. The additional HSAs are a necessary condition for improved MCH service delivery to the villages, but they are by no means sufficient. IEF's follow-on project could assist the Government of Malawi by providing the process/management inputs required to develop a model program/system in one district that would continue to function effectively after IEF leaves Malawi.

SCOPE OF WORK FOR
MID-TERM EVALUATION
MALAWI VITAMIN A AND NUTRITION PROJECT
OCTOBER 1990

1. Activity to be evaluated:

The activity to be evaluated falls under the International Eye Foundation's CS-V (Vitamin A) intervention grant from USAID/FVA/PVC, Cooperative Agreement # ORT-0500-A-00-9159-00. The life of the project extends from September 1, 1989 through August 31, 1991.

2. The Purpose of the Mid-Term Evaluation:

The purpose of the mid-term evaluation is to:

1. Assess progress of activities to date (9/1/89-10/1/90) to identify strengths, weaknesses and constraints in project design and implementation.
2. Recommend any mid-course corrections to enhance project implementation, and expansion of activities into additional areas and new intervention(s).
3. Outline possible future project activities and research priorities.

The end-users of the mid-term evaluation will be IEF headquarters and country staff. A copy of the mid-term evaluation will serve as the required A.I.D. annual report. The collaborative evaluation effort with Adventist Development and Relief Agency (ADRA) project staff will be a learning experience and may help reduce consultant costs. A draft of questions for the mid-term evaluation is attached.

3. Methods and Procedures:

The IEF estimates that an evaluator and team will require five working days in Malawi and an additional two days for report writing. (This estimate may change.) The team would interview project staff and review project documents and possibly finances. The team would meet with MOH officials at national, regional and district levels, and officials from the Agriculture Development Division (Ngabu ADD). Other meetings will occur with A.I.D., other area PVOs and multi-lateral agencies (MSF, WVI, FAO). If time permits visits to field sites would be made to interview GOM staff involved in project activities and to talk with Volunteer Health Promoters, and examine roster books.

At the conclusion of the data collection, the team will spend a day reviewing information, issues and develop recommendations. A draft document will summarize the findings

and will be presented to field staff on the final day. At that time staff will have the opportunity to make final comments and suggestions. The final document will be produced for distribution to IEF staff, MOH officials and others. IEF field staff may decide to arrange for a formal presentation to MOH officials.

The team should consist of a strong independent outside evaluator with experience in child survival and African countries. Additional members should represent the MOH HQ (Nutrition Unit), A.I.D. (Health Officer or delegate), ADRA representative, IEF representative (HQ). The team would be actively assisted by the IEF country ophthalmologist and epidemiologist.

Mid-term Evaluation Questions: Preliminary List

Administration

1. Is the MIS in place (personnel, accounts, reports)?
2. Are there any outstanding staff needs?
3. Is the Bethesda technical/management support sufficient?
4. Are appropriate policies in place (management, VAC, Trachoma and T.E.O.)?
5. Is the project budget on track?

Project

1. Are the outputs and indicators met? Are they appropriate? Do they require adjustment?
2. Is the schedule on track? Do they require adjustment?
3. Is the HIS working? Is the rally session delivery method appropriate? How can it be improved?
4. Can costs per beneficiary be determined?
5. How can the objectives be strengthened (in particular nutrition education)?
6. How can staff performance be improved? Are there any outstanding issues concerning HSAs, OMAS and other staff?
7. How can the performance of the VHPs be improved? Are the incentives provided appropriate?
8. Does the project address community needs? Are there issues concerning community demand of services not met?
9. Does the project address GOM/MOH (and AID) needs? How can collaboration with MOH be improved?
11. How can collaboration with other PVOs, multi-lateral agencies be improved?
10. What aspects of the project are sustainable (short and long term)? How can this be enhanced?
12. Can the project be expanded (by villages, VHPs, HSAs)?
13. Can additional interventions be implemented (malaria, EPI)?

14. How can IEF expand its program in the LSV in the future?
15. What role should IEF play in distribution of VACs and TEO for the LSV?
16. Are there future research needs?

APPENDIX II

AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

COPY

July 5, 1990

Re: Mid-term Evaluation Guidelines for CSIV Projects

Dear Colleague,

At the Aliso Creek workshop for U.S. based PVO Child Survival project staff in 1990, PVO representatives again expressed appreciation for the importance of midterm evaluations in adjusting the direction and improving the performance of Child Survival projects. I want to share with you our views concerning the direction and scope of these evaluations which should be carried out between now and the end of September, 1990.

First, these evaluations should provide headquarters an opportunity to review personally with project field staff the progress that each project has made in the last eighteen months, and the potential of the project for reaching its stated objectives by the end of the project (September, 1991 or 1992). Now is the time to review problems and constraints within the project and revise strategies for overcoming these obstacles accordingly.

Second, these midterm evaluations should present an opportunity for you to involve people outside your immediate CS staff to provide them with a closer perspective of your project and its effectiveness. For example, you might wish to ask other PVO in-country Child Survival professionals, or local UNICEF or A.I.D. mission health staff to participate in your project evaluation. In particular, you may wish to obtain outside views on sustainability of project activities. You may wish to ask a MOH representative to take part in your evaluation. This is a time for you to obtain maximum input in order to make sure the priorities for action are clearly identified as you plan the next steps to be taken for the project to achieve its objectives.

Third, these evaluations should provide the basis for preparation of your second annual report and be incorporated into it. The forthcoming guidelines for the Second Annual Report are likely to include the following types of information:

1. Assessment of Effectiveness - Has there been sufficient progress in meeting stated objectives and yearly targets? How many infants, children and mothers have actually received CS interventions? Are targeted high risk groups being reached effectively?

2. Assessment of infrastructure supporting key Child Survival activities - Does the project have adequate staff to meet the technical, managerial and operational needs of the project? Do these staff have local counterparts? Does the local staff have the managerial and technical capacity to eventually take on the functions necessary to operate all project activities?
3. Technical Support - Has headquarters and external TA been adequate? What are future TA and headquarters technical support requirements in the time remaining in the project?
4. Information Systems - Is the project health information system being used for decision making? Do the indicators need refinement? Does the project need to conduct a survey?
5. Modifications to the work plan or budget - How does the rate of expenditures to date compare with the project budget? Can the project achieve its objectives with the remaining funding? Is there a possibility that the budget will be underspent at the end of the project?
6. Sustainability - What are project activities which could be sustained after project funding ends? Will any project activities be institutionalized by government, local NGOs, community or other means? Is there a demand in the community or in the health sector for the health benefits to be sustained? Does the MOH see this project as effective?
7. Recurrent Costs and Cost Recovery Mechanisms - Do the project managers have a good understanding of the human, material, and financial inputs required to sustain project activities? Can one distinguish between the resources which were needed for start up activities and the resources which will be required on an on-going, recurrent basis? Does the community agree to pay for any ongoing costs of preventive and promotive health activities? Is the Government prepared to assume any part of the recurrent costs?
8. Recommendations - What steps should be taken by PVO field staff and headquarters for the project to reach its objectives on time?

In the Second Annual Report Guidelines there will be a section for you to report on methodology, key findings and lessons learned from the midterm evaluation. We will also ask you to attach a copy of your midterm evaluation. The Second Annual Report will be due in October, 1990, the specific day will be announced later.

In conclusion, the purpose of the midterm evaluation is to help you to identify what is working well with your project and what areas need further attention. Technical assistance will be available on a limited basis.

Please call your project officer for any further information.

Sincerely,

Sallie Jones for

John McEnaney
Chief, Child Survival & Health
Bureau of Food for Peace
and Voluntary Assistance

APPENDIX III

Documents Reviewed

- Courtright, P., Trip Report: IEF Vitamin A and Nutrition Project/Malawi (VITAP Report, November 1989).
- Eldridge, C.R., communication dated 22 August 1989.
- Ferguson, D.C.E. and S. K. Stansfield, End of Project Evaluation, IEF Child Survival Grant (December 1988).
- IEF, Child Survival and Blindness Prevention Program for the Lower Shire Valley of Malawi - Country Proposal (December 1988).
- IEF, Malawi Vitamin A Project - Detailed Implementation Plan (Bethesda: December 1989).
- IEF, Project Description Summary - Vitamin A Intervention Program: Lower Shire Valley, Malawi (August 1989).
- McEnaney, J., communication dated 26 June 1990.
- McEnaney, J., communication dated 5 July 1990.
- McEnaney, J., communication dated 24 August 1990.
- Stansfield, S.K., IEF/Malawi Vitamin A Project - Management Information System Interim Report (VITAL Report, undated).
- Stansfield, S.K., Trip Report: Consultation to IEF/Malawi for Vitamin A Project Design and Planning of Pre-Project Activities (VITAP Report, August 1989).
- Stansfield, S.K., Trip Report: Consultation to IEF/Malawi (VITAP Report, October 1989).

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APPENDIX IV

PERSONS CONTACTED

A.I.D./Washington

Sallie Jones Deputy, PVC Office

USAID/Lilongwe

Gary Newton Director, Health, Population, Nutrition Office
Mexon Nyirongo Program Officer, HPN Office

IEF/Malawi

Paul Courtright Project Director
Susan Lewallen Ophthalmic Technical Advisor
H.D. Mlozi Banda Training and Supervision Coordinator
Monty Mkona Bookkeeper/Office Manager

IEF/Bethesda

John Barrows Child Survival Coordinator
Jack Blanks Program Director

Peace Corps Volunteers

Sally Swan PCV, Chikwawa
Beth Rink PCV, Nsanje

Ministry of Health

Teresa Banda Nutritionist, Lilongwe
Gloria Khunga Regional Primary Health Coordinator, Blantyre
Dr. Jonkman Regional Health Officer, Blantyre

UNICEF

Gillian Knox Social Mobilization Officer, Southern Region
Alfred Mwenifumbo Asst. Program Officer (Health)

Nyasa Village, Chikwawa District

Chisambo Ophthalmic Medical Assistant
Nyamizinga Health Surveillance Assistant
Felesta Kholopate Village Health Promoter
Ms. Jimu Village Health Promoter
Village Headman and Village Health Committee Members

Nyanthumbi Village, Nsanje District

Chalichi	Ophthalmic Medical Assistant
Bagi	Health Surveillance Assistant
Dolika Peterson	Village Health Promoter
Alignet Vintura	Village Health Promoter
Traditional Birth Attendant, Village Headman and Village Health Committee Members	

Chabvi Village, Nsanje District

Judith Thombozi	Village Health Promoter
Traditional Birth Attendant, Village Headman and Village Health Committee Members	

APPENDIX V

Project Description Summary
INTERNATIONAL EYE FOUNDATION
VITAMIN A INTERVENTION PROGRAM: LOWER SHIRE VALLEY, MALAWI

The International Eye Foundation (IEF) is proposing the following modifications to the IEF's initial Child Survival Project Proposal for the Lower Shire Valley of Malawi. As requested by the 1989 Child Survival Proposal Review Summary, the revised submission will now be for a Vitamin A Intervention Grant as opposed to a Child Survival Program Grant.

The goal of the modified program is the reduction of infant and child morbidity and mortality in the Lower Shire Valley of Malawi through a measurable decrease in the prevalence of Vitamin A deficiency in the target population.

Key interventions will include:

- 1) The expansion and improvement of IEF's current Vitamin A delivery system to the indicated target population via mobile distribution units at the village level;
- 2) The development and delivery of a nutrition education package at the village level focusing on Vitamin A which will complement the Ministry of Health's current nutrition education efforts in the target area;
- 3) The development and implementation of a comprehensive Vitamin A health information system (HIS) including baseline data survey, appropriate data collection instruments, monitoring systems, ongoing analysis of data and evaluation of program interventions;
- 4) Curative care, including medical management and intensive nutritional therapy, for children suffering from advanced stages of xerophthalmia.
- 5) Continued collaboration with the MOH and other agencies in the Lower Shire Valley to promote maternal and child health and well-being through basic CS interventions.

In addition to the above interventions, IEF will utilize private resources to investigate the potential for fortifying Likuni Phala, a weaning food which is currently distributed throughout Malawi via health units and under-five clinics.

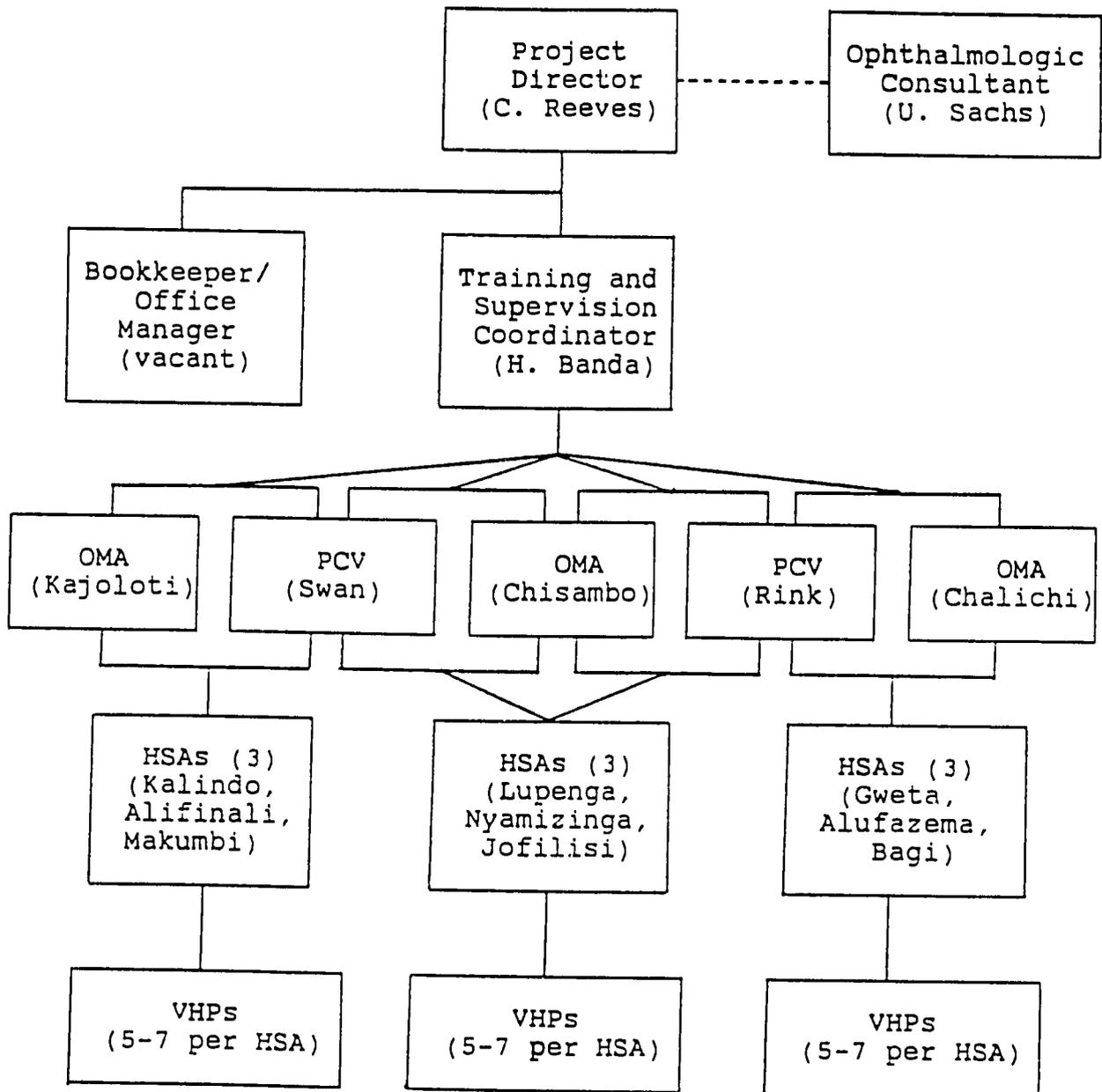
The beneficiary population for these interventions includes the estimated 210,000 members of the target groups (57% of the 366,000 estimated total population of the project area). These target groups include 90,000 children under the age of six (vitamin A supplementation) and 120,000 women aged 15-35 (nutrition education).

The project is designed for implementation over a two-year period, commencing July 1989, with total annual budgets (headquarters and field) of \$443,445 for year 1 and \$405,794 for year 2. Of the project total of \$849,239, an amount of \$529,819 is requested from USAID. The balance will be provided by IEF resources totalling \$219,420 and additional resources outside of USAID and IEF contributions (MOH, etc.) estimated at \$100,000.

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IEF/MALAWI VITAMIN A PROJECT

Organizational Diagram



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APPENDIX VII

Task Description for the Health Surveillance Assistant

1. The HSA will assist in the training of the VHPs from their area. Specifically, the HSAs will meet in small groups with their VHPs and conduct the post test, and lead the discussion of nutritional sources of Vit A in their areas and ways the VHPs feel food supplementation can be introduced and encouraged.
2. After VHP training the HSA will visit each VHP village within two weeks to encourage roster preparation. If the roster has not been started, the HSA will assist the VHP in initiating the roster. He HSA will ensure that a full roster is completed within 4 weeks of completion of VHP training.
3. The HSA will conduct periodic meetings of all VHPs in their region. The HSA will direct the 1-2 hour meeting by first conducting a health/nutrition education class (as designed by the IEF training coordinator and assisted by the PCVs). The first meeting will start within six months of VHP training. Afterwards, the HSA will elicit questions and comments from the VHPs and identify problem areas and topics of interest for future meetings. The HSA will prepare a short checklist regarding the meeting. The checklist should include the attendance, health education topic, any problems and topics of interest. This will be given to the TSC. VHPs will be given a bar of soap or some other incentive as well as return transportation costs.
4. Every month the HSA will visit each VHP in their village. At this time, the HSA will restock Vit A capsules. According to the support checklist (monthly report) the HSA will review the roster with the VHP. The monthly report should be submitted to the TSC and reviewed with the project director. The HSA will assist the VHP in assessing the adequacy of the diet of children or mothers that failed to attend the previous session. The HSA will fill in the monthly report for each VHP.
5. Every two months the 9 HSAs will meet in a central location with the training coordinator to review educational objectives, discuss additional methodologies and current problems.
6. The HSA will attend the quarterly mass Vitamin A campaigns in each village. During this time, the HSA will conduct a health education session and assist the OMA and VHP.

APPENDIX VIII

Teaching Materials Prepared for HSA & VHP Trainings

Breast feeding is important for good nutrition
Frequent feeding and feeding with vitamin A rich & energy dense foods is important
A talk on vitamin A promotion
Some barriers to changing poor feeding practices
How ca a VHP help in the prevention of blindness
Topics for nutrition education in the villages
Proper feeding practices for children <4 months
How ca a VHP and villages prepared for roster
VAN project objectives, indicators and survey results
Learning how to conduct periodic meetings
HSA tasks
Pre and post tests
Frequency and content of supplemental foods
Calendar (seasonality) of vitamin A rich vegetables and fruits
Codebook for roster
Codebook for supervisory check list
List of vitamin A rich foods
Nutrition education
Primary eye care
End of training evaluation
Mass campaign procedures
How to conduct nutrition education
Helping VHPs start and check the roster
Suggested reading material (for IEF staff)

Task Description for the Village Health Promoter

The tasks to be done by the VHP are as follows:

1. The VHP will create a roster (by household) of all children <6. Pregnant women will be identified. Women who become pregnant will be added to the roster. Infants delivered will also be added to the roster. The roster will include the following information:
 - A. Session attendance for children <6 and pregnant women (with sufficient space to include standard 6 month intervals).
 - B. Vit A supplementation to mothers within 2 months of delivery

2. The roster will guide the VHP in their tasks. As such, the VHP will:

I. VIT A SUPPLEMENTATION TO CHILDREN <6

- A. Within eight weeks of completion of the roster, the VHP, in coordination with the HSA, OMAS and a PCV, administer one Vit A dose (mass supplementation) to each child less than 6 years of age.
- B. At quarterly intervals thereafter, administer Vit A at the village mass campaigns. The VHP will be responsible for the distribution of the Vit A dose and record session attendance on the roster.
- C. Follow up visits to children and mothers who did not attend the mass campaign.

II. VIT A SUPPLEMENTATION TO MOTHERS WITHIN 2 MONTHS OF DELIVERY

- A. Identify women who have delivered and administer Vit A within 2 months post-delivery.

III. SUPPLEMENTAL FOODS

- A. Identify whether women are feeding their infants (4 mo to 6 years) supplemental foods.
- B. Determine how many supplemental feedings per day are being done. Encourage four or more feedings per day.

IEF/Malawi Vitamin A Project DIP

- C. If no supplemental foods are being given to the child identify whether Vit A rich and energy dense foods are eaten by the rest of the family. If so, encourage feeding of the child.
- D. If no supplemental foods are being given and Vit A rich foods and energy dense foods are not in the family's diet encourage the addition of available Vit A rich foods to the child's diet.
- E. Encourage women with infants less than 4 months of age to breast feed only.

VHP Training Objectives

The training objectives (capital letters) and details are listed below:

THE PROJECT OBJECTIVES AND RESULTS OF THE SURVEY

IMPORTANCE OF VITAMIN A & SOURCES OF VITAMIN A

1. Vitamin A and its contribution to eye disease and blindness
2. The contribution of Vitamin A to other childhood diseases and potential mortality.
3. Vitamin A capsules: frequency and role
4. Food sources of Vitamin A

THE IMPORTANCE OF BREAST FEEDING FOR NUTRITION

1. Malawi should be proud because almost all mothers breast feed their babies for a long time
2. Breast feeding protects babies from infection
3. Babies should be put to breast immediately after birth
4. A child should be breast fed on demand during the day and night. The more the baby breast feeds the more milk the mother produces.
5. Breast milk alone is the best food and drink for babies until they are 4 months old. Nothing else should be given before that age.
6. Children should be breast fed until they are at least 2 years old.
7. It is safe for mothers who are pregnant to breast feed.
8. It is almost always safe for mothers who are sick to continue to breast feed. If a mother is forced to stop for a few days she can start again if the baby suckles frequently.
9. Any mother who has a breast feeding problem should consult a health worker.

THE IMPORTANCE OF FREQUENT FEEDING & FEEDING WITH VITAMIN A RICH & ENERGY DENSE FOODS

1. Breast milk alone is not enough after the age of 4 months. Other foods should be introduced gradually.
2. Children aged around 4-6 months should be given a mixed phala that includes many different available foods. They should continue to breast feed often.
3. Young children should be fed frequently because they have small stomachs and so cannot eat much at one time.
4. When babies are aged about 6-8 months they should be fed at least 4 times a day and continue to be breast fed often.
5. At around 8 months a child can eat more solid foods in addition to weaning foods and breast milk.
6. Food for a young child (weaning foods as well as solid foods) should be put on a separate plate. If the child eats from the same plate as the rest of the family, the child may not get enough.
7. Young children should be given snacks between meals to make sure they eat frequently. Good snacks are boiled potatoes, sweet potatoes, cassava, fruit, carrots, mango, papaya, chiponde (ground

- nuts), and chikonda-moyo (mixture of sugar, soda and flour).
8. The greater the variety of food young children eat the better they grow.
 9. Children should continue to be fed when they are ill.
 10. Children with diarrhoea should have plenty to drink and continue feeding and breast feeding. Children with diarrhoea often die because they do not drink enough.
 11. After an illness a child needs extra food to regain lost weight and strength.

EYE DISEASES

1. Children with conjunctivitis (red, with exudate) or other eye problems should be sent to a health worker for treatment
2. Children detected with trachoma during quarterly examinations should be treated with tetracycline.

HEALTH EDUCATION, ADMINISTRATION & PROBLEM SOLVING

1. The roster should be maintained in an appropriate and up to date manner.
2. Appropriate health education is the best way to transmit Vitamin A and energy dense food information
3. By reporting problems and trying to problem solve solutions, appropriate methodologies for intervention can be developed.

APPENDIX XI

TRAINING GUIDE
FOR TRAINING VILLAGE HEALTH PROMOTERS
IEF SHIRE VALLEY VITAMIN A PROJECT

Topic	Time	Instructional Objectives	Methods & Teacher	Teacher Notes
MONDAY, 30 OCTOBER				
1. Opening Comments	8:00-8:15am	Open meeting	Dr. Van Dijk (DHO/Chikwawa)	1. Before opening the course, a packet of material for each VHP should be prepared. The packet should include a pen, the roster, small notebook and badge with name.
2. Project Introduction	8:15-9:00am	Project objectives & indicators Survey results & implications	C. Feeves (lecture)	2. VHPs: Thanks for their interest; selected because they were the best. Project is 2 years; don't take notes; instead, participate. Training is goal oriented; may require workshops later.
3. Pre-test	9:00-10:00am	To learn what each VHP already knows about Vit A deficiency & appropriate nutrition	H.M. Banda (pre-test)	3. Explain how to take test; This is more of a group effort than questions addressed to individuals
Break	10:00-10:15			
4. Vit A & Blindness	10:15-11:15am	Why Vit A is important Blindness can be prevented VHP role in blindness prevention	H.M. Banda (discussion)	4. Tell us what is Vit A deficiency--who is at risk of blindness and why, how you detect it. Better to prevent or cure? and how prevent it; is it seasonal?, which seasons? and why? Why didn't we measure it during survey?, discuss distribution in world, prevalence to be public health problem; suggested that giving Vit A can reduce mortality--why? how is it stored? how long can it be stored?, what does fever do to storage?, need energy rich to bind
5. Role of VHPs in project	11:15-12:00am	Who are the VHPs How the VHPs can prevent blindness	H.M. Banda (discussion)	5. VHPs' place in community; why are we involving you? What tasks can VHPs undertake?, how much of your time can we reasonably use? Discuss VHPs responsibility to community
Lunch	12:00-1:30pm			

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Topic	Time	Instructional Objectives	Method & Teacher	Teacher Notes
MONDAY, 30 OCTOBER				
6. Vit A Capsules & food sources	1:30-2:30pm	To learn the food sources of Vit A To learn the capsule frequency & dosage	H.M. Banda (demonstration)	6. What are the food sources of vitamin A? How much Vit A is in nsima (you have to eat nsima the size of a house to get enough Vit A) How often should a child eat Vit A rich foods? recap seasonality (make a calendar) of Vit A; Vit A units (200,000 in capsule - children 11-71 mo, 100,000 for children 6-11 mo), frequency?
7. Roster for Vit A distribution	2:30-3:30am	To learn the use of VHP roster	H.M. Banda (demonstration)	7. Describe the purpose of the roster; why important to keep accurate; what their role is in roster preparation. Do some practice filling them out. Have a couple filled out incorrectly; find the error.
Break	3:30-3:45pm			
8. Mass Campaigns	3:45-5:00pm	To learn the purpose of the mass campaigns	H.M. Banda (role playing)	8. Major goal is supplementation by mass campaign; important to get good turn out; how? Go over plan and roles for mass campaign; planning required before. Start date, communication procedure; what to do if <5 clinic day; team fails to show. If all roster not done, do at mass campaign

Topic	Time	Instructional Objectives	Method & Teacher	Teacher Notes
TUESDAY, 31 OCTOBER				
1. HSA role in roster preparation	8:00-9:00am	To learn how the HSA will assist in roster preparation	H.M. Banda HSA (practice)	1. In what way can the HSA assist you? What problems do you see in preparing the roster? Set up a day with the HSAs that you'd like to start. Role play how they would start a roster. How would they ensure that all houses were done; what they would do if the village was big.
2. Ensuring good turnout at campaign	9:00-10:00am	To learn how to get mothers to come with children to campaign	H.M. Banda (demonstration)	2. How can you make sure that most mothers and children will come to the mass campaign? Who should do the announcement? If your village is large, should you have half days in different parts? What to do if it has to be changed and who should be informed?
Break	10:00-10:15			
3. Primary eye care	10:15-10:45am	To learn the parts of the eye and what to do for complaints	L. Chisanbo (lecture)	3. Talk about conjunctival (white part of eye) changes, corneal (clear part) changes; what they should do if they see them. Also talk about trachoma, conjunctivitis and neonatal conjunctivitis
4. Appropriate feeding practices	10:45-12:00am	To learn what is appropriate feeding for children (4 mo) To understand barriers to changing poor feeding practices	H.M. Banda (discussion)	4. Tell story of 2 children (one who got weaning foods too early, other after 4 months) Why did one child get sick and the other not? Why do people feed children supplemental foods too early? What are the barriers to changing this practice? How would they tell their friend about changing this practice?
Lunch	12:00-1:30pm			

Topic	Time	Instructional Objectives	Method & Teacher	Teacher Notes
6. Review of Vit A & Roster Preparation	1:30-2:00pm	To review sources of Vit A To review how to prepare roster	H.M. Banda (discussion & role playing)	6. What are the various sources of Vit A?; practice filling out a roster; practice checking a roster, review the plan of activities for mass campaign Draw a calendar of when certain vegetables/fruits are available. Discuss drying--better in shade than sun.
7. Different recipes for Vit A rich foods	2:00-3:00pm	To learn how to prepare different Vit A rich foods	H.M. Banda (demonstration)	7. Have Vit A rich food for lunch. What are some different recipes that children like that include Vit A rich foods? What recipes would you create during the "dry season"? What is the best way to transmit this information?
Break	3:00-3:15pm			
9. Appropriate feeding practices for children	3:15-4:15pm	To learn what is appropriate feeding for children >4 mo To understand barriers to changing poor feeding practices	H.M. Banda (lecture & discussion)	8. Tell story of two children (one who got fed nsima only, other with variety of food) Why did one child get sick and other not? Why do people feed children only one food?; What are the barriers to changing this practice? How would they tell their best friend about changing this practice?
10. Frequency and content of supplemental foods	4:15-5:00pm	To understand that children need to eat 4+ meals per day To understand that children need variety in their diet	H.M. Banda	9. How many times do VHPs eat per day?--are they still growing? How much per meal (big stomach) What about children (how big is stomach?) How many times do they think a child needs to eat per day? (at least 4). Tell story of two children, one stuffed with nsima + little bit of other stuff 3 x per day (too full to eat), one getting more feedings per day and more than nsima. What kinds of foods can be added? What is the family eating? Make sure child has separate plate.

Topic	Time	Instructional Objectives	Method & Teacher	Teacher Notes
WEDNESDAY, 1 NOVEMBER				
1. Appropriate nutrition education in the village	8:00-9:00am	Learn the best way to teach nutrition to village women	Mrs. Zigona (Chikwawa Hospital)	1. Guest speaker
2. Energy dense foods	9:00-10:00am	Learn the role of energy dense foods Learn which are most available and inexpensive	H.M. Banda (discussion)	2. What are energy dense foods? Why do we need them? Do children need them more? Why? Which are most available and when? What is the cost? Are they generally on adult's plates? Children need their own plates. Give results of survey.
Break	10:00-10:15am			
3. Review of appropriate nutritional practices	10:15-11:15am	Review	H.M. Banda	3. Review of appropriate nutritional practices
4. Periodic VFP meeting meetings	11:15-12:00am	Learn what is expected periodic meetings Establish logistics	H.M. Banda (discussion)	4. Every 2 mo need to get together with other VFPs and have nutrition education session. Also chance to have them discuss their progress. How would they set up their sessions: where? when? how get people there? (problem solve)
Lunch	12:00-1:30pm			

Topic	Time	Instructional Objectives	Method & Teacher	Teacher Notes
6. Integration of VHPs into community	1:30-2:30pm	Role the VHPs play in improving health & nutrition of community	Mrs. Maganga (Chikwava Hospital)	6. Guest speaker
7. Review & selection of new VHPs & health committees	2:30-3:00pm	Review of support practices and supervisory check How to select new VHPs	H.M. Banda (discussion & practice)	7. What will you do if village is huge, and new VHP is needed (villagers must recognize it as a problem and come up with solution) Liaison with Mr. Banda to get that person trained. Village health committees are key to success. We think all the VHPs are great. Support is from the village-- responsible to village. Schedule visits with HSAs and village committees.-- ask how programme can be improved.
Break	3:00-3:15pm			
8. Small vegetable gardens	3:15-4:00pm	Learn how to start start small village vegetable gardens	Miss M'antha (guest speaker)	8. Guest speaker
9. Diarrhea	4:00-5:00pm	Learn how to teach mothers what to do if a child has diarrhea	H.M. Banda (discussion)	9. Diarrhea is common--what is the cause of diarrhea? How do mothers treat it? What are the barriers to changing how mothers treat diarrhea? How do we get mothers to continue feeding their children? What is the best format for teaching about prevention of diarrhea

Topic	Time	Instructional Objectives	Method & Teacher	Teacher Notes
THURSDAY, 2 NOVEMBER				
1. Problem Solving	8:00-9:00am	To learn how to problem solve	H.M. Banda (discussion)	<ol style="list-style-type: none"> 1. Present a number of examples of problems in the course of their work (lost roster, bad weather, sick VHF, angry mother, death in the village) and problem solve. Set up referral network for eye problems. 2. Review any outstanding issues. 3. Same test as pre-test; observe and ask if anyone is having difficulty taking test. Test checked by PCVs. 4. Review up-coming schedule of trainings and set up preliminary schedule of village visits. Go over results of post test; elaborate on any area that test results indicate lack of knowledge 5. Have certificates and incentives ready.
2. Summary	8:45-10:00am	To review any outstanding issues	H.M. Banda P. Courtright	
Break	10:00-10:15am			
3. Post-test	10:15-10:45am	To learn how much the VHPs have learned	H.M. Banda (post-test)	
4. Dispersal of supplies & review of post-test	10:45-11:15am	To disperse supplies and review post-test	H.M. Banda (discussion)	
5. Ceremony	11:15-12:00am	Awarding of VHP certificates and close of training programme	Mr. Barrows	
Lunch	12:00-1:30			

APPENDIX XII

Roster of Families with Pregnant Women and Children Under 6

Name of Mother	Name of Child	Child's Birthdate	Vit-A to Mother	Session Attendance and Follow-up Visits to Homes							
				1stQuar	2ndQuar	3rdQuar	4thQuar				
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HSA MONTHLY REPORT

HSA: _____ Month/Year: _____

Name of VHP and Date of visit:							

# Households:							
# Children <6							
# Children <6 at at last session							
# Follow-up visit							
# Infants <12 mo							
# Mothers (with infants) given vitamin A:							
# Pregnant women:							
# Capsules given to supply VHP:							
# Home visits with VHPs:							
Observations:							

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