The Development of the Essential Drugs Program and Implications for Self-Reliance in Tanzania

Gasper K. Munishi
University of Dar es Salaam

February 1995

a reprint of works produced
with support from the
International Health Policy Program
About the Author

Gaspar K. Munishi is a specialist in public administration. He is professor in the Department of Political Science and Public Administration and dean of the Faculty of Arts and Social Science, University of Dar es Salaam, Tanzania. He received his Ph.D. in development administration from the University of Wisconsin in 1982. His address is:

Professor Gaspar Munishi
Faculty of Arts and Social Science
University of Dar es Salaam
P.O. Box 35051
Dar es Salaam, Tanzania
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Acknowledgments

The International Health Policy Program (IHPP) thanks the many institutions and individuals whose assistance has made possible the production of the IHPP reprints and working papers. Support for IHPP work in Tanzania covered in this reprint has come from Carnegie Corporation of New York. Funds from The Pew Charitable Trusts have enabled the IHPP to prepare and disseminate it and the other IHPP working papers and reprints. Ralph Andreano has served as senior technical advisor to the working paper and reprint series, Alice Dowsett has been series editor and project coordinator, Beatrice Del Monte did the graphic design, and several anonymous reviewers have given additional valuable guidance. Permission to reprint this article has been provided by the Journal of Clinical Epidemiology, Elsevier Science, Ltd., Pergamon Imprint, Oxford, England, in which Professor Munishi's article initially appeared as Gaspar K. Munishi, "The Development of the Essential Drugs Program and Implications for Self-Reliance in Tanzania," vol. 44 (supplement II), 1991, pp. 7S - 14S. The Textile Museum of Washington, D.C. has provided permission to use the textile patterns appearing on the covers: the textile from a child's skirt in Indonesia (object number 67.4) on the cover of the working papers, and the cloth from the skirt of a male dancer in Zaire (object number 1988.11.1) on the cover of the reprints.
Foreword

Tanzania's experience with essential drugs illustrates the dilemma posed by the conflicting demands of immediate effectiveness and long-term sustainability. By all accounts, Tanzania's donor-assisted program was unusually effective in achieving its immediate objective of providing essential drugs to government facilities that previously lacked them. However, the attainment of sustainability has thus far proven elusive.

A central objective of the studies of the Tanzanian program undertaken by Gaspar Munishi and six colleagues since the late 1980s with support from the International Health Policy Program (IHPP) has been to identify a path toward sustainability. Their involvement began at the request of the then chief medical officer of Tanzania's Health Ministry, who correctly anticipated that the sustainability issue would soon become increasingly urgent. He thus turned to the University of Dar es Salaam's Department of Political Science and Public Administration for advice. Professor Munishi, a department member who is currently serving as dean of the university's Faculty of Arts and Social Science, has coordinated the study team since 1989.

To date, the team has produced nearly twenty papers on different aspects of the issue. Most of these papers have been designed for informal circulation and discussion with policymakers and others at seminars and meetings in Tanzania. However, two of them have been published in international, peer-reviewed journals. The study reprinted here is one of these two.

In this paper, Professor Munishi provides a historical overview of Tanzania's experience with essential drugs as it evolved during the 1970s and 1980s. As he explains, the initiation of the essential drugs program grew out of the economic crisis that had been brewing during the beginning of this period and came to a head in the early 1980s. As a result, Tanzania ran out of foreign exchange, and the country's supply of drugs—almost all either purchased from abroad or made from imported raw materials—declined drastically.

This decline caught the Tanzanian government's health programs at an unusually awkward time. Over the preceding years, the network of government health facilities had expanded rapidly and was already beginning to show signs of strain. The decline in the supply of essential drugs at government facilities induced by the crisis turned a worrisome situation into a desperate one.

In 1984, the government of Denmark stepped forward with an offer to meet the Tanzanian government's entire need for essential drugs in its rural facilities. Distribution of these drugs was to represent one element of a multifaceted program, which was also to include establishing an essential drugs list, improving Tanzania's pharmaceutical production capacities, and strengthening the Ministry of Health's Central Medical Stores (CMS) through which pharmaceutical supplies had previously flowed to government clinics. To distribute the drugs purchased with Danish assistance, a special strategy was developed.
It involved the preparation of uniform packages or kits of essential drugs at the Copenhagen central procurement agency of the United Nations Children’s Fund (UNICEF), with which the Tanzanian and Danish governments contracted to operate the program; the shipment of these kits directly to distribution points in Tanzania; and the monthly delivery of kits from the distribution points to dispensaries and health centers.

By all accounts, including that of Professor Munishi, this strategy proved remarkably effective in getting essential drugs to previously deprived health facilities, despite the formidable obstacles posed by the near-paralysis of the country's transportation and administrative systems. In doing so, it clearly provided a major service; however, other aspects of the overall essential drugs program fared notably less well. For example, plans to generate revenue through reimbursement for the drugs by the local governments receiving them fell through when the local governments were unable or unwilling to pay. As a result, the funds intended to enable the CMS to resume its previous role never became available. Also, the plan to revive Tanzania's pharmaceutical production facilities was never effectively implemented.

Thus, by the time Professor Munishi and his colleagues became involved, the essential drugs program had become a largely independent, vertical supply agency that was fully funded and primarily operated by the external agencies involved. It was providing some 60 to 80 percent of the country's drugs and becoming increasingly important as the government’s continuing financial problems resulted in the program’s taking over supply to urban as well as rural facilities. Government officials and donor representatives alike were coming to realize that, whatever its immediate benefits, such a system could not be sustained over the long term.

The exploration of this situation organized by Professor Munishi and his colleagues was by no means the first assessment of the essential drugs program to have been undertaken. It was, however, the first exploration to be designed and executed by Tanzanians, and to be led by political scientists with previous experience in many aspects of public administration and development policy outside the pharmaceutical sector.

The exploration has included a wide range of studies. These have produced numerous recommendations. For example, financial analyst Mushi investigated the program's financial dimensions. Using a series of projections, he argued that Tanzania's likely need for essential drugs far exceeded what the government could realistically be expected to finance. This led him to advocate that drugs be sold rather than provided free of charge.

In another study, epidemiologists Mnyika and Kilewo studied prescribing practices in a sample of government clinics. They found that clinic personnel inaccurately diagnosed illnesses in more than half of the cases they investigated and prescribed drugs irrationally in nearly two-thirds of them. They noted that diagnostic and prescribing accuracy could be improved significantly by means of such simple measures as brief refresher courses and adherence to appropriate treatment schedules. Their finding indicated that the supply
of drugs to facilities, while necessary, is not sufficient, and that education for facility staff and for patients is also an essential component of an effective pharmaceutical supply program.

These and other studies led Professor Munishi and his fellow investigators to recommend an alternative approach to the supply of essential drugs. This approach differed sharply from the centralized, top-down strategy as it had evolved up to that point, and also from the similar overall development strategy that had previously dominated Tanzanian government thinking. Instead, the recommended approach was oriented toward the village and the consumer, drawing on ideas beginning to emerge as the government shifted toward a more decentralized view of political, social, and economic development. At the heart of the approach were locally directed and financed village drug cooperatives that would buy drugs and supplies as needed from both national and international producers, and resell them to members at prices that would cover the cooperatives' expenses. The national-level supply and production systems would be designed to serve the needs expressed by cooperative members through their purchases, rather than to supply the drugs that the central authorities considered most appropriate.

As a first step in this direction, the IHPP-supported group recommended that regional and local authorities be encouraged to prepare and pay for supplementary drug kits. These kits would feature items whose supply was inadequate in the current kits. These items could be expected to vary from area to area because of differing disease patterns. By permitting flexibility, the supplementary kits would help overcome the standardized kits' inability to accommodate regional variations in health conditions, a widely recognized limitation. The supplementary kits would consist primarily of items produced by Tanzania's currently underutilized pharmaceutical industry, and as part of the approach the government would release an increased supply of foreign exchange to the industry to permit the purchase of raw materials. Over time, the scope of items in the supplementary kits would grow and that in the current kits would decline, thereby permitting local authorities to play an increasing administrative and financial role. This has not yet happened. However, it still might, for government thinking is changing in a manner conducive to the ideas that Professor Munishi and his colleagues have put forth.

These changes have been influenced by developments outside as well as within the pharmaceutical sector. At the international level, UNICEF has led in the development of an Africa-wide "Banako Initiative," which emphasizes locally managed and financed village drug cooperatives similar to those suggested by the IHPP-supported group, and this has greatly increased health policymakers' interest in local approaches like those the team has been advocating. Also, the shift away from centralized planning has continued in Tanzania. This and a concomitant erosion of earlier opposition to charging for services that were once free have facilitated consideration of locally organized and financed programs.
These and other changes have paved the way for a 1991 government master plan for pharmaceuticals, which includes some of the central reforms advocated by Professor Munishi and the members of his group. The basic strategy for pharmaceutical delivery, for instance, is to change from the present supply-oriented, foreign-led system to a demand-driven approach administered by districts. As a first step in this direction, the CMS has been transformed into an autonomous public sector institution, the Medical Stores Department, which is to take over both the management of the essential drugs program and the procurement of other government health supplies. In addition, the authorities have taken a series of steps to ensure that local governments pay for the drugs they receive through the essential drugs program. If successful, this will bring program financing a step closer to the village level.

In his more recent writing, Professor Munishi is skeptical of these changes. While acknowledging that they are steps in the right direction, he doubts whether they go far enough to represent a significant change from the traditional, centralized approach that has served as an important deterrent to the achievement of long-term sustainability. Others worry for different reasons. They are concerned that local cooperatives would give in to the popular pressure for inappropriate medications found by Mnyika and Killewo, thereby worsening the situation.

How justified are such doubts and worries? Do the changes under way represent a false start or a start in the wrong direction? Or will they prove to represent important first steps toward the sustainable approach—which might include elements of the strategy suggested by the IHPP-supported group—that everyone agrees is needed?

Only time will tell. The Tanzanian essential drugs program's struggle for sustainability is an ongoing one, whose end is not yet in sight. The struggle represents an instructive case study in the transformation of an externally financed, largely independent, vertical program to an ongoing, locally based, and locally financed activity undertaken as an integral component of an overall development effort. As such, it deals with an issue that is important not only for the delivery of pharmaceutical products and health services, but also for programs in many other areas of development. Its progress is thus well worth following closely.

Davidson R. Gwatkin
Director
International Health Policy Program

THE DEVELOPMENT OF THE ESSENTIAL DRUGS PROGRAM AND IMPLICATIONS FOR SELF-RELIANCE IN TANZANIA*

GASPAR K. MUNISHI

Department of Public Administration, University of Dar es Salaam, P.O. Box 35691,
Dar es Salaam, Tanzania

Abstract—This report provides a background history of the Essential Drugs Program (EDP) in Tanzania. Because of a scarcity of drugs in the Ministry of Health (MOH) managed units a program to fill up the empty shelves was welcomed. Critical questions were not addressed about other important policy components. Success of the EDP has been measured in terms of a successful delivery of drugs without questioning the source and its reliability in the near future. Other program components have not been implemented successfully to insure the program's sustainability and self-reliance. There is a need to improve local production, quality assurance capability, inspection, intersectoral linkages and active local participation in shouldering the financial burden.

INTRODUCTION: PRELUDE TO PROBLEMS OF SELF-RELIANCE AND THE ESSENTIAL DRUGS PROGRAM (EDP) IN TANZANIA

The Essential Drugs Program (EDP) in Tanzania was initiated in 1983, because of the pressing conditions of scarcity of medicines in most of Tanzanian health units; especially the rural health centers and dispensaries. The acceptance of EDP in Tanzania was influenced by three major factors. The first was an economic crisis which persisted during the 1970s. It had reduced the capability of the government to afford the free health services offered in its 239 health centers, 2644 dispensaries and 146 hospitals. Although there were healthcare facilities throughout most of the country they lacked basic, essential medicines. The second factor was development of the WHO concept of an essential drugs program. Third, the state had developed a paternalistic welfare system which provided medicines free of charge. It was believed that a rationalized, shortened list of essential drugs would be better than an open-ended list of drugs liberally used by prescribers.

A brief background to the environment surrounding the implementation of the EDP, especially the political and economic aspects in historical perspectives is necessary. Tanzania attained its political independence in 1961 as one of the poorest states in the world. Life expectancy was 35 years (1964), per capita income of the Sterling was f18; and there was a high infant mortality rate of 215 per 1000 (1961).

About 95% of the entire Tanzanian population lived in rural areas. The new nationalist government vowed to fight three major enemies, namely, ignorance, by providing free education to the masses; poverty, by creating productive opportunities; and diseases, by providing primary and free medical care to its entire population.

In providing health services, the central government's involvement was modest at independence but changed progressively with time. At the time of independence local governments and Christian voluntary agencies (VA) played quite a significant role, especially at the dispensary level. Most of the dispensaries were based in the

*Research for this paper was made possible by a generous grant from the Carnegie Corporation of New York.
Table 1. The distribution of health provision units in Tanzania as of independence in 1961

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<th></th>
<th>Hospitals</th>
<th>Health centres</th>
<th>Dispensaries</th>
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<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Beds</td>
<td>Number</td>
</tr>
<tr>
<td>Central government</td>
<td>52</td>
<td>6565</td>
<td>---</td>
</tr>
<tr>
<td>Local governments</td>
<td>---</td>
<td>---</td>
<td>22</td>
</tr>
<tr>
<td>Voluntary agencies</td>
<td>48</td>
<td>4724</td>
<td>---</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>11,289</td>
<td>22</td>
</tr>
</tbody>
</table>


rural areas. The distribution of the health units in 1961 is shown in Table 1.

In addition to the health units, there were also 19 special hospitals which dealt with specific diseases, such as leprosy and tuberculosis. Voluntary agencies managed 48% of the hospitals, while local governments managed 86% of all dispensaries. The central government managed only 25% of the dispensaries at that time. The balance started to shift after 1967 when Tanzania declared a grand policy of socialism and self-reliance. This committed the government to provide social services such as education and health services on an equal basis to the different Tanzanian regions. Locally organized groups in the regions (districts) erected buildings for dispensaries and then called in the government to provide the medicines and staff to manage the units. Self-reliance appeared to end with the completion of the structures, after which, the government was expected to take over the responsibility. This also produced a situation in which political development resulted in centralization of the provision of essential services to the masses.

In 1969 the government took over the responsibility of establishing and managing all major units which provided essential services, especially those concerned with education and health. This in a way was a systematic centralization in the production and distribution of essential services. This resulted in the creation of 736 dispensaries, belonging to both central and local governments. The number rose to 1425 10 years later (1971), and increased to 2644 dispensaries in 1984. This does not include the voluntary agencies' dispensaries which also kept on increasing as well. Most voluntary agencies' dispensaries continue to receive large grants from the government for staff, salaries and bed charges. The structure of the government health units is shown in Table 2.

During the post-1980 years government policy deliberately discouraged the establishment of new health units. The main burdens of the government were to manage the already numerous health units, and dispense free medical services to the majority of the people. The responsibility of supplying the units with medicines increased the government's burden. In addition, the government had to assist the voluntary agencies' health units, including provision of supplies. Voluntary agencies' units are allowed to purchase subsidized drugs from the government-owned Central Medical Stores.

Because of its social nature, the government initially had no clear policy on the role of the private sector. Private hospitals and clinics were prescribed in 1981, save for a few, which could claim attachment to some voluntary agency. The government then went further and nationalized even the large voluntary agencies' hospitals, for example the Kilimanjaro Christian Medical Centre in Moshi and the Bugando Hospital in Mwanza. These now serve as consultant hospitals in particular zones.

This background indicates the extent to which politically motivated statization occurred in the provision of the health services. It also explains

Table 2. The hierarchy of government health units establishments in Tanzania

<table>
<thead>
<tr>
<th>Administrative area/zone</th>
<th>Number</th>
<th>Number of health units</th>
<th>Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region</td>
<td>Consultant hospitals</td>
<td>4</td>
<td>Medical superintendent</td>
</tr>
<tr>
<td></td>
<td>Regional hospitals</td>
<td>17</td>
<td>Regional medical officer</td>
</tr>
<tr>
<td>District</td>
<td>District hospitals</td>
<td>129</td>
<td>District medical officer</td>
</tr>
<tr>
<td>Division</td>
<td>Health centre</td>
<td>239</td>
<td>Medical assistant</td>
</tr>
<tr>
<td>Ward</td>
<td>Dispensary</td>
<td>2644</td>
<td>Rural medical aid</td>
</tr>
<tr>
<td>Village</td>
<td>Health post</td>
<td>257</td>
<td>Village health worker</td>
</tr>
</tbody>
</table>

Source: Ministry of Health Headquarters.
the difficulties faced in implementation of the EDP. Measures to achieve self-reliance and some initiatives for cost recovery were put before government and the ruling political party, but were usually turned down as inappropriate policy.

On the economic side, Tanzania was not doing well. The prices of commodities such as coffee, cotton and sisal, on which it depended, kept falling. With decreasing financial resources, the Ministry of Health (MOH) budget was kept constant or reduced despite the increasing population and worsening living standards. Starting in 1975 for example, the per capita expenditure on healthcare services dwindled or remained constant. The rates have been at T.sh. 24.80 in 1975/76 to T.sh. 23.18 in 1988/89. The budget was kept constant because of foreign aid. Currently foreign aid to Tanzania exceeds 50% of the foreign exchange. It also amounts to 15% of the Gross Domestic Product (GDP). The economic deterioration in the late 1970s brought to Tanzania a pathetic situation. The MOH could not provide adequate essential medicines or drugs to the health units. Though there was an elaborate network of national health units within a walking distance of 5–10 km for about 90–95% of the population, these were useless without the essential medicines. The situation became more alarming and the government had to seek some assistance from friendly countries. Some responded quite positively, but medicine supplies were not organized or reliable.

A task force was created in 1979 to examine the situation and make recommendations concerning the scarcity of drugs in Tanzania. The task force included experts from the World Health Organization (WHO), United Nations Children’s Fund (UNICEF) and the Ministry of Health (MOH). The task force reasoned that the acute shortage had been caused by the shortage of foreign currency to import the drugs, an increasing population, and awareness of the usefulness of modern medicines. Wastage was caused by lack of planning and control in the production, procurement and distribution of drugs and the uncontrolled procurement and prescription of drugs.

THE ESSENTIAL DRUGS PROGRAM

The Essential Drugs Program (EDP) was created specifically to deal with the drugs scarcity crisis in the country. The objectives of the EDP were intended in principle to create reliable procurement sources and an efficient effective distribution system, and hopefully to lessen dependence on external support for the supplies. The extent to which these objectives were realized is the subject of this presentation.

The 1981 task force recommended: (a) development of an essential drug list to include a shortlist of effective medicines; (b) a system of security to assure a continuous flow of affordable, essential drugs which would be available even in times of minimal budgetary allocations; (c) a system that would distribute and use essential drugs in the most cost-efficient manner; (d) placing the MOH in charge of all the importation of pharmaceuticals; (e) requiring that importers and users adopt the established list of essential drugs; (f) discouragement and eventual abolition of brand names in favour of generics; (g) creation of conditions for merged or closely coordinated drugs procurement channels; and (h) development and strengthening of local production, especially in the areas of essential drugs.

The implementation of the task force recommendations provided the rationale for the creation of the EDP in 1983. It was considered to be a component of the Primary Health Care program in the context of the 20 year term of the MOH plan (1980–2000). Tanzania reasoned that there cannot be a convincing Primary Health Care (PHC) program without well-managed procurement and distribution of essential drugs; and that the Alma Ata commitment could not be achieved without strengthening the drugs supply and utilization conditions in the country.

A situation analysis of what was needed to deal with the scarcity of drugs was completed by 1982. Tanzania searched for assistance and obtained it principally from the Danish Government which offered a grant of U.S. $30 million to initiate the program. The other principal actors in the EDP were the WHO which offered advice periodically and UNICEF which managed the program from its inception.

The operating principle of the drugs supply system in Tanzanian EDP was the creation of two types of “ration kits”. The first one was the dispensary kit intended to contain medicines to treat 1000 attending cases for an estimated period of 30 days. Each type of drug or other elements contained in the kit were expected to last for 30 days, when replenishment was
delivered by opening of a new kit for the ensuing month. The second kit was larger and it was designed for a health centre. A health centre was estimated to serve 2000 cases a month, and the contents of the drugs was therefore expected to serve this population for 30 days. The supplies were prepared and arrived in time to start the program in 1983. The funding initiative was through a generous grant from DANIDA which provided 100% of the medicaments under the program context.

A VIEW OF PERFORMANCE IN SOME COMPONENTS OF THE ESSENTIAL DRUGS PROGRAM (EDP)

One major component of the EDP was the creation and adherence to an essential drugs list. The logic and usefulness of such a list had been given serious consideration even before the initiation of the EDP. The first attempt to draw up such a list had been made in 1977, as a strategy to deal with the worsening economic conditions of the late 1970s. The list was revised in 1981 and in 1986.

The existence of an essential drugs list is quite different from its implementation. The list had no legal backing to oblige drugs producers, importers and distributors to adhere to its standard elements. The list was implemented by the units directly falling under the MOH, but not so much those outside it. It is still voluntary in the eyes of the major public-owned drugs producers such as Tanzania Pharmaceutical Industries (TPI) and Keko Pharmaceutical Industries (KPI). The major public-owned drugs importers and distributors, namely the National Pharmaceutical Company (NAPCO) has its drug procurement and distribution pegged to 50% of brand names and the rest is optionally left out for generics. Controlling and directing the activities of companies such as NAPCO has been rather difficult. They fall under jurisdiction of the Ministry of Trade and Industries that has a primary concern for profit, while the MOH has always been geared to provide free services to the majority of the population. The development of the Nation's Drug Policy is seen to be an affair of the MOH alone, making its implementation quite impossible. In short, if one expects that adherence to a shortened list of essential drugs is a strategy to make an optimum use of scarce resources, then this strategy has fallen short of effective implementation by not only the private sector agencies involved in drugs, but to a large extent even by the government-owned drug units outside the MOH. There was lack of coordination between the public agencies purported to be implementing a public policy as important as the EDP.

Drugs procurement was another program component which was expected to have an impact. An integrated or well-coordinated procurement system was expected to be in place. Instead the old system, which is still largely in practice, has procured drugs from the Central Medical Stores for MOH-owned health units and some non-profit VA units. The VA units individually acquire drugs from abroad through direct purchasing or by donations from their benefactors abroad. The second major institution is the National Pharmaceutical Company (NAPCO) which procures and distributes to private pharmacies, drug shops and clinics. Under such a procurement system, one cannot determine adherence to the Essential Drugs List. This means that while the MOH and its EDP advocates adhere to generics, outside procurement agencies tend to make their own options without regard to the EDP recommendations.

There are some more far reaching implications for self-reliance for the nation. The process of a drugs management cycle, namely, selection, quantification, procurement, distribution, storage and drug utilization, are not being institutionalized by using the EDP facilities. This undermines quality assurance and the state's capacity to handle drugs procurement and distribution.

The process of drug procurement as designed within the EDP system does not enhance self-reliance either. When the EDP started in 1983 it was considered proper to organize a vertical program. The existing government medical procurement agency—the Central Medical Stores (CMS) was considered inefficient at the initiation of the EDP in 1983. While the EDP would continue to use the CMS premises and improve the CMS system, the EDP procurement system is a detached unit. The EDP program manager in the MOH liaises with the UNICEF country office in determining the quantities required for specific health units in remote or to other parts of the country. UNICEF forwards orders for drugs to its unit—the UNICEF Packing and Assembly Plant or UNIPAC in Copenhagen. The orders are packaged into dispensary and health centre kits. The kits are assembled according to the six
zonal destinations in Tanzania. They are containerized and shipped directly to the zonal centres without going through the MOH or CMS. The containers are opened at the zonal office. Kits are counted and distributed directly to districts (Medical Officers) who make arrangements to have the kits delivered to dispensaries and health centres every month or so. A new kit is opened on the 1st and 15th day of the month in cases where a dispensary gets two kits.

The process assures that containers with drug kits are shipped directly to Zonal Medical Stores and then to the dispensaries in Tanzania with minimum or no problems. It is not clear how such a verticalized and centralized procurement and distribution system will in the future be handled by Tanzanians to maintain the efficient manner in which it now operates. The degree of active participation by MOH officials in the process is quite small compared to the complex process of selection, assembling, shipping, etc.

CMS continues to procure and distribute medicines to public units outside the EDP system. The system faces acute liquidity problems which develop into drug shortages in government dispensaries, health centres and hospitals that are outside the EDP procurement and supply system. In response to this, EDP (as of 1989/1990 onwards) now promises to extend its activities in a wider area to include government health units hitherto not integrated in the initial EDP. This also implies that the principal donor (DANIDA) is prepared to continue to shoulder a heavier load than before, but of course not permanently.

There are some built-in methods to ensure that funds are created to enable the CMS to eventually take up the role of UNIPAC (UNICEF). Once the kits have been delivered to the Zonal Medical Stores, the District Executive Directors are supposed to pay for the kits supplied to their respective health units by funds granted by the central government for that purpose and deposited with the Ministry of Local Government. But paying the funds to the CMS has proved quite unsatisfactory. Only 50% of funds are recovered by the CMS for its intended revolving fund. This state of debt recovery has two aspects. First the EDP facility supplies drugs without helping to create a revolving fund in CMS that will eventually take over the procurement when DANIDA and UNICEF withdraw their support. Secondly the funds intended by the government for drug purchase and unremit to the CMS revolving fund may be used by the district-level government for inappropriate commitments such as personal emoluments. The MOH has no power over the money because it is initially allocated to the Ministry of Local Government (MLG). The MLG is supposed to provide the funds to the district level where they are to pay for the EDP and other drug purchases or supplies committed by government health units under their administrative jurisdictions. The activities of the district level in drug fund raising and administration also contributes to the unlikely event that districts will be able to procure drugs on their own.

The distribution system does not hold up supplies if debts are not recovered. Therefore there is increasing indebtedness on the part of District Councils while the CMS does not keep its revolving fund account growing. An example of the state of payment trends is shown for the northern Zone (Table 3). The total debts for the 19 districts amount to T.sh. 48,810,612.85 for the period 1984–1987.

The growing debt trend can also be attributed to the effect of devaluation of the Tanzanian shilling. The prices are adjusted accordingly since the sole source is by importation using hard currencies. The attitudes of the local authorities has been apathetic. They are astounded by the rapidly rising prices of kits. But since they are not required to pay promptly, they continue to wait and see what steps are to be taken by the government. The pricing factor forced some 13 VA dispensaries to refuse their kit allocation in 1989 in Kilimanjaro. They are required to pay cash on collection and sell to users at minimal prices. They argued that they would have

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<td>Tanga</td>
<td>391,895.35</td>
<td>3,155,200.00</td>
<td>3,905,234.00</td>
<td>12,380,674.00</td>
</tr>
<tr>
<td>Arusha</td>
<td>655,512.50</td>
<td>3,508,879.55</td>
<td>2,858,937.85</td>
<td>9,867,206.00</td>
</tr>
<tr>
<td>Kilimanjaro</td>
<td>540,654.40</td>
<td>6,466,407.85</td>
<td>9,572,766.85</td>
<td>28,913,181.25</td>
</tr>
</tbody>
</table>

Source: Northern Zonal Medical Stores Office Moshi.
problems in raising the money and charges to patients would have to be too high.

All of this occurs in an environment in which the International Monetary Fund (IMF) requires devaluation of the currency before a country is provided with a loan or any assistance. This pinches the local drug users and indirectly undermines the ability to raise funds for the CMS revolving fund. More significantly though, is the fact that there seems to be a questionable capability to purchase drugs on the part of the District Councils (which administer the government dispensaries and health centres). For example, in one district in Arusha region, Monduli, the Council’s health-services allocated funds were not impressive. Its vote code number 513 (which includes drugs for dispensaries) allocations were not measuring up to the expected commitments as shown in Table 4.

The districts are quite unprepared to financially shoulder the drug bill in their jurisdictions. Monduli was selected as being one of the districts whose income earning is average. The districts’ fund raising capabilities are further impaired by a deliberate centralization of various forms of taxation and licence issuance.

The EDP may be sustained by use of local production—enhancement. Presently, UNIPAC supplies rural health units with minor items which may be procured from local manufacturers. Items like cotton wool, record forms and some basic drugs could be obtained from local manufacturers if only conditions were improved. The plans of operations from 1983 onward promises EDP’s assistance to local production units which would eventually take over the supply of the essential drugs. Some suggested strategies include combined kits that could be repackaged at the country (MOH) level. Locally designed and produced elements of the kits could be added into the individual zonal and/or district-directed kits. Unfortu-

nately there are no mechanisms to enable local producers to participate in the supply of the essential drugs and other items designed for the kits.

It was also intended that at some stage the CMS would be able to increase its capability to handle local packing. This strategy would have enabled the CMS to pack and distribute health centre and dispensary kits trying to accommodate the variations in disease syndromes which vary with time and geographical conditions in the country. These strategies have not been implemented after nearly a decade of the EDP existence in Tanzania.

The long-term objective was to have the EDP assist the publicly-owned drug manufacturing plants to increase quality and capacity. Most plants use only 40% of their installed capacity and some, such as the Tanzania Pharmaceutical Industries (TPI), used as little as 25% of their capacity in some years, Table 5.

The local industries could contribute much if means were found to enhance their utilization. One major factor which limits capacity utilization is an acute shortage of raw materials which have to be imported using hard currencies. High interest rates and other conditions make local bank loans for purchasing the foreign currency from the Central Bank rather expensive, and manufacturers (whose prices are most likely to be state-controlled) are discouraged from borrowing. If it were possible for the EDP system to provide basic raw materials to the manufacturers for the production of some essential drugs, the EDP could make great strides to assist local production.

The major local drug manufacturers (Tanzania Pharmaceutical Industries (TPI) and the Keko Pharmaceutical Industries (KPI)) produce many items which are presently supplied by the EDP–UNIPAC procurement system. TPI, for example, is capable of contributing 28 items. These include ampicillin, chloramphenicol, chloroquine, multivitamins, tetracycline, anti-acid tablets, co-trimoxazole, cough syrup, ex-petamin syrup, metronidazole, paracetamol, penicillin V, procaine penicillin, water for injection and salbutamol. KPI is also capable of contributing 12 items to the kit. These include infusions, aspirin, diazepam, chloroquine, mebendazole, aminophylline, folic acid, tetracycline, bendrofluzide, chlorpromazine and paracetamol.

There are numerous reasons why the local industries are incapable of being integrated into

<table>
<thead>
<tr>
<th>Estimated Expenditure</th>
<th>Actual Expenditure</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984/85</td>
<td>245,600.00</td>
<td>2,336.00</td>
</tr>
<tr>
<td>1985/86</td>
<td>620,000.00</td>
<td>100,000.00</td>
</tr>
<tr>
<td>1986/87</td>
<td>884,500.00</td>
<td>293,299.00</td>
</tr>
<tr>
<td>1987/88</td>
<td>4,305,600.00</td>
<td>1,092,129.80</td>
</tr>
</tbody>
</table>

Source: Examination of files and interview with Mr J. Kichao in District Medical Officer’s Office, Monduli, Arusha.
the EDP and unable to take over even part of the supply. These include the fact that the kits are prepared overseas, and are not to be opened up until they reach the prescribing/dispensing counters. Second, the EDP objective, to strengthen local production, has not been implemented. Third, the organization of the EDP as a uni-sector, vertical program structured as a bilateral/multilateral-managed procurement system discourages coordination among sectors within the country. This hinders involvement of the local participants. Fourth, there is a misunderstanding that a success of an EDP depends only on procurement and efficient distribution of drugs. The goals of the program in Tanzania were much broader. They were to include selection, storage, utilization, quality assurance and local production as well. The EDP program in Tanzania is partly successful, but has not had a favourable impact on local production. This is needed to sustain the program and assure self-reliance.

SOME REFLECTIONS ON DRUG POLICY AND SELF RELIANCE: THEORY AND PRACTICE PROBLEMS

I have noted that the EDP has had problems in implementation because of its vertical orientation. But the EDP implementation plans call for a more modified approach [1]. It should have some horizontal aspects which include programs in immunization, control of Acquired Immunity Deficiency Syndrome (AIDS), maternal and child health, and control of malaria. Unfortunately the other programs are autonomous. This creates parallel, competing activities among externally-funded programs. There are 17 parallel programs in the MOH whose resource utilization is not coordinated.

Should there be a single- or limited-purpose program that focuses on a few objectives, or a broad-purpose program with varying objectives? The design of the EDP is multipurpose. Its implementation remains limited-purpose. Procurement of medicines and efficient delivery has been achieved. But, the other expectations to attain program self-sustenance and self-reliance have not been achieved. The MOH policy makers are considering broadening of the EDP objectives from drug procurement from abroad, and distribution to MOH health units, to a more general program to include local production, quality control capability, local packing and management of distribution; and most importantly selling the idea to policy makers at Cabinet level. The drug users also need to be educated to cooperate with the EDP. This is a widespread problem in the development of a drug policy in developing countries [2]. Institutions outside the MOH, along with some in the MOH still resist the philosophy of a limited number of generic drugs. The major public drug procurement and distribution company (NAPCO) seems to be unprepared to integrate with EDP for joint procurement even if such a move would save foreign exchange resources and contribute towards self-reliance.

Donor-supported programmes (especially when support is 100%) seems to deter self-reliance. The donor's muscle is much stronger than the recipient can fend off. Donors also want highly-silhouetted programs that make a great impact in short periods. That kind of expectation by donors tends to tilt programs to a vertical single-purpose approach, with heavy overhead costs. Sometimes efforts of the donors seem not to recognize the existence of capacities in the local environment which can be integrated into their program from their very initiation [3]. The EDP has operated more or less parallel to the MOH's and CMS's operations in the area of procurement and distribution.
CONCLUDING REMARKS

This report provides a background history of the Essential Drugs Program (EDP) in Tanzania. Because of a scarcity of drugs in the Ministry of Health (MOH) managed units a program to fill up the empty shelves was welcomed. Critical questions were not addressed about other important policy components. Success of the EDP has been measured in terms of a successful delivery of drugs without questioning the source and its reliability in the near future. Other program components have not been implemented successfully to insure the program’s sustainability and self-reliance. There is a need to improve local production, quality assurance capability, inspection, intersectoral linkages and active local participation in shouldering the financial burden.

This paper has not addressed the issue of community participation in the EDP program. As a vertical program, that is rather paternalistic, not much is expected from the ordinary-level citizen to participate. Its primary concern has been to deliver the drugs to the communities. This is one of the problems of “development from above”. In such situations program outputs may be used to court political support under conditions in which communities have to continue to say “thank you to the providers” as long as the supplies flow. This is a dependency syndrome.

In another dimension, program sustainability and self-reliance implies a process of institutionalization of the program’s concepts and rationale. The concept of institutionalization entails propagation, integration, internalization and rationalization of the new organizational concepts and processes into or with the existing ones. The EDP in Tanzania is not taking steps towards program institutionalization. Even though the programs are to provide multilateral or bilateral assistance they have tended to be suspicious of the existing institutional framework. New programs like the EDP are started, in parallel with familiar institutional frameworks and tend to ignore the expectation that program administrators need to take over.

The need for self-reliance and sustainability requires that existing organizational forms accept new programs and concepts; but also develop systematic local initiatives (that may cut across sectors) to transform and adopt the program as their own. When small communities are self-reliant, their state also becomes self-reliant. The EDP design and its implementation seems not to have taken this dictum seriously.

REFERENCES


APPENDIX I

| Items Contained in the Essential Drug Program Dispensary and Health Centre Kits |
| Acetylsalicylic acid | Procaaine penicillin |
| Aminophylline | Vitamin A |
| Diazepam | Sulfamethoxazole + trimethoprim |
| Belladona extract | Tetracycline |
| Benzathine benzyl penicillin | Water for injection |
| Benzyl benzate emulsion | Chlorpromazine |
| Chloroquine phosphate | Surgical blade |
| Chlorpheniramine maleate | Syringe |
| Chlorpromazine | Silk sutures |
| Benzoic acid ointment | Catgut sutures |
| Magnesium trisilicate | Suture needles |
| Acriflavine | Needle, intramuscular |
| Gentian violet crystals | Gloves |
| Ephedrine | Gauze, absorbent |
| Epinephrine (adrenaline) | Cotton wool, absorbent |
| Ergometric oxytocin | Bandages |
| Ferrous sulphate | Paracetamol |
| Folic acid | Phenobarbital |
| Lidocaine | Phenoxymethyl penicillin |
| Methedrazole | Phenytin sodium |