III. IMPACT OF THE PROJECT

1 Improvement on Indicators in Child Health

Through the implementation of various community health interventions of GMP+, community referral activities and environmental health activities, the health status of under-5 children has improved in the six target areas. The final evaluation was conducted in January 2007 to analyse the changes in the indicators for measuring the achievements of the Project. The results of these changes show significant improvements and imply that the Project purpose, which is to improve the health status of under-5 children through the establishment of effective and sustainable community-based health activities in selected Health Centre catchments, has been achieved to a high degree.

The percentage of children who completed full vaccination before becoming 1 year old has increased from 58.9% (2002) to 65.3% (2006). Measles cases have also reduced considerably in all the target areas. The incidence rate of measles in under-5 children has decreased from 18.2 cases per 1,000 population (2002) to 1.3 (2006). This reduction was achieved partially because of the measles campaign conducted in 2003. The number of malnutrition cases has declined as well from 72.4 per 1,000 population (2002) to 21.6 (2006). The incidence of diarrhoea (both bloody and non-bloody) of under-5 children has dramatically decreased in the Project target areas during the Project term. The figure changed from 682.2 cases per 1,000 population (2002) to 267.6 (2006) for non-bloody diarrhoea and from 25.9 cases per 1,000 population (2002) to 5.8 (2006) for bloody diarrhoea. Finally, the percentage of under-5 children who are below the growth line has dropped from 14.8% (2002) to 10.0% (2006).

²Impact of the Project on the immunisation coverage was scientifically analysed using a method designed by the University of Niigata in Japan (see Box 3.1).



Prof. Suzuki, a member of the Project Supporting Committee, interviewing a coordinator as part of project evaluation



Dr. Suganami, a member of the Project Supporting Committee, and JICA staff interviewing volunteers at a focus group discussion

2 Impact on Knowledge and Behaviour on Key Family Practices

Together with the improvement in the abovementioned indicators, the Project observed considerable changes in people's health behaviour and knowledge over the past years. The results of the quantitative and qualitative surveys including the final evaluation of the Project are indicative of these changes.

A. Behavioural and knowledge changes in child health

The Project has aimed at the improvement of the health status of under-5 children in six Health Centre catchment areas through motivating caretakers to participate in GMP+, propagating appropriate knowledge on nutrition and child care through various forms of health education, and encouraging community referral activities. The improvement in the indicators in the above areas, as seen in the quantitative research, strongly suggests that the Project activities have contributed to the improvement of child health in the target areas during the Project term (from 2002 to 2006).

Figure 3.1 Child Health Indicators in 2002 and 2006 Full immunisation coverage before 1 year Incidence rate of measles 90 60 80 Incidence rate (cases per 1,000 pop) 50 70 60 40 Percentage 50 30 40 30 20 20 10 10 0 0 George Kanyama Ng'ombe Chipata Chawama Mtendere All areas Kanyama Ng'ombe Chipata Chawama Mtendere All areas Area 2002 2006 2002 2006 Prevalence rate of malnutrition Incidence rate of diarrhoea (non-bloody) 200 1600 Prevalence rate (cases per 1,000 pop) (dod 1400 160 Incidence rate (cases per 1,000 1200 1000 120 800 80 600 400 40 200 Kanyama Ng'ombe George Chipata Chawama Mtendere All areas Kanyama Ng'ombe Chinata Chawama Mtendere Area Area 2002 2006 2002 2006 (LDHMT:HMIS)

IMPACT OF THE PROJECT

The average number of times that under-2 children are weighed in total has increased from 14.6 to 15.9 in the six target areas since the Project commenced in 2002, though the number has slightly decreased in Kanyama. The percentage of mothers who practice exclusively breastfeeding for their children for the first 6 months increased from 49.9% to 55.8% during the Project term. Improvement has also been seen in people's knowledge on the methods to prevent diarrhoeal diseases. 60.9% of the respondents showed they have proper knowledge³ on the prevention of diarrhoea in 2006, compared to 46.2% in 2002. The strengthening of community referral activities were also seen, as the percentage of people taking their children to the nearest clinic immediately after they see any danger signs in their children's health status increased from 35.3% to 46.4%.

³Respondents were asked to answer freely to the question "How can you prevent diarrhoea?" The number of those who gave relevant answers was counted.

B. Behavioural and knowledge changes in hygiene and sanitation

Behavioural change has also been considerable in the field of hygiene and sanitation. The percentage of households that have access to safe water has increased from 85.7% in 2002 to 94.4% in 2006. The improvement in the figure is particularly visible in Ng'ombe Health Centre catchment area, which can be explained by the introduction of tap water facilities funded by Japanese grant aid. In addition, more people now treat water by boiling or chlorinating in 2006 (89.2%) compared to those that did in 2002 (72.3%). Proper hand washing has also become considerably more prevalent, increasing from 13.6% in 2002 to 46.0% in 2006. Finally, the number of people who use latrines has increased from 87.2% to 91.7%.

C. Changes in the attitudes of people towards health staff and community volunteers

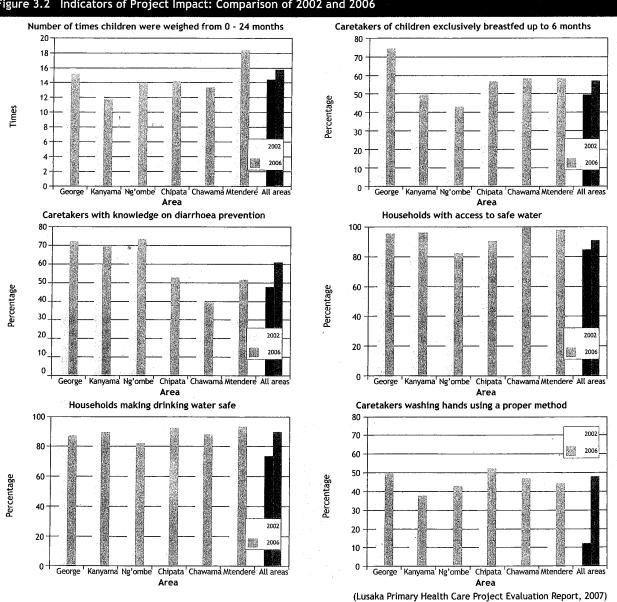
In all the six catchment areas, considerable changes in people's attitudes and behaviour towards Health Centre staff and community health volunteers were observed. Several positive opinions were raised in the discussion with community health volunteers. For example, people in the catchment areas sometimes drove health volunteers out of their homes who visited for health education. Health Centre staff who gave vaccinations to children used to be called "Satanist" by some people who had mistakenly thought that the health staff were collecting blood from children. Throughout the Project term, the sincere efforts of volunteers in implementing community activities had served to gradually soften up the attitudes and behaviour of the people, and it has been observed that recently fewer people seek the services of traditional healers instead of going to health facilities.

⁴This focus group discussion was conducted with community volunteers partially to collect quantitative data for the project terminal evaluation targeting 6-8 community health volunteers trained by the Project in each of the six target areas.

D. Correlation among the indicators

The Project carried out a multiple regression analysis using the above indicators to learn which key family practices or behaviours contributed to the improvement of indicators in child health. Improvements in proper handwashing practices and access to safe water were identified as the major factors for the reduction of diarrhoea cases (both bloody and non-bloody) with a significant correlation between these two factors and the incidence of diarrhoea. Similarly, improvements in these two factors also had a significant correlation with the reduction in the prevalence of malnutrition.

Figure 3.2 Indicators of Project Impact: Comparison of 2002 and 2006



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3 Limitation of Project Impacts

Though the results of the indicators for each of the six Health Centre catchment areas in general showed an improvement compared to the baseline figures, there are gaps in the degree of improvement among the areas apparently due to some external conditions that have been beyond the control of the Project.

For example, in Kanyama a higher incidence rate of diarrhoea (bloody), a higher prevalence of malnutrition and a lower percentage of children who complete full vaccination before 1 year of age were observed. The deterioration of these indicators in Kanayama may be due to the fact that many residents from neighbouring and outside areas of Kanyama, which are not part of the Project target areas, are now accessing Kanyama Health Centre, and the inclusion of these patients in the HMIS data may have influenced the results. To make matters worse, the shortage of nurses at Kanyama Health Centre is more serious than at other Health Centres, which makes it difficult to send nurses regularly to outreach activities such as GMP+. In addition, as an area with a large immigrant population, a certain percentage of the population may have difficulty in fully understanding the health messages provided by community volunteers.

In Chipata, a higher rate of underweight children was observed in 2006 compared to the rate found in 2002. According to CHCs in Chipata, the deterioration of this indicator might be caused by some disadvantageous conditions in the Chipata catchment area. One of the main disadvantages is that Chipata Health Centre has had no Nutritionist to supervise NPs. As a result, NPs became inactive and the activities relating to nutrition have been weakened.

4 Improvement of the Planning Capacity of the LDHMT

The LDHMT followed the National Health Strategic Plan 2001-2005, which covered many of the problems the LDHMT had also faced. However, the LDHMT had to overcome their own problems, and some of these were not priorities at the national level. Under conditions of severely limited resources, the areas to be tackled have had to be prioritised, and those priorities have to be guided by a long-term vision and objectives in a coherent manner, since none of the priority areas was of a nature enabling their solution in a short time period. However, there were no long-term vision, mission or goals explicitly stated, resulting in somewhat ad hoc approaches to the priorities when seen retrospectively. Moreover, the ways in which resources were allocated were not clear and no financial analysis from the District Health Office (DHO)⁵ was readily available.

⁵The DHO is used in reference to the management staff at the LDHMT office.

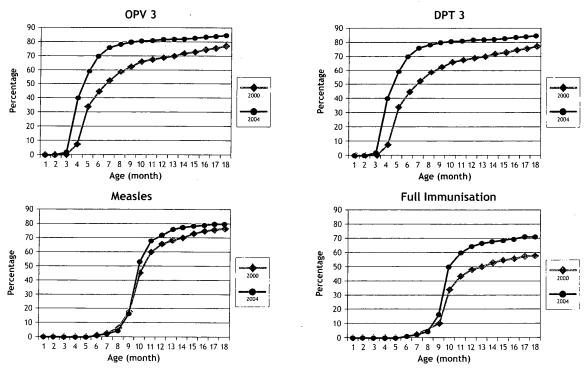
To remedy this situation, the LDHMT developed the "Lusaka District Health Strategic Plan 2004-2006" in 2004. It was the first time such a plan had been developed at a district level in Zambia. Moreover, six Health Centres supported through the Project developed Prioritised Action Plans (PAPs) 2005-2007 in 2004 followed by the finalisation of "A Manual for Prioritised Action Plan". In 2005 all Health Centres under the LDHMT developed their own PAPs. Through these processes, the planning capacity and strategic thinking of the LDHMT including Health Centres have been enhanced with a view to improving support for community-based health activities.

In order to further strengthen its planning capacity, the LDHMT issued the "Lusaka District Health Data Book 1998-2004" in 2005, followed by the "Lusaka District Health Data Bulletin 2005" in 2006. They aimed to achieve structured annual planning based on evidence from the District Health Office and Health Centres through the analysis of the health status of their catchment areas and the entire district as well as the improvement of data quality.

Box 3.1 Analysis of the Impact of the Interventions on Immunisation Rates

The Project analysed the immunisation patterns of all children born in the year 2000 (n=667 from the baseline survey in 2003) compared with the children born in the year 2004 (n=758 from the terminal survey in 2006) using a method designed by the University of Niigata, Japan. The immunisation coverage at age 12 months improved significantly in the group born in 2004 compared to the group born in 2000 for OPV3, DPT3, measles and fully

immunised: OPV 3 (69.3 % to 81.9%, OR=2.01, p<0.01), DPT3 (73.8% to 83.3%, OR=1.75, p<0.01), measles (65.2 % to 71.5%, OR=1.34, p<0.05), fully immunised (47.2 % to >64.4%, OR=1.78, p<0.01). It was found that the children born in the year 2004 were receiving immunisations in a timelier manner within the prescribed period, which means caretakers were bringing their children for immunisations as per schedule.



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IV. KEY APPROACHES FOR EFFECTIVE COMMUNITY-BASED ACTIVITIES

1 Combination of Top-down and Bottom-up Approaches

Through the nearly 5-year implementation of Phase II of the Project, great efforts were made to establish mechanisms combining top-down and bottom-up approaches between and among the MoH, LDHMT, Health Centres and Communities to support community-based activities. It was realised that strong linkages between Health Centres and Communities in particular is essential to implement and sustain community-based activities.

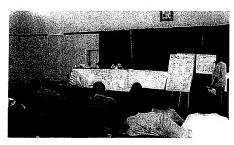
All community-based activities have been supervised by CHCs and LDHMT staff, who were trained on how to supervise and coordinate activities at Training of Trainers (TOT) courses. Several issues and problems that have arisen in the course of implementing the activities are discussed at monthly meetings with the participation of community volunteers and CHCs. CHCs also raise their own issues at a monthly coordinators meeting attended by those from the six Project areas to find solutions as well as to further coordinate activities. A CBO Joint Coordination meeting, which is chaired by LDHMT staff, has also been held for representatives of both CBOs and Health Centre staff from the six Project catchment areas to facilitate the exchange of experiences.

At the district level, technical meetings within the LDHMT and Task

Force meetings with relevant stakeholders have been held regularly to discuss technical issues related to community-based activities. In addition, annual stakeholder meetings on community-based child health and environmental health activities have been organised to share good practices and constraints experienced through the Project implementation with the participation of all concerned stakeholders, including representatives from the MoH and other donors that support community-based activities.



A Stakeholder meeting on Child Health attended by WHO, UNICEF and other institutions concerned



A CBO Joint Coordination meeting from six Health Centre catchment areas at Nakatindi Hall

Figure 4.1 Linkage from the MoH to the Community

| Level | Activity |
|-----------|--|
| МоН | Standardisation of strategy for community-based activities through coordination with stakeholders |
| LDHMT | Capacity building of CHCs in training and supervision, and provision of support for the community-based activities |
| нс | Mobilisation and empowerment of volunteers through training and supervising their activities and coordination of CBOs |
| Community | Implementation and monitoring of field activities and feedback of achievements and constraints to Health Centres and the LDHMT |

All meetings minutes have been prepared and shared among those concerned to return the feedback to the communities through the Health Centres.

The Project has found it to be very useful to share experiences, in further improving community-based activities and endeavouring to overcome constraints.

2 Formulation and Standardisation of Guidelines and Manuals

Standardisation of approaches and tools is a practical way to facilitate the replication of effective community-based activities in other areas. One objective of the standardisation process was to design a method that can also be applicable to other areas based on the experiences and lessons learnt from the Phase I activities. This process involved reviewing and deliberating on the approach in order to maximize outcomes through its implementation. The tasks of the standardisation included designing guidelines that describe the conditions and the procedure of the approach and developing the materials and tools that were required for its operation.

The process of the standardisation and formulation of guidelines started with the formation of a Task Force and Working Groups. Members of the Task Force were invited from a broad spectrum of organisations, including the MoH, LDHMT, international organizations, NGOs and academic institutions. The Task Force was expected to evaluate the approach from the broad aspect of health policy and to confirm the compatibility of the designed guidelines with national health policy, while at the same time ensuring coherence among stakeholders. On the other hand, the Working Groups were made up of members of the technical staff of the LDHMT who practically implement and supervise activities. The roles of the Working Group were to compile the guidelines and the manuals and to prepare the tools. The progress of the Working Group was regularly reported to the Task Force, so that comments and suggestions from the Task Force could be reflected in revisions and further developments.



Discussion to develop guidelines at a Child Health Task Force Meeting



Guidelines and Manuals

Through the process of standardisation in this manner, four advantages of such a process were recognised:

(1) Knowledge sharing

The design of manuals aims at transforming tacit knowledge into explicit knowledge through active information transmission. Sharing information and experiences among a wide range of related parties reveals advantages and lessons of the approaches. The process of standardisation can serve as an important opportunity to advocate the achievements and impacts of the activities to other stakeholders.

(2) Ownership

The would-be-users of the guidelines and manuals were the main actors in their creation. This process contributed to a deepened sense of ownership of and responsibility for the activities on the part of those implementing them.

(3) Efficiency

The approaches implemented in the Phase I area were evaluated and proven to be effective. Manuals, procedures and instructions for the activities were formulated with a view to ensuring that all the parties could easily understand and implement these approaches and the associated activities. Simple step-by-step guidelines can be easily followed. Furthermore, standardising these approaches could remove the need for those attempting to duplicate similar approaches to employ trial and error tactics in initiating new projects.

(4) Quality assurance

Standardisation of the approaches made it possible to design a uniformed method of monitoring and evaluation. This method was applied to activities to enable progress to be monitored and the quality of the activities to be upgraded.

3 Capacity Building of Health Centre Staff as Focal Persons for Community Health Activities

For all community-based activities in the Project, including GMP+, PHAST and Income Generating Ventures (IGVs), the focal persons are the CHCs at the Health Centres, who supervise and monitor community health activities. In order to implement promotional and preventive community child health interventions effectively in the community, the role of CHCs is critical.

CHCs have had their capacity in the field of community health activities enhanced by undergoing TOT in community health.



CHCs, health volunteers and JICA experts at a GMP+ site

They then go on to train community volunteers to become CHWs and NPs. In addition to the TOT in community health, there is also a TOT programme using PHAST methodology for EHO/EHTs, particularly targeting those who will train volunteers dealing with environmental health activities.

Those volunteers who are trained and provided with technical support by the CHCs are expected to be able to identify and solve their own problems in their communities. In the Project, MCH nurses/midwives, Clinical Officers, Nutritionists, and EHO/EHTs have been selected based on the criteria of the guidelines of TOT.

Besides directly monitoring and supervising the field activities of GMP+ and PHAST, CHCs also organise various meetings with communities to share information on progress, achievements and constraints, and to facilitate problem solving.

At monthly monitoring meetings, CHCs have been seen to be taking on stronger facilitation roles for the abovementioned purposes, and have developed their leadership in the communities.

At technical meetings and coordinators meetings, CHCs share common issues with other coordinators beyond Health Centre catchment areas in the Project and find solutions and ways forward. At these meetings, they require presentation skills to present their achievements using specific indicators in child health. Through these monthly and quarterly meetings, they have developed the capacity in analysing data and presentation of achievements.

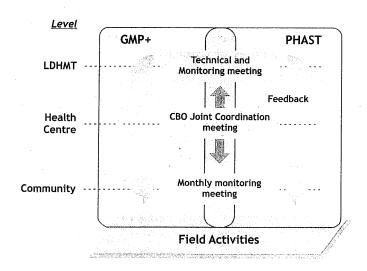
Figure 4.2 A Cycle of Monitoring and Feedback



The District MCH officer facilitating a session of TOT



A CHC facilitating a session of CHW training in Kanyama



In working with communities, the approach of activating existing human resources such as Health Centre staff is one of the keys to success in a community health project. Governmental Health Centre staff are normally occupied, however, with their ordinary work. It may be tempting for outside organisations to bypass Health Centre staff and work directly with the community alone. However, working directly in the long run with Health Centre staff in their catchment areas is a more effective and sustainable approach to implement community-based activities.

The role of Health Centre staff as CHCs is critical considering that they are able to:

- develop a sense of solidarity to unite community volunteers in their catchment areas;
- closely monitor and supervise volunteers and update their active/non-active status through their attendance in activities and meetings;
- follow up and guide those volunteers who need further attention individually;
- coordinate information and resources in response to epidemic outbreaks; and
- influence other staff at Health Centres to be more aware of the importance of community health activities.

Other staff can also assist in outreach immunisation services and accept referred patients from the communities in a more welcoming manner at the Health Centres.

4 Introduction of a Participatory Method

Participatory methods have been recognised as powerful tools for community empowerment. Community participation is seen as a key to the successful implementation of community-based activities. From the experiences of the Project interventions, four advantages of community participation have been observed: deepening of commitment, identification of needs, realisation of resources, and sharing of benefits. Community participation brings out and deepens a sense of responsibility and commitment towards their communities, encouraging them to participate in their improvement. It also enables people to identify and recognise their communities' particular needs, making an action plan that specifically caters to those needs. Community participation is also critical in assisting communities to mobilise otherwise untapped resources, in terms of human resource and materials, that will assist in realising improvements. Finally, community participation provides an opportunity for people to share the achievements and benefits of their work with their fellow community members.





Volunteers actively participating in a PHAST workshop in Kanyama

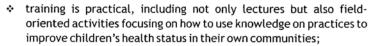
The Project has utilised these advantages of community participation through the introduction of PHAST as a participatory method. PHAST was introduced in the George Health Centre catchment area in 2000 and scaled up to the five other areas in Lusaka from 2002 for the promotion of community-based environmental health activities. PHAST is an innovative approach used to promote hygiene, sanitation and community management of sanitation facilities. It was an adaptation of a methodology of participatory learning that recognises the innate ability of people to address and overcome their own problems and difficulties. It has been recognised that sustained change at a community level can be achieved only with real commitment to the involvement of the community.

The utilisation of the participatory method starts with the identification of the problems that they encounter. A variety of visual tools are employed to help community members to identify both problems and their solutions. The process of searching for solutions through their own efforts enhances self-confidence. The solutions that are found and selected belong to the community. The underlying principle is that the best way to promote change is to offer communities ways to take control of their own development.

5 Continuous and Consistent Capacity Building of Communitybased Volunteers '

Capacity building is crucial in almost any project. In this Project, community-based volunteers have received a variety of training sessions including CHW, NP and PHAST training, as well as training relevant to IGVs, such as business management training.

Some of the key characteristics of the capacity building programmes for community-based volunteers in this Project are as follows:



- the trained volunteers are involved in field activities immediately after the training in which they can utilise the knowledge and skills they acquired;
- the trained volunteers can brush up their knowledge and skills through refresher workshops;
- the trained volunteers can develop their capacity in analysing the situation around them and indicators in child health and environmental health activities through the monthly meetings; and
- the trained volunteers can build their capacity in presentation skills through the CBO Joint Coordination meetings, and any other meetings beyond the Health Centre catchment areas.



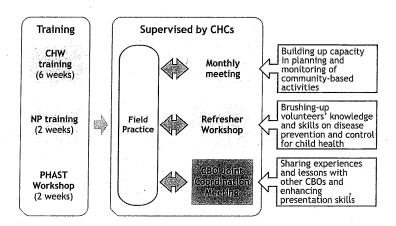
Volunteers receiving certificates and ID cards at the closing ceremony of a PHAST workshop



PHAST workshop participants practicing health education at a community tap

Therefore, the approach on how to build capacity for community-based volunteers in this Project is not just by training at one time but by a series of support sessions with a long term perspective. In addition, training has been conducted following the careful selection of volunteers with fixed criteria. Once volunteers have been trained, they are closely supervised by CHCs with a regular monitoring system. It is a continuous cycle of capacity development with a long-term perspective, through a series of training, fieldwork, evaluating performance at the meetings and refresher workshops.

Figure 4.3 Training and Follow-up for Community Health Volunteers



Box 4.1 Capacity Building through GMP+ Activities

CHWs and NPs are the key community-based volunteers in GMP+ activities, and are coordinated by the NHC. CHWs are trained for 6 weeks and NPs for 2 weeks. Training includes lectures as well as clinical and field practices. Towards the end of the training, both CHWs and NPs attend one GMP+ activity at an outreach point to demonstrate their performance, including weighing children and plotting on tally sheets and growth cards. Once they have been trained and have conducted routine GMP+ activities, they attend the monthly meetings of the GMP+ and Community Referral at Health Centres and share information on achievements, constraints and ways forward with other zones. Representatives of volunteers also attend CBO Joint Coordination meetings organised by the Project and they share their progress and common issues with other areas beyond their Health Centre catchment areas.

Active CHWs and NPs participate regularly in refresher

workshops. The topics addressed by these workshops vary. For NPs, for example, topics are mostly concerning how to properly tally or conduct nutrition counselling. Topics also include seasonal challenges such as cholera prevention, as well as those that reflect areas of concern by the Government and other donors working in the field of community child health. The workshops also focus on how to use IEC materials effectively. Volunteers have been oriented on how to identify general danger signs through watching IEC videos and have improved their knowledge and skills on community referral systems.

Through the activities outlined above, CHWs and NPs have enhanced their capacity to organise their own GMP+ and other related activities in community child health. Starting with training and through their routine activities, they are closely supervised by CHCs. As such, CHCs are able to easily recognise improvements in performance to encourage them.

Box 4.2 Capacity Building through PHAST Activities

EHC members are trained through a 2-week PHAST workshop. Through the PHAST methodology employed during the workshop, they develop the capacity to analyse and conduct planning to solve environmental health problems in their own communities. Immediately after the workshop, trained members begin carrying out the activities prioritised by themselves including VIP latrine and drainage construction, vector control, solid waste management and health education on hygiene and sanitation in the communities to improve the environmental health condition of their community. Like the cycle of GMP+

activities, volunteers in environmental health also attend monthly meetings to share the progress of activities and discuss constraints and possible solutions. They also join CBO Joint Coordination meetings to share the progress with areas beyond their Health Centre catchment areas. Refresher workshops are organised by CHCs at the Health Centre level to brush up the knowledge and skills of volunteers. Through these activities above, members of the EHCs have enhanced their capacity to serve their communities.

6 Strengthening the Operational Cycle of District Management for Community Health Activities

The Lusaka District Health Data Bulletin is to be published every year before the planning cycle starts. Based on annually published Data Bulletins, the Lusaka District Health Data Book is to be updated every 6 years.

The District annual planning process is usually conducted from April to September based on the indicative planning figures (IPF) which are informed by the Provincial Health Office (PHO). Each Health Centre analyses their achievements and constraints from the previous years by using the Data Bulletin and develops a 3-year Action Plan every year following the Action Planning Handbook for Health Centres, Health Posts and Communities. Based on all Health Centre Action Plans as well as those from each department/programme in the DHO, the LDHMT develops a 3-year Action Plan and Budget, which follows the Action Planning Handbook for District Health Teams.



Completed PAPs of Health Centres

Following this, Health Centres identify how to allocate their limited resources in tackling the issues they have identified as priorities for them, developing PAPs for the next year. PAPs form a part of their annual Action Plan linked to the Lusaka District Health Strategic Plan, which is to be revised every 6 years following the National Strategic Plan.

Implementation of activities is monitored through Performance Assessment organised by the PHO and LDHMT twice a year and through the use of the quarterly monitoring forms by Health Centres. Monitoring of activities at the Health Centre level is, however, discouraged due to lack of financial resources and a critical shortage of staff.

7 Effective Approaches to Motivate Volunteers

Through 10 years of experiences from Phase I and Phase II, the Project concluded that one of the keys for the sustainability of the community activities lies in how to continue to motivate volunteers. It is widely recognised that, as people working in difficult conditions without remuneration, maintaining motivation for volunteers is a highly challenging task, and without measures to enhance motivation, a high dropout rate can be expected in such community-based activities. Considering this situation, the Project attempted several approaches to address the issue of motivation, which are summarised in the following six practices:

Box 4.3 Criteria for Selection of Volunteers

In order to sustain their performance, clear criteria to select motivated volunteers are critical. In this Project, criteria have been clearly set up and followed. Some of the examples are:

- Permanent resident in the community
- Accepts to be a volunteer
- 25 years old and above
- Willing to be trained to work closely with the NHC and Health Centre staff
- Willing to learn and change
- Respected by the community
- Able to interact with others
- Familiar with local situations

Not belonging to any other CBOs

It is sometimes difficult to find volunteers who are permanent residents in the community in periurban areas. However, it was seen as preferable to select those who have lived in the area for some years and who are still planning to live there in the future considering the interaction with the communities. In the Project, it was found that those in an older age group who don't need to be concerned about feeding their children or who are supported by their family can work harder and stay longer in their voluntary work.

(1) Selection of volunteers

The selection of volunteers passes through three steps, namely: (1) announcement about the recruitment of volunteers in the community, (2) screening of candidates according to the criteria set by the Project, (3) interviews by Health Centre staff. In the last stage the candidates are asked to demonstrate basic knowledge on child and environmental health, and are required to give their consent to work for the community on a purely voluntary basis. Therefore, the candidates who expect monetary incentives from community health activities are excluded.

(2) Regular refresher workshops

The Project has provided opportunities for the trained volunteers to refresh and update their knowledge and reconfirm their mission as a volunteer through regular refresher workshops (at least quarterly) at the Health Centre. Surveys conducted in 2006 in the Project, show that 89% of the active volunteers consider that participation in the regular refresher workshops is one of the three most important factors in maintaining their motivation.

(3) Accomplishment of visible effects

In the Project, volunteers can observe how their activities have contributed to the improvement of the state of their community's health. The Project has tried to indicate the outputs and effects of their activities in a quantitative way (for example, the number of children taken to GMP+ sites or the Health Centre for referral activities) for the volunteers as well as the Health Centre staff to enable a clearer understanding to the effects. In addition, volunteers realise that the construction of VIP latrines and drainage has brought about visible impacts such as the improvement of environmental health in the area. These obvious results encourage volunteers to continue to work. In Project surveys, 60% of the active volunteers consider that achieving visible results is one of the three most important factors in maintaining their motivation. These results are clearly recognised by people in the community who show their appreciation of voluntary activities.

⁷A research on the motivations of health volunteers was conducte based on questionnaires collectec from 306 volunteers out of about 850.



Shirts, aprons and first aid kits provided to volunteers as incentives



Hammer mill business for income generation

(4) Provision of support materials

The Project has provided a variety of goods and materials for the volunteers such as T-shirts and aprons as a uniform, identity cards, first aid kits for CHW activities, stationery, soap for environmental health activities and calendars as IEC materials. Although the provision of these goods was originally intended for the purpose of supporting the activities of volunteers, establishing their identity in the community and health education, it has boosted volunteers' motivation as well. According to Projects surveys, 25% of the active volunteers consider that receiving these goods is one of the three most important factors in maintaining their motivation.

(5) Regular provision of monetary incentives

The provision of monetary incentives was recognised as being necessary in sustaining volunteer activities over the long-term 10 year Project experience. The Project established income generating ventures (IGVs) in the six target areas to generate financial resources for the volunteers' activities, especially as monetary incentives for the volunteers themselves. Among them, IGVs in George and Ng'ombe have already started distributing monetary incentives for active volunteers from their monthly profits and individual volunteers now receive 5,000 Kwacha (equivalent 1.2USD) for attending activities for half a day. 75% of the volunteers who receive monetary incentive answered that the monetary incentives motivate them. As a matter of corse, the number of volunteers who participate in the activities has either increased gradually or been maintained since the distribution of incentives was commenced.

(6) Involving active volunteers in occasional activities that bring monetary incentives

Volunteers sometimes acquire opportunities to participate in periodical national campaigns or short-term activities that are supported by donor funds. Health Centre staff were encouraged to involve volunteers who are recognised as being active in these opportunities because in many cases the involvement of non-active members in these occasions was seen as demoralising active members, who regarded such opportunities as potential rewards for their hard work. In 2006, a National Child Health Week campaign was conducted twice by the LDHMT and was financially supported by UNICEF. Meanwhile, the LDHMT and Health Centres also implemented indoor residual spraying (IRS) for the prevention of malaria in major unplanned settlements in Lusaka, which was financially supported by the Global Fund. Both activities gave active volunteers chances to acquire monetary incentives, which resulted in the strengthening of the motivation of active volunteers.

8 Regular Interventions to Strengthen the Social Capital of Activity Implementers

Social capital refers to institutions, networks, relationships, values and norms that influence th quality and quantity of interactions of development activities. The Project has established a system for communication between the Health Centres and CBOs and among CBO members by means of the introduction of a unified reporting format, and the promotion of regular meetings on daily community activities, among others initiatives. These approaches have enabled CBO members and Health Centre staff not only to share information easily but also to get closer to each other. As a matter of course, networks among the groups (CBOs abd the Health Centre) and the solidarity within each group have been strengthened.

In more detail, the approaches that served to promote such solidarity and networks are as follows:

- (1) Facilitation by Health Centre staff in workshops and training sessions Health centre staff who have acquired skills in motivating volunteers through the TOT courses are generally responsible for facilitating and conducting the workshops and training sessions for volunteers. This serves to strengthen the relationship between and the Health Centre staff.
- (2) Regular meetings held at the Health Centre
 After volunteers are trained, they are required to attend regular meetings at the Health Centre for sharing information as they start field activities. By visiting the Health Centre frequently and attending the meetings, volunteers become more familiar with each other and closer to the Health Centre.
- (3) Unified reporting system

 The introduction of a reporting system utilising a fixed report format has lubricated the communication between the Health Centre and the CBOs. It has become routine for CBO members to visit the Health Centre and report to the staff.

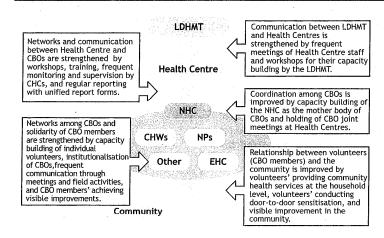
Capacity building of the NHC as the coordinator of community

volunteer activities

The Project has also strengthened the capacity of the NHC through training sessions to understand their functions and roles, to develop their leadership skills and to acquire knowledge on basic health, which are required to coordinate the community volunteer activities. Although the NHC does not receive much support in financial and technical terms from donors or the Government, it can start functioning by holding CBO joint meetings at a local level and organising community volunteer activities using these skills and with small initial inputs.⁸

For example, NHCs in Chipata, Chawama and Mtendere initiated a system for funeral funds for community volunteers by collectin some money regularly from them. NHCs in Kanyama and George can call for meetings related to community health issues, inviting several stakeholders including other CBOs, church leaders and schools.





(5) Involvement of trained volunteers in actual activities that resulted in visible effects in the community

> Trained volunteers are able to build and strengthen linkages with their communities by the fact that they interact closely with members communities in their day-to-day activities. Furthermore, volunteers contribute to visible improvements in the condition of their communities, they are in position to receive respect and appreciation from their communities, which further serves to strengthen this bond.

Box 4.4 Example from Mtendere

- Relationship between Health Centre staff and CBO members has been remarkably improved -

In the Mtendere Health Centre catchment area, many CBOs such as the NHC and Child Health Promoters (CHPs) trained by CARE had been working actively before the Project started its activities in the area. However, CBO members often found difficulty in holding proper meetings, as there was no space for volunteers to gather in the Health Centre. Since the Project funded the construction of an office for CHCs and a storeroom in 2005, a place is now available for volunteers to meet regularly and report to CHCs. As a result, the communication between CHCs and CBOs as well as

among CBO members was improved. Furthermore, the attitude of not only CHCs but also of other Health Centre staff towards volunteers has become more friendly compared to their attitudes before the commencement of the Project. Currently, many volunteer members can be observed visiting the Health Centre almost everyday even when we have neither a meeting nor activities, and communicate freely with CHCs.

(Interview with Mr. Maximillian Ngoma, NHC chairperson in Mtendere, 2007)

Box 4.5 Example from George

 People became more aware of health issues and changed their attitudes towards volunteers and community activities, which in turn served to further motivate volunteers -

We could observe the change in people's attitudes in George especially when we started environmental health activities based on PHAST around the year 2000 (in Phase I). The Project invited NHC members, church and other community leaders for a PHAST workshop which was attended by 26 members, and the George Environmental Health Committee (GEHC) was formed. It was quite unique and new for the participants at that time to work towards analysing problems, finding solutions and planning in such a participatory workshop. After the formation of GEHC, members were trained to acquire skills and knowledge for constructing VIP latrines and drainage, and started construction in the field. When the activities started, people's attitudes were not cooperative. Construction had been completed only by GEHC members without any

support from other community members. However, observing the VIP latrines being constructed one by one, many community members got interested in having them. Eventually, GEHC and the Project decided to construct 20 additional VIP latrines. People's attitudes had improved gradually and many joined the construction cooperatively while others offered lunch for the volunteers. User fees were also introduced during this time. GEHC volunteers also became more committed to activities after realising the improvement of people's attitudes. GEHC members were encouraged, and went on to apply for funds from the Japanese Embassy and CARE to construct more VIP latrines and drainage on their own initiative.

(Interview with Mrs. Tamara Mwamulowe (EHT in George Health Centre, 2007)