2－3　ジェンダー配慮に係る調査結果

2－3－1　ネイバーフッド・ヘルス・コミッティ（NHC）及びその他コミュニティレベルで活動する組織の概況

保健省によって保健医療改革政策（Policy on Health Reform）が実施される以前は、コミュニティ・ヘルスワーカーが住民に対して保健医療の普及活動を行っていたが、1992年に保健医療改革政策の実施により、NHCがUHCの下に設置され、コミュニティ・ヘルスワーカーに代わって住民に対する普及活動を行うことになった。NHCは、UHCとの連携を図るため月に1回、会合を開いている。NHCは、地域住民に対する保健医療の普及活動の実施、地域住民の問題点やニーズの発掘とUHCへの伝達、病人のUHCへの移送などを行い、住民のUHCへのアクセスの強化を図っている。しかし、PCMワークショップで、NHCについての参加者分析で明らかになったように、NHCは無給で活動していること、活動拠点がないためUHCに間借りしていること、地域住民に対する普及活動に必要な機材がないことなどの問題を抱えており、活動意欲がそがれている。また、NHCに対して研修が実施されているが、科目の内容、指導教官については、今回の調査では明らかにできなかったが、改善の余地が残されていると思われる。

NHC以外にコミュニティレベルで保健医療の普及活動を行っているのは、ピア・エジュケイター（Peer Educator）、コミュニティ・ヘルスワーカー、伝統的産婆（Traditional Birth Attendance）である。ピア・エジュケイターは、1カ月間の研修をUHCで受けた後、HIV／AIDSの予防キャンペーン活動や、その時期に流行している病気に関する医療知識を歌などで住民に対して普及活動を行っている。ピア・エジュケイターには、月額8,000クワチャ支給され、週1回、UHCに集まっている。ジョージ・コンパウンドでは、30名（女性28名、男性2名）のピア・エジュケイターが活動しているが、研修については、UHCで時間に余裕のある看護婦や学校の教師、あるいは自分たちで学び合っており、研修官を外部から招聘するなどして、基礎的な医療技術や地域住民に対する普及活動方法に関する技術的な訓練を受けることが今後必要と思われる。

保健医療改革政策が実施される以前に地域住民への普及活動を行っていたコミュニティ・ヘルスワーカーは、NHC設置後に解散することなく、NHCと同じ無給の待遇ではあるが、NHCと一緒に活動したり、あるいはコミュニティ・ヘルスワーカーからNHCへ身分を変えて活動を続けている。

伝統的産婆については、UHCが年2名に対して6カ月の研修を行っている。しかし、現在までのところ、すべての伝統的産婆に対して研修が行われているわけではない。

最後に、伝統的医療師（Traditional Healer）は、近代医療とは対時する立場にあるが、近代医療が普及する前から、ザンビアの文化や風習に根付いた方法で、地域住民の病気の治療に関わってきており、現在も活動を行っている。ザンビアの伝統的医療師は、信仰的医療師（Faith Healer）、精神的医療師（Spiritual Healer）、薬草による治療を行う者（Herbalist）の種類に分けられる。また、伝統的産婆も伝統的医療師に含まれる場合もある。

モデルプロジェクト地域の1つであるカウンダスクエア・コンパウンドのNHCの組織構成を基に関係組織を示すと以下のようになる。

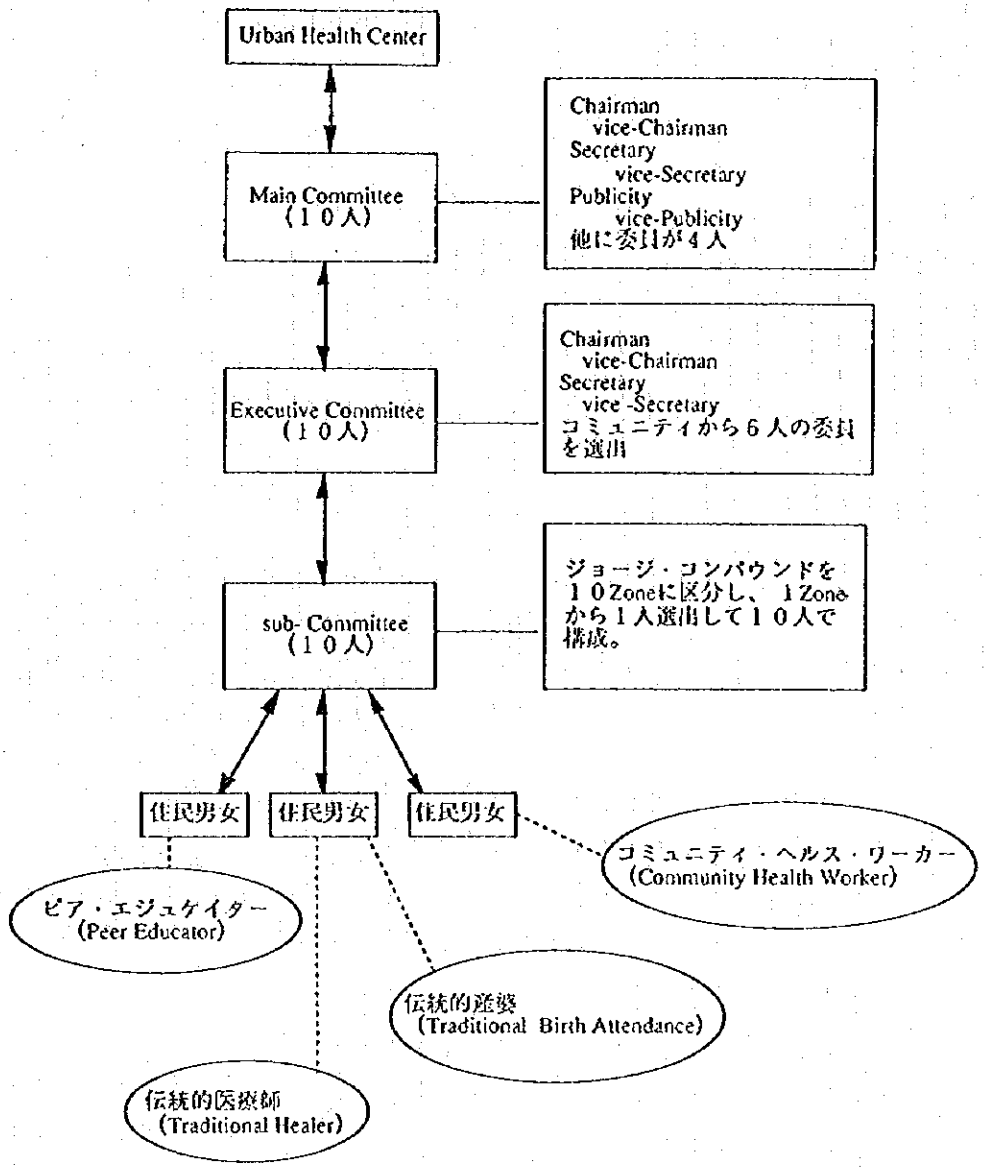

図２－６

(1) 考察

以上から、NHC、コミュニティ・ヘルスワーカー、ピア・エジュケイター、伝統的産婆、更に伝統的医療師は、地域住民に対する保健医療の普及活動を最前線で行っている、あるいは関与している人たちであり、本案件のコミュニティレベルでの活動を展開する上で、重要な役割を果たすと考えられる。したがって、PCM の参加者分析を通して、活動内容や問題点などが洗い出されたが、これらの情報を基に、研修・活動内容、相互関係及び住民との関係性について更に詳細な調査を行うことが、今後どのような住民参加が可能で、どのように住民参加を促進することができるのかなど、コミュニティレベルの活動の方向性を検討するために必要となろう。

2－3－2　モデルプロジェクト地域の概況

ザンビア最大都市であるルサカ市は、人口増加率6.1%（1992）[注1]、人口の42%が貧困層であり、ほとんどがインフォーマルセクターで低資金の労働に従事していることから[注2]、生活はかなり厳しい状況にあるといえよう。ルサカ市内の3カ所のモデルプロジェクト地域（ジョージ・コンパウンド、カウンダスクエア・コンパウンド、ンゴンベ・コンパウンド）の概況については、①人口、社会経済インフラ状況、②UHCの主な活動内容、③地域住民男女に関しては、主としてUHCに外来に来た住民男女を対象に保健医療に関する意識・知識及びNHCとの関係の観点からまとめた。

ザンビアは73部族からなる国家といわれ、3カ所のモデルプロジェクト地域には主にトンガ系、ニャンジャ系、ベンバ系が住んでいる。主民族と少数民族は対立的な関係にはなく、むしろ飢餓の克服という大きな課題を共通の課題として抱えている。また、保健医療に携わるスタッフはニャンジャ語、ベンバ語など主要な現地語を話し、住民も主要な現地語は話すため、住民の医療施設の利用における大きな問題とはなっていない。

社会インフラについて、3カ所のモデルプロジェクト地域で共通していることは、衛生と居住環境についてである。衛生面については、ゴミの回収は定期的に行われておらず、空き地に山となって捨てられたままの状態である。また、穴を掘って、自然に汚物を土にしみこませるピットラトリン（Pitlatrin）[注3]と呼ばれるトイレを利用しているが、場所が狭いために家の近くに設置している。更に、幹線道路からはずれたコンパウンド内の道路は、狭く、舗装されていないため、雨期の集中的な雨によって道路にはゴミが流れ出し、泥道と化したところを車が通るため道路の表面が凸凹で、水たまりが多くあり、不衛生な環境が作られやすい状況にある。

居住環境は、乱雑に建設されており、大半の住居は泥のレンガで壁をつくり、床はコンクリート、屋根はトタン屋根で、石で飛ばないように押さえている。窓は1カ所ないし2カ所ついている場合もあるが、ほとんどは窓がないため家の中は大変暗い。流し・台所は室内にはないため、外で調理している。

(1) ジョージ・コンパウンド

ジョージ・コンパウンドは、1967年に南アフリカや南ローデシアなどの白人によって所有されていた農地が解放され、それまで雇用されていた労働者が雑貨商などの商売を始めたことで、1968～70年にかけて全国各地から人の流入が始まった。現在の人口は、およそ4万7,868人（男性：2万3,149人、女性：2万4,719人）で世帯数は1万2,925世帯である[注4]。経済社会インフラとして、小学校が4校、市場が2カ所、UHCが1カ所、安全灯設置、コミュニティセンターが2カ所、25世帯ごとの給水施設及び洗濯場（無償資金協力によるルサカ市周辺地区給水計画）が整備されている[注5]。ジョージ・コンパウンド内でこれまでに発生し、流行した病気には、1992～93年にコレラと麻疹、1995年にポリオがある[注6]。

1) ジョージ・ヘルスセンター

ジョージ・コンパウンドのUHCは、通称ジョージ・ヘルスセンターと呼ばれ、建物は英国

(注1) Human Development Report 1995 UNDP
(注2) "The Bamako Initiative in Zambia" UNICEF 1991
(注3) 「ザンビア企画調査（人的資源開発分野）報告資料」1994年　国際協力事業団
(注4) "Population of Lusaka by Township 1990" ルサカ市市役所
(注5) "Settlement Information Chart 1994" ルサカ市市役所
(注6) 「ジョージ・コンパウンド調査報告書ドラフト」　Care International

ODAの援助によって建設された。2名の一般医療技師、1名の登録看護婦、18名の看護婦、5名の登録助産婦、12名の助産婦が勤務している(注7)。5歳児未満の診察、ワクチン接種、家族計画、一般診察など日々の診察の予定が組まれている。結核については月に1回診察が行われている。

1日の患者数は、その日の診察予定による変化、及び雨期になるとマラリア患者が増加するといった季節的な変化はあるが、平均して200人くらいが外来に訪れている。

外来患者の80%が保険制度に加入している。ザンビアの保険制度は、加入時に3カ月分前払いとして1人当たり1,560クワチャを最寄りのUHCに支払い、その後は1人当たり月額で500クワチャを毎月支払い、保健カードにスタンプをもらい、保健カードにスタンプがあれば、UTH、UHCでの診察が無料になる。ただし、薬については、UTH、UHCに確保されている薬であれば無料で支給されるが、確保されていない場合は、処方箋に基づいて市中の薬局から別料金で購入しなければならない。ジョージ・ヘルスセンターに確保されている薬は、鎮痛剤、ビタミン剤など種類及び量とも限られていたため、ほとんどの場合、市中で薬を買い求めなければならないのが現状である。しかし、住民は高額の薬を購入する経済的余裕がないため、薬を買わない場合が多いとのことである。したがって、毎月500クワチャを支払う意味がない、保険制度が効果的でないと感じている地域住民も少なくない。

残りの20%の外来患者は、保険制度に加入していないため、その都度診察料を支払わなくてはならず、平均して2,000~2,500クワチャを支払っているとのことであった。

保険料を支払えない、十分な生活費が稼げないなど生活が厳しい人々に対して、地方開発・社会サービス・文化省（Ministry Community Development, Social Service and Culture）が社会保障制度（The Public Welfare Assistance Scheme: PWAS）を行っているが、社会保障制度を受けることを認められているのは、ジョージ・コンパウンドでは14人であった。

2) 地域住民男女と保健医療

ジョージ・コンパウンド内の主な疾病にはマラリア、下痢症がある。マラリア、下痢症、栄養失調の原因についての地域住民からの回答は、以下の表のような結果を得た。特に男女間で理解の違いはみられなかった。

(注7) Check List for Urban Health Center 1994

表2－7

病　名	住民が回答した病気の原因例
マラリア	蚊に刺される、汚染された水、ため池に蓋をしない、澱んだ池で泳ぐ、風邪をひくなど
下痢症	衛生施設の不備、汚染された水、食べ物の管理不備（食べ物に蓋をしない）、調理を十分にしない、沸騰させない水を飲む、腐った食べ物を食べる、手を洗わないなど
栄養失調	貧困、食料不足、不健康など ほこり、風邪をひく、煙草を吸う、住宅環境が密集していること、遺伝的な喘息など

病気の原因については、知らない場合は罹患していても知らないし、知っている場合は罹患に関係なく、疾病の原因について理解しているという傾向がみられた。回答の中には、マラリアの原因として風邪、澱んだ池で泳ぐと回答するなど、直接的には関係しないことも病気の原因としている場合もあり、住民の理解にはかなりのばらつきがあると思われる。

表２－８　モデルプロジェクト地域の概況

		ジョージ・コンパウンド	カウンダスクエア・コンパウンド	ンゴンベ・コンパウンド
人口		47,868 人 男性：23,149 人 女性：24,719 人	17,740 人 男性：9,802 人 女性：7,938 人	17,288 人 男性：8,332 人 女性：8,956 人
世帯数		12,925 世帯	2,798 世帯	N.A.
経済社会インフラ		小学校４校、市場２カ所、UHC1 カ所、安全灯設置、コミュニティセンター2 カ所、25 世帯ごとの給水施設及び洗濯場（無償資金協力によるルサカ市周辺地区給水計画）	小学校２校、市場１カ所、UHC1 カ所、安全灯設置、コミュニティセンター1 カ所、各家屋に給水施設	情報なし。水源は深井戸と共同栓を利用しており、２カ所は既に建設済みで、更に現在、１カ所増設中。
ヘルスセンター		平均して１日約 200 人の患者数。外来一般医療技師２名、登録看護婦１名、看護婦 18 名、登録助産婦５名、助産婦 12 名が勤務。５歳児未満の診察、ワクチン接種、家族計画、一般診察など診察の予定がある。約 80%の外来患者が保険制度に加入。	平均して１日約 300 人の患者数。一般医療技師２名、登録看護婦２名、看護婦 20 名、助産婦５名が勤務。ンゴンベ・コンパウンド地域も診察対象地域に含める。小児科診察、家族計画、往診、予約日などの予定が組まれている。	ンゴンベにはヘルスセンターが整備されていない。ンゴンベの NHC は、病人の移送、小学校の授業時間を利用した保健教育などを行っている。
地域住民男女	病気の原因	理解に差がみられる	理解に差がみられる	理解に差がみられる
	UHC への問題点	待ち時間が長い、機材の破損、薬の不足、態度が良くない等	分かりやすい説明でない、薬の不足、産科病室の整備等	
	飲料水	共同栓、手掘り井戸の目的別使い分け。衛生の理解あり。	衛生についての重要性を理解	目的別使い分け。衛生の理解あり。
	伝統的医療師	否定的な印象を持つ傾向	UHC との使い分け	UHC との使い分け
	NHC	必ずしも知られていない	必ずしも知られていない	

ジョージ・ヘルスセンター及びUTHの利用に関しては、①診察までの待ち時間が長いこと、②医療機材が破損していること、③薬が少ないこと、④診療所とUTHのスタッフの患者に対する対応があまりよくないこと、⑤UTHに通うための交通手段がないことが問題となっている。薬については、アスピリンなど鎮痛剤くらいしかなく、期待する治療が受けられないことを指摘した。

伝統的医療師については、地域住民は、薬草で作った薬が効果的でないこと、魔術を使っているなど否定的な印象を持つ傾向がみられた。また、伝統的医療師ではなくUHCに行く理由には、レントゲンなどの近代的な治療を受けることができ、薬がもらえ、伝統的医療師よりも病気が治るからと回答している。前述したようにUHCで確保している薬は、種類及び数とも限られているが、薬草よりも近代医療による薬が治療効果があるという住民の意識が窺える。

飲料水は、無償資金協力による共同栓を利用しているが、手掘り井戸も併用して活用している住民もあった。水の利用については水が汚い場合は沸騰させたり、フィルターで濾したりしている。またトイレの使用後、食事の前に手洗いをすることについては、病気になるから、汚れた手で食べるとコレラになるからと、その重要性を理解しており、衛生観念はある程度は普及していると思われる。

栄養状況については、主食であるミルミルが1年の間で2倍以上に値上がったために食事の絶対量が少なくなったこと、主食、副食の栄養バランスがとれていないことが栄養に関する問題点となっている。

NHCについては、住民男女はNHCの存在を必ずしも知っている現状にない。しかし、存在を知っている場合には、HIV/AIDSの感染を防ぐためにコンドームを配布したり、エイズの恐ろしさや家族計画の必要性について話すといった活動内容を理解しており、また自ら参加して普及活動を行っている場合もある。健康を増進するためのコミュニティ活動への関心はあることが観察された。

(2) カウンダスクエア・コンパウンド

人口は1万7,740人（男性：9,802人、女性：7,938人）、世帯数は2,798世帯である(注8)。経済社会インフラ整備については、小学校が2校、市場が1カ所、UHCが1カ所、安全灯設置、コミュニティセンターが1カ所、各家屋に給水施設が整備されている(注9)。

1) カウンダ・ヘルスセンター

カウンダスクエアのUHCは、通称カウンダ・ヘルスセンターと呼ばれ、平均の1日の患者数は、およそ300人である。一般医療技師が2名、登録看護婦が2名、看護婦が20名、助産婦が5名、勤務している。カウンダ・ヘルスセンターは、ンゴンベ・コンパウンド地域も診察対象地域（Cachment Area）に含めるため、診察対象となる患者数は2万6,000人ほどに上る。小児科診察、家族計画、往診、予約日など日々の予定が組まれている。

2) 地域住民男女と保健医療

カウンダスクエア・コンパウンド内で、罹患率の高い病気としては、マラリア、下痢症、麻

(注8) (注2) と同じ。
(注9) (注3) と同じ。

疹がある。病気の原因についての住民からの回答は、以下の表のとおりである。病気の原因についての理解には、ジョージ・コンパウンドと同じように、程度の差がみられた。

表 2－9

病名	住民が回答した病気の原因例
マラリア	蚊に刺される、澱んだ水たまりがある、背の高い草が生えているなど
下痢症	汚い水たまりがある、不衛生な食べ物を食べる、環境が衛生的でない、蠅が多いなど

カウンダ・ヘルスセンターとUTHについては、①老人に分かりやすい説明がないこと、②薬が絶対的に不足しており、支給されたとしてもアスピリンをもらう程度で病気が完治しない、③産科病室が欲しい、などが問題となっている。

伝統的医療師については、①伝統的医療師を信用していない、②病気には伝統的医療師ではなく、医者による診察と薬が必要であるから、といった理由で伝統的医療師に行ったことがないという場合と、①病気が初期状態にあるとき、②ヘルスセンターに行っても治らないとき、あるいは③体がだるい、腕や足など体の一部が痛いとき、④てんかんが起きたときなど、病気の症状によって伝統的医療師に行くという場合があった。更に、ヘルスセンターと伝統的医療師の両方で治療を受けると効果的と考えている場合もあった。カウンダスクエア・コンパウンドでは、伝統的医療師の料金はだいたい5,000～1万クワチャとなっている。

水及び衛生については、水が汚い場合は沸騰させてから飲料水として活用したり、トイレ使用後、食事の前に手を洗うなど、衛生についてはその重要性を理解している。

栄養に関しては、食費が高いこと、同じ食品を用いた食事内容であることが問題となっており、改善策には収入を増やすために技術を身につけることに関心を示した。

NHCの活動については、保健医療に関する普及活動、病気になった場合に手助けしてくれるなどNHCの活動内容を理解している場合とNHCの存在を知らないと回答した場合があり、NHCについての理解に差がみられた。

生活上の問題点には、生活費が不足していることを挙げており、毎月1人当たり500クワチャ支払うことができないため保険制度に加入していない住民が存在すると容易に予測される。

(3) ンゴンベ・コンパウンド

1971年ごろからンゴンベ・コンパウンド地域に人々が住み始め、現在の人口は1万7,288人（男性：8,332人、女性：8,956人）、世帯数は不明である(注10)。経済社会インフラについては、情報が得られなかった。水源は深井戸と共同栓を利用しており、2カ所は既に建設済みで、更に現在、1カ所増設中である。共同栓については、現在までのところ9カ所に建設し、更に今後2カ所増設する予定で、合計11カ所の共同栓を設置するとのことであった。水道料金については、1世帯につき1カ月1,000クワチャを徴収する予定であるとのことであった。ンゴンベ・コンパウンドは、10セクションに区分されており、そのセクションごとに委員長（Section Chairman）が住民より選出されている。水道料金は、この委員長によって徴収され、水道公社

(注10) (注2) と同じ

に支払う仕組みになっている。

1) NHCの活動

ンゴンベ・コンパウンド内には診療所が現在のところないため、住民は3キロメートル離れたカウンダ・ヘルスセンターに通っている。しかし、カウンダ・ヘルスセンターに外来に来た住民からは、3キロメートルの距離が近くないことが指摘された。ンゴンベのNHCは、病人の移送、小学校の授業時間を利用した保健教育などを行っている。

2) 地域住民男女と保健医療

ンゴンベ・コンパウンド内で罹患率の高い病気には、マラリア、下痢症が挙げられる。病気の原因についての住民からの回答例は、マラリアでは、①蚊に刺される、②澱んだ汚い水があること、③背の高い草があること、④ごみが散乱していることを挙げた。下痢症については①トイレ使用後に手を洗わない、②バランスのとれた食事をとっていない、③住環境の衛生を保っていない、④汚い食べ物を食べてしまうことが原因として回答した。

伝統的医療師については、①占いだけなので信じない、②薬をくれないから行かない、といった回答を得たが、一方で、悪魔にとりつかれた場合には、伝統的医療師のみが治療できるので、伝統的医療師のところへ行くと回答した場合があった。また、病気の症状によって伝統的医療師へ行く場合とUHCへ行く場合に分けている場合もあった。

衛生観念については、トイレ使用後、食事の前に手を洗うことが実行されており、意識は高いと思われる。水の使用方法についても、井戸水は洗濯や食器洗いに使用し、飲料水としては利用せず、共同栓からの水を飲料水として利用するなど、使用目的によって水を使い分けている。

日常生活上の問題点としては、十分な食事がとれないことを挙げ、更に、子供のための洋服、授業料、居住環境を改善するための収入が十分にないことを回答した。収入を上げるために技術を身につけることや、健康増進のためのコミュニティ活動への参加には関心を示した。

視察したドラマは、小学校教師などが出演者となって、土曜日の午後、小学校の一角を利用して行われた。今回のドラマは特に保健医療に重点を置き、内容は、①食事の前には手を洗わないとコレラになるので手を洗うことの必要性を説く内容、②家族計画の重要性を説く内容のものなどについて面白おかしく、また現地語の分からない私たちにも分かるような話の筋で演じられた。観客はほとんどが子供であったが、娯楽施設がないので、子供たちにとっては楽しいひとときだったに違いない。

(4) 考察

今回の3カ所のモデルプロジェクト地域についての調査は、時間的制約のため、調査対象がヘルスセンターに来た患者に限られたことに加え、これまでにコンパウンド内の状況について詳細に調査が行われていなかったために、今回の調査結果はかなり量的、質的に限界があった。しかし、視察した時の全般的な印象からは、ンゴンベ・コンパウンドの生活状況は3カ所の中でも厳しいように見受けられた。

3カ所のモデルプロジェクト地域に共通してみられた点は、抱えている問題点、コンパウンド内の罹患率の高い病気、衛生知識、NHCとの関係においてみられた。すなわち、生活上の一番の問題点が、生活費の不足であり、したがって十分な量とバランスのとれた食事がとれていない

ことであった。また、主な病気にはマラリア、下痢症、栄養失調があり、病気の原因については理解に差がみられた。しかし、トイレ使用後、食事の前の手洗いなどの重要性は理解されていると思われる。また、NHCの存在及び活動内容については、必ずしも地域住民に知られておらず、コミュニティでの健康促進のための活動に対しても、一様に関心があった訳ではなかった。

今回の調査結果から、3カ所のモデルプロジェクト地域における問題や住民の理解の大凡の傾向は把握されたものの、詳細な社会層の把握、社会層ごとの経済活動や問題点の背景などの調査を今後実施することが肝要である。しかし、カウンダ共産党政権時代の政府に頼る風潮が住民の中に残っていることや、またルサカ市の人口増加率が6.1%で著しい都市化が進んでいることなどが影響して、コミュニティの組織化やコミュニティの人々とともに活動を始めることに多くの時間を要すると考えられる。

2－3－3　保健医療と女性

多くの途上国においては、女性は、①子供の世話、②食糧を生産し、食品を選択し、食事を準備し、家族に分け与えるという家族の食に関する仕事、③病人や体が不自由な家族の世話、④家族の病状の見極め、⑤家族のこれまでの健康状況についての理解、⑥家族の病気に対する初めの処置などを通して家族の健康の維持に深く関わっており、責任を持っている(注11)。他方で、女性はジェンダーバイヤスによって栄養、教育の機会、雇用の機会、労働条件、出産や家族計画の決定権などにおいて不利な立場に立たされており、自身の健康を維持することが難しい状況にある。例えば、男児を好む風習により、女児の栄養は不足し、このため貧血や栄養失調になりやすい。また女性は家事におわれて時間がなかったり、あるいは経済的な理由から教育の機会を失う傾向がある。更に教育の機会の喪失は雇用の機会、労働条件に影響し、長時間、低賃金の労働を強いられることが少なくなく、健康の維持が難しくなる。また、女性に出産や避妊などに関する決定権がなければ、短い間隔で出産を繰り返すため母体の健康が損なわれやすい。加えて、水汲みや洗濯や料理などの仕事を通して水に接する機会が多く、水を媒体にした病気に罹りやすい。このように女性は一方で家族の健康の維持を担い、他方で自身の健康が脅かされていることから、保健医療活動への女性からの視点及び女性の保健医療活動への参加は不可欠となっている。

2－3－4　保健医療とザンビア女性

(1) 保健医療政策におけるジェンダー

1992年の保健医療改革政策によって保健省内にWID局が設立され、WID局は下記の活動を目的としている。

1) 保健省の職員に対しジェンダー研修を実施し、保健プログラムの計画・実施・モニタリング・評価のサイクルにジェンダーの視点を導入する。
2) 保健・医療の分野でジェンダーに関する調査・研究を行う。
3) 保健・医療のプログラムに対し技術的なアドバイスを行う。

(注11) "Women as Provider of Health Care" 1987 WHO

4) ジェンダーと開発に関する資料を作成する(注12)。

上記のとおり、保健政策にジェンダーの視点を組み入れるべく努力されているが、明確なWID政策を打ち出すに至っていない。このため構造調整による保健・社会サービス分野の予算の切り詰めによって、従来、政府が担ってきた保健医療分野は、コミュニティレベルに更に、家族や個人、つまり女性が保健医療・健康について多くを担うことになったが、適切な政策がみられないため女性の役割・負担が大きくなっている。

1987年に保健医療の指標が男女別で調査されたが、それ以後はUHCレベルでは調査が行われているが、全国レベルでは行われていない。妊産婦死亡率は、1987年の調査ではUTHレベルでは140／100,000、ヘルスセンターレベルでは220／100,000となっている。主な原因は妊娠中毒症、敗血症などとなっている。現在、保健医療に関する情報整備については、全国レベルで行われているのは、HIV／AIDS、STDの使用、伝染病について男女別で統計がとられているが、他の分野については男女別に集計されていない。UHCレベルでは年齢別、性別に記録がとられている。今後は継続的に男女別にデータを集計することが必要となっている。

(2) HIV／AIDS

1995年の人間開発報告において、10万人当たりのエイズ患者数は、ザンビアでは239.3人と報告され、この数値はサハラ以南アフリカの平均15.6人の15倍強である。ザンビアにおいてHIV／AIDSは医療問題にとどまらない大きな問題となっている。つまり労働人口における罹患率が高まったことによる、生産性低下、市場規模の縮小化など経済活動への影響が深刻化している（表参照）。

表2－10　年齢別エイズ患者数

年齢層	0-4	5-14	15-20	21-39	40+	不明	合計
女　性	103	15	179	952	129	124	1,502
男　性	99	9	33	1,009	379	115	1,644

出典：「国別医療協力ファイル　ザンビア」　国際協力事業団

更に、HIV／AIDSの社会的な問題には、両親あるいは片親を失った孤児の増加、配偶者を失った女性あるいは男性の増加、扶養負担率増加などが挙げられる。HIV／AIDSで両親あるいは片親を失った孤児の内訳は、24%の孤児が両親ともエイズで失い、25%が母親を失い、51%が父親を失っていると報告されている。今後、母親と父親の死亡率は同じまで死亡者の増加が予想されており、家庭を失った子供たちが増えることによって、教育や社会性を身につける機会が得られない子供たちが成長する可能性が高まり、そのことによる社会的経済的影響が問題となっている。また未亡人となった場合、女性の再婚は男性の再婚と比べ難しく、女性世帯主となった場合、経済的社会的に厳しい状況に置かれる。更に労働人口の感染率が高くなることによって、労働人口の扶養負担率が高まるため、生活の質の低下が危惧されている。

(注12)「国別WID情報整備調査報告書（ザンビア、マラウイ）」P34、国際協力事業団　1995

過去の傾向から HIV／AIDS の患者の男女の比率をみると、女性は若年層において、男性は高齢層に感染していることが分かる。

表２－１１　1985～93 年の年齢別のエイズ患者における性別比

年　齢	15-19	20-29	30-39	40-49	50-59
男　性	13	35	54	69	77
女　性	87	65	46	31	23

出典：The Situation of Women in Zambia P41 ZARD 1994

２－３－５　長期調査について

事前調査において、他のドナーや NGO との意見交換及び視察・調査から、コンパウンド内の状況は貧困、高い人口増加率、衛生環境の悪化など様々な要因がかさなり合って複雑な社会経済状況にあることが分かった。しかし、コンパウンド内の状況についての報告書や資料が少なく、したがって①3 カ所のモデルプロジェクト地域についての基礎的な資料が整備されていないこと、また、②今回の事前調査結果からは、コミュニティにベースを置いた具体的な活動内容を検討するための情報が十分でないこと、更に、③本案件開始後に実施するプロジェクト対象住民男女に関する生産、再生産活動、それらの活動に関するアクセスとコントロールなどについての調査を開始するための基礎情報を収集するために、長期調査において、コミュニティレベルでは NHC 及び関係者に重点を置いた下記の項目を調査・分析することが望まれる。

(1) 関連政策及び他のドナーの活動に関する調査項目

1) 社会保障制度（The Public Welfare Assistance Scheme: PWAS）

地域開発・社会サービス・文化省（Ministry of Community Development, Social Welfare and Culture）が、構造調整による社会・サービス分野の予算切り詰めによる影響を受けやすい貧困層を対象に実施している社会保障制度である。この制度は、国家、郡、地域レベルの 3 つのレベルの委員会が設置されており、国家レベルの委員会（the National Public Welfare Assistance Committee）では制度の政策策定を行い、郡レベルの委員会（the District Welfare Assistance Committee）では、地域レベルの委員会（Local Area Committee）が社会保障制度の対象者として提示した住民の承認を行っている。制度の対象者には、育児が経済的に難しいと思われるシングルマザーや未亡人、孤児や虐待を受けたり生活の面倒をみてもらえない子供たち、家族から支援を受けられない老人、身体障害者、干ばつなど自然災害を受けた人々が考えられている。また場合によっては、貧困層、病弱な人々に対しても適応されている。しかし、制度の広報が十分でないため、資格がありながら制度について知らないことや、資格が明確でなく、予算が十分でないために社会保障制度を受ける人数が限られてしまうといった問題点がある。

長期調査においては、適応者選定方法、支援内容、3 カ所のモデルプロジェクト地域内の制度を受けている人数及び生活状況などについて調べる。

2) コミュニティ・イニシアティブ・ファンド

英国ODAがコミュニティレベルで実施している運用回転資金 (Revolving Fund) の供与であるが、詳細が明らかでないため、基金の内容、本案件との関わりなどについては今後の調査で行う。

(2) 3カ所のモデルプロジェクト地域に関する調査項目

1) NHC、コミュニティ・ヘルスワーカー、ピア・エジュケイター、伝統的産婆など保健医療の普及活動関係者について

調査内容としては、まずこれらの関係組織に対して実施されている研修内容、組織及びグループ間の実際の活動上の関係、住民との関係を調査することが必要となろう。

① 研修内容については、現状を把握した上で、普及活動に必要な保健医療技術のみならず、地域住民男女に対する普及活動に求められるコミュニケーションスキルやジェンダーの視点について今後、どのような研修が求められるのかなどについて、DHMT及びそれぞれの組織から聞き取り調査を行う。研修内容に関連した項目として、彼らの教育水準及び人選の方法についても調査を行う。

② NHC、コミュニティ・ヘルスワーカー、伝統的産婆、ピア・エジュケイターの組織上の関係は、NHCがUHCの下位組織であり、コミュニティ・ヘルスワーカー、ピア・エジュケイター及び伝統的産婆はNHCと協力関係にあり、伝統的医療師はNHCとは特に協力関係にはないが、コミュニティレベルの医療活動に重要な役割を果たしているという関係は把握された。

長期調査においては、3カ所のモデルプロジェクト地域内での実際の活動上の関係をNHC、コミュニティ・ヘルスワーカー、伝統的産婆、ピア・エジュケイター及び関係者からの聞き取り調査から把握し、今後NHCを中心に周辺組織との協力関係の可能性について分析する。

③ NHC、コミュニティ・ヘルスワーカー、ピア・エジュケイターの人選の方法とも絡んでくるが、彼らがどのような地域住民男女との協力・支持関係にあり、地域住民男女の状況をどのように把握しているかを調査する。特に、NHCについては地域住民に必ずしもその存在を知られていない場合があり、その場合には、NHCを補完して、コミュニティ活動を展開できる住民組織について、DHMT、地域住民及び関係者からの聞き取り調査を行う。

2) 3カ所のモデルプロジェクト地域の住民男女について

① 3カ所のモデルプロジェクト地域において、保険制度に加入している世帯数と加入していない世帯数、加入あるいは加入していない理由、加入を辞めた理由についてアンケート調査を行う。調査結果から、コミュニティレベルの活動を実施する上で必要となる社会的配慮を提示する。

② コンパウンド内の年齢層、宗教、男性及び女性世帯主、教育レベルに関する数量的なデータをまとめる。特に、世帯主別については、都市と地方の女性世帯者数を比べると地方の女性世帯主の数値が都市の世帯主の数値よりも上回っているが、近年のHIV／AIDSの流行に伴って、夫を失った女性世帯主がルサカ市においても増加している。したがって、世帯主別によって経済活動、生活状況が違ってくることが予想されるため、数値の把握とともに経済

状況についても調査を行う。

(3) 調査方法及び期間

PRA などによる住民が参加する形での聞き取り、グループディスカッションなどの手法を用いて、約2カ月間で調査を行う。

(4) 関係機関

情報及び統計資料の収集や調査に関係する機関として、事前調査で訪問した以外に、以下の機関がある。

① ザンビア大学アフリカ研究所の図書館及び調査報告書（Health Systems Research Programme Development, Women and Health Project Development)

② ザンビア大学女性学研究協会（Research Association of the Zambia University Women Academics: PAZUWA) Ms. Monica Munachonga

③ ZARD の女性に関する資料センター

(5) 調査における注意事項

住民に対する調査においては、現地語（主としてニャンジャ語）を話す通訳を活用することが必須であるが、NHC、ソーシャルワーカーレベルの人たちは十分に英語を話すので、通訳は特に必要はない。女性に対する調査で通訳を必要とする場合は、女性の通訳であることが望ましい。

2－4　他の援助機関の動向

2－4－1　二国間援助

(1) the United Kingdom Overseas Development Administration (ODA)

訪問日：2月23日、午後

応対者：

Dr. Michael O' Dwyer (Health and Population Field Manager)

Mr. Andy O' Connell (Urban Health Advisor)

Ms. Deidre Geurts (Field Management Assistant)

プロジェクトタイトル：Lusaka Urban Health

ルサカ市のヘルスセンターの機能向上と紹介システムの強化によって、同市のヘルスケアを改善しようとするプロジェクト。

差し当たっての目標としては、①ヘルスセンターでの臨床診断、患者収容能力の強化、②ヘルスサービスの有効性と効率性の改善、③健康増進に当たっての地域住民参加の推進を挙げている。

①の指標として、マラリア、結核、エイズ、コレラの治療の質を向上、②の指標として UTH の内科と小児科の患者の平均入院期間を3日から4日とすることと、UTH への不要な不適切な入院率を30%にまで減少させることとしている。

これらの目標を達成することにより、①ヘルスセンターのベッド稼働率を100%に増加させ、②UTH での軽微な治療は30%まで低下させることを目指している。

今回の事前調査ミッションでは、ジョージ・コンパウンドのヘルスセンターで病棟の増設が行われていた。

(2) United States Agency for International Development (USAID)

訪問日：2月23日、午後

応対者：

Dr. Paul H. Hartenberger (Director, Population Health Nutrition Office)

Dr. Steven T. Wiersma (Child survival and HIV-AIDS Advisor)

Dr. Remi Sogunro (Child Health Project Manager)

プロジェクトタイトル：Zambia Child Health Project

このプロジェクトはザンビア全体の小児保健の向上を持続させることを最終目標とし、西暦2002年までに5歳未満の小児死亡率を200／1,000未満にし、同時に12～23カ月児の国際的な標準体重の下位10%に入る小児の割合を20%未満とすることを目指している。

これに至るための目標に、小児保健における治療と予防の質を増進させることを挙げ、その指標として、①咳嗽、呼吸困難、発熱への適切な対応が60%増加すること、②西暦1998年から2002年までの間にディストリクトレベルの麻疹接種率を80%に維持すること、③ヘルスセンターを受診する5歳未満児の60%が適切なヘルスサービスを受けられるようにすることを列挙している。

実施プログラムは多岐にわたるが、特にヘルスセンターのスタッフには、①西暦2002年までに半数がIntegrated Case Management (ICM) の訓練を受けること、②ICMでの基礎訓練項目として、予防接種、患者とのコミュニケーション、予防の実習、③西暦2002年までに60%のディストリクトが独自の方法で保健医療従事者を訓練することの3点を挙げている。

USAIDでは特にHIV／AIDSに関する訓練を重点的に行うこととしており、これはU.S.-Japan Common Agenda: Population and HIV／AIDS Initiativesに合致するものである。代表的なプログラムとしてエイズ患者の在宅ケアがある。

(3) Irish Aid

訪問日：2月23日、午前

応対者：Ms. Bernadette Crawford (Senior Programme Officer)

Irish Aidは援助総額自体が少額であるため、母子保健と給水事業に絞って有効に援助を行っている。また、大使館内に外務省直轄のIrish Aidの担当官がいるのが特徴的である。

1) 母子保健（MCH）

1982年以来、ルサカ市のヘルスセンター21カ所のうちの3カ所のUHCにおいて妊産婦ユニット（Maternity ward）を建設し、6カ所の既存の妊産婦クリニックを援助し、出生前検診、分娩、産後検診、新生児破傷風予防プログラム、ハイリスク妊婦のUTHへの紹介による医学的管理を行うとともに、助産婦のトレーニングを行った。また、急患や合併症があり、UHCからUTHへ至急に紹介の必要のある妊婦を輸送するための救急車両を提供している。本プロジェクトによって、UHCでの分娩数が増加し、一方でUTHでの分娩数が減少するとともに、妊婦死亡率、新生児死亡率の軽減に貢献した。

(4) SIDA (Swedish International Development Authority)

本調査団は今回のミッションで訪問をしなかったが、SIDAは必須医薬品（Essential Drug）の供給において大きな貢献をしていることから、ルサカ市のプライマリーヘルスケアプログラム

を実施する上で考慮が必要である。SIDAによる必須医薬品の供給は1987年に3地区で始められ、1990年にはすべての農村地区と4つの都市部地域で実施されている。このプログラムによって、必須医薬品の配備、医薬品の保管、管理の技術が移転された。しかしながら、ルサカ市におけるUHCではSIDAの必須医薬品プログラムの対象にならないために、ルサカ市内のヘルスセンター（UHC）での医薬品不足は深刻である。

2－4－2　国連機関による多国間援助

(1) WHO

訪問日：2月23日、午前

応対者：Dr. Wilfred S. Boayue (Representative Zambia)

WHOでは、ケニアのWHO、AFRO (African Regional Office) の管轄下にザンビアの「ヘルスリフォーム（保健医療制度の改革）」に関する助言、マラリアコントロール、エイズ予防、結核対策に重点を置いた援助活動を行っている。WHOの援助の方法としては、具体的なプロジェクトを実施するというより専門家（アドバイザー）の保健省への派遣、ザンビア保健省または関連NGOsへの財政的援助を行っている。

1)　「ヘルスリフォーム」

1992年以来、保健・医療制度の専門家を保健省に派遣して、以下の政策を推進している。

①　中央集権化した機能の地方分権化（Decentralization）

②　保健医療機関のスタッフに対するプログラム運営・管理能力の強化

ヘルスリフォームが1994年に実現して以来、専門家の数は削減の方針である。

2)　マラリアコントロール

ルサカ市近郊では1980年代から1990年代にかけてマラリアの新規発生者の数が激増している (e.i.: 1982年は107.1／1,000人であったが、1992年には353.6／1,000人となっている)。WHOからNMCCに対して技術的・財政的支援を行っている。WHOが1993年に打ち出した「マラリア制圧のための世界戦略（A Global Strategy for Malaria Control）」に基づいたパイロット試験では、1993～95年にかけてザンビアの3つの村落（うち1つはコントロールの村落）で殺虫剤の残留噴霧、殺虫剤処理済みの蚊帳の配布地域に分けてパイロット事業を実施したところ、いずれの方法でも患者数、マラリア原虫保有率が減少した。しかしながら、ルサカ市周辺においては有効な対策が打たれていない。

3)　エイズ予防

WHOは保健省、他の援助機関と協力して大規模なHIVのサーベイランスに協力して、HIVの抗体測定キットの供給などの技術協力をしている。

4)　結核対策

エイズの感染者の増加とともに結核の新規発生者数が増加に転じている。抗結核薬の供給が不十分であるため、SIDA等のドナーと協力して抗結核薬の供給を行っている。

(2) UNICEF

訪問日：2月23日、午前

応対者：Dr. Ahmed

UNICEF は多数のプロジェクトを平行して実施しているため、ここではプロジェクトタイトルを列挙するにとどめる。

- Copperbelt Health Education Project
- Family Health Trust
- Kara Counselling and Training Trust
- National AIDS／STD／TB and Leprosy Control Programme
- DB Studios and a contortium of Kara Counselling Unit at UTH in counselling parents of children with AIDS
- Supporting programmes for the Ministry of Education
- Joint programmes with the Zambia Red Cross／Street Kids International
- Joint programmes with the Lusaka City Council／Public Health Department
- Joint programmes with the Salvation army／Chikankata Hospital

3．相手国実施機関の体制

3－1　ルサカ保健運営管理チーム（ルサカ DHMT）の概略とプロジェクト実施機関としての検討

(1) 背景

今回、ザンビア側との協議で本プロジェクトの協力分野は、以下の3分野となった。

① 3コンパウンドにおける住民参加型の地域保健活動強化

② UHC の機能強化

③ UTH、CHCH 等による UHC スタッフへの訓練サービス、技術支援体制の強化

このように活動分野が広範にわたる場合、活動の各分野を一元的に管理対応でき得る機関を実施機関とすることが重要となるが、調査以前の国内検討段階では UTH を中心的機関としたプロジェクト実施体制を検討していた。しかし、今回の調査・協議の結果、UTH は地域医療サービスを直接担当している機関ではなく、その予算も割り当てられていないことから、本プロジェクトの中心的実施機関としては期待できないと判断された。一方、DHMT については、保健省の下部機関として一貫して各ディストリクトの地域保健サービス事業を所轄していること、更にコンパウンドの環境整備を担当している LCC とも協力関係が密にあることから、本プロジェクトの中心的実施機関として適当と判断された。

(2) 沿革

地域保健行政の実施機関として設置されたルサカ DHMT は 1993 年来、ルサカ市公衆衛生部（Department of Public Health）とともに LCC の一部局に属していたが、その活動が停滞していることから、1996 年初頭から保健省の直轄機関として移管されることとなった。ただし、DHMT の活動は市長（Administrator, Lusaka City Council）を長とする保健省の地域保健委員会（District Health Board; DHB）の政策支援・実施機関として位置づけられており、市庁との協力関係は継続している。なお、公衆衛生部は同じく機構改編によって衛生環境整備を専門とする環境サービス部（Environmental Services Department）として市庁の一機関としてとどまることとなった。

(3) 構成要員

構成要員の内、中核メンバーは以下の7名からなっている。

① チームリーダー（地域保健局長、District Director of Health; DDH）

② 副チームリーダー（管理担当副局長、Deputy Director Administrator; DDA）

③ 副チームリーダー（事業担当副局長、Deputy Director Health Planning; DDHP）

④ メンバー（UTH 評議委員長、Executive Director UTH Board）

⑤ メンバー（チャイナマ病院長、Executive Director Chainama Hospital Board）

⑥ メンバー（地域会計官、District Accounts Officer）

⑦ 追加メンバー（市庁環境サービス局長、Director of Environmental Services）

なお、ザンビア政府及びドナー間の合意があれば、外国人専門家を追加メンバーとして認めることとなっている。

傘下の委員会は、以下のとおりである。

① 財務委員会（Finance Committee）
② 入札委員会（Tender Committee）
③ 技術委員会（Technical Committee）
④ 人材委員会（Human Resource Committee）
⑤ 病院運営チーム（Hospital Management Team）
⑥ 管理委員会（Administrative Committee）

DHMTの実働部隊の構成については不明である。

(4) 主要機能

① 民間、NGOを含んだ地域内の保健開発計画の見直し。
② 地域保健委員により承認される地域保健活動年間計画（予算を含む）の作成準備。
③ 地域保健委員による地域保健活動の経過報告の原案作成。
④ 年間計画に基づく地域保健サービス活動の実践。
⑤ 地域保健活動に係る他の機関との連携調整。
⑥ 地域内の医療機関の連携調整。
⑦ 保健管理情報システム（Health Management Information System; HIMS）の整備活用促進。
⑧ 地域内の研修ニーズの把握と地域保健委員会への人材養成計画の提言。
⑨ 地域内の保健スタッフの配置及び懲罰の実施。
⑩ 地域医療に対する住民参加の促進。

(5) 本プロジェクトにおけるDHMTの役割（案）

本プロジェクトの活動の場は、

① 指定された3コンパウンドのUHC及び地域社会
② UHC及びコミュニティへの技術支援を行うUTHアウトリーチセンター
③ 地域医療スタッフの研修機関となるCHCH
④ 地域保健行政の実践機関となるDHMT

の主要4カ所となり、これらの多岐にわたる活動を1つのプロジェクトとして包括するには全体を調整する機関の存在が重要となる。その点においてDHMTは、コアメンバーに主要活動機関の関係者が含まれており、機関間の連携調整が容易になること、また、DHMTは地域保健サービスの包括的実践・調整機関であることから地域医療を行政面から一貫してフォローすることが可能であり、更にプロジェクトの成果を国家政策に反映させるためにも本プロジェクトの中核カウンターパート機関として最も適していると判断される。

4．プロジェクト実施に係る留意点

4－1　案件の概要

ルサカ市のPHCプロジェクトの事前調査団は、ザンビアの医療の現状を十分調査するとともに、下記の事項について確認し、ザンビア政府と合意文書に署名することを最終目標とする。

その条件は次のようなものである。

(1) ザンビア政府の要請に基づくこと
(2) ザンビア政府の政策（ヘルスリフォーム）に沿ったものであること
(3) JICAのスキームに沿ったものであること
(4) 末端の人々（地域住民）、特に子供や女性の健康にダイレクトに貢献するもの
(5) WHOやUNICEFの方針に沿ったものであること
(6) ザンビア側の能力の範囲内であり、持続可能なもの
(7) 他のドナーやNGOとの協調

(1) ザンビア政府の要請
　① Primary Health Care Project for Lusaka Urban
　② Rehabilitation of Chainama Hills College Hospital to be a district level hospital and PHC institute
　③ Malaria Control Project
　④ Assistance for IDD control
　⑤ Equipment supply for 9 general hospitals

(2) ザンビア政府の政策（ヘルスリフォーム）
　① 地方分権（districtの強化、意志決定権、予算の分配）
　② 地域住民の参加
　③ Essential Package of Careの導入
　④ 医療の有料化
　⑤ 組織改革

(3) JICAのスキーム
　① プロジェクト方式技術協力
　② 無償資金協力
　③ 特別医療機材供与

(4) 地域住民、特に女性・子供に貢献する
　① 十分な聞き取り調査
　② PCMワークショップの開催

(5) WHO、UNICEFの方針
　① 現地事務所との意見交換
　② WHO等の出版物を参考にする

(6) ザンビア側の能力、持続可能性
運営、維持管理、予算獲得、人員の確保等、十分に考慮する
(7) 他のドナー、NGOとの協調
① これまでの活動の調査
② 事前の意見交換
③ PCMワークショップ

ザンビアでは、近年の経済の行き詰まりや干ばつの影響、エイズの蔓延、薬剤耐性マラリアの出現等により、医療、保健、衛生の状況は悪化している。5歳以下の死亡率はここ数年、急激に悪化しており、1995年は200／1,000出生以上と思われる。主な小児の死亡原因はマラリア、肺炎、下痢、エイズ、栄養障害である。

・マラリアはどの統計をみても死亡率がいちばん高い。
・HIV陽性率は、ルサカ市内で20～30%、母子間の垂直感染は20～40%である。
・ほとんどすべての死亡例の背景に栄養障害がある。栄養状態の良い子供は疾病に罹ってもそう簡単には死亡しない。しかし、下痢等の感染症を繰り返すうちに栄養状態が悪くなり、ますます抵抗力をなくすという悪循環は重要である。

保健省の今年の予算は、約6,000万ドルで、国民1人当たり7ドル程にしかならないという非常に厳しい状況にある。ヘルスリフォームは対費用効果を追求した結果であるともいえ、地域住民レベルでの予防を重視した医療活動を目指している。

特に、ルサカ市内のコンパウンドでの状況は劣悪である。年6%を超える人口の増加にとうていインフラは追い付かず、下水はもちろん上水道のない地域が多い。診療所（ヘルスセンター）も人口150万人に対し21カ所しかなく、そのほとんどは入院施設を持たない。スタッフの技術レベル、士気も高いとはいえず、薬剤や医療器具の供給も不足しがちである。UTHは混雑し、3次医療施設、教育施設としての機能を十分果たせない。こういった背景から、ルサカのプライマリーヘルスケアのプロジェクトをJICAに要請するということになった。

＜日本側の背景＞

JICAの医療協力は従来、研究所型、近代的病院型であったが、近年、地域住民レベルでの活動も重視されている。特に経済的余裕のない最貧国ではそうあるべきであろう。医療というものはその社会の多数のファクターの結果であって、社会開発を含めた総合的な柔軟なアプローチがどうしても必要である。一方、NGOは草の根レベル、地域住民レベルでの活動を中心にこれまで様々な試みを行い、多くの経験を積み重ねている。また、資金繰りの苦しいNGOにとって対費用効果は常に重要な課題であり、いわゆるPHCの手法を実践してきた。この経験を生かすべく、JICAのプロジェクトにNGOを組み込もうというプロジェクトである。

4－2　プロジェクト実施のフレームワーク（案）

(1) プロジェクト本部
仮に、LCC内に事務所を開く。

UTH 新小児病棟が完成した時点で再検討する。

(2) 長期専門家と業務内容

1) チームリーダー（医師）

・DHMT の一員となり、医療行政のアドバイザーとなる。
・DHMT、LCC、UTH、MOH、他のドナー、NGO との調整
・プロジェクト全体の監督、指導
・JICA、大使館との連絡
・UHC 巡回指導

2) 調整員

・通常どおり

3) 小児科医

・ヘルスポスト、Nutrition Centre での技術指導
・コミュニティでの調査、教育、予防活動等の指導
・IEC 開発
・UHC 巡回指導

4) 保健婦／看護婦

・コミュニティでの調査、教育、予防活動等の指導
・NHC、CHW の指導
・薬生協の管理、運営の指導
・IEC 開発

5) 栄養士

・Nutrition Club、Nutrition Centre での栄養指導
・食生活改善
・Nutrition Club、菜園、薬草園の管理、運営の指導
・住民の栄養教育
・IEC 開発
・NHC、CHW の指導

6) 養鶏

・Nutrition Club、Nutrition Centre での養鶏、アニマルバンクの技術指導、管理、運営の指導
・コミュニティでの普及活動

(3) 短期専門家と業務内容

1) 熱帯病

・マラリア対策のための調査、計画作成、実施準備
・住血吸虫対策のための調査、計画作成、実施準備
・エバリュエーション

2) 薬草（WHO との連携）

・パイロット薬草園の開設

・ザンビアで使用し得る薬草の研究
・普及活動

3) 臨床検査技師
・UHC での検査技術の向上（セミナー、巡回指導）

4) 社会開発
・コンパウンドでの生活向上、相互扶助、開発の道を探る。
・WID について研究する。

5) IEC
・IEC ソフト開発、普及

(4) パイロットコンパウンド（まずはンゴンベ・コンパウンド）での活動

1) Neighborhood Health Committee（NHC）
・コミュニティ・ヘルスワーカー（CHW）の組織強化、トレーニング

2) 住民の把握
・ブロック（50～100 家族程度）ごとに NHC に担当させ登録する。
・継続的に出生、死亡、疾病のデータをとる。
・重要な感染症（ポリオ等）のサーベイランス
・ブロックはワクチン、環境整備、教育等の活動の単位となる。
・Home Based Care の必要な患者、孤児、未亡人を把握する。

3) 小児のスクリーニング
・すべての小児をスクリーニングし、母子手帳を配布する。
・ワクチンの不足分を実施する。
・低体重児の母親を集め、Nutrition Club を作る。

4) ヘルスポスト建築／開設
・土地の確保等、LCC の許可を取り、建築
・スタンダードの設計図はある。
・井戸を併設する。
・スタッフの確保（できれば常勤、カウンダスクエアから出張も可）
・スタッフの指導、トレーニング
・医療機材を入れる。
・Essential package of care の実践

5) 薬生協の開設
・ヘルスポスト内に
・NHC、CHW が管理、運営する。
・初期投資は DHMT／JICA が行う。

6) 菜園、薬草園、養鶏場、アニマルバンク、テラピア養殖場の開設
・NHC、CHW、Nutrition Club の共同経営
・孤児、未亡人も参加可能
・土地の確保、LCC と交渉

・安全性確保、泥棒対策
・収穫は栄養改善、Home Based Care、孤児のために使用
・余剰はボランティアのインセンティブ・事業拡大

7) 地域住民の医療教育、生活改善
・ドラマ
・IEC（ビデオ、ポスターなど）のソフト開発、普及
・CHWを通して衛生指導
・七輪、豆炭の普及

8) 環境整備
・清潔な水の確保（井戸等）
・マラリア蚊発生源対策
・ゴミ処理／堆肥作り
・衛生的なトイレの普及

9) マラリア対策
・保有率、発生源等の調査
・住民教育
・早期診断、早期治療（顕微鏡診断、2ndライン治療薬の常備）
・ベクターコントロール
殺虫剤屋内残留噴霧
impregnated bed-net
発生源対策（埋め立て、排水）
・薬剤耐性の調査

10) リファーラルシステムの確立
・カウンダスクエア、Chainama. UTH経由のマイクロバス路線の開設
・救急車、通信設備

11) エイズ対策
・教育、コンドーム普及、STD治療等（USAIDと連携）
・Home Based Care（Hope House等との連携）

12) 家族計画（USAIDとの連携）

13) 住血吸虫対策
・調査、住民教育、集団治療、巻貝対策
・河川の流域で一斉に行うことが望ましい。

14) CHCHの学生の実習を行う（カリキュラムに組み込む）。

15) 次のパイロット地区を検討する。

(5) アウトリーチアクティビティ（UHC巡回指導＝in-job training、UTH学生の実習）

1) DHMT／UTHと実施計画を作る。

2) 車両、通信機器を補充する。

3) 指導の内容を検討する。

4) 巡回指導を実施する。
5) UTH 学生教育のカリキュラムの検討
6) 医療機材の維持、管理を指導する。

(6) UHC スタッフの再教育（セミナー）
1) DHMT／ODA／USAID と協議し、不足分を明確にする。
2) 本プロジェクトで実施可能かどうかを検討する。
3) セミナーの内容を検討する。
4) 短期専門家の派遣を検討する。
5) WHO／UNICEF 等の国際機関所属の講師派遣を検討する。
6) セミナーを実施する。
7) 卒後研修制度を検討する。

(7) リファーラルシステム
1) DHMT／UTH／CHCH と運営、管理の方法、救急車、通信機器の不足分について協議する。
2) 不足分の救急車、通信機器を購入する。
3) 運営、管理をアシストする。

(8) Nutrition Centre／ Nutrition Club in CHCH
1) CHCH／DHMT と実施計画を作成する。
2) D 病棟の改修（キッチン、トイレ等）
3) スタッフの確保／トレーニング
4) 給水システムの強化（井戸等）
5) IEC 導入
6) 菜園の開設、拡張
7) 養鶏場の開設、アニマルバンクの検討
8) 既存の養豚場の拡張
9) プールを利用したテラピア養殖の検討、実施
10) 薬草園の開設
11) 作業療法室／車両整備場の職業訓練場としての活用の検討
12) 学生実習、卒後研修に組み込む。

(9) その他
1) Nutrition Club
構 成 員：栄養障害児を持つ親（一定期間）、CHW、NHC
指 導 員：UHC のスタッフ（看護婦等）
事業内容：菜園、養鶏場、アニマルバンク、薬草園等を運営し、栄養障害児の栄養改善を図る。余剰はボランティアのインセンティブ、Home Based Care、薬生協等の資金に回す。同時に、栄養教育、衛生教育、野菜栽培や養鶏の技術指導を行い、地域住民の相互扶助による自立を促す。

2) Nutrition Club in CHCH
構 成 員：入院が必要な栄養障害児を持つ親、Nutrition Centre スタッフ

指 導 員：Nutrition Centre スタッフ

事業内容：

① Nutrition Centre を運営し、重症の栄養障害児を入院させ救命する。

② 菜園、養鶏場、養豚場、魚養殖場、薬草園を運営し、栄養障害児の栄養改善に充てるとともに、運営資金を得る。

③ 親に対し栄養教育を行う。

④ 栄養障害児退院後も通える親は菜園等の運営に一定期間参加し、収穫の一部を得る。

⑤ 野菜栽培、養鶏、養豚等の技術指導をする。

⑥ アニマルバンクを運営し、普及を図る。

3) 長期調査員の役割（もし来るのなら）、R/D ミッション前2カ月間

① 日本側でプロジェクト実施計画案を詰める。

② 実施計画案を JICA ザンビア事務所、日本大使館と協議する。

③ 実施計画案を MOH/DHMT/CHCH/UTH と協議し、日本側にフィードバックする。

④ 専門家の要請（A1 フォーム）を出させる。

⑤ 本年度に必要な機材を整理する。

⑥ 研修員の候補を検討する。

⑦ DHMT に参加し情報を得る。

⑧ 実施計画案の問題点をできるだけ解決する。

・コンパウンドのヘルスポストの土地確保、建設許可

・コンパウンドでのパートナーの選別

・他のドナーとの住み分け（セミナー等）

・エイズ、家族計画、小児の健康の分野で USAID との連携内容

・NGO（CARE、Hope House 等）との連携内容

・臨床検査等の分野での感染症対策プロジェクトとの連携内容

・アウトリーチ/リファーラルシステムに関し DHMT/UTH 協議を促す。

・WHO、UNICEF との連携

・医薬品の供給システムの検討

⑨ 合意事項をミニッツにし、署名

4) 食生活改善について：主食「ンシマ」に関する一考察

ザンビアを始め、南部アフリカの多くの人の主食はメイズ（白トウモロコシ）の粉を湯で練った「ンシマ」である。メイズはカロリーは取れるが、蛋白質、ビタミン等はあまり含まない。これをあまり清潔とはいえない手で再び練って食べる。1つの大皿に盛って家族で一緒に食べるので、子供に十分当たらない場合も多い。冷めると美味しくないようで、余ったら捨てている。副食は、肉、魚、野菜などをトマトと煮込み、塩味をつけたものである。

しかし、昨年より干ばつやクワチャの値下がり等の影響でメイズの値段が3倍以上に高騰した。今の値段では一般の労働者の給与で家族のためにメイズを十分量買うことも困難である。栄養価の高い肉や魚を副食に用意することはできない。より干ばつに強いソルガム、ミレット、キャッサバ等でも「ンシマ」を作るが、あまり好まれない。

ルサカ市内の栄養障害児（標準体重の80%以下）は15%ほどである。地方では30%を超えるところもある。マラスムス（摂取カロリーの不足）とクワシオコール（摂取蛋白の不足）両方の状態が存在する。ほとんどすべての感染症による小児の死亡の根底に栄養障害がある。栄養を改善しない限り小児の死亡率を下げることは、いくら薬品を供給してもできないであろう。

栄養改善のためには、これだけ高価なメイズに依存していたのでは限界があると思われる。雑穀、イモ、豆、野菜、魚、卵、肉、ミルク、手に入るものを何でも上手に料理して有効に利用する文化が必要である。東南アジアの変化に富んだ食文化は、栄養改善によほど貢献しているのではないだろうか。

例えば、雑穀、豆、（もし可能なら卵、ミルクを加え）を材料に、七輪、豆炭を利用し薄く焼いたナンのようなものをNutrition Clubで研究開発し（受け入れられる味と価格プラス栄養価）、普及する（ナンは、ルサカにもインド料理店がいくつかあり人気もある）。まとめて作った方が効率が良いであろうから、マーケットでNutrition Clubが作り、衛生的な方法で販売する。もちろん栄養障害児やHome Based Careにも支給する。1日ぐらいは保存も可能であり、より小児の口に合うであろう。材料は、できるだけNutrition Clubの菜園、養鶏場等から供給する。

日本人が彼等の文化にどこまで立ち入っていけるのか疑問であるが、現状のままよりはいろいろな挑戦があった方が成功の可能性が大きいことは確かである。

附　属　資　料

① ミニッツ
② プロジェクトデザインマトリックス
③ ザンビア保健省保健計画

附　属　資　料

① ミニッツ
② プロジェクトデザインマトリックス
③ ザンビア保健省保健計画

① ミニッツ

MINUTES OF MEETINGS
BETWEEN
THE JAPANESE PRELIMINARY SURVEY TEAM
AND
THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE REPUBLIC OF ZAMBIA
ON
THE PROJECT ON IMPROVEMENT OF PRIMARY HEALTH CARE MANAGEMENT SYSTEM IN LUSAKA CITY

The Japanese Preliminary Survey Team (hereinafter referred to as the Team) organized by the Japan International Cooperation Agency (hereinafter referred to as JICA) headed by Dr. Shigeru SUGANAMI, President of the Association of Medical Doctors of Asia (AMDA), visited the Republic of Zambia from February 15 to February 27, 1996, for the purpose of making the survey on the proposed Technical Cooperation on the Improvement of Primary Health Care Management System in Lusaka City in the Republic of Zambia (hereinafter referred to as the Project).

During their stay in Zambia, the Team exchanged views and had a series of discussions with the Zambian authorities concerned.

As a result of the survey and the discussions, the Team and Zambian authorities came to an agreement of the matters referred to the document attached.

Lusaka, Zambia
February 26, 1996

Dr. Shigeru SUGANAMI.
Leader
Preliminary Survey Team
Japan International Cooperation Agency
Japan.

Dr. Kawaye KAMANGA
Permanent Secretary
Ministry of Health
The Republic of Zambia

Witness by:

Mr. Gibson H. ZIMBA
Administrator
Lusaka City Council
The Republic of Zambia

Mr. M. C. SOKO
Director, Technical Cooperation
National Commission for Development Planning
The Republic of Zambia

S.S

Attached Document

I. The Project Framework

The Project framework was formulated through a series of meetings between the relevant Zambian authorities and the Team on the basis of the preliminary Project Design Matrix (Annex) prepared at the 3-day Project Cycle Management workshop held during the visit of the Team in Zambia, which was attended by community-level health workers, various government agencies and donors.

I-1. Title of the Project

Project on Improvement of Primary Health Care Management System in Lusaka City

I-2. Terms of Cooperation

The duration of the technical cooperation will be five years from the date determined in the Record of Discussions (R/D), which will be concluded during the visit of the JICA's project implementation survey team.

I-3. Overall Goal (long-term impact of the project)

The overall health status of the community in Lusaka City will be improved.

I-4. Project Purpose (to be expected to be achieved in the project period)

Primary Health Care Management System in Lusaka City will be improved in line with Zambian Health Reform Policy and Strategic Health Plan.

I-5. Outputs

(1) Community based health care system will be strengthened in pilot compounds
(2) Capacity of medical and management staff of Urban Health Centers (UHCs) in Lusaka City will be improved
(3) Proper referral system between UHCs in Lusaka City and University Teaching Hospital (UTH) will be developed

I-6. Activities

(1)-1. Conduct medical as well as socio-economic and cultural surveys on the pilot compounds in collaboration with community level health workers (i.e. TBAs,

Neighborhood Health Committee, Community Health Workers, traditional healers)

(1)-2. Identify leaders and groups relevant to health activities at community level

(1)-3. Establish a Community Project Implementation Commitee for each pilot compound, consisting of representatives from relevant community groups, community leaders and community polyvalent health workers

(1)-4. Assist Community Project Implementing Committees in identifying, designing and implementing health promotion and disease preventing activities (including management of malnutrition) that could also address community's development interests

(1)-5. Train community-level health workers

(1)-6. Assist Community Project Implementing Committees in identifying materials, equipment, means of transportation, etc. that would be required for health promotion and disease preventing activities and provide them through the committees

(2)-1. Assist UTH Board/CHCH in designing & conducting in-service training programs (in the fields of Anti-HIV, malaria control, for example) for UHC medical & management staff

(2-)2. Provide self-learning materials on Primary Health Care to UHCs

(2)-3. Provide training to UHC medical staff on routine maintenance of medical equipment

(2)-4. Assist UTH Board in designing & conducting training programmes for CHCH and District Health Management Team (DHMT) medical staff for their outreach activities at UHC level

(3)-1. Assist DHMT in designing ambulance service system for Lusaka City

(3)-2. Assist DHMT in designing and implementing their outreach activities and training programmes

(3)-3. Assist DHMT in training management staff

1-7. Implementing Organizations

(1) Principal Implementing Organization

District Health Management Team (Lusaka Urban Health Management Board)

(2) Other cooperative partners

a) Lusaka City Council
b) Chinama Hills College Hospital
c) University Teaching Hospital
d) National Malaria Control Centre

II. Issues

II-1. Formation of the coordinating committees for the Project

Both sides recognized the necessity of the coordinating unit for preparation and implementation of the Project. Accordingly, it was agreed to formulate the Project Coordinating Committee, consisting of representatives of relevant authorities from Zambian side and JICA local office and the project expert team from Japanese side.

II-2. Responsibilities of implementation organization and cooperative partners

Due to the shortage of time for detailed discussion, responsibilities of implementing organizations in respect of the Project could not be clearly identified. Therefore, it was agreed that each organization would delineate its responsibilities for the Project in consultation with the others.

II-3. Development of referral system

Due to the time constraints, the Zambian authorities and the Team could not reach an agreement on details with regard to development of referral system (i.e. inclusion of CHCH as part of referral system). It was agreed that the details of the activities for referral system would be defined at the commencement of the Project.

II-4. Coordination with project activities sponsored by other donors and international NGOs in the field of urban health care in Lusaka City

It was pointed out that there were several ongoing and planned projects sponsored by other donors in Lusaka City in the field of urban health care. In this connection, the importance of the role of Ministry of Health in coordinating these projects was stressed.

II-5. Necessity of dispatch of supplemental survey team from JICA prior to the project implementation survey team

It was agreed that additional survey team in the areas of primary health care and social/gender analysis would be required to be dispatched from JICA prior to the project implementation survey team in order to (a) discuss the issues mentioned above; and (b) further elaborate the framework for medical and socio-economic and cultural studies which would be conducted in theProject.

II-6. Financial Arrangement

It was agreed that financial and personnel arrangement by Zambian side, including

arrangement for tax exemption (i.e. VAT and customs duties), for the Project would be completed before the commencement of the Project.

② プロジェクトデザインマトリックス

Annex. Preliminary Project Design Matrix

Project Summary	Important Assumptions
Overall Goal The overall health status of the community in Lusaka City will be improved	No change in government health policy
Project Purpose Health care system of Lusaka City will be improved in line with Zamblan Health Reform and Strategic Health Plan.	No further deterioration of Zambia economy Continuous drug supply
Outputs 1. Community based health care system will be strengthened in pilot compounds 2. Capacity of medical & management staff of Urban Health Centres (UHCs) in Lusaka City will be improved 3. Proper referral system among UHCs in Lusaka City and UTH will be developed.	Trained personnel will stay in the institutions
Activities 1-1. Conduct medical as well as socio-economic and cultural surveys on the pilot compounds in collaboration with community-level health workers 1-2. Identify leaders and groups relevant to health activities at community level 1-3. Establish a community projecct implementation commitee for each pilot compound, consisting of representatives from relevant community groups, community leaders and community polyvalent health workers. 1-4. Assist community project implementing committees in identifying, designing and implementing health promotion and disease preventing activities (including improvement of malnutrition) that could also address community's development interests 1-5. Train community -level health workers 1-5. Assist community project implementing committees in identifying materials, equipment, means of transportation, etc. that would be required for health promotion and disease preventing activities and provide them through the committees 2-1. Assist UTH Board/CHCH in designing & conducting in-service training programs(in the fields of anti-HIV, malaria control, for example) for UHC medical & management staff 2-2. Provide self-learning materials on PHC to UHCs 2-3. Provide training to UHC medical staff on routine maintenance of medical equipment 2-4. Assist UTH Board in designing & conducting training programs for CHCH medical staff for their outreach activities at UHC level 3-1.Assist DHMT in designing ambulance service system for Lusaka City 3-2.Assist DHMT in designing and conducting their outreach activities and training programs 3-3.Assist DHMT in training management staff	No epidemics will occur There will be no abrupt change in population in Lusaka City Preconditions Government counterpart staff at DHMT, LCC, CHCH and NMCC are appointed Government budget for the project is in place Consensus on the project framework among relevant government agencies are reached Outreach centre is established at UTH

Inputs will be discussed during the R/D mission. Objectively Verifiable Indicators and Means of Verification will be discussed after the commencement of the project.

③ ザンビア保健省保健計画

REPUBLIC OF ZAMBIA
MINISTRY OF HEALTH

NATIONAL STRATEGIC HEALTH PLAN
(Investment Plan)
1995 - 1999

FROM VISION TO REALITY

Ministry of Health
21 October 1995

FOREWORD: The Zambian Cadillac

"The Health System in Zambia has been likened to a Cadillac which was maintained by a relatively wealthy family for years. The family's economic situation has changed, and it can no longer afford to maintain this expensive vehicle without seeking assistance from cousins and relatives, to help fuel repair and maintain the gas-guzzling vehicle. The alternative is to design and construct a more efficient vehicle that can meet the family's changing health care needs given its limited means.

We in the Ministry of Health have initiated the process of redesigning the car, but there is more to be done. We are trying out parts and road-testing them first. But the vision of the whole new Zambian health vehicle must be a "product of our societal consensus, a product of our collective which will "go beyond our own interests".

To ensure dramatic, but affordable improvements in health care utilization and quality is the overriding goal of Zambia's health reform process. Analogous to the design of a "new car", the Government recognized that a new framework and modus operandi were needed in order to achieve this objective, and resolve issues arising in different parts of the health system. A Strategic Plan has thus been drafted by the Ministry of Health, whose starting point and focus are the *production levels of health*, the household and community -- a fundamentally different approach from the traditional top-down planning method. In effect, the Government is designing a system that responds to national health goals. Furthermore, the process of developing this design has been participatory, across a wide spectrum of the Ministry of Health and its out-posted staff, and it has built national confidence in the capacity of the MOH to sit in the driver's seat of the new car.

The National Strategic Health Plan describes how we will achieve the aspiration of our National Health Policies and strategies, "to provide Zambians with equity of access to cost-effective quality health care as close to the family as possible".

Hon. Mr. M.C. Sata, MP
MINISTER OF HEALTH, ZAMBIA

NATIONAL STRATEGIC HEALTH PLAN : PAYING ATTENTION TO PROCESS

STATEMENT BY THE DEPUTY MINISTER OF HEALTH

To achieve anything, there must be a shared vision, a preferred future that is not simply stumbled into but deliberately chosen. This must be a morally preferred vision chosen not only because it seeks to make things better for us today but rather because it forces us to take tough decisions now in the service of our collective responsibility to ensure the positive interests of our future generations.

We are determined to avoid the pitfalls of the past. Witness the observation of Dr Haslam, then Director of Medical Services between 1933-1946 as he introduced his Ten-Year Health Services Development Plan (1945-1955):

> Sitting down, at the age of fifty-seven, to write the memorandum on development of health services in Northern Rhodesia, I am reminded of Captain Hook in Peter Pan saying: Something moves me to make my dying speech, for it seems certain that I shall never carry out the plans, dearly as I should like to do so. Like others who have done a great deal of planning, I have been at times, somewhat cast down when many hours of work and thought have served no more useful purpose than to swell the bulk of a file called Health Department: Future Development. Like others too, I have smiled sadly when turning the yellowing pages of an ancient file recording the plans of a predecessor which, after a full, careful and hopeful period of gestation either failed of delivery and died in utero or succumbed soon after birth to the east wind of financial stringency (Dr. J.F.C. Haslam, Director of Medical Services, HDS 1945).

Haslam's Plan suffered the same fate that many attempts at reform in the health sector have suffered many years after colonial rule.

Recent political, social and economic changes in Zambia as in most African countries have emphasized the growing awareness of the turbulent environment within which such health reforms have to be developed and implemented. Further, the turbulence involved in these changes has re-affirmed our understanding that government intervention anywhere is self-evidently partial, incoherent, and provisional in nature. To achieve a shared vision:

Increase Choice: Instead of increasing bureaucratization of health care through a vertically and centrally commanded national health service, a factor which decreases diversity and limits social choices, Leadership Accountability and Partnership (LAP) promotes more diversity in policy responses to health concerns. We have been clear in our reform effort that a pluralized approach may increase uncertainty at individual, household, and health partner/provider level (and thereby turbulence), however, it also encourages innovation and broadens the adaptive response repertoire. In a plural health policy environment, greater tolerance for differing possibilities, statuses and mechanisms to regulate conflict is necessary. Through corporatist interventions, conflicting groups such as traditional healers, private family physicians, Natural Family Lifers and Abortionists, should be able to work out symbiotic interactions which are mutually beneficial if local level structures are made

possible. The decision to diversify the choices or potentials in the health sector was therefore made against a stifling background of a socialist tradition aspiring for a health system which assumes a classless society.

Negotiate the Health Order: It is our view that a more effective basis for adaptation to a turbulent policy environment is a system of LAP that stresses cooperation rather than competition. The new mode of health system management assumes that there will be a multiplicity of nodes of power and only a measure of cooperation between them will produce a change in the desired direction.

The failure in the past to harness the private mining, and the mission health sectors despite the policy rhetoric of integration, is evidence of the inherent dynamic of competitive behavior among health providers. The issue is not to proscribe these sectors out of existence as was tried. A collaborative attitude promotes a freer exchange of information, the opportunity for dialogue, the formation of shared values and ideals, and the consideration of win-win solutions to shared problems when proper structures of negotiation are provided.

Formulate a futurist vision of health: In turbulent conditions, where unpredictability exists and it seems as though man lacks complete control over the consequences of his actions, it is important to guide one's plans in the direction of a desired future. The sole use of present and past trends to plan for the future is particularly maladaptive in a turbulent environment because the situation is changing so rapidly. When the future directs actions in the present, this trap is thought to be avoided. Health reforms driven by a vision of a desirable health future counters the practice of disjointed-incrementalism in health planning.

Influence Instead of Control - Increasing regulations and bureaucracy serve to make rigid our social and political institutions and reduce their ability to change thereby rendering them obsolete in a short time. Instead of regulations, our focus must be to propose that self-guiding mechanisms governed by values be established. Thus events are 'controlled' by influence.

In an uncertain, turbulent environment, error needs to be corrected as often as possible. To do this, the centres of control were to be broken up and dispersed and more power would rest with localized units. Such structures would allow for greater public participation and greater local 'control' over the means and ends chosen in health development. They are also more flexible and easier to disassemble and reorganize as change becomes necessary.

In our new scenario of reform, competence was to be measured in terms of one's ability to learn, experiment and embrace error. This error-embracing attitude promotes continuous interactive learning and leads to the next principle.

Use Interactive Learning Processes - The need for society to adopt an attitude of being in a state of continuous learning is critical to our three tier health vision. Because one cannot be sure that one's data are correct in a country like Zambia. There is a need to continuously test new ideas and hypotheses in real life situations and learn by them, and a need to constantly revise the vision of the future which guides planning processes. As

policy leaders of the health sector, we had to believe in the notion that we were ready to learn from our mistakes.

Authoritarian and non-participative bureaucracies do not encourage creative and mutual learning at and between all levels. Theories, ideals, and real world experiences must interact in order to adapt to turbulence. We had think of ways of fusing the technical know-how of our staff, the pressures from our people for quality health care, the structure of our donor partners and the emerging collective vision in an on-going bold experiment of health reform. This interactive and mutual learning process had to emerge on basis of mutual respect for all social agents.

Greater Respect for Individual and Local Autonomy

Respect for persons as responsible and autonomous beings is important both to adapt to turbulence and in terms of individual health and well-being. Respect for autonomy can lead to the democratization of decision-making and encourage citizen participation at different levels. Health institutions had to begin to treat people as thinking and responsible people who can appreciate the value of their own health. If target populations are treated as thinking, learning and responsible people, then greater participation in decision-making processes and greater independence of thought and responsibility can be included in their expected partnership for a healthy society.

Although greater individual and local autonomy may appear to increase turbulence because more variety is introduced, we in Zambia believe it is a more adaptive response because decisions are more likely to be in keeping with individual and local differences. In concert with cooperation, continuous learning, a future orientation, and influence rather than control, greater respect for individual and local autonomy is adaptive to turbulence. The manner of our managing change towards our health vision, continue to be driven by these principles. The use of think-tanks, consultants, local workshops, national consensus building meetings and careful analytical thinking at the policy leadership level are part of the broad mix of factors currently being put to work towards the attainment of Zambia's future vision. This is the process of social learning which, like a rider on a bicycle, we must continue to peddle, otherwise the reform will collapse. As the World Development Report (1993) clearly indicates and many other newer reforms being proposed in developed countries show, Zambia is on the right course.

Hon (Dr) Katele Kalumba MP
Deputy Minister of Health

16 April 1994

EXECUTIVE SUMMARY

"The sum of our health sector strategies must lead to a society in which Zambians create environments conducive to health; learn the art of being well; and provide basic level health care for all".

The Government of the Republic of Zambia is committed to defining an essential package of cost-effective health care services to which every Zambian will be entitled. The Ministry of Health will channel its resources towards ensuring that every Zambian has effective access to these essential services. The Government can no longer finance care which is not cost-effective. To insure the greatest benefit from its limited resources, a smaller package of higher quality, cost-effective care will be made available to all Zambians, and services which are sought outside the essential package will not be financed by government resources.

The purpose of the Strategic Plan is to define new standards for the reformed Zambian health care system which will ensure the most efficient and effective delivery of this package of services. The document describes how these standards are being derived, and how they will be implemented. Standards address what health care services the system will provide, how they will be organized and delivered, and what resources will be required to ensure the effective delivery of service. The "health care system" here encompasses health care facilities, management and support institutions as well as the household and community.

National standards are intended to provide guidance to districts in setting local standards, provide national estimates on the resources needed to transform the existing system into the more cost-effective system which has been envisioned, and to enable the Ministry of Health to define a strategy which will best support households in their efforts to produce better health.

The Strategic Plan is intended to serve as a reference document for the implementation of reforms. It builds upon the policies outlined in the Corporate Plan, and describes how they will be recognized. This document is intended to be dynamic, and consistently updated to reflect the developments in planning and implementing health care reform in the nation. An intensive analytical process has been, and continues to be, employed for defining the package of cost-effective care to which the Government of Zambia will ensure all Zambians have access. The definition of packages of care, how they will be delivered and what resources they will require, continues to be defined, but the initial work has determined that the emphasis of the reforms should focus on the care provided at the health centre, as this is the first level of contact between the formal health care system and the household, and the level of the system where the majority of essential services can be provided more efficiently.

The reallocation of resources between and within districts, and between the centre and the districts will be necessary to implement the new system. This transition will not be accomplished overnight. It will require appropriate incentives to districts to reallocate resources and national strategies for defining appropriate allocations for public financing. Encouraging households, communities and the private sector to seek and provide care appropriately will also require a period of transition. As the quality of health centres improves individuals will be increasingly willing to seek care at appropriate levels of the system, and to participate through financial contributions and through their involvement in setting standards for the system.

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CHAPTER I: BACKGROUND

1.1. Reasons for the Strategic Plan

The Government is committed to providing Zambians with equity of access to cost-effective, quality health care as close to the family as possible. To facilitate this vision, the Government is committed to better management for quality health care for the individual, the family and the community. Yet, the health system in Zambia has been likened to a Cadillac which was maintained by a relatively wealthy family for years. The family's economic situation has changed, and it can no longer afford to maintain this expensive vehicle without seeking assistance from cousins and relatives who could help to fuel, repair and maintain the vehicle. The design and construction of an affordable and effective health care system, and defining the strategy for transforming the existing system into the more cost-effective one, is the purpose of this Strategic Plan.

Through the strategic planning exercise, the Ministry of Health has instituted the process of reforming the national health care system into a more efficient and effective vehicle. This document seeks to describe the process of designing the new health care system (setting national standards for outputs, processes and use of inputs), the plans for implementing this new more cost-effective system, and how the central Ministry together with the districts will assess and reassess the appropriateness of the design, and the process of implementation.

The formulation of national standards is necessary in order to budget limited resources efficiently, train staff appropriately, define needs for central level support, and provide districts with guidance for decision making. The nationally defined standards are not intended to be completely adopted by each district, but adapted to their own situation. Districts will then monitor their own performance, and be monitored by the Province, against these modified, nationally sanctioned standards.

This comprehensive Strategic Health Sector Plan is also intended to act as a guide for discussion with potential donors. It is hoped that donors will wish to support this comprehensive government sector programme, rather than individual projects outside an overall agreed upon design.

1.2. The Planning Approach

The approach which has been taken is unusual. The existing system is incapable of meeting national objectives for providing quality health care as close to the household as possible. But, instead of taking a traditional approach of defining the problems with the existing system (repairing the broken Cadillac), the Ministry of Health has undertaken to draft the designs for a new system which will be capable of meeting needs for health care given the limited resources available (the design of the new, more efficient car). The design describes standards for the reformed system's outputs (what health care interventions will be provided), processes (how will the delivery of the

outputs be organized, supported and managed), and inputs (what resources will be required to realize these outputs given the defined organization, support and management). The costs of the inputs will determine whether the draft standards are affordable (financially sustainable). This iterative process of designing an affordable system has involved medical and health staff, economists, logistical experts, accountants, economists and managers.

Issues of implementation have not been disassociated from the planning exercise. The sustainability of the plan, and whether the gap between the existing system and the standards for the reformed system is realistic have been considered throughout the process. Evaluation of the plan's implementation will address both the ability of the system to achieve standards, and the ability of the standards to achieve objectives. National standards, and by extension, local standards, will be constantly reassessed against the emerging needs of the country and its changing economic situation.

Zambia's vision of the new health care system needed to be fleshed out, by answering the questions: **What do we want? What do we have? What do we need? What can we afford?** A step-by step process has guided planners to:

(a) Undertake a critical self-assessment (of health needs, identification of financial, physical human and academic resources, stakeholders in the process of reform).

(b) Propose a set of standards of the new health system -- on the basis of agreed-upon principles (i.e. equity, affordability) -- in terms of what the respective levels of health care could reasonably be expected to provide, starting from the household and moving through the hierarchy of health facilities. Identifying requisite inputs and management support has been a critical part of this process.

(c) Estimate consequent costs, based on level of institution and its anticipated workload; the quantity and type of recurrent and investment costs; and total investment cost and first year's operational cost.

(d) Define a health financing strategy to cover these costs; deciding which costs the Ministry's budget will cover, what would be willingly paid by clients or private expenditure, and or what areas the GRZ would seek the support of external donors.

(e) Reassess needs and the draft plan until one was developed for which the financing would be sustainable,

(f) Determine how to implement the plan - transform the existing system into the vision of the reformed system.

(g) Monitor the impact of this plan's implementation on beneficiaries.

1.3. Health Policy Reforms

In the National Health Policies and Strategies document of 1991, the Government has articulated radical policy reforms, characterized by a move from an excessively centralized system to a more effective decentralized system in which the centre provides support and national guidance. Underlying these reforms is the desire to build effective leadership, accountability and partnership in order to provide equity of access to cost-effective quality health care as close to the family as possible. The reforms document has been designed to reflect multiple policy concerns that follow from the focus on managing for quality in the health care services. The vision is to

- Create environments conducive to health
- Disseminate knowledge on the art of being well
- Ensure the equitable access to an essential package of integrated health care services

1.4. Major Accomplishments so Far

(a) The Health Reform Implementation Team has been established. This is operating as a project team. So far, it has exceeded expectations in its ability to create capacity for Health Reforms Implementation. The Health Reforms Implementation Team in conjunction with the Planning Unit has developed a strategy for integrating vertical programme activities into district health plans.

(b) The Ministry has received an increase in the share of the total central budget allocation for health from an annual average of 8% in 1995 to 13% in 1994, 14.2% in 1995, and 14.3% in 1996. Ministry has allocated nearly 18% of its budget as grants to District Health Management Boards, and 10% for drugs under recurrent departmental charges. Disbursement of funds within the Ministry of Health is in line with the new policy of decentralization. Thus, in 1993, the District Health Boards submitted plans for their activities to the Ministry of Health for review. Using a formula based upon an allocation system based on a weighted per capita formula, districts were given grants for implementing their plans.

(c) There is now a National Health Services Act in place as at 6th September, 1995.

(d) A Health Care Financing Policy Framework paper (Community Co-Financing) has been completed. Cost sharing medical fees have been introduced across the board in the country. Further research on cost-sharing is necessary, but meanwhile, communities have been introduced to the idea that health care services cannot be provided at no cost or entirely free of payment.

(e) Rehabilitation of urban clinics and rural health centres according to the new health package standards has started. Critical Rehabilitation of Central and Provincial Hospitals based on the new Health Packages will continue in 1996.

(f) Although the basic employment conditions of the civil service for health staff cannot be improved in isolation from the rest of the civil service, where health institutions generated sufficient medical fees, incentive bonuses have been awarded periodically to hospital staff. Transport as well as housing has been made available to staff in addition to improving the physical environment in which they work.

In order to address the issue of staff inbalances a national human resource survey has been conducted.

(g) Eight more Hospital Management Boards were created in 1994 (Namely: Lewanika, Livingstone, Chipata, Mansa, Solwezi, Kasama, Choma and Kabwe) and 58 District Health Boards were created to manage the district Health Systems. Boards were established in the remaining three districts in 1995.

(h) Critical training programmes were organized for district health personnel to prepare them for the added responsibilities they will handle. District Health Management Teams received training in planning, management and financing - while specialized training was given for accountants and district Health Information Officers. Diploma level training for District Health Managers, (Core District Management) is planned to begin in 1996. Negotiations with other training institutions cater for Hospital Managers, Accountants and Technical Staff.

(i) An ambitious process of decentralization began in June, 1992, and the Ministry has tentatively defined new roles for the central, provincial and district levels, new roles for districts and responsibilities have been defined and guidelines produced. The major thrust of Health Reforms has been the devolution of the key Ministry of Health functions of planning, management, service delivery, funding and resource allocation, and revenue generation. Decentralization of responsibilities for service provision so that districts can have discretionary authority for personnel recruitment, for the assignment of tasks, and for the allocation of resources has been a central focus of reform. A time-table for delinkage of Health Boards Personnel has been worked out and it is envisaged to start in 1997 and will be completed in 1999.

(j) There is a need for suitable structures for community participation in decision-making, for quality control, and for financial accountability. The symbiotic relations being promoted among social forces at the district level, between this level and higher levels are beginning to release a considerable amount of implementation capacity in the reform programme to the extent that the centre is pressed to intensify its monitoring and consultative capacity.

(k) A study to determine the unit costs of health service provision in the existing system was undertaken in 7 districts during July and August 1995. The exercise was carried out in advance of finalisation of the package due to the need for

baseline information on service costs, and also to feed into the central level resource allocation process; to test assumptions made regarding the shares of district budgets to be allocated to hospital, health centre and district administration; to gather cost information to be fed into the packaging process; and to train district and provincial health staff in the methodology. The identification of various factors affecting costs between districts will be applicable in the adoption of the package across the country.

The study identified resources used, quantified and costed them, then combined the information with utilisation data to determine the unit cost of an outpatient visit, under-five visit, antenatal, delivery, and postnatal and family planning. Final figures are not yet ready, and major problems were experienced due to the poor quality of both health and management information at health facility and district level.

(l) A pilot scheme has been established in 9 districts to formalise the linkage between the Department of Social Welfare and the Ministry of Health in ensuring access to health care by the destitute.

(m) **Laboratory Policy**

A task force was appointed in May 1995to formulate a comprehensive policy on Laboratory Services: Policy has been drafted on test profiles equipment specifications and distribution of Laboratory supplies, a situation analysis of Laboratory services in the country has been completed.

(n) **Financial administrative management system (FAMS)**

A uniform FAMS has been developed through a participatory process with all the key stake-holders involved. The development of FAMS is part of the preparatory phase in the implementation of "basket funding" which involves donor support being channeled to the districts using a single set of planning, budgeting, disbursement, accounting and auditing mechanisms.

(o) A Zambian essential package of cost-effective health services has successfully been defined for all levels as indicated in Annex 1.

Packages of Health Care to be funded under GRZ have been worked out for Health Post, Health Centre, Level I, Level II, Level III. Draft packages for Household and Community will be shared with other statcholders.

(p) In order to ensure vertical programmes are brought on board within the Health Reforms integrated performance audit instruments committee and action plan have been developed.

(q) An urban health development strategy has been defined in Lusaka as a pilot

activity. As a result a number of projects have been identified and funded and lessons from Lusaka are being shared with other urban districts.

(r) A Human Resources Staffing Situation Survey has been completed which confirms some of the urban versus rural distribution biases.

(s) The first workshop for the operationalising of the Polyvalent Health worker with the stakeholders has been held.

(t) Workshops were conducted for participatns from all levels to introduce the concept of packages, DALYS and cost-effectiveness analysis. The information from the workshops will enable the finalisation of the Zambia essential health care packages based on cost-effectiveness of interventions as well as consideration of demand and contextual issues.

(u) Releases from Ministry of Finance to Ministry of Health as well as actual expenditures and releases from Ministry of Health to lower levies of the health care system are now being monitored on a monthly basis by Headquarters. The monitoring includes comparisons between actual payments/expenditures and budgeted expenditures for each item under the budget and each grant receiving institution.

1.5 Health Needs

In order to determine what level and types of health outputs must be produced, the system must consider population parameters and health indicators. Table 1.1 presents critical population parameters, and Table 1.2 presents health indicators.

Zambia has seen rising infant mortality and malnutrition rates over the past decade. Morbidity and mortality in adults and children due to malaria and AIDS has risen dramatically. Diarrhoeal disease (especially cholera), perinatal deaths, complications of pregnancy and child birth, tuberculosis, vaccine preventable disease (especially measles), acute respiratory infections, nutritional deficiencies, and injuries among a rapidly increasing population place a heavy burden on the health system.

Table 1.1: Population Parameters

PARAMETER		PROPORTION	1995
TOTAL POPULATION		100%	9,233,258
RURAL POPULATION		58%	5,355,290
URBAN POPULATION		42%	3,877,968
POPULATION GROWTH RATE		3.28%	3.2
BIRTHS PER ANNUM		4.95%	457,046
POPULATION DISTRIBUTION	0-12 MONTHS	3.99%	368,407
	0-59 MONTHS	20.26%	1,870,658
	0-14 YEARS	48.76%	4,502,137
	15+ YEARS	51.24%	4,731,121
	WOMEN CHILD BEARING AGE	22.1%	1,903,542
NUMBER OF PROVINCES			9
NUMBER OF DISTRICTS			61

1.6. The Health Care System Before Reforms

The existing health care system has been heavily dependant upon hospital care. Health centres are equipped to provide only basic services, and chronic shortages of staff and supplies at this level has caused individuals seeking care to consistently by-pass this level, receiving basic curative care at less cost-effective levels of the system. Financing policies have traditionally encouraged inefficient health care, giving a greater proportion of the budget to referral hospitals where less cost-effective and essential services would be provided. Community outreach activities, including most public health services were only funded through specially-funded projects, and were not part of the government financed package of care. Health care services were provided free of charge until 1989, providing no discouragement for inappropriate utilization of services.

Standards for care vary widely in Zambia. Those in Lusaka with access to the University Teaching Hospital can receive sophisticated care, whereas others cannot receive even basic preventive services. Many standards for care which are articulated are not appropriate or achievable (e.g., health care policies mandate 13 prenatal care visits per pregnancy). The services which are provided at health centres differ greatly by urban and rural areas, between mission-run and government-run facilities (although both are staffed with government personnel), and between provinces which receive extensive donor support and those which receive little external assistance.

Traditionally, the health care system in Zambia was excessively centralized. Districts carried out activities under detailed instructions from Ministry of Health and Provincial Level. Capacity at the District level for planning and management and budgeting was not encouraged under this system. All authority for resource management was also centralized. Districts were allocated equipment and supplies as the province deemed appropriate however this constraints the ability of the service providers to respond to the needs of the communities they served.

1.7 Overview of Poverty in Zambia

Given the incidence of poverty in the country -- 69% of the national population is estimated to be "very poor" according to the recent World Bank Poverty Assessment -- Zambia must adopt radical policies to abate the scourge of the poverty trap.

Rural Poverty

"Despite the availability of abundant land and water resources, there is widespread and deep poverty in rural Zambia. The apparent contradiction of abundant natural resources combined with rural poverty is explained by policies designed to benefit the formal sector in urban areas, institutional rigidities, inadequate investment in public goods such as infrastructure, agricultural research and extension, combined to create an unfavourable environment for smallholders and discouraged their investment and productivity. These factors are reinforced by low levels of human capital, poor health, malnutrition and food insecurity, to create a vicious cycle of poverty".

Urban Poverty

Up to 40 percent of the urban population is below the poverty line. Within this broad picture, however, the characteristics of poverty vary across urban areas. Urban populations in Copperbelt are not only poorer but have characteristics that differ from Lusaka. Household sizes are smaller and there is a higher incidence of female-headed households. Formal sector employment is concentrated in the less well remunerated categories of the parastals. Urban poverty also has an important spatial dimension. It is the spatial nature of urban poverty that defines both the environmental hazards and social fragmentation characteristic of urban poverty.

1.8. Financial Resources

Economic Perspective

The economic goal in 1994 was a stable economy. Prices and exhange rates were therefore stabilised during the year. In terms of GDP however, there was a decline of -5%. the producation sectors (e.g. mining, manufacturing, construction and utilities) accounted for the whole decline. The investment rate has been stable since 1991 and average 10 - 11%. Net export during 1994 was -17%.

Due to the collapse of a large private bank in February this year, the Kwacha has depreciated by 15% in comparison with 1994 average. Prices rose at the end of 1994. despite this, inflation was extremely low in April, which together with relatively stable interests on loans led to a positive real interest for the first time during the year.

The 1995 budget amounts to K854 billion of which 327 billion are financed by donors. The largest income is trade related taxes and VAT.

The cash budget system that was introduced in 1993 has been kept. It has contributed to the low inflation that Zambia has enjoyed since 1994.

The major structural reforms are:

- Privatisation of state owned companies
- Public Sector Reform Programme (PSRP)
- Land Bills

The PSRP consists of three parts, (1) restructuring of Ministries, (2) development of incentive systems and personnel, and (3) decentralisation and strengthening of Local Government.

(a) Trends and Patterns for GRZ 1990-94

Real health expenditures fell from K112.9 million in 1984 to K90.0 million in 1992, while the population increased from 6.4 million in 1984 to 8.6 million in 1992. Simple

arithmetic demonstrates, that this represents a tremendous decline in real per capita expenditures in the health sector. In constant 1990 kwacha expenditure increased from K1.90 billion in 1990 to K2.35 billion in 1991, but then declined to K1.44 billion in 1992, and an estimated K1.08 billion in 1993. However, in 1994 it has increased again to a budgeted K1,88 billion.

During the 1980's, allocation for the health budget accounted for an average 7 per cent of total Government budget. Beginning from 1994, the Ministry has received an increase in the share of budget to 13 percent (budgeted). In accordance with the new policy of decentralization, the Ministry of Health has allocated 36 percent of its budget as grants to newly established District Health management Boards and 9 percent for drugs.

Table 1.3 shows GRZ health expenditure by economic type for 1994 1995 (excluding Military Health Expenditures). As shown in the table, the allocation to Provincial/General Hospitals, central procurement and districts has increased as a percentage of the total Ministry of Health budget where as allocations to Ministry of Health Headquarters, UTH and central hospital boards have decreased as a % of the total budget, the increase in central procurement is mainly due to an increase in the allocation for drugs.

This clearly shows the Ministry's commitment to reallocate resources from the central level to the lower levels, where health care can be provided much more cost-effectively.

Within the district grants, districts are not allowed to spend more than 40 percent of the funds for hospital services. Until the new budgeting process is initiated, an exemption to the rule has been applied in those districts with more than one hospital (public or private), or where 40 percent would not be sufficient to meet the minimum costs of one hospital, in which case extra grants are given. At least 55 percent of the funds should be used to implement PHC activities, such as the running of rural health centres in the districts.

Building on the premise that a district.based health care system can serve up to 98 percent of preventive and curative health care needs, the role of central hospitals should be limited to provide technical back-up and some support by training health personnel. In 1995, University Teaching Hospital (UTH) board gets about 14 percent of the total Ministry of Health budget and another 13 percent is distributed to other central hospital boards (including grants to Ndola, Kitwe, Chainama Hospital Boards and Arthur Davidson). Thirty six percent of the total Ministry of Health.budget is allocated to district health services (including District Health Boards, CMAZ funding and the balance of Provincial Personal Emoluments) in 1995.

It is recognized within the Ministry that much work remains to be done to develop this budgetary system. However, the criteria for allocation of resources between different levels and between different intitutions in the same level have been developed, to

reflect transparency and more equitable distribution of resources. The Ministry has allocated almost 20% of the total budget to the provinces (provincial hospitals, provincial offices, and personal emoluments for all staff at provincial level).

Table: 1.3: Public health expenditure by economic type

GRZ Public Health Expenditure 1994-1995

	1994				1995				Increase/ decrease
		USD				USD			(%-units)
LEVEL	Kwacha	USD	per capita	%	Kwacha	USD	per capita	%	1995-94
1. MOH HQ + Province	4,390,111,631	4,390,112	0.48	10.04%	4,033,368,740	4,033,369	0.44	7.25%	-2.79
2. MOH HQ cent. proc.	4,776,537,000	4,776,537	0.52	10.93%	6,929,473,000	6,929,473	0.75	12.45%	+1.52
3. UTH Board	7,355,600,000	7,355,600	0.80	16.83%	7,561,702,000	7,561,702	0.82	13.59%	-3.24
4. Centr. hosp. boards	7,166,740,000	7,166,740	0.78	16.40%	7,031,251,000	7,031,251	0.76	12.63%	-3.77
5. Statutory boards/bodies	2,405,480,000	2,405,480	0.26	5.50%	2,877,508,000	2,877,508	0.31	5.17%	-0.33
6. Prov/Gen. hosp. boards*	2,552,275,730	2,552,276	0.28	5.84%	7,054,854,540	7,054,855	0.77	12.68%	+6.84
7. Others	115,901,000	115,901	0.01	0.27%	272,925,000	272,925	0.03	0.49%	+0.22
8. District health services	14,945,565,641	14,945,566	1.62	34.19%	19,896,512,720	19,896,513	2.16	35.75%	+1.56
TOTAL	43,708,211,002	43,708,211	4.75	100.00%	55,657,595,000	55,657,595	6.05	100.00%	±0.00

Reference notes:

Exchange rate: USD1=K1,000

1. MoH/Province & HQ includes PEs (HQ), part of PEs at Provincial level (3%), grant to Regional Health Authorities (i.e. the Provincial offices), purchase of services, training costs at central level and grant to Central Health Board

2. MoH HQ central procurement includes purchase of goods (drugs, lab equipment etc.)

3. UTH covers the grant to UTH hospital board (including salaries)

4. Central hospitals include grants to Ndola, Kitwe, Arthur Davidson and Chainama hospital boards (including salaries)

5. Statutory boards/bodies include ZFDS, NFNC, OHB, TDRC, GNC, MCZ, Vehicle Service Centre, Blood Transfusion Service, Dental Training School, Public Health Labs and Mwachisompola Health Demonstration Zone

6. Provincial/General hospital boards include 13% of provincial PEs, plus grants to 9 Provincial/general hospital boards (incl. Chikankata, St Francis, Monze, Chilonga, Mansa in 1995)

7. Others include payments to local and international NGOs/agencies e.g. PPAZ, UNICEF, WHO etc.

8. District Health Services includes grants to District Health Boards, CMAZ funding and the balance of Provincial PEs (84%)

(b) Bilateral/Multilateral Donor Support

Table 1.4 Summary of committed/anticipated donor support 1994 - 1998

DONOR AGENCY	ACTIVITY/PROGRAMME	AMOUNT**	DURATION
1. ODA	1. Human Resource 2. Kitwe/Ndola Hospital Management Board 3. UNZA School of Medicine - performance related rewards 4. Population/Family Health 5. Lusaka Urban Primary Health Care support 6. AIDS	19 Million British Pound (US$22.5 million)	4 years (1994 - 1998)
2. SIDA	1. Health Planning and Management 2. Sexual and Reproductive Health 3. AIDS 4. External Procurement including Essential Drugs	170 Million SEK (US$21.25 million)	4 years (1994 - 1998)
3. DANIDA	1. Planning and Management 2. District Provincial Capacity Building 3. Management Information System. 4. Quality Assurance	175 Million Danish Krona (US$25 million)	4 years (1995 - 1999)
4. Netherlands	1. Essential Drugs 2. PHC Western Province 3. PHC Northern Province 4. Technical Assistance (Dutch Doctors supplementation scheme) 5. TB drugs	US$ 8 Million (annually)	4 years (1994 - 1998)
5. USAID	1. Population and Family Planning 2. AIDS 3. Child Survival	39 Million US Dollars 20 Million US Dollars	4 years (1994 - 1998) 7 years

6. EC	1.	Blood Transfusion Services	9.982 Mil ECU (US$11.98 million)	4 years (1995 - 1999)
	2.	Rehabilitation		
	3.	Management Support/Training		
	4.	Water & Sanitation		
	5.	Laboratory Support		
7. WHO	1.	Human Resource Development	1 Million US Dollars annually	5 years (1995 - 1999)
	2.	Health Systems Research		
	3.	Primary Health Care		
	4.	Malaria		
	5.	UCI/EPI		
	6.	CCD		
	7.	Vaccines/Emergency drugs		
8. UNFPA	1.	Population/Family Health Trust/AIDS	US $7 million	3 Years (1994 - 1996
9. UNICEF	1.	Maternal Health	US $10 million	3 Years (1994 - 1996)
	2.	Universal Child Immunization (UCI)		
	3.	Control of Diarrhoeal Diseases (CDD)		
	4.	Nutrition		
	5.	District PHC Strengthening		
	6.	Institutional Strengthening		
	7.	HIV/AIDS		
9. International Development Association (IDA) of the World Bank (Credit 40 years grace period, 0.75 interest rate)	1.	Policy development/Operations research	US $56 Million	1995 - 98
	2.	Investment Programme (Infrastructure, rehabilitation, drugs, equipment)		
	3.	Recurrent Budget		
	4.	Monitoring and evaluation		

(c) NGO Support

Zambia receives significant support to the health sector from NGOs. The total contribution from local and international NGOs equals about US$10.5 million. The numerous local NGOs who work in the health sector include CMAZ (Churches Medical Association of Zambia), SWAZ (Society for Women and AIDS), Family Health Unit, Medical Women's Association, PPAZ (Planned Parenthood Association of Zambia), Red Cross, Street Kids, Zambian Cancer Foundation, Zambian Council for the Handicapped, Rotary Club, and Cheshire Home. International NGOs include MSF (Medecin Sans Frontiers), OXFAM, the Danish International Cooperation Agency, the Netherlands Development Organization, German Development Service, YMCA, Africare, CARE International, World Vision Relief and Development, and Christian Children's Fund.

CHAPTER TWO: ESSENTIAL HEALTH PACKAGES OF CARE

2.1. Vision

Zambia can afford and achieve better health care. This does not necessarily mean that *more* resources should be spent, but rather that the available resources should be allocated in a more cost-effective way. Therefore, the Government has committed itself to financing a basic package of cost-effective health care services as close to the family as possible. The aim with the basic essential package of care is to save more lives with the same resources.

2.2. Introduction

In order to achieve this aim in Zambia, there has to be a redistribution of resources from cost-ineffective hospital care to more cost-effective primary care and first level referral care at the district hospital level and below. Primary care serves a larger population and is provided much closer to the families. Although this redistribution of resources has already started, the package will assist in identifying those services previously supplied at hospital level that can be moved down to lower levels without increasing costs or reducing efficiency.

With limited resources, there is a choice between providing more services for fewer people (with advanced hospital technology) or attacking the leading causes of death and saving more productive years for ALL Zambians. It is our belief that it is possible to save more lives and to reach more people through identifying a package of essential health care services. Care outside this basic package will not necessarily disappear from Zambia, but it will require private sources of funding rather than Government resources. An essential package should consist of highly cost-effective services that can greatly improve the health of the poor.

2.3. What should be included in the basic package?

In order to set priorities, the burden of disease or the loss of productivity due to various diseases in Zambia, have been identified. The method of Disability Adjusted Life Years (DALYs) have been used to measure the burden of disease in Zambia (see Table I). It is estimated that over 80% of the loss of productivity is due to death in Zambia, and less than 20% is due to disability.

The burden of disease has been calculated using Zambian (facility based) data from health centres and hospitals. It was felt that the institutional based data that we had were grossly underestimated, especially for malaria, ARI, diarrhoea, maternal, perinatal, HIV/AIDS and TB. These calculations were therefore based on population based data from other Southern African countries and data from studies made in Zambia. Malaria,

ARI, diarrhoea, AIDS and perinatal account for most DALYs lost in Zambia, which is a typical pattern for most countries in Southern Africa[1].

The Zambian package is being identified on the basis of the cost-effectiveness of different interventions for the identified diseases. The possible interventions for each disease have been identified and the cost-effectiveness (or the cost per DALY saved) for most of these interventions have been calculated. Other costs (e.g. administration, transport, maintenance, OH costs etc.) have been identified, but costs for these have not yet been estimated. We also looked at other interventions that are not specifically disease oriented such as Family planning and normal deliveries, for which the total costs were estimated. We have also identified needs for support functions (e.g. costs for DHMTs, PMOs, HQs, training, IEC etc), but costs for these have not yet been calculated. Some IEC activities have been identified as well as areas for intersectoral collaboratin such as water and sanitation.

In identifying a national package of care, it was important that health care workers at all levels as well as key people representing different areas of interest and knowledge participated in the process of identifying this package, as they will be the implementors of the package. The package is therefore being defined through a consultative process, including health care workers and administrative staff at all levels of the health care system. The package is now being finalised together with people from all levels of the health care system and with key people from HQs.

An important part of the cost-effectiveness is quality of interventions. If quality can be increased, cost-effectiveness is increased. Quality assurance and quality strengthening is therefore vital inputs to the package. Further studies and research is proposed in areas of economics, efficacy of treatments etc. in order to improve the package.

The community health worker (CHW) and traditional birth attendants (TBA) are crucial in delivering health care within the communities. The communities should therefore be encouraged to support the CHWs and the TBAs in order to improve access to health care services.

It is recognised that the method of DALYs and cost-effectiveness also has draw-backs. However, this method is a useful tool for introducing a sense of cost-effectiveness thinking at the health care institutions on all levels. It also serves as a useful tool for reallocation of resources from central levels to lower levels of the health care system.

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[1] The top five diseases were the same even when facility based data was used.

2.4. What remains to be done in 1995?

Although much work has been done, some issues remain to be solved. There is for example need to agree on "non-negotiable" services that need to be included in the package although not on cost-effectiveness grounds but rather due to moral issues and/or demand, such as care for aids patients for example. We need to define the costs for identified support functions (e.g. training, maintenance, IEC, administration such as running costs for DHMTs, Provincial offices, HQs etc.), define the roles for statutory boards, Public Health Laboratories etc.[2], define costs and needs for capital investments at each level and new posts and training of staff to support the package and identify real costs for providing the package at each level. Information from the costing study should be fed into the cost-estimates during 1996. The expected interventions to be undertaken by the households need to be further developed.

The package will be presented to the districts, provincial offices and hospitals in the general annual meeting that will take place in December 1995. This will give the participants of the process a chance to comment and reflect on the propsed package. Thereafter it will be presented in the senior management meeting.

2.5. Implementation

The package will be introduced as far as possible in 1996. It is estimated that those health centres that are being rehabilitated in 1996 could start providing most of the health centre package, and that these could serve as pilot health centres, to verify the costs and the effectiveness of the package. The monitoring should be extended to include health posts and communities in order to verify what activities are being carried out at this level given a well-functioning, upgraded health centre in the district. The monitoring should also include a control group of ten districts where the health centres have not been upgraded, in order to monitor the health impact in the population, the coverage, the health seeking behaviour etc. There are two main objectives with monitoring the implementation of the package:

1. To compare the assumptions made when calculating the cost-effectiveness in the packages with reality (focusing on inputs needed, cost estimates, demand etc.)

2. To look at the cost-effectiveness and rationale for upgrading some health centres and downgrading others (focusing on health outcome indicators,

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[2] It should be noted that in the budgeting process for 1996, all statutory boards have bee uested to plan and budget for their activities as well as provide the Ministry with tifications for further funding.

coverage, health seeking behaviour etc.).

This evaluation will lay ground for how the package should be further implemented. Based on the outcomes, necessary alterations of the assumptions made in the cost-effectiveness calculations and in the identification of the package will be made before the package is further implemented in 1997. The package should be subject to a yearly revision of assumptions as disease patterns, costs, inputs etc. change over time, and as the reliability of data improves. For the revision of the package in 1996, the outcomes from the costing study that will be carried out in 1996 to estiamte actual costs at hospital level will serve as an input. Other relevant research will feed into the continous revision of the package.

Discussions will be held with the piloting districts during the annual general meeting to modify their action plans for 1996 to better reflect the identified package. Districts will receive further training in DALY-calculations and cost-efectiveness calculations in order to facilitate the development of a specific district package that reflects disease patterns and costs in that district.

All districts will be informed about the contents of the defined national package in 1996 and be recommended that they should implement the package as far as possible and should base their plans for 1997 on the defined package.

A plan for downsizing central hospitals will be worked out in 1996 in order to facilitate further implementation of the package.

A survey will be undertaken in order to establish the available equipment at different levels. Based on this survey and the definition of the Zambian package, a gap between what is presently there and what is required will be identified (see further the chapter on equipment) The baseline survey will be carried out during 1995 and first quarter of 1996.

ANNEX A

BURDEN OF DISEASE IN ZAMBIA

DISEASE	DALYS lost
Malaria*	6,777,962
ARI*	5,451,037
AIDS*	3,205,208
Diarrhoea*	2,146,002
Perinatal*	1,320,444
TB*	266,799
Malnutrition	125,955
Other Gastro-intestinal diseases	106,150
Maternal	91,887
Anaemia	65,624
All other diseases in the nervous system	44,620
Heart diseases	38,924
Injuries and poisoning	36,171
Measles	34,315
Other Bacterial diseases	24,990
UTI/PID	15,254
Mental illness	9,728

Diabetes	8,657
Worms	5,504
STDs	3,809
Hypertension	3,439
Eye diseases	1,937
Bilharzia (tot national figures)	1,248
Ear diseases	783

* Calculations for DALYs lost due to these diseases are based on population based data. The top five diseasesare the same even when facility based data is used for these.

In transition while we are finalising the Zambia Health Package, we have adapted the World Bank minimum package of care applicable to a community with a burden of disease similar to ones similar health capita expenditure on health of US $12 per capita. The health package appears at annex

PART TWO

INPUTS

CHAPTER THREE:	**Human Resource Development**
CHAPTER FOUR:	**Drugs and Policy Development**
CHAPTER FIVE:	**Medical Equipment, Transport and Communication Equipment**
CHAPTER SIX:	**Infrastructure**

PART TWO: INPUTS AND THEIR COSTS

Introduction

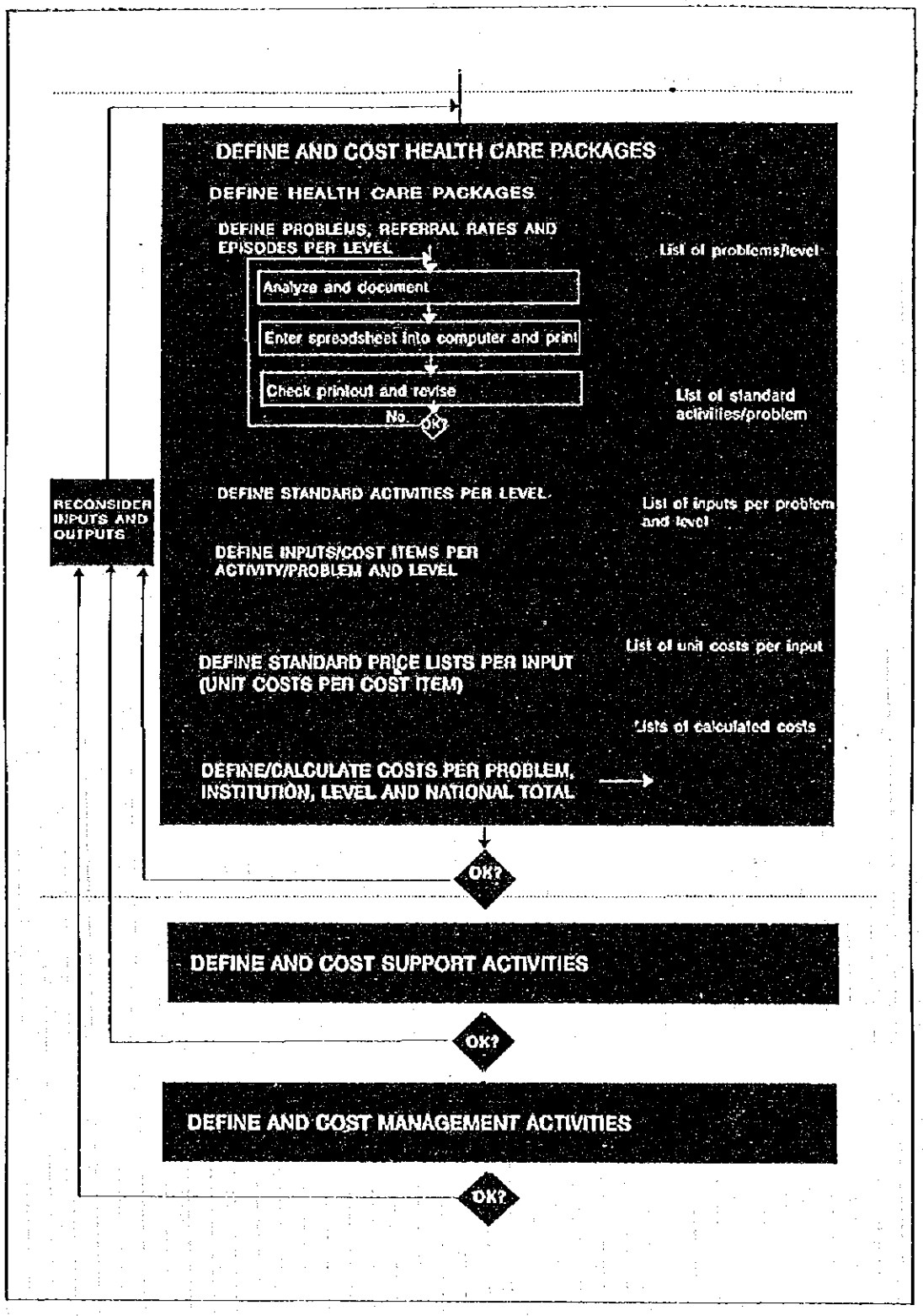
Commitments to expand access to quality primary health care to a greater number of people in Zambia raises fundamental questions about the resources required to do so. The Ministry of Health could extrapolate resource needs on the basis of past expenditure levels, but this would clearly be inferior to determining resource requirements for alternative, cost-effective approaches. The Ministry has a strong interest in establishing such costs since it is involved in the financing and also the direct provision of health care, whether personal health services at health facilities or through public health activities. In addition the Ministry subsidizes private voluntary providers and encourages expansion of private for-profit providers. Accurate cost information is therefore required in order to guide resource decisions.

The process of costing the reformed health care system has sought to define input requirements by targets for outputs. This will affect the way in which inputs are currently employed. Some categories of staff will need to be reduced, retrained or redeployed. Some facilities will need to be re-sized. Systems of logistics will have to reorganized to respond to the revised types and quantities of inputs required at each level of the system.

Two aspects of costing have been tackled in this Plan: firstly, the estimated annual operational costs, of the newly defined system; and secondly, the investment cost of moving from the current situation to the desired system.

The process of defining the packages above involves detailed specification of the activities to be carried out, whether health care, support or management, together with itemization of the various inputs required for their implementation. These inputs are classified into recognized categories, e.g., personal emoluments, drugs, laboratory supplies, buildings etc, and combined into lists which state the name, unit of measure, and unit cost/price of the input.

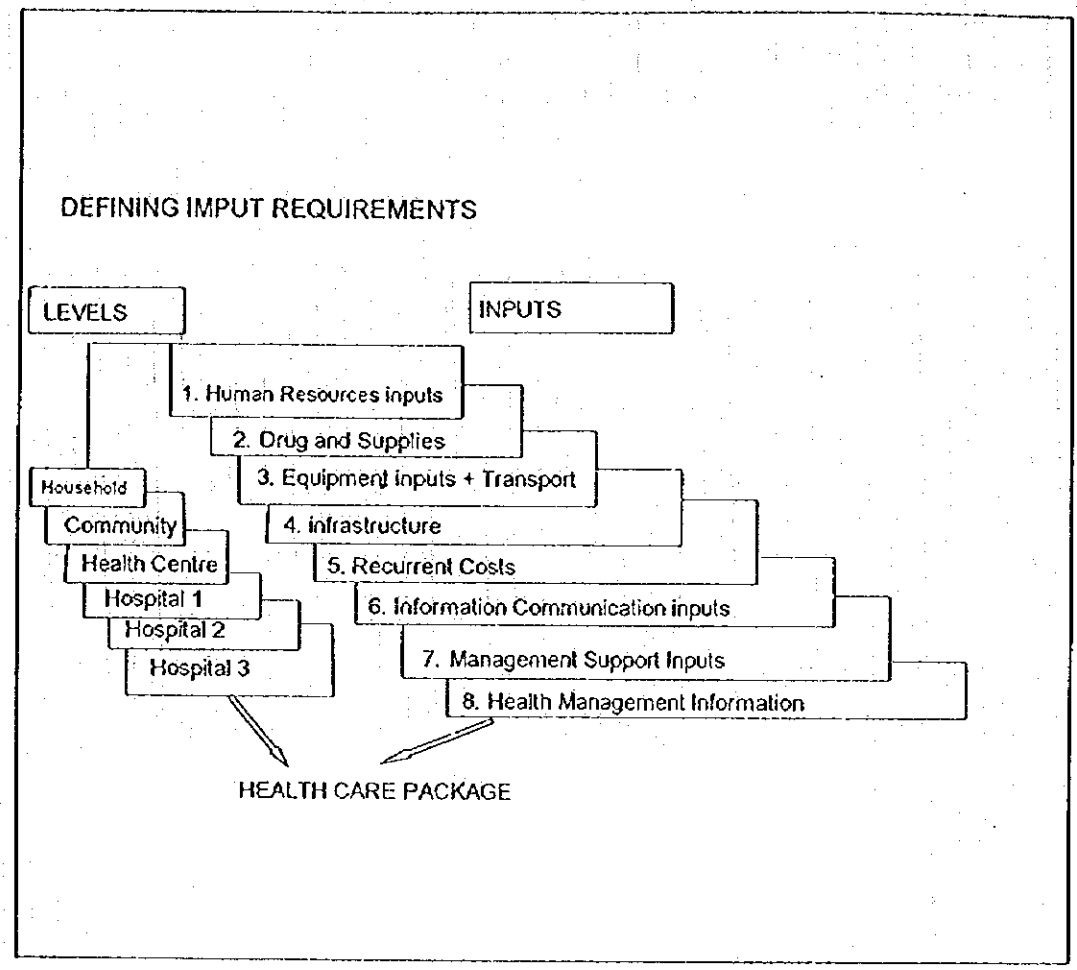
The following diagram explains the process of costing the packages of care, management and support.


DEFINE AND COST HEALTH CARE PACKAGES
DEFINE HEALTH CARE PACKAGES
DEFINE PROBLEMS, REFERRAL RATES AND EPISODES PER LEVEL
List of problems/level
Analyze and document
Enter spreadsheet into computer and print
Check printout and revise
No
OK?
List of standard activities/problem
RECONSIDER INPUTS AND OUTPUTS
DEFINE STANDARD ACTIVITIES PER LEVEL
List of inputs per problem and level
DEFINE INPUTS/COST ITEMS PER ACTIVITY/PROBLEM AND LEVEL
List of unit costs per input
DEFINE STANDARD PRICE LISTS PER INPUT (UNIT COSTS PER COST ITEM)
Lists of calculated costs
DEFINE/CALCULATE COSTS PER PROBLEM, INSTITUTION, LEVEL AND NATIONAL TOTAL
OK?
DEFINE AND COST SUPPORT ACTIVITIES
OK?
DEFINE AND COST MANAGEMENT ACTIVITIES
OK?

- For the purposes of calculation of costs, inputs have been classified as either fixed or variable. Variable inputs are considered as those which vary directly with output, and requirements therefore follow directly from the activities defined.

- Fixed inputs, such as microscopes and other equipment, and personnel are calculated on the basis of workload at the given level, i.e., once total time requirements for their use or of given skill have been calculated. Again, this quantification of requirements is combined with the relevant price information.

- Definition of infrastructure requirements to support the defined health care packages has been carried out through a functional analysis of the activities in the packages, i.e., specification of the space requirements of those packages. construction, rehabilitation, and maintenance costs for standardized infrastructure have been calculated. The next stage will be to undertake a situation analysis to determine how far the existing facilities differ from the agreed standard. This latter exercise will enable the investment and recurrent costs of infrastructure to be calculated.



Budget Formats

Table 4.1 gives an overall picture of the operational cost of the new system, based on the spreadsheet which has been introduced for district budgeting and which is now being extended to other levels of the Ministry of Health. In 1996, the MOH budget will be based on a summation of individual district budgets.

Table 3.1: Operational costs at [Health Centre/Hospital Level 1/Level 2/Level 3]

LEVEL:		NO OF UNITS:		
INPUT	QUANTITY	UNIT COST	TOTAL COST/ INPUT	TOTAL COST/ LEVEL
Personnel				
e.g., Polyvalent Workers				
CDEs				
Sub-total - personnel				
Drugs and supplies				
Essential drugs				
Vaccines				
Medical supplies				
Non-medical supplies				
Sub-total - drugs and supplies				
Transport				
Fuel & lubricants				
Maintenance & spares				
Sub-total - transport				
Other costs				
Heating/lighting				
Maintenance				
Sub-total - other costs				
CAPITAL COSTS				
Vehicles				
Communications Equipment				
Medical equipment				
Furniture				
Office equipment				
Total Capital				

Inputs and their Costs have been defined under the following chapters:

Chapter Three:	**Human Resource**
Chapter Four:	**Drugs Supplies and Drugs Policy Development**
Chpater Five:	**Medical Equipment, Transport and Communication Equipment**
Chapter Six:	**Infrastructure**

CHAPTER THREE: HUMAN RESOURCE DEVELOPMENT

3.1. Introduction:

The development of human resources is critical to the implementation of the health reform. In this development consideration is being given to what skills, knowledge and attitudes are required to deliver the essential package of care, instead of the more of the "same syndrome". Such an approach has resulted in the development of the concept of the polyvalent worker (Public health practitioner) in response to the prototype package as the most efficient and effective way of staffing the rural and urban health centres, as well as the health post at the community level. This approach is assisting the Ministry of Health in the definition of training needs, redefining categories of staff, and determining appropriate allocations of staff according to the levels of care.

3.2. Vision:

To provide a well motivated workforce, operating in conducive environment in which the right skills are available in the right place, at the right time, to deliver quality health service as close to the family as possible.

3.3. Strategies

3.3.1 Redesigning organisational structure and job descriptions for all levels.

3.3.2 Develop and institute Human Resource and selection practices and procedures:
performance appraisal system;
supportive supervision system;
recruitment, selection and placement, systems.
performance related pay and reward systems.

3.3.3 Technical and management training at all levels which will include:-
- Training needs analysis
- Training plan in management and technical areas for all cadres of staff.

3.3.4 Develop retention policy and strategies, this includes:-
documentation of basic issues of incentiveû/retention;
- Design of retention schemes to be tested and replicated;
- development of retention policy;
- assessment of attrition factors vis-à-vis a review of training requirements.

3.3.5 Human resource information system:
- development of human resource systems at all levels and linkages

linkages to the HMIS system within the overall monitoring and evaluation system.

3.3.6 Maintain personnel management system guidelines and standards:

- development and use of the human resource management handbook at all levels;

3.3.7 Human Resource Planning at national level:
- develop system for national macro level planning;
- design of post-graduate training strategy and co-ordination of post-graduate training.
- review of training requirements with training institutions.

3.3.8 Develop human resources policy taking into account the overall Ministry of health gender policy.

3.3.9 Assess Financial implications of Human Resource in-put:-
- costing the training of an individual worker;
- costing the other in-puts for staffing;
- cost implications of redefined staff projecting future costs.

3.3.10 Monitor and evaluate the implementation of HRD strategies which will include:
Development of a methodology of M&E
for HRD in liaison with the M & E unit.

3.4 The Process:

The process for achieving the expected outputs involves three phases, namely:-

(a) The present situation
(b) Managing transition
(c) The future vision

Managing the transition will include the following steps:

3.4.1. Translate the delivery of the package in terms of the appropriate mix of knowledge, skills and attitudes of health staff.

3.4.2. Translate the knowledge, skills and attitudes into the staff requirements by title/post, level of competence, profession, etc.

3.4.3. Define the functional and organisational structures for each level of care.

3.4.4. Define by workload the members required by each job in the structure.

3.3.5. Review the current staffing situation by cadre in terms of:-

(i) Numbers and levels and distribution pattern and the staff mix.

(ii) Define the gaps between what is and what is required.

3.4.7. Based on the situation assessment carry out appropriate activities such as
(i) Redeployment
(ii) Retrain,
(iii) recruit and place according to decentralisation provisions
(iv) In view of decentralisation and autonomy of Boards and define the role of the centre.

3.4.8. Define national training priorities to ensure a constant flow of critical cadres to ensure quality of service at all levels.

3.4.9. Providing technical assistance for human resources to all levels by request.

3.4.10 Facilitate in the building of expertise in human resource management and development to allow for autonomy of Boards in managing and developing its own staff.

3.4.11 Identify source for bulk training sponsorship of critical cadres and co-ordinating the redeployment for purposes of equity and commitment to servicing a National Health System.

3.4.12 Review Human Resource policies especially those that relate retention to and incentive schemes and assist the emerging boards in the design and implementation phase.

3.5. Institutionalisation of human resource development in support of the health reform

(i). Establish a task force whose responsibility will be as follows:-.

(a) Review existing curricula in all health training institutions as they relate to the reform.
(b) Revise existing curricula
(c) Pre-test the curricula
(d) Revise the curricula
(e) Develop indicators for monitoring and evaluation the following:-
(i) Institutions
(ii) Health staff

(f) Implementation plan of the new curricula
(g) Development of the in-service training plan

3.6. Principles used in estimating staff requirements based on prototype package

The staff categories, composition and standards have been derived from the packages of care that have been developed for each level. The standards i.e. type and numbers described here are the ideal number if we are to deliver those packages in the most effective and efficient manner. From the community up to district level may appear to have more numbers for the obvious reason that in the reform, most activities have been shifted down.

3.7 Health Posts will be staffed by a single multi-skilled grade II worker (polyvalent). This is a new cadre of staff who will encompass medical, nursing and outreach skills. These staff will be produced by upgrading the skills of existing nurses, technical environmental officers and clinical officers. This new cadre of staff is intended to support the integrated concept of care, enable the more efficient use of human resources and raise the stature of the health centre worker.

Rural and urban health centres will be staffed by the described type of multi-skilled (polyvalent) worker, Grades II and III. The latter will be Grade II with additional training in community outreach. Laboratory and facility management will be the responsibility of a Grade III worker with special additional training. Urban facilities will have additional Grade III staff who have received special training in dentistry, mental health, physical therapy and optometry.

The average level 1 Hospital will require 48 professional staff, and 26 support staff. The addition of the package of level 2 referral services will require 4 specialists encompassing the areas of surgery, obstetrics, pediatrics and internal medicine.

3.8. The staff requirements are estimates based on the existing information and will continue to be updated as new information at these levels is made available. Please see annex 2, table 1 for staff at Community and Health Centre Level, table 2 for Level 1 and table 3 for Level 2 Hospital, table 4 District Health Office, table 5 Regional Health Office.

CHAPTER FOUR:DRUG SUPPLY AND POLICY DEVELOPMENT

4.1 Vision

The vision of a National Drug Policy (NDP) is to provide equity of access for all Zambians to good quality, efficacious and safe drugs (medicines), which are affordable and rationally used as close to the family as possible.

4.2 Strategies

Situation analysis for the NDP development process through background papers on:

- rational drug use in Zambia
- drug legislation and regulation in Zambia
- local production of pharmaceuticals in Zambia
- human resources development
- financing, procurement and distribution of pharmaceutical including medical supplies
- traditional medicine
- quality assurance
- research and development including monitoring and evaluation

Multilevel and multisectorial consultation based on a participatory approach in building consensus on objectives and elements of the National Drug Policy.
Miinistry of Health adoption of the National Drug Policy document with its implemetation strategy.

4.3. Gaps/ Issues

The steady increase in costs for drugs and medical supplies and the lack of a drug pricing policy.

The drug supply system including procurement, inventory control and storage.
The irrational drug use including counterfeit and substandard drugs.
Patient compliance and management procedures including diagnostic, prescribing and dispensing practices.
The critically low staffing level.
Lack of suitable, practical and relevant reference material both for providers and consumers (IEC).
Poor patients records keeping leading to inaccurate estimates for drug requirements.

Absence of up to date comprehensive and relevant drug legislation.

4.4 Implementation plan milestone

Drug policy development.

Information, education and communication strategies (IEC).
Human resource development.
Monitoring and evaluation.
Regular supply of drugs.

CHAPTER FIVE: MEDICAL EQUIPMENT, TRANSPORT AND COMMUNICATION EQUIPMENT

5.1. Visiort

To equip medical institutions with high quality, durable and locally serviceable, and regularly maintained medical equipment, consistent with the essential health package according to international standards in order to deliver quality health care.

5.2. Problem Statement:

The availability of essential medical equipment is vital to the provision of quality care at all levels. Currently the system is constrained by the lack of an adequate budget for maintenance and replacement of equipment, lack of specialized training facilities in the country, lack of standardization of equipment, inadequate trained manpower and no inventory/monitoring system in place.

Objectives :

(a) Define standard equipment list for each level.

(b) Establish local capacity for revising existing medical equipment standards based upon standards for the delivery of care as required, considering cost-effectiveness, feasibility of procurement of initial equipment and spares, national standardization , and local capacity for maintenance and repairs.

Priorities for Medical Equipment:

5.1. Define a prototype equipment package to support the essential package of care.

5.2. Conduct a situation analysis by review of equipment to establish total minimum equipment requirements for each level of care.

5.3. Establish a "donation protocol" on equipment.

5.4. Define criteria for providing equipment to facilities i.e. sufficient infrastructure, staff trained in use, drugs, reagents, fuel availability, with maintenance plan (including repair, replacement, redistribution or disposal of existing medical equipment) and budget in place.

5.5. Develop training plan and strategy for setting up of medical equipment repair

workshops for each level.

5.6. Develop an inventory methodology and survey format in liaison with the infrastructure sub-team.

5.7. Establish a database of

(i) Equipment standards
(ii) Inventory
(iii) Needs, investment costs
(iv) Maintenance.

5.8. Establish a Procurement Plan

5.9. To refine HQs accounting procedures to establish separate votes for medical equipment.

5.10. **Transport and Communication**

Vision:

To provide health institutions with reliable, durable and locally serviceable mode of transport and communication to facilitate delivery of essential health package as close to the family as possible.

5.11. **Problem Statement:**

Availability of relaible, durable and locally serviceable mode of transport and communication equipment is vital to the promotion of quality health care to the Zambian community. Currently, inadequate transport and communication equpment has led to delays in the delivery of drugs and supplies, difficulties in referring patients to the next level and carrying out supervisory visits.

Objectives:

The policy on transport and communication will be developed in the long term. In the short term in order to facilitate the delivery of essential package, there is need to do the following:

5.11.1. Define a prototype mode of transport and communication at all levels.

5.11.2. Carry-out a situation analysis to review communication equipment and transport needs in order to establish the minimum requirements for each level.

5.11.3. Develop a donation protocol on type and model of transport and communication equipment.

5.11.4. Development of local capability in transport management, maintanance and repair of available transport and communication equipment.

5.11.5. Development of a procurement plan for appropriate spare parts for transport and communication equipment.

5.11.6. Establishment of a database for transport and communication equipment available at all levels.

CHAPTER SIX: INFRASTRUCTURE

6.1. Vision:

This component of the strategic Health Plan seeks to have infrastructure that is conducive to the provision of cost effective quality health care as close to the family as possible. This will facilitate the provision of appropriate packages of care at various levels.

6.2. The Development of Standards

As a consequence of the development of packages of care by level, an infrastructure rehabilitation programme has been developed.

An infrastructure strategy has been developed in support of the packages of care at all levels with a focus on health care facilities in line with the mission statement of the health policy.

The first stage in the development of the infrastructure strategy was to agree on the number of health centres to be rehabilitated based on the population and the standard design of a health facility which would deliver the package and selection criteria.

- Development of a design of a prototype health centre has been completed and general information concerning the infrastructure strategies is available as a booklet.

- The bed capacity of the new design of the proto-type health centre is 12 beds for rural and 29 to 30 for urban areas.

- A situation analysis based on data collection on all centres both general and technical information, accompanied by a general survey will be completed by the end of October, 1995.

- Information collected from the infrastructure data collection exercise will be used for planning, implementation and selection of facilities to be rehabilitated at both national and district levels.

- A Data bank will be established which will be an integral part of the Health Management Information System and will be accessible to health planners.

- The PHI together with the Provincial Commissioner of Works will be the fore-

runners in the implementation of the infrastructure strategies and the centre will confine itself to planning and decision making e.g. siting and standards for new health centres either by NGOs or through community initiates.

- Development of norms will cover maintenance components of all health facilities, and districts and other levels will be trained to budget for the costs which for the majority will range from 1.5 - 2% of the recurrent budget after consultations with the financing group.

6.3. In this plan only 400 Rural Health Centres are earmarked for upgrading however, financial resources are available for only 200 Rural Health Centres, leaving a shortfall of 200*. In addition, to this there are 300 Rural Health Centre that do not qualify for upgrading. These Rural Health Centres will continue to provide existing level services during the transition period.

Health Centres that conform to the proposed design standards and require only minor works should be encouraged to implement the packages of care.

Self-help project proposals for new Health Centres should be channelled through District Health Boards. There should be a freeze on all construction of self-help centres outside the Health Reform Programme. District Health Boards should base their recommendations for self-help proposals on the following criteria::

(a) The demand for health care facilities in the area catchment population of 10,000 for Rural Health Centres and 50,000 for Urban Health Centres.

(b) Bed capacity in-patient assessment to ensure that 12 bed in-patient capacity is available to the catchment population.

(c) Assessment of the existing health centre state of building structure type of facilities available which will form the basis of recommendations for upgrading.

(d) Services i.e. if the water supply, power supply and sanitation is adequate.

(e) Accessibility of the health facility by vehicular and pedestrian traffic.

(f) Other health care services available within the radius of 12km and 29km. Only one facility should be upgraded if there is more than one.

6.4. In view of the pivotal (central) role that the District Health Office will play in the provision of health care services, their offices shall be accommodated outside the district hospital. A standard design of the office block shall consist of the following:

four offices, a meeting/conference, store rooms and ablution area. The current estimated cost for one block is twenty-six thousand United States Dollars ($26,000).

6.5. The objectives of the next three years would be to rehabilitate and expand 58 health centres per year with a minimum of 5 staff houses per health facility.

Where are we now with this programme?

- The first ten (10) pilot health centres will be ready by May, 1996.
- The next forty-one (41) will be ready by the end of 1996.
- Total number of health centres rehabilitated will be fifty-one (51) by the end of 1996.

6.6. **Preventive Maintenance**

Preventive maintenance is an integral part of the infra structural programme. Therefore, 5% has been factored into the estimated total cost of the programme. Recognising the short-fall in the overall budget for the programme, this is the activity which may be sacrifised if definate activities are not planned for. Accordingly, both GRZ and donor funding will be committed to implement the following preventive maintenance activities.

6.7. **Maintenance Teams**

- Formation of maintenance teams will be undertaken with focal point persons in the regional office and work in liaison with the Ministry of Works and Supply.

- A maintenance manual will be developed to be used by teams at various levels of the health system.

- Maintenance teams will be trained based on the developed maintenance manuals. Minor maintenance works will be undertaken by works on the spot. Available community resources will be utilized.

6.8. Outstanding policy decisions include the following:-

- The remaining health facilities (300) and their future role needs to be carefully considered. These facilities may either be downgraded to health post or converted into residences for staff;

- Need to identify care team at district level to monitor and supervise maintenance capacity building.

- Policy decision on down grading of certain Tertiary Level Institutions to second level facilities.

- Policy decision on what to do with 1st referral facilities in each district which are in excess of the demand.

6.9. **Gaps identified in strategic plan**

(a) **Finance**

- 400 Health Centres to be rehabilitated; money available will cover 200 Health Centres.

- Only US$6 million is available for the referral hospitals 1,2,3. This represents a serious shortfall.

(b) **Bias towards Health Centres**

- Overall picture to include higher levels of package delivery.

(c) **No specific Plan to Construct/Renovate District Health Offices**

Recommend: - Standard design of district office to be made.

- Feasibility study for establishment of District Health Office be undertaken in 1996.

Proposal of District Health Offices to include:

4 offices
1 meeting room/conference room
1 store
1 ablution block

Approximate cost = US$26,000

(d) **Staff accommodation**

- To be retained as a condition of service especially in rural areas (incentive);

- House ownership schemes in urban areas with assistance of employer (Civil Service and Boards).