Rational Pharmaceutical Management Plus Mapping of *Duka la Dawa Baridi* Services in Ulanga District, Morogoro October 12-23, 2005.

Dr Romuald Mbwasi Rogatian Shirima Allen Malisa Richard Valimba

Management Sciences for Health
Rational Pharmaceutical Management Plus Program
MSH Tanzania Office Dar es Salaam
P.O. Box 50104, ASG Building -Nyerere Road
Dar es Salaam, TANZANIA
Fax number: (255)-22-2136412





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About RPM Plus

The Rational Pharmaceutical Management Plus (RPM Plus) is a program within the Center for Pharmaceutical Management of Management Sciences for Health (MSH) that provides technical assistance in strengthening drug and health commodity management systems. The program offers technical guidance and assists in strategy development and program implementation in improving the availability of health commodities—pharmaceuticals, vaccines, supplies, and basic medical equipment—of assured quality for maternal and child health, HIV/AIDS, infectious diseases, and family planning. RPM Plus also promotes the appropriate use of health commodities in the public and private sectors. RPM plus is funded by the United States Agency for International Development under co-operative agreement Number HRN-A-OO-OO-OOO16-OO.

Contents

Acronyms	4
Background	6
Purpose of the Mapping	7
District: Ulanga	8
Duka la Dawa Baridi in Ulanga	9
Services Provided and Quality of Care	9
Participation of Local Government Authorities and Officials	13
Problems with DLDB as expressed by Local Leaders	14
Infrastructure	15
Annex 1: Location of DLDB in Ulanga District	17
Annex 2: Distribution of DLDB by Ward and Population Size	18
Annex 3: Most commonly dispensed medicines and average prices	19
Annex 4: List of Resource Persons Interviewed	20
Annex 5: Mapping Itineraries	24
Annex 6: Mapping Tools	ot defined.

ACRONYMS

ADDO Accredited Drug Dispensing Outlet

AIDS Acquired Immune Deficiency Syndrome

DDTC District Drug Therapeutic Committee

DLDM Duka la Dawa Muhimu (ADDO)

DLDB Duka la Dawa Baridi (Part II Drug Shops)

DMO District Medical Officer

RPM Plus Rational Pharmaceutical Management Plus

TFDA Tanzania Food and Drugs Administration

USAID United States Agency for International Development

VEO Village Executive Officer

WEO Ward Executive Officer.



Crossing Kilombero river on a canoe......ADDO will reach every corner.



Now we can ride (Dr Mbwasi on the bicycle & canoe during mapping)

BACKGROUND

Duka la Dawa Baridi (DLDBs) were constituted by the Tanzania Food and Drugs Authority (TFDA) to provide non-prescription drugs in the private sector, as opposed to pharmacies that provide both prescription and non-prescription drugs. DLDBs constitute the largest network of licensed retail outlets for basic essential drugs in Tanzania. It is estimated that there are more than 4,600 DLDBs across all districts in the country; over 50% more than all public health facilities and 11% higher than all public, voluntary, and religious facilities combined.

DLDB Ownership

DLDB owners tend to be equally divided between medical staff working within the government health system (doctors, nurses, clinical officers) and non-medical persons. The non-medical owners included farmers and business persons. Few DLDB owners are women however this number may change after accreditation as women are more and more mobilized by the government to become self employed and entrepreneurs.

Application Process

Application to open a *Duka la Dawa Baridi (DLDBs)* must receive approval from various levels of local government including the village government, the District Medical Officer (DMO), and the Regional Drug Advisory Committee chaired by the Regional Commissioner. The approved applicant pays a fee of TSH of 10,000 (approx. US\$ 10) before being issued with permit by the TFDA. The application process can vary from a few months to one year.

Regulations require the DLDB owner to apply annually for TFDA permit (either at the beginning of January or July). The owners are also required to apply for a business license from the respective District Council at the same period. The current business licensing procedures stipulates that owners with business gross income of less than TZS. 20 million (approx. US\$20,000) need to apply for a license once only.

The current system requires owners to travel to regional headquarters just to collect the TFDA permit; which can be very expensive and may contribute to many shops operating without a TFDA permit on the premises.

Inspection

Inspection of the DLDB has been delegated by the TFDA to the Regional Drug Advisory Committee. According to the 1978 Pharmacy and Poisons Act no. 8, district authorities were not mandated to carry out inspection of pharmaceutical outlets, although administratively in some districts DMOs with their pharmacy staff do carry out some inspections. Nevertheless, the new TFDA Act of 2003 does give mandate to TFDA to appoint any person or a team of persons at any level to carry out inspectorate activity on behalf of TFDA.

Drug shops have mushroomed illegally since 2003 when TFDA issued a directive to all Regional Technical Drug Advisory Committees not to issue TFDA permits and business

licenses for establishing new drug shops. Many *duka la dawa baridi* have rarely been visited for inspection or supervision purposes.

PURPOSE OF THE MAPPING

Although they provide an essential service, evidence shows that DLDB shops are not operating as intended. Prescription drugs that are prohibited for sale by the TFDA are invariably available for sale, quality cannot be assured, and the majority of DLDBs dispensing staff lack basic qualification, training, and business skills.

As a result, the MOH/TFDA, in collaboration with MSH, has developed a process where Duka la Dawa Baridi (DLDBs) can gain accreditation and become Duka la Dawa Muhimu (DLDM) also known as Accredited Drug Dispensing Outlets (ADDOs). Accreditation involves a comprehensive approach combining education, incentives, and regulatory oversight while also affecting client demand/expectation of quality products and services. The project has been piloted in Rivuma region and will be expanded to Morogoro region over a 30-month period beginning in July 2005.

The TFDA, with technical assistance from MSH, will provide program planning and regulatory oversight; the Mennonite Economic Development Associates (MEDA) will direct business development, training, and monitoring and evaluation. In addition to replicating the basic ADDO system, the program will further develop ADDOs to support HIV/AIDS care and treatment programs.

Mapping is one of the first activities in the accreditation process – carried out after regional and district level consultation and sensitization workshops have been conducted. The purpose of the mapping activity is to collect basic information on the existing *duka la dawa baridi* services in a district and has the following specific objectives:

- 1. To identify and locate all existing *duka la dawa baridi* in the district, and determine their registration status.
- 2. To assess services provided by *duka la dawa baridi*, including the determination of medicines dispensed and the price at which they are sold; the skills and training of dispensers; the infrastructure of the facility; population served and overall quality of care provided.
- 3. To determine the participation and involvement of local government authorities/officials (District, WEO and VEO) in the inspection, regulation, supervision monitoring and application process of DLDB.
- 4. To identify problems with *duka la dawa baridi* as perceived by local leaders (WEO, VEO) and to solicit recommendations for improved performance.

5. To assess general infrastructure in the district (roads network, communication and training facilities) and gather other relevant information that will likely help in delivering DLDB services and scaling up the ADDO accreditation process.

Mapping in Ulanga District was carried out October 12-23, 2005. Two teams using rapid assessment tools carried out the assessment in five divisions, namely Mwaya, Vigoi, Lupilo, Mtimbira and Malinyi. Key informants included:

- Ward Executive Officers (WEO)
- Village Executive Officers (VEO)
- Owners and sellers of DLDB
- District officials

DISTRICT: ULANGA

Ulanga is one among the six districts in Morogoro region. Located in the southern part of Morogoro region; Ulanga has a population of about 200,000 people (2002 census).

The district lies in the Kilombero river plateau, the flat, fertile agricultural land with several large and small rivers most of which do not dry up during the dry season. A substantial part of Ulanga district lies within the Sealous National Game Reserve.

Administratively, the district has five divisions, twenty-four wards and sixty five villages.

In Ulanga district there are 2 hospitals: Mahenge district hospital (government-public) and Lughala hospital (Lutheran). In addition, there are 3 government health centers located in Mwaya, Lupiro and Mtimbira divisions. There are 25 dispensaries: 13 government, 11 NGO and 1 private dispensary which is located in Ngombo. Populations living in the southern part of Ulanga district have difficulty reaching the district government hospital and therefore depend on the mission hospital at Lughala or Ifakara

HIV Prevalence and Services for People Living with HIV/AIDS

Catholic Church Hospital in Kilombero district for referral services.

ADDO program in Morogoro region will integrate HIV/AIDS prevention, care and treatment activities. In particular ADDO will try to link its services to home-based care (HBC) being provided to critically sick patients. Since HIV/AIDS is a major problem, basic information was collected on HIV/AIDS prevalence and the availability of organizations NGOs or Govt. that provide related services.

Regional data indicates that about 95,030 individuals are HIV positive which is a prevalence of about 5.4% of the regional population of 1,759,809 inhabitants.



Data obtained from the District AIDS Coordinator shows that Lupilo, Mtimbira and Malinyi divisions have a HIV prevalence of 22%, 12% and 10% respectively. Mahenge on the other hand has very low HIV prevalence (1.9%) among antenatal pregnant women. Ulanga District does not have public facilities which provide Home Based Care (HBC) services for chronically sick patients staying at their homes, but has a number of NGO providing such services.

DUKA LA DAWA BARIDI IN ULANGA

There were a total of 32 DLDB shops identified in all 5 divisions of Ulanga district. See Annex 1. However, DLDBs were not evenly distributed across all wards and villages, with most concentrated in the main peri-urban trading areas. Eight wards, located far from the main roads were found to have no DLDB shop at all. See Annex 2.

Although the regional pharmacist office provided the list of names of shops which were approved by the Regional Drug Advisory Committee and the permits issued, these have not been collected or sent to the respective applicants. Only 15 (48.4%) shops had TFDA permits issued in 2004/05, only 2.9% had the 2005/2006 TFDA permit physically verified in their shops during the mapping. Respondents complained of the frequent travel trips required for follow up in the application process. Communication from the Regional or district office to the applicant informing the status of the application has rarely been the practice.

The ownership of the shops according to the regional pharmacist is equally distributed between medical staff working within the government health system and non medical or non government employed persons. Owners include farmers, business persons and those with medical/nursing background. Very few women in Ulanga district, about 5%, own DLDB outlets. Most owners are men. Some respondents pointed out that shops could only be established by those who had medical background and in a case where non medical person wanted to operate such a shop, a care taker with a medical background had to be identified. In such arrangement the actual owners name would not appear openly to the authorities. Some say that this was the reason that made some people not with medical background fail to apply for operating DLDB. This observation was very much true for Malinyi and Mtimbira divisions but the situation in Mahenge, Lupiro and Mwaya was much mixed; that's one could find farmers, and business people owning such shops although they are few. Nevertheless this was not the requirement by law but introduced by the regional/local authority, mainly may be to control rapid expansion of the DLDB net work.

SERVICES PROVIDED AND QUALITY OF CARE

As part of the mapping survey, data was collected on various components important to assessing the type kind of services and quality of care provided by DLDB shops. Information was gathered on the kinds of medicines dispensed, their cost, the qualification of owners and dispensers, clients served per day and the overall physical

condition of the DLDB shop. DLDB owners were also asked about the frequency of inspection visits.

Average Prices of Most Commonly Dispensed Medicines

The most commonly dispensed drugs were Amoxycillin, Cotrimoxazole, Medendazole, Fansidar, Ampicillin and Erythromycin. See Annex 3.

Prices of drugs varied widely, although in some instances owners and sellers were reluctant to provide prices of antibiotics because they wanted to hide the fact that they have products not permitted under DLDB regulations. Nevertheless, these drugs are widely available in the DLDB. With the exception of a few items, the prices were reasonable and comparable to prices in other major towns elsewhere.

Other services provided

There was evidence of on-going clinical practices taking place within the shops e.g. injections and wound dressing. Treatments were performed under poor hygienic conditions, by Nurse Assistants or trained relatives working in the shops while the owners were away. This picture was taken in one of the shops where there is a clear evidence that injections are being given within the premises.



One of a typical injection room in a DLDB

Qualifications of owners and sellers

Analysis of the records shows that between 80-90% of the sellers in DLDB are Nurse Assistants (one year training on nursing services). These people were meant to assist Nurses in hospitals and have very limited or no experience at all in drug dispensing.

Average number of clients per day

The number of clients per *duka la dawa baridi* range from 6 to 40 clients per day. This number should be taken with care because most of the owners were reluctant to reveal there actual numbers because that would disclose their daily income. Many business tend to understate the number of clients because they are afraid of tax collectors who use the clients number to estimate their incomes and determine amount of tax to be paid. Also lcak of good records on sales per day made it difficult to verify.

Physical state of premises, cleanliness, storage conditions

Most DLDBs are very small, dusty, and dirty with poor drug storage conditions. Premises do not have adequate ventilation thus subjecting the drugs most of the time to high temperatures and humidity. Outlet sellers are not properly dressed and care very little on the premise environment. This is a typical example of DLDB.



Inside view of a typical DLDB where attended customers have to stand outside the premise to get services.

Quality of Products

One of the major concerns regarding the services being provided by many DLDB is the poor quality of medicines and related medical supplies being supplied to their client. It is therefore not surprising to find expired products being sold, the expired dates on containers being changed to justify the continuation of sell of such poor products. More serious is that most of such products are antibiotics some of which very life serving. Lack of close supervision and regular inspections has in a way encouraged these poor and unethical practices. The pictures below elaborate real situation found in some of the shops during mapping.



A vial of Benzyl penicillin constituted several days ago and stored under hot temperatures waiting for a customer.



A tin of Propranolol tablets probably expired sometimes ago but the dates have been changed to justify sales.

Frequency of inspections

Although the district authorities have some responsibility for monitoring the performance of DLDB through inspections, this was rarely done. When inspection was carried out, this was limited to the duka la dawa baridi along the main roads, shops in far remote villages have rarely been inspected by the district or regional or TFDA authority. The local authority at ward and village level have not been involved in any way during such inspectorate activities nor did the inspectors share information with the authorities after carrying out inspections.

Respondents in Ulanga said that the district DMO office staff carried out some inspections although this was irregular and did not involve the local authorities. Some shops have not been inspected for more than two years; at least two inspections are required to be carried out per year for each DLDB. Lack of regular inspections could be the major reason for mushrooming unlicensed DLDB as well as sale of drugs not recommended under the DLDB regulations.

PARTICIPATION OF LOCAL GOVERNMENT AUTHORITIES AND OFFICIALS

Respondents acknowledged that local leaders at the village level are involved in the establishment of DLDB; however, there have been some instances where shops have been established without them being involved. In such situations, when owners are asked/questioned on who approved their application to establish the shop without involving the village the answers is simple-"we have been permitted by the authorities at the top". Also other applicants once approved by the village committee to open DLDB, do not follow the application steps of going to the district and regional level to get their approval and final permit from TFDA. One simply starts to operate the DLDB.

Although both WEO and VEO are somewhat involved in the establishment of DLDB at village level, both voiced lack of involvement in the control of the DLDB once it is established. One leader said; "these shops belong to people at the top, we are not allowed to oversee them in any way. Owners think we know nothing about drugs". Even when inspectors from the region, district or TFDA come to the village for inspections and supervision, the leaders are not involved or even briefed after the performance of DLDB in their villages.

Some WEO's and VEO's were reluctant to be involved in the supervision and inspection of duka la dawa baridi. Many were afraid of the community reaction in case they are required to make recommendation for legal action following irregularities found during inspection. They said drugs shops are the only sources of medication in their areas so they will need support from TFDA and regional authorities as well as training on technical and legal/inspectorate procedures.

Both WEO and VEO gave several reasons why they supported DLDB shops in their ward or village. Some of these reasons are summarized below:

- Public dispensaries continue to experience shortage of essential drugs that are essential. DLDBs are able to provide prescription drugs written from public and private facilities.
- Patients who have less serious medical condition are able to access the DLDB as the first point of contact to get drugs and in this way the congestions at the health facilities is reduced and serious patients are attended faster.
- Some villages are very far from health facilities or hospitals and the only nearest source of drugs is the DLDB. DLDBs are the only alternative where villages do not have dispensaries or first AID box within the village.
- Health facilities and hospitals are closed and during weekends and public holidays
 and only provide emergency services and DLDB becomes the only sources of
 drugs in such situation given their long operating hours every day including
 weekends and public holidays.
- DLDB sometimes provide drugs which are not in the health facility kits, but which the "doctors" themselves prescribe. Without these shops where would one get them?
- The DLDB dispensers are friendlier to us than the health facility workers.
- People living with AIDS need drugs regularly for pain and fungal infections. These shops help a lot to provide them with these drugs.

Both the Morogoro regional and Mahenge district authorities were very positive for the introduction of ADDO program and they expressed their readiness to work with TFDA and MSH/RPM Plus and will provide the needed support.

PROBLEMS WITH DLDB AS EXPRESSED BY LOCAL LEADERS

Problems associated with DLDB were identified by the VEO and WEO level authorities. These issues are as follows:

- Drugs are expensive when only one DLDB in the village and there is no competition.
- Most of the dispensers working in the shops do not have adequate knowledge and skills; sometimes they give you the wrong drug or even dose. Also many of them are not clean and have no uniforms.
- The DLDB premises are dirty, poorly constructed and very often drugs are subjected to very hot temperature and direct sun light.

• Some sellers are very rude when you ask and do not provide any information during drug dispensing.

Information was also solicited from the local authorities on how the shops could be improved. Incorporating these recommendations will be important in ensuring the future participation of local leaders in DLDM scale-up. The leaders had the following to say:

- Many commented that they live very near the shops and even get the services from the *duka la dawa baridi* many times and suggested that local leaders should be fully involved in the establishment and control of the DLDB services.
- Regular supervision and inspection visits by TFDA, regional and district authorities involving local leaders should be conducted so that the quality of the services is always assured.
- Not everybody should be allowed to work in a drug shop because this can be very
 dangerous. Those working in the shops should be properly trained and monitored
 and inspected all the time so that they do the right thing. The owners should be
 trained as well because they are the ones who force these dispensers to sell
 expired drugs or do illegal things for money.
- The village/ward health committee should have the responsibility to see that shops are established as required by law and determine location of these shops. Local leaders should be given the mandate to inspect the shops regularly to ensure that the regulations are followed all the time.
- Many areas are not passable during the rain season and it is difficult to travel to
 the nearest health facility or sometimes the facility does not have the drugs at all.
 We suggest that these shops should be allowed to dispense legal prescription
 drugs to save lives.
- Wholesale shops should be established in every division so that DLDB shops can get these drugs easily even during the rain season. This will reduce the drug prices which are very high.
- Owners who do not have enough capital should be assisted with loans/credit facilities or grants to expand their business and perhaps open other new shops in areas that currently have no shops at all.

INFRASTRUCTURE

Ulanga district is connected by a major road to Ifakara town in Kilombero district which is accessible throughout the year. However, other roads connecting various part of the district (Mahenge and Malinyi) become unreliable during the rain season (February-April) and depending on the amount of rain received, some of the roads are temporally closed during these months. Traveling during the rain season represents a huge logistical

challenge as many villages become inaccessible for several months and many small to medium-sized temporary bridges are washed away during the rain season or floods.

The district has two air strips for small chartered plane; one is at the Lughala Lutheran Hospital in Malinyi and another one within Selous game reserve.

Only Mahenge (the district headquarters) is accessible by land line telephone. However, current investment in cellular phone communication have reached some parts of Ulanga districts such as Mahenge, Mwaya, Mtimbira, Malinyi, Lupilo and Mlimba divisions as well as the crossing of the upper part of Kilombero river with a canoe is fully covered by Celtel network although some areas experience erratic disconnection/connection. The mission health facilities network in the district are linked through radio call network.

ANNEX 1: LOCATION OF DLDB IN ULANGA DISTRICT

				Nearest Distance to:		to:
Division	Ward	Village	Name of DLDB Shop	Health Center or Dispensary	Pharmacy	Hospital
Lupiro (4)	Iragua	Iragua	Reuben Medical Store	1.5 Km	55 Km	70 Km
• , ,	Lupiro	Igumbiro	Mpallang'ombe Med. Store	5 Km	40 Km	40 Km
		Lupiro	Wadugu Medical Store	0.5 Km	30 Km	45 Km
	Minepa	Mavimba	Hapa Medical Store	1,5 Km	15 Km	75 Km
Vigoi (6)	-		Ugua Pole Med. Store	10 Km	300 Km	3 Km
G , ,	Mahenge	Mahenge-T	Mahenge Medical Store	1.5 Km	220 Km	0.5 Km
			Innocent Medical Store	0.4 Km	0.4 Km	0.2 KM
			Motari Shop	0.8 Km	0.8 Km	1 Km
			Shamak Med. Store	0.1 Km	0.8 Km	0.3 Km
	Vigoi	Isongo	Kwiro Medical Store	0.5 Km	220 Km	0.5 Km
Mwaya (5)	Chirombola	Chirombola	Chirombola Med. Store	0.5 Km	250 Km	30 Km
-	Ilonga	Chigandugandu	Chigandugandu DLDB	1.5 Km	1.5 Km	138 Km
	Mwaya	Mwaya	DM Imani Med. Store	0.5 Km	0.5 Km	50 Km
			Ugua Pole Med. Store	0.5 Km	0.5 Km	40 Km
	Ruaha	Ruaha	Stephan Kazikulima M.S.	2o Km	252 Km	32 Km
Mtimbira (7)	Itete	Njiwa	Juma Matego DLDB	1.5 Km	140 Km	60 Km
		Minazini	Msamalia Mwema DLDB	1 Km	140 Km	60 Km
ı		Madibira	Morning Side Health Care	1.5 Km	150 Km	45 Km
	Mtimbira	Mtimbira	Mtafungwa - DLDB	2 Km	2 Km	2 Km
		Mtimbira	Ngao DLDB	3 Km	3 Km	3 Km
	Sofi	Majiji	Majiji-DLDB	0.3 Km	170 Km	20 Km
	Usangule	Usangule	Mtimini DLDB	2 Km	150 Km	45 Km
Malinyi (10)	Biro	Biro	Mico M.S. DLDB	1.5 Km	205 Km	20 Km
		Ngombo	Ngombo DLDB	20 Km	240 Km	25 Km
	Malinyi	Malinyi	Imolomakoye DLDB	1.5 Km	190 Km	5 Km
			Malinyi DLDB	1.5 Km	190 Km	5 Km
			Msimbazi DLDB	1 Km	190 Km	5 Km
		Misegese	Green Leal Medical Care	5 Km	190 Km	8 Km
		Igawa	Igawa DLDB	0.5 Km	200 Km	5 Km
		Lugala	Lugala DLDB	5 Km	195 Km	1 Km
		Kipingo	Alfa Med. Store	2 Km	190 Km	5 Km
	Ngoheranga	Ngoheranga	St. Janeth DLDB	3 Km	220 Km	30 Km

ANNEX 2: DISTRIBUTION OF DLDB BY WARD AND POPULATION SIZE

Name of Ward	Population Served	# of Shops
Malinyi	25,421	7
Itete	15,380	2
Vigoi	12,869	1
Minepa	12,067	1
Lupiro	10,745	2
Ilonga	10,609	1
Mtimbira	10,456	3
Usangule	9,330	1
Sofi	8,522	1
Ruaha	8,368	1
Mahenge	7,303	5
Mwaya	7,105	2
Iragua	6,738	1
Isongo	6,585	0
Mbuga	6,535	0
Msogezi	5,225	0
Kichangani	5,048	0
Chilombola	4,988	1
Ngoheranga	4,517	1
Biro	4,219	2
Sali	3,810	0
Euga	3,733	0
Kilosa Mpepo	2,744	0
Lukande	1,892	0

ANNEX 3: MOST COMMONLY DISPENSED MEDICINES AND AVERAGE PRICES

SELECTED DRUGS	AVERAGE PRICE	RANGE of PRICES
1. Amoxycillin caps	1068.75	600 – 1200
2. Amoxycillin syrup	870.00	900 – 1500
3. Cotrimoxazole tabs.	528.60	400 – 800
4. Cotrimxazole syrup	828.60	700 – 1000
5. Mebendazole tabs.	230.00	150 – 600
6. Mebendazole syrup	560.00	500 – 600
7. Fansidar tabs.	320.00	300 – 450
8. Ampicillin caps.	960.00	900 – 1500
9. Ampicillin syrup	800.00	800
10. Erythromycin tabs.	1350.00	750 – 1500
11. Erythromycin syrup	1025.00	900 – 1500
12. Doxycycline tabs.	715.70	300 – 1500**
13. Tetracycline caps.	946.15	600 – 1500
14. Metronidazole tabs.	526.90	300 – 900
15. Metronidazole syrup	825.00	700 – 1000
16. Paracetamol tabs	125	100 – 200
17. Paracetamol Syrup	500	400 – 600
18. Aspirin tabs	100	100

^{**} The pattern of Doxycycline caps/tabs price was very strange as one can see the range.

ANNEX 4: LIST OF RESOURCE PERSONS INTERVIEWED

S/N	Name of Resource Person	Position/Responsibility
1	Joseph Mfumbi	Ward Executive Officer (WEO)
2	Rajabu H. Ngululi	Ward Executive Officer (WEO)
3	Adoldhina Mwammala	Ward Executive Officer (WEO)
4	Denis Goha	Ward Executive Officer (WEO)
5	Azizi A. Kagoya	Ward Executive Officer (WEO)
6	Reinfrida Pessa	Ward Executive Officer (WEO)
7	Donald T. Hwaya	Ward Executive Officer (WEO)
8	Pascal M. Malala	Ward Executive Officer (WEO)
9	Mendrad O. Liwoko	Ward Executive Officer (WEO)
10	Honesta Likalafu	Ward Executive Officer (WEO)
11	Antony T. Mcheuka	Ward Executive Officer (WEO)
12	Hamisi Faya	Ward Executive Officer (WEO)
13	Yohana G. Kasapira	Ward Executive Officer (WEO)
14	Mwasi Mrisho	Ward Executive Officer (WEO)
15	Peter Manyanga	Ward Executive Officer (WEO)
16	Nemwe W. Lwimbo	Ward Executive Officer (WEO)
17	Avelina Nkasiwa	Ward Executive Officer (WEO)
18	Vicent J. Gunena	Ward Executive Officer (WEO)
19	Rajabu H. Mgululi	Ward Executive Officer (WEO)
20	Erasto F. Sepera	Ward Executive Officer (WEO)
21	Issa Matanda	Ward Executive Officer (WEO)
22	Gerold Machege	Ward Executive Officer (WEO)
23	Festus F. Fikiri	Ward Executive Officer (WEO)
24	Emmanuel S. Salehe	Ward Executive Officer (WEO)
25	Mariana Ndopweli	Ward Executive Officer (WEO)
26	Maximilian Ndeketeza	Ward Executive Officer (WEO)
27	Enispar Mbwasi	Ward Executive Officer (WEO)
28	Magreth Kunyatila	Ward Executive Officer (WEO)
29	Zikeni Magoha	Ward Executive Officer (WEO)
30	Patrick Mpandule	Ward Executive Officer (WEO)
31	Beno Chanangula	Ward Executive Officer (WEO)
32	Peter J. Chilonda	Ward Executive Officer (WEO)
33	Marijan F. Ngayela	Ward Executive Officer (WEO)
34	John A. Lihawa	Ward Executive Officer (WEO)
35	Fulgence F. Choyo	Ward Executive Officer (WEO)
36	Tekla T. Mzaniki	Ward Executive Officer (WEO)

37	William J. Mnjeru	Ward Executive Officer (WEO)
38	Berthod Lipingu	Ward Executive Officer (WEO)
39	Thomas Mponguliana	Ward Executive Officer (WEO)
40	Fortunatus Kazingoma	Ward Executive Officer (WEO)
41	Hillary Z. Chipeta	Ward Executive Officer (WEO)
42	Peter J. Mhali	Village Executive Officer(VEO)
43	Jerome X. Mhilu	Village Executive Officer(VEO)
44	Ally K. Lijumii	Village Executive Officer(VEO)
45	Bakari A. Mbelawike	Village Executive Officer(VEO)
46	Abasi A. Ngajuja	Village Executive Officer(VEO)
47	Silvanus P. Solly	Village Executive Officer(VEO)
48	Selemani S. Mtenga	Village Executive Officer(VEO)
49	Seth G. Maunga	Village Executive Officer(VEO)
50	Guntram K. Omari	Village Executive Officer(VEO)
51	Idi M. Kaigua	Village Executive Officer(VEO)
52	Salome S. Mgendera	Village Executive Officer(VEO)
53	Yosam K. Kazibure	Village Executive Officer(VEO)
54	Borgias M. Halihali	Village Executive Officer(VEO)
55	Novatus A.Nryangiri	Village Executive Officer(VEO)
56	Condradina Mbukutu	Village Executive Officer(VEO)
57	Habibu H.Choyo	Village Executive Officer(VEO)
58	Salustian D. Likasi	Village Executive Officer(VEO)
59	Festor S. Uyalo	Village Executive Officer(VEO)
60	Patrick N. Maumba	Village Executive Officer(VEO)
61	Salehe A. Ngamera	Village Executive Officer(VEO)
62	Salum S. Ngwembe	Village Executive Officer(VEO)
63	Gaudence J. Matei	Village Executive Officer(VEO)
64	Hamis F.Iranga	Village Executive Officer(VEO)
65	Rosina M. Kavuruga	Village Executive Officer(VEO)
66	Novatus K. Mvogo	Village Executive Officer(VEO)
67	Hussein H. Matali	Village Executive Officer(VEO)
68	Rajabu S. Mkambaku	Village Executive Officer(VEO)
69	Pelegrin W. Myonga	Village Executive Officer(VEO)
70	Hidaya S. Maita	Village Executive Officer(VEO)
71	Rashid Mgendera	Village Executive Officer(VEO)
72	Andrea B. Kusakala	Village Executive Officer(VEO)
73	Marselin Mkoma	Village Executive Officer(VEO)
74	Pasua Kayaghameni	Seller
75	Hidaya Zidadu	Seller

76	Emma Ngonyani	Seller
77	Magua D. Ngassa	Seller
78	Bihhildis Choyo	Seller
79	Patrick Kihava	Seller
80	Euphemia Myayau	Seller
81	Abula Ngahunga	Seller
82	Daria Kandengukila	Seller
83	Gabriel N. Manyama	Seller
84	Clementina Ngonyoka	Seller
85	Fadhila M. Ngozi	Seller
86		Seller
	Lucas J. Mgombela	Seller
87	Hadija Mahamdu Veronica M. Mbwasi	Seller
88		
89	Germana Kademba	Seller
90	Redemta N. Njayale	Seller
91	C.S Msongamwanja	Seller
92	Theresia Ngalya	Seller
93	Bihawa Maburuki	Seller
94	Zuena I. Masoud	Seller
95	Severiana S. Mayenja	Seller
96	Leonia Peter	Seller
97	David Maziku	Seller
98	Alex Z. Hollela	Seller
99	Beguma Stephen	Seller
100	Henry P. Balua	Seller
101	Richard P. Balua	Seller
102	Juliet Balua Rwamsozwa	Seller
103	Mary Satu	Seller
104	Neema Mawalanga	Seller
105	Rhoda Range	Seller
106	Ahmed S. Njokamtali	Seller
107	Beatrice L. Thomas	Seller
108	Maria Fungamali	Seller
109	Redegunda Kweka	Seller
110	Frank F. Mkuya	Seller
111	Everina Matimba	Seller
112	Maria Shayo	Seller
113	Lauren Linkanti	Seller
114	Wilfrida Thomas	Seller

116 Jane 117 Ras 118 Isra 119 Ken 120 Elia 121 Nur 122 Julii 123 Cor 124 Sam 125 Luc 126 Leo 127 Ale: 128 Wil 129 Dr. 130 Ricl 131 Wac 132 Mw 133 Step 134 Reu 135 Kas 136 Hen 137 Free 138 Bag		
117 Ras 118 Isra 119 Ken 120 Elia 121 Nur 122 Julii 123 Cor 124 Sam 125 Luc 126 Leo 127 Ale: 128 Wil 129 Dr. 130 Ricl 131 Wac 132 Mw 133 Step 134 Reu 135 Kas 136 Hen 137 Free 138 Bag	iolata Thomas Libutu	Seller
118 Isra 119 Ken 120 Elia 121 Nur 122 Julii 123 Cor 124 Sam 125 Luc 126 Leo 127 Ale: 128 Wil 129 Dr. 130 Ricl 131 Wad 133 Step 134 Reu 135 Kas 136 Hen 137 Fred 138 Bag	eth A. Mganga	Seller
119 Ken 120 Elia 121 Nur 122 Julii 123 Cor 124 Sam 125 Luc 126 Leo 127 Ale: 128 Wil 129 Dr. 130 Riccl 131 Wac 132 Mw 133 Step 134 Reu 135 Kas 136 Hen 137 Free 138 Bag	hid Magomba	Seller
120 Elia 121 Nur 122 Juli 123 Cor 124 Sam 125 Luc 126 Leo 127 Ale: 128 Wil 129 Dr. 130 Ricl 131 Wad 132 Mw 133 Step 134 Reu 135 Kas 136 Hen 137 Free 138 Bag	el R. Msitu	Seller
121 Nur 122 Julii 123 Cor 124 Sam 125 Luc 126 Leo 127 Ale: 128 Wil 129 Dr. 130 Ricl 131 Wac 132 Mw 133 Step 134 Reu 135 Kas 136 Hen 137 Free 138 Bag	nyata Gerald & Mandwa Ngassa	Seller
122 Julii 123 Cor 124 Sam 125 Luc 126 Leo 127 Ale: 128 Wil 129 Dr. 130 Ricl 131 Wad 132 Mw 133 Step 134 Reu 135 Kas 136 Hen 137 Free 138 Bag	zary M. Kweka	Seller
123 Cor 124 Sam 125 Luc 126 Leo 127 Ale: 128 Wil 129 Dr. 130 Ricl 131 Wad 132 Mw 133 Step 134 Reu 135 Kas 136 Hen 137 Fred 138 Bag	din Mgaza	Seller
124 Sam 125 Luc 126 Leo 127 Ale: 128 Wil 129 Dr. 130 Riccl 131 Wac 132 Mw 133 Step 134 Reu 135 Kas 136 Hen 137 Free 138 Bag	us N. Mtafungwa	Seller
125 Luc 126 Leo 127 Ale: 128 Wil 129 Dr. 130 Ricl 131 Wad 133 Step 134 Reu 135 Kas 136 Hen 137 Fred 138 Bag	nel J. Ngao	Seller
126 Leo 127 Ale: 128 Wil 129 Dr. 130 Rich 131 Wad 132 Mw 133 Step 134 Reu 135 Kas 136 Hen 137 Free 138 Bag	nwel Mathias	Seller
127 Ale: 128 Wil 129 Dr. 130 Ricl 131 Wad 132 Mw 133 Step 134 Reu 135 Kas 136 Hen 137 Fred 138 Bag	as J. Mgombela	Seller
128 Will 129 Dr. 130 Rich 131 Wad 132 Mw 133 Step 134 Reu 135 Kas 136 Hen 137 Free 138 Bag	nard L. Hala	Seller
129 Dr. 130 Riccl 131 Wac 132 Mw 133 Step 134 Reu 135 Kas 136 Hen 137 Free 138 Bag	x Z. Hollela	Seller
130 Rickles 131 Was 132 Mw 133 Step 134 Reu 135 Kas 136 Hen 137 Free 138 Bag	liam Range	Seller
 131 Wad 132 Mw 133 Step 134 Reu 135 Kas 136 Hen 137 Free 138 Bag 	Amani R. Kombe	Seller
 132 Mw 133 Step 134 Reu 135 Kas 136 Hen 137 Free 138 Bag 	hard P. Balua	Seller
 133 Step 134 Reu 135 Kas 136 Hen 137 Free 138 Bag 	dugu Macmillan Wadugu	Seller
134 Reu 135 Kas 136 Hen 137 Free 138 Bag	risongola Yusuph Ngidasiwe	Seller
135 Kas136 Hen137 Free138 Bag	ohani Kazikulima	Seller
136 Hen137 Free138 Bag	ben A. Linkanti	Seller
137 Free 138 Bag	sim Ngonge Mpallang'ombe	Seller
138 Bag	nry P. Balua	Seller
· ·	edom Ally Hassan Chimu	Seller
139 Ahr	guma Stephen	Seller
10)	ned S. Njokamali	Seller
140 Day	rid Maziku	Seller

ANNEX 5: MAPPING ITINERARIES

Mapping	Itinerary for TEAM 1	
DATE	ACTIVITY	RESPONSIBLE
11/10/05	PM Team Travels to Morogoro	Shirima (MSH), Emmanuel
11/12/05	Meeting with Regional authorities	(TFDA), M/S Rick (MEDA) -Same-
11/12/05	Team travels to Mahenge – Ulanga District	Shirima (MSH), A. Malisa (Regional Pharmacist)
10/13/05	Team meets the district authorities & preparation of the itinerary	Shirima (MSH), A. Malisa
10/14/05	Mapping in Mahenge – Msogezi, Mhindo, Isongo, Uponera in Vigoi Division	Shirima (MSH), A. Malisa & Ag. District Pharmacist
10/15/05	Mapping in Vigoi Division cont. – Chikuti, Mbagula, Makanga, Epanko & Nawenge	Shirima (MSH), A. Malisa & Ag. District Pharmacist
10/16/05	Visited VEO for Chikuti and Motari Medical Store	Shirima (MSH), A. Malisa & Ag. District Pharmacist
10/17/05	Team visits Trade officer & later travels to Mwaya Division – Lukande, Sali, Gombe and Nkonge	Shirima (MSH), A. Malisa & Ag. District Pharmacist
10/18/05	Team met Divisional Secretary (DS) for Mwaya; later visited- Mbuga, Iputi Village, Ruaha Ward	Shirima (MSH), A. Malisa & Ag. District Pharmacist
10/19/05	Team traveled to Mgolo Village, Kituti village, Chilombola Ward, Mzelezi Village	Shirima (MSH), A. Malisa & Ag. District Pharmacist
10/20/05	Team Travels to Msogezi Ward; later to Lupilo Division- Idunda, Kichangani, & Mlola,	Shirima (MSH), A. Malisa & Ag. District Pharmacist
10/21/05	Lupilo Division cont. Team visited Minepa and Iragua wards	Shirima (MSH), A. Malisa & Ag. District Pharmacist
10/22/05	Debriefing and comparison of notes	Shirima (MSH), A. Malisa & Ag. District Pharmacist

10/23/05	Team Travels back to Dar Es salaam	Shirima (MSH) & A. Malisa
Mapping DATE	Itinerary for TEAM 2 ACTIVITY	RESPONSIBLE
11/12/05	Team travels to Malinyi Division – Ulanga District	Dr Mbwasi (MSH), R. Valimba
10/13/05	Team meets Malinyi Divisional Secretary & plans activities and mapping itinerary	Dr Mbwasi (MSH), R. Valimba
10/14/05	Division secretary sends information to all WEOs and VEOs for Malinyi and Mtimbira divisions	Divisional Secretary
10/15/05	Mapping Malinyi Division- Malinyi, Misegese Kipingo & Lugala	Dr Mbwasi (MSH), R. Valimba
10/17/05	Mapping Malinyi Division –Ngoilanga, Tanga, Kilosa Mpepo	Dr Mbwasi (MSH), R. Valimba
10/18/05	Mapping Malinyi Division – Ngombo, Biro, Igawa	Dr Mbwasi (MSH), R. Valimba
10/19/05	Mapping Mtimbira Division – Sofi, Sofi Majiji, Kiswago & Mtimbira	Dr Mbwasi (MSH), R. Valimba
10/20/05	Mapping Mtimbira Division - Itete,	Dr Mbwasi (MSH), R. Valimba
10/21/05	Mapping Malinyi Division (follow-up of those missed on 10/13/05) – Malinyi, Kipingo	Dr Mbwasi (MSH), R. Valimba
10/22/05	Debriefing Divisional secretaries.	Dr Mbwasi (MSH), R. Valimba (Loc. Consultant
10/23/05	Team Travels back to Dar Es salaam	Dr Mbwasi (MSH), R. Valimba (Loc. Consultant

QUESTIONNAIRE/MAPPING TOOL FOR LOCAL OFFICIALS

other services provided by duka la daw	<i>va baridi.</i> / Dodo	mation which will be used by the Tanzani so hili linalenga kupata takwimu muhimu wa dawa na huduma zinazotelewa na mad	zitakazotumika katika mpa	
1. Ward/Kata			2. Division/Tarafa	3. District/Wilaya
4. Name of the WEO/Jina la Katibu Ka	ata			
5. The number of duka la dawa baridi	i present in the v	ward./ Idadi ya maduka ya dawa katika wa	di yako na mahali lilipo	
6. Village/Kijiji	7.Population size/Idadi ya watu	8. Name of the VEO/ Jina la Katibu mtendaji wa Mtaa/Kijiji	9. Name of the shop / Jin	a la Duka
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				

9.			
10.			
11.			
12.			
13.			
14.			
15.			
REGIST 10. Who is responsible to supervise an			AJILI,USIMAMIZI NA UKAGUZI
12. Describe the involvement of Ward and licensing of duka la dawa baridi/unavyoshiriki katika kuruhusu uanzish	yote ya baridi yalikaguliwa? l authority (WEO) in the appli Eleza jinsi uongozi wa kata aji wa duka la dawa baridi.	Cation 13. Describe the inspection of dusimamizi na ul	e involvement of Ward (WEO) authority in supervision and uka la dawa baridi/Eleza jinsi uongozi wa kata unavyoshiriki katika kaguzi wa duka la dawa baridi.
14. Describe the involvement of Villag and licensing of duka la dawa baridi/unavyoshiriki katika kuruhusu uanzish	Eleza jinsi uongozi wa kata	inspection of di	e involvement of Village authority (VEO) in supervision and uka la dawa baridi/ Eleza jinsi uongozi wa kata unavyoshiriki katika kaguzi wa duka la dawa baridi.

16. What are problems associated	
with duka la dawa baridi as	
identified by local officials?/Je kwa maoni yako, ni matatizo gani	
yapo katika huduma za duka la	
dawa baridi?	
dawa baridi:	
17. What are recommendations	
for improvement?/Tupatie maoni	
yako ni jinsi ya kuboresha huduma	
za duka la dawa baridi.	

QUESTIONNAIRE/MAPPING TOOL FOR DUKA LA DAWA BARIDI

	Introduction	/Utangulizi			
This questionnaire aims at collecting important inforand other services provided by duka la dawa baridi./ serikali ya Tanzania katika kurekebisha na kuboresha	<i>mation which will be used</i> Dodoso hili linalenga kupa	by the Tanzania Minis ta takwimu muhimu zita	akazotumika katika mpang	go wa Wizara ya Afya ya	
1. Name of the duka la dawa baridi/Jina la duka	2. Village/Kijiji	3. Ward/Kata	4. Division/Tarafa	5. District/Wilaya	
1. SHOP O	 WNER AND DISPENSEI	RS/MWENYE DUKA N	NA WAUZAJI		
6. Name/Jina	7. Postal Address/Anwani: SLP		8. Education level of Elimu/ujuzi	8. Education level or Qualification/Kiwango cha	
9. Sex/Jinsia	10. Employment/Kazi unayofanya				
□ Female/ Mke □ Male/Mme					
11. How many dispesnsers/employees do you have?/Una wafanyakazi wangapi katika duka lako	12. Na	me /Jina	13. Sex/Jinsia	14. Education level or Qualification/Kiwango cha Elimu/ujuzi	
	1.		□ Female/ Mke □ Male/Mme		
For each dispenser, provide name and their education/qualifications/Kwa kila mfanyakazi au	2.		□ Female/ Mke □ Male/Mme		
muuzaji wa wako wa duka taja jina na ujuzi wake	3.		□ <i>Female</i> / Mke □ <i>Male</i> /Mme		
	4.		□ <i>Female</i> / Mke □ <i>Male</i> /Mme		

	, LICENSURE AND INSPECTION OF DUI A LESENI, KIBALI NA UKAGUZI WA DUKA			
15. Is there a TFDA Registration license in the shop? ☐ YES/Ndiyo ☐ NO/Hapana Je unacho kibali na leseni toka Mamlaka ya Chakula na Dawa katika duka lako?		16. Year of license?/Mwaka kibali kilitolewa		
17. Please provide the license and registration numbers from regional authority and TFDA for this and last years/Utuandikie nambari za leseni na kibali cha Mkoa/Mamlaka ya Chakula na Dawa cha mwaka jana na mwaka huu	17.1 License No/Nambari ya leseni	17.2 Registration No/Nambari ya Kibali		
18. If no license is present, please give the reason (our ai unaweza kutoa sababu za kutokuwa nazo.(nia yetu ni kuku				
19. Please explain the process and procedure followed to kufungua duka hili na kupata leseni ya biashara kwa mara How long did it take? /Ilichukua muda gani?		fadhali elezea utaratibu wote uliofuata hadi kuruhusiwa		
20. Please explain the procedure followed for renewal of liseni ya kuendelea na biashara hii kila mwaka? How long did it take? /Ilichukua muda gani?		utaratibu unao ufuata unapotaka kupata Kibali na		
21. Please mention the problems/dificulties encountered/	Unaweza kuyataja matatizo hayo?			
22. Has your drug shop ever been inspected?/Je duka lako limewahi kukaguliwa na mamlaka yoyote? □ YES/Ndiyo □ NO/Hapana	23. When was the last time your shop was inspected? (Provide the month and year)/Je mara ya mwisho kukaguliwa ilikuwa lini? (taja mwezi na mwaka) Date/Tarehe:	24. Which authority carried out the inspection?/Kama ndiyo, ni mamlaka ipi iliyofanya ukaguzi? □ Village/ □ Ward/Kata □ District/Wilaya □ Region/Mkoa □ TFDA/Mamlaka ya Chakula na Dawa		

25. In your opinion, was the inspection useful?/Kwa maoni yako ukaguzi ulikuwa na manufaa yoyote? YES/Ndiyo NO/Hapana					
Please explain/give reasons for your answer/Toa sababu ya jibu lako.					
	3 AVAII ARII I	TY OF ESSENTIAL MEDICINES	S/IIPATIKANAII WA	MADAWA MIIHIMII	
26. Please provide the price	3. AVAILABILITY OF ESSENTIAL MEDICINES/UPATIKANAJI WA MADAWA MUHIMU provide the price 26.1 Name of the drug/Jina la dawa 26.2 Price when 26.3 Are these drugs available all the time?/J				
for a full dose of the following			sold?	hizi muhimu zinapatik	
drugs in your area. Andika bei ya dozi moja ya dawa	1. Amoxycillin	1		□ YES /Ndiyo	□ NO /Hapana
	2. Cotrimoxazo	ole		□ YES /Ndiyo	□ NO /Hapana
zifutazo zinavyo uzwa katika sehemu hii, hata kama wewe	3. Mebendazol	e		□ YES /Ndiyo	□ NO /Hapana
mwenyewe huuzi.	4. Fansidar (S	P)		□ YES /Ndiyo	□ NO /Hapana
	5. Ampicillin			□ YES /Ndiyo	□ NO /Hapana
	6. Metronidazo	ole		□ YES /Ndiyo	□ NO /Hapana
	7. Erythromyci	in		□ YES /Ndiyo	□ NO /Hapana
	8. Doxycyclin			□ YES /Ndiyo	□ NO /Hapana
	9. Tetracycline	;		□ YES /Ndiyo	□ NO /Hapana
27. Do you provide other services apart from dispensing drugs? Je katika duka lako unatoa huduma nyingine zaidi ya kutoa dawa? YES/Ndiyo NO/Hapana					
If yes, please mention the services provided/Kama ndiyo tafadhali zitaje.					
28. How far is your shop from the nearest 29. How far is your shop from the nea			e nearest dispensary	30. How far is your sh	nop from the nearest
duka la dawa baridi?/Je kuna umbali gani kati		or health center?/Je kuna umbali gani kati ya duka		pharmacy?/Je kuna umbali gani kati ya duka lako na	
ya duka lako na Duka la Dawa Baridi lililoko		lako na zahanati/kituo cha afya kilichopo karibu zaidi		pharmacy iliyo karibu zaidi	
karibú kabisa					
Km		Km		Km	

31. On average, how many clients/patients do you serve per day? /Kwa wastani, unahudumia wateja wangapi kwa siku?				
32. On average, how much do you sell per day? Kwa wastani, mauzo yako kwa siku ni kiasi gani?				
33. Where do you get/procure your medical supplies?/Unapata wapi dawa zako?	34. What problems do you encounter when procuring your medical supplies matatizo gani unayapata katika ununuzi na upatikanaji wa dawa?	?Ni		
DATA COLLECTOR OBSERVATION OF DLDB PREMISES/MKUSANYA TAKWIMU ANGALIA JENGO LA DUKA LA DAWA BARIDI				
35. Please comment on the physical state of the DLDB shop. The ceiling Tafadhali to maoni yako kuhusu ukubwa wa chumba, paa, sehemu ya ku				
	THANK YOU!			