



William Davidson Institute  
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# Enhancing Access to Medicines through Innovations in Working Capital Financing for Drug Shops

FINAL REPORT

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## **About WDI**

The William Davidson Institute (WDI) is a non-profit research and educational institute at the University of Michigan that promotes actionable business and public policy approaches to address the challenges and opportunities within emerging market economies. More specifically, the WDI Healthcare Research Initiative produces independent, multi-disciplinary research and business knowledge to help increase access to essential medicines, vaccines and other health technologies in developing countries.

## **About SDSI**

The Sustainable Drug Seller Initiatives (SDSI) Program, funded by a grant to Management Sciences for Health (MSH) from the Bill & Melinda Gates Foundation, works to improve access to essential medicines in the developing world by fostering partnerships between the public and private sectors.

## **Recommended Citation**

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## **ABBREVIATIONS & ACRONYMS**

ADDO	Accredited Drug Dispensing Outlet
ADS	Accredited Drug Shop
MoH	Ministry of Health
MoHSW	Ministry of Health and Social Welfare
MSH	Management Sciences for Health
NDA	National Drug Authority
ODK	Open Data Kit
SDSI	Sustainable Drug Sellers Initiatives
TFDA	Tanzania Food and Drugs Authority
WDI	William Davidson Institute

## **EXECUTIVE SUMMARY**

### ***Background***

A healthy pharmaceutical market requires a well functioning credit provisioning system across the multiple entities in the pharmaceutical distribution network. To ensure sustainability of pharmaceutical retailers in low-income countries it is important to develop an in-depth understanding of the credit provisioning system in the pharmaceutical distribution system. The next phase of the accredited drug seller program includes ensuring the accredited drug shops are sustainable to a greater extent. This study assesses the need for working capital in rural drug shops, analyzes how working capital impacts the availability of medicines, and compares different mechanisms for providing capital to rural drug shops while ensuring efficient monitoring, debt collection, and overall sustainability.

Accredited Drug Dispensing Outlets (ADDOs) in Tanzania and Accredited Drug Shops (ADSs) in Uganda were interviewed in this study to determine how access to working capital impacts the availability, sufficiency and variety of medicines stocked. Findings from this study are intended to enhance the long-term sustainability of accredited drug seller initiatives and thereby increase the ability of drug shops to consistently stock the right quantity of pharmaceutical products based on changing community health needs. To identify current stock and cash management practices and potential working capital constraints, a cross-sectional study design was employed using a comprehensive survey instrument developed for the study population of ADDO and ADS owners. A random sample of ADDOs in Morogoro region, Tanzania, and ADSs and class C drug shops (by NDA standards that had not undergone accreditation through the ADS pilot program), within Kibale District, Uganda was obtained with the help of MSH based on the geographic presence and heterogeneity of drug shops within each country. Surveys were successfully administered in paper format (Tanzanian data collection) to 21 ADDOs and electronic format using tablet devices (Uganda data collection) to 12 ADSs and 3 class C drug shops. In addition to the completion of a survey questionnaire, full inventory was taken for a subset of the sample to capture specific brand, manufacture and price information for all products in stock and for sale on the day of the shop visit.

### ***Findings***

#### ***Sourcing Characteristics***

A majority of the ADDOs (76.19%) reported purchasing medicines from a primary supplier (either sub-wholesalers or wholesalers) located in Morogoro Town. 50% of the ADSs surveyed reported purchasing medicines from a primary supplier located in Kampala, and 33% reported purchasing their medicines from Kagadi, serving as the second most common supplier location. For the ADDOs, the average distance between ADDOs and their primary supplier was 2.45 hours by personal vehicle. Of the ADDOs surveyed, 76% cited more than one supply source for medicines. Of the ADS, 58% cited more than one supply source for medicines.

Most ADDOs ordered their medicines once every 2 weeks (48%) or once per week (38%). For ADSs, a third of owners order supplies once a week and another third sourced their medicines twice a month (n=4, 33%). Pick-up/delivery costs are on average 22% of the total operating costs of ADDOs that incurred pick-up/delivery expenses. For ADSs pick-up/delivery costs were 17% of the overall operating costs. While higher frequency of ordering helps maintain lean inventory at the drug shops, it can increase the transport costs for the shop owner. There are multiple reasons shop owners stock more frequently of which customer demand fluctuations due to seasonality, familiarity to certain medicines and medicine expiry dates are a few. It is also likely that shops travel more often to replenish supplies due to limited working capital, which prevents them from making larger purchases, less often.

#### *Access to Capital and other shop constraints*

81% of ADDO owners and 58% of ADS owners indicated that they did not have enough money to operate their business. 48% of ADDOs and 75% of ADSs surveyed stated not having enough money to conduct business as their greatest challenge. Compared to this, 29% of ADDOs (25% of ADSs) said not having enough customers was their greatest challenge and 19% of ADDOs (16% of ADSs) said sensitization of patients to the medicines (i.e., the patients' relative familiarity to different medicines and treatment methods) was their biggest challenge. 43% ADDOs and 42% of ADSs stated that not having enough capital was constraining them from stocking "enough" medicines, 52.4 % of ADDOs (50% of ADSs) stated that lack of capital was not allowing them to keep their shop in good condition.

#### *Assortment Planning Decisions*

Community demand was cited as the main driver for medicines stocking behaviors, with 32% of ADDOs and 42% of ADSs stocking the medicines that their customers ask for. Product categories that were found to be in stock in 100% of the ADDO and ADS shops included: anti-malarials, disinfectants/antiseptics, cold/flu preparations, antiworm, antibacterial/antibiotic, antifungal, antianaemia/vitamins & minerals/supplements, and antacid/anti-flatulent/anti-peptic ulceration. Product categories that were available in less than 50% of ADDO shops included: oxytocics, laxatives, anti-diarrheals (specifically loperamide), anti-convulsants, anti-epileptics and anesthetics. Categories such as oxytocics, loperamide are not stocked by ADDOs even though they are authorized to stock these medicines. For ADS, with consideration for the smaller sample size, dental products (i.e., toothpaste, toothbrushes) were available in less than 50% of shops despite the approval to stock such products.

#### *Sufficiency of Inventory Stocked*

A detailed analysis by specific product types and subcategories including select anti-malarials, antibiotics, anti-fungals, anthelmintic, ORS and bottled water was carried out. On an average (across all items) the shops stocked 1.5 months of stock and their average replenishment frequency was twice a month. Thus, on an average they seem to be stocking enough stock. However, there are significant variations both across shops and across specific products. There are shops that are not keeping enough stock of some medicines to satisfy overall demand. Findings suggest that shop owners struggle to

manage their stocking effectively, which might point to a lack of capital to carry sufficient stock of all medicines for which there is demand in the community, concerns related to expiration dates of medicines and/or the lack of ability to properly plan stocking.

Both a lack of inventory planning skills and a lack of capital to purchase more inventory seem to be factors in less than sufficient inventory.

#### *Cash Flow Analysis*

Detailed cash flow analyses were run for a subset of ADDO and ADS shops for which complete survey and inventory data had been collected. Of the five ADDOs analyzed, cumulative net cash flow was positive for 3 of 5 shops. With the two ADSs analyzed, both shops revealed a cumulative net cash flow in the negative. There was some indication that the two ADDO shops with a negative net cash flow were over-stocking their medicines on a monthly basis based on the previous sufficiency of stock analysis. This finding may be a reflection of poor inventory management and business management training.

#### *What-if analysis from stocking additional products*

An ABC classification and product assortment simulation was done to gain insights into the main products that drive their revenue and analyze the effect on overall profitability of adding new product lines or dropping some product lines. This analysis was used to identify the main revenue and profit drivers in ADDOs and ADSs and then estimate the impact on revenue and profitability when products that are currently not stocked by many ADDOs and ADSs are included in their stocking assortment. Using this analysis doxycycline and penicillin injections were identified as product categories that are not consistently stocked by all shops, but have good market potential in shops that are stocking them.

A what-if analysis was conducted to emulate the revenue and gross profit increase that would result when a shop starts stocking an item that it is currently not stocking. This analysis was completed for ADDO shops specifically, noting that insufficient price data for ADS and illegal status of penicillin injections were limiting factors for running this analysis for ADS. The average sales, retail price, and cost of purchase of the product were estimated from shops that are currently stocking and selling that product. This information was used to estimate the revenue and gross profit increase from stocking an additional product. Each of these products was added (if the shop was not already stocking) to the cash flow and the net cash flow was simulated accordingly. On average in the ADDOs, stocking doxycycline increased net profits by 8.26% and stocking penicillin injection increased net profits by 1.13%. Given the limitations with sample size of this specific study, the cash flow impacts this specific analysis illustrates are narrow.

#### *Percentage Mark-Ups*

Average percentage mark-up for all products was determined after additional review of product price data. The percentage mark-up ranges from -7.69% to over 4000% across the product categories. The range in mark-ups suggests that some shops are making a loss on certain products because of poor pricing practices. This trend often occurred for bulk items that were split and sold at a value less than the purchase price for the entire bulk package (i.e., condoms). Negative mark-ups on certain products and

very high mark-ups on others could be leading to some type of cross subsidization. If properly designed, cross subsidization can help reduce the costs of medicines that are of highest public health benefit. However, cross subsidization also creates sustainability risks if the demand side market dynamics change. For this reason, cross subsidization is not recommended as a long-term strategy.

### ***Synthesis of Findings***

Geographical reach of direct distribution/deliveries of most pharmaceutical wholesalers and distributors is limited to cities and large towns. As a result, owners of drug shops (ADDO and ADS) in smaller towns and villages either travel to larger cities to purchase medicines or to sub-wholesalers in nearby mid-sized towns. Pick-up sales are typically carried out on a cash basis. Larger shops that may be able to access credit with wholesalers and sub-wholesalers, still may not be able to access the same level or terms of credit as their urban retail pharmacy counterparts do. This could raise the cost of holding stock, increase overall operating costs and in some cases risk the sustainability of a drug shop.

In some cases retail drug shops may take a loan from a local finance institution to support the working capital needed to maintain their cash-to-cash cycle. With limited understanding of the functioning of the retail drug shop business, local banks are cautious in lending working capital credit to shops or offer it at high interest rates. As a result accredited drug shops may have trouble gaining access to sufficient working capital both from their wholesaler/sub-wholesaler and local finance institutions. 43% ADDOs and 42% of ADSs stated that not having enough capital was constraining them from stocking “enough” medicines and 52.4 % of ADDOs (50% of ADSs) stated that lack of capital was not allowing them to keep their shop in good condition.

### ***Recommendations***

In combination, the aforementioned analyses provide insights into the business management practices of ADDOs and ADSs as well as some understanding of the role of capital in shop stocking behavior. The assortment breadth analysis and stock sufficiency analysis revealed that while the majority of shops were stocking essential medicine categories, these categories were not always stocked optimally.

The analysis of ADDO shops in Tanzania suggests that accredited drug shops would benefit from additional working capital to stock the optimal quantity of currently under stocked medicines. Likewise, strategic planning around additions to shops’ current product assortment remains an important area of potential profit growth. Community sensitization to currently unstocked products remains an important component to understand, as increasing credit and the ability to purchase new medications may not be enough to incentivize shop owners to stock them if they feel there will be no or little demand. Finally, findings concerning overstocking of certain products and under stocking of others, suggests that inventory management is poorly practiced among shop owners. What-if analyses indicate that if product planning is conducted in a strategic way, with emphasis



on essential medicines and/or diverse range product offerings, shops may be able to improve their profitability incrementally overtime. It is recommended that training opportunities serve as a prerequisite for any working capital intervention targeted for the drug shops. Specifically, training should include applied exercises to develop routine-stocking strategies as well as consistent cash flow management. Training opportunities might also provide support to shop owners to plan for credit provisions and completing funding applications.

#### *Access to Fixed Capital Resources*

As noted earlier in this analysis, most drug sellers identified large challenges with maintaining the condition of their drug shops or renovating their shops to remain competitive within communities. A fixed capital provisioning method for drug shops needs to be designed by leveraging local banking institutions. A portion of the local banks risks from lending fixed capital to ADDOs or ADSs can be covered using collateral guarantees thereby making the case stronger for the banks to lend to drug shops and reducing the interest rates. Starting a fixed capital mechanism may automatically prime the system so that as banks begin to understand the drug shops business model better and can assess the credit worthiness of the drug shops, they might also start offering working capital credit lines to the drug shops.

#### *Working Capital Mechanism*

This small-scale, in-depth analysis of access to working capital and its impact on the availability of medicines in remote areas reveals that working capital constraints are indeed an impediment to running a sustainable business. To address this specific challenge developing a working capital financing mechanism may provide an innovative solution for financing drug shops while also encouraging the appropriate use of funds by prioritizing use of funds on essential medicines and health products. As was simulated with the cash flow product addition analysis, identifying products that are of high value to communities (and are currently unstocked) will improve the cash-to-cash cycle of drug shops in a strategic fashion. Successful completion of supplemental business training for shop owners that focuses on inventory management, cash flow management should be a prerequisite for the provision of additional working capital.

One way to enhance working capital availability for drug shops would involve drug shops receiving both working capital and fixed capital loans through local banking institutions. Banking institutions would receive collateral guarantees and downside risk coverage from the capital financing mechanism. The banks will lend both forms of capital and manage the logistical aspects of lending money and receiving payment on balances.

The second working capital mechanism recommended involves a credit facility that is managed by a community of accredited retail shop owners. A group of accredited shop owners would be provided an initial investment of capital by an external funder (donor, investor, or mix of both types of funds) that can be utilized in a revolving fashion. Certain portions of the revolving credit facility will be loaned to shop owners who identify a need for additional capital and are approved to use by the regional accredited retail drug shop association. Accountability will stem from the group structure,

mirroring the commonly utilized microfinance model, which is also based on community accountability. However, this second model relies on the availability of an accredited shop owner association to manage the use of funds. This may place a burden on shop owners, especially for owners that already manage businesses in addition to their drug shop.

In addition, if credit to the national wholesalers becomes cheaper or their need for working capital decreases, wholesalers may be better positioned to lend working capital credit to the drug shop owners. Wholesalers' need for working capital might decrease as a result of their credit terms with the pharmaceutical manufacturer or due to the creation of pre-wholesaling operations by the manufacturer. More favorable cash to cash cycles for the wholesaler may lead to a "trickle-down" effect where wholesalers begin extending similar credit terms to drug shops as they do for urban and peri-urban pharmacies.

Regardless of the mechanism determined most fit to address the identified challenges, the role of technology should play a central role in the ongoing management of any financing approach.

## **INTRODUCTION**

A healthy pharmaceutical market requires a well functioning credit provisioning system across the multiple entities in the pharmaceutical distribution network. To ensure sustainability of pharmaceutical retailers in low-income countries it is important to develop an in-depth understanding of the credit provisioning system. The next phase of the accredited drug seller program includes ensuring the accredited drug shops are sustainable to a greater extent. This study assesses the need for working capital in rural drug shops, analyzes how working capital impacts the availability of medicines, and compares different mechanisms for providing capital to rural drug shops while ensuring efficient monitoring, debt collection, and overall sustainability.

Findings from this study will help to enhance the long-term sustainability of accredited drug seller initiatives and will increase the ability of drug shops to stock pharmaceutical products based on changing community health needs. This report outlines the approach used to first understand the cash-to-cash cycle of accredited drug dispensing outlets (ADDOs) in Tanzania and accredited drug shops (ADS) in Uganda, and provides a full analysis of findings for both countries.

## **STUDY OBJECTIVES**

In partnership with Management Sciences for Health, five primary objectives were developed to guide this exploratory research on working capital constraints. The following outlines the objectives of the current study:

1. To understand the cash-to-cash cycle of ADDO/ADS owners in Tanzania and Uganda.
2. To assess the need for working capital by ADDO/ADS owners in Tanzania and Uganda with specific emphasis on the following questions:
  - a. Where do ADDO/ADS owners currently obtain working capital (finance from business, loan from family etc.)?
  - b. What is the need and availability of credit for different size of ADDOs/ADS?
  - c. Do ADDO/ADS owners lose sales revenue because of working capital credit constraints?
3. To model the measurable impact of enhanced access to working capital for ADDO owners on the availability and prices of a list of drugs with significant public health benefit.
4. To understand the impact of working capital availability on the long-term sustainability of ADDOs/ADSs as well as the ability for ADDOs/ADSs to adapt stocking patterns according to changes in health needs of the communities they seek to serve.
5. To analyze the feasibility of different potential arrangements for enhancing working capital needs for ADDOs/ADSs, including (but not limited to) a working capital facility. Additionally, to model, project and compare the risks, benefits, sustainability of each proposed arrangement.

## **PROJECT PARTNERS**

The Tanzanian Food and Drug Authority (TFDA) and the National Drug Authority (NDA) in Uganda are responsible for the scale-up or piloting and overarching regulation of the ADDO and ADS programs in their respective countries. Both entities served as key government partners providing support to this research project.

*Management Sciences for Health (MSH)* - A US-based NGO serving as the lead technical and implementing partner for the ADDO/ADS programs in Tanzania and Uganda respectively, as well as the ongoing director for the Sustainable Drug Seller Initiatives (SDSI) work funded by the Bill & Melinda Gates Foundation.

*William Davidson Institute (WDI)*- A non-profit educational and research institute, affiliated with the University of Michigan, lends its expertise in the areas of scalable and sustainable models for the delivery of goods and services in healthcare. The WDI Healthcare Research Institute's extensive knowledge base and ongoing research help identify interventions that improve the efficiency and function of healthcare supply chains.

## **METHODOLOGY & STUDY DESIGN**

In order to address each of the aforementioned study objectives, a cross-sectional study design was employed using a comprehensive survey instrument developed for the study population of ADDO and ADS owners. Surveys were administered in paper format (Tanzanian data collection) and electronic format using tablet devices (Uganda data collection). The software utilized for electronic data collection was Open Data Kit (ODK), an open source platform that runs as an application on android-based devices. Survey forms were uploaded prior to and downloaded after data collection using Open Data Kit Aggregate. Further details on the topics included in the survey tool as well as the sampling methodology used in survey administration are included in the text that follows.

### *Survey Tool*

A survey tool was developed to elicit a greater understanding of the cash to cash cycle of accredited drug shops in Tanzania and Uganda. The tool captured key characteristics of the drug shop and the drug shop owner (see ANNEX 1):

#### *1. Drug Shop owner questionnaire*

- *Contents:*

- Drug shop owner characteristics (general demographics of owner's household, proxy measures for socio-economic status etc.)
- Drug shop characteristics (number of employees, distribution of labor, responsibilities included in the day to day shop management, patient volumes, days and hours of operation, etc.)
- Drug Shop's medicine supply (where are medicines sourced, how are orders placed, frequency of order placement, etc.)

- Access to capital and credit (has drug shop ever received a formal or informal loan, does supplier provide drug shop credit, what are the repayment periods and conditions for credit/loans, etc.)
  - Non-current, current assets/liabilities
  - Drug shop owner expenditures
  - *Format:* Paper-based (Tanzania), Electronic tablet-based (Uganda)
2. *Inventory sheet- The inventory captures everything that was in stock and for sale on the day of the shop visit*
- The inventory tool captures the following:
    - Brand Name
    - Manufacturer
    - Country of manufacture
    - Expiry Date
    - Number of units in stock
    - Purchase price and retail price (when available)
    - Whether each medication had been stocked out in the last 30 days
  - *Format:* Paper-based (Tanzania and Uganda)

#### *Region Selection in Tanzania*

Data collection was conducted in Morogoro region within central Tanzania, which was selected based on the following criteria:

- *Presence of Accredited Drug Dispensing Outlets-* The Tanzania Food and Drugs Authority (TFDA) is in the process of scaling the ADDO program across Tanzania on a region-by-region basis. This study was conducted in a region (Morogoro region) in which ADDO conversion had already taken place.
- *Heterogeneity of ADDOs (high vs. low volume shops)-* The study team needed to assess the working capital constraints, as well as the need and availability of credit at ADDOs of varying sizes. MSH suggested that Morogoro would have the diversity of shops required to obtain a representative sample.

#### *Region Selection in Uganda*

The study site in Uganda (Kibale District) was chosen based on the following criteria:

- *Presence of Accredited Drug Shops-* The ADS program was launched in 2009, and currently these accredited shops are only found in Kibale district as scale-up to other districts is forthcoming. As a result, Kibale district was chosen for the data collection conducted in Uganda.

### *Participant Selection*

This study targeted the drug shop owners as the primary survey respondents. However, in certain cases in which the drug shop owner was not available, the drug seller/dispenser was interviewed instead. Additionally, although the study targeted drug shop owners, as mentioned above, the survey instrument also captures basic information on all staff members and their roles and responsibilities in each drug shop.

### *ADDO/ADS Selection*

MSH provided WDI with a list of all known ADDOs in Morogoro region, Tanzania and ADS in Kibale District, Uganda. A representative sample of 21 ADDOs, stratified by year of ADDO training and volume of customers, was randomly selected from this master list. Due to the rains, difficult logistics, and time constraints, two districts in Morogoro region (Ulanga and Kilombero) were excluded from the study sample pool. The districts within Morogoro region where the 21 sampled ADDOs were surveyed included Morogoro Rural, Kilosa and Mvomero. In Uganda, 12 ADSs and 3 class C drug shops (class C by NDA standards with no accreditation through the ADS pilot program) were randomly selected from the ADS master list.

To note, as this research was exploratory in nature, the sample size determined was intended to provide an in-depth view of a small population of shops. The findings presented in this report may not be statistically generalizable to all accredited drug shops. In-depth survey instrumentation along with complete inventory of selected drug shops created resource constraints in the form of time limitations and budgetary limitations. As a result, findings should be taken with consideration for the sample size outlined above.

### *Replacement Drug Shops*

In addition to the sample of ADDOs and ADSs that were randomly selected, an additional 5 drug shops in each of the country's sample areas were also randomly selected to serve as replacements in the chance that the study team found the ADDO/ADS closed or in instances when the owner was not present.

### *Drug Shop Owner Participation in the Study*

All randomly selected ADDOs/ADSs in the target districts were approached and provided with an informed consent, during which time the study procedures and implications for participation were described, making it clear that the participant could refuse to participate or cease participation at any time. The study team only proceeded to interview drug shop owners (or drug sellers/dispensers in some instances) when witnessed verbal consent was provided. The University of Michigan Institutional Review Board (IRB) approved this study with exemption status as it was determined to be of minimal risk to the drug shop owners and dispensers. Under this approved application, the aforementioned verbal consent was outlined along with examples of survey instrumentation used.

**Table 1: Project Timeline**

<i>Activity</i>	<i>Time Period</i>
Review literature, interview key informants and develop questionnaire/framework to measure the needs and availability working capital at ADDOs/ADSs	Oct-Nov 2011
Conduct interviews with a stratified sample of ADDO/ADS owners in Uganda and Tanzania	Dec 2011-Jan 2012
Create a flow model to understand the impact of marginal increase in working capital on different impact parameters (availability, price, profitability, etc.)	Feb-Mar 2012
Analyze the technical and long term economic feasibility of different potential arrangements for enhancing working capital needs for ADDOs/ADSs	Feb-Mar 2012
Finalize technical report, discussion with external partners	April 2012

A random sample of ADDOs in Morogoro region, Tanzania, and ADSs and class C drug shops within Kibale District, Uganda was obtained with the help of MSH based on the geographic presence and heterogeneity of drug shops within each country. Surveys were successfully administered in paper format (Tanzanian data collection) to 21 ADDOs and electronic format using tablet devices (Uganda data collection) to 12 ADSs and 3 class C drug shops. In addition to the completion of a survey questionnaire, full inventory was taken for a subset of the sample to capture specific brand, manufacture and price information for all products in stock and for sale on the day of the shop visit.

To understand the impact of additional working capital credit, this study utilized direct responses from shop owners, sufficiency of stock analysis, and what-if analyses from stocking additional products. Each of these approaches provides unique information regarding the ways in which shop cash-to-cash cycles are managed, stock decision making practices and role of working capital credit in the accredited drug shop network.

## **FINDINGS**

### *Shop Characteristics:*

The majority of respondents interviewed in both Tanzania and Uganda ranged in age between 25 years and 64 years, with just over half of all respondents being male (ADDO: 67%, n=21; ADS: 53%, n=12). Among ADDO owners<sup>1</sup>, the highest level of education reported was a Diploma<sup>2</sup> (n=22, 18%) while the most common level of education received

<sup>1</sup> Note that ADDOs/ADSs may have more than one owner and therefore data on owner traits may reflect a larger sample, than the sample of respondents (one per shop) interviewed at each shop.

<sup>2</sup> A diploma is achieved after spending generally 2 years undertaking specialized coursework or training. Diplomas are issued in the Technical, Vocational Training, and University sectors. In the technical and vocational training sectors, a person holding an ordinary diploma would have at least an advanced vocational certificate or a technician certificate. In the University sector, a person holding an ordinary diploma would have a bachelor's degree. Standardized rankings and equivalences across the aforementioned sectors do not exist. However, where the same qualifications are issued in more than one sector (i.e. Diploma) they are equivalent but sector-differentiated.

by owners was secondary school, level 4 (n=9, 41%). The two most commonly reported levels of education for ADS owners were University degrees (n=18, 56%) and diplomas (n=18, 17%). Type/level of training varied widely across shops, however, nursing/midwifery training was the most frequently cited for owners by both ADDO (n=23, 35%) and ADS owners (n=18, 28%).

The majority of ADDOs interviewed had fewer than 150 customers per week, however, there was a range among shops sampled, anywhere between 36-1050 customers. ADSs interviewed had 78 customers per week on average; however, a similar range of customer population size extended from 13 to 500 customers per week. Customer information obtained was all based on self-reported weekly volume and so should be considered an approximation of actual customer volumes.

### *Stocking Practices*

The majority of ADDOs sampled (n=21, 76.19%) reported purchasing medicines from a primary supplier (either sub-wholesalers or wholesalers) located in Morogoro Town (Table 2). Across the shops, the average approximate distance between ADDOs and their primary supplier was 2.15 hours (range 0.5-4hours SE: .243) by personal vehicle.<sup>3</sup>

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<sup>3</sup> Many shop owners may utilize public transport (i.e., bus) to reach their supplier, which may equate to longer time-distance calculations. This is not reflected in this report as personal vehicle was used to measure this time and distance between shops and suppliers.



Figure 1: Map of ADDO and Supplier Locations in Tanzania

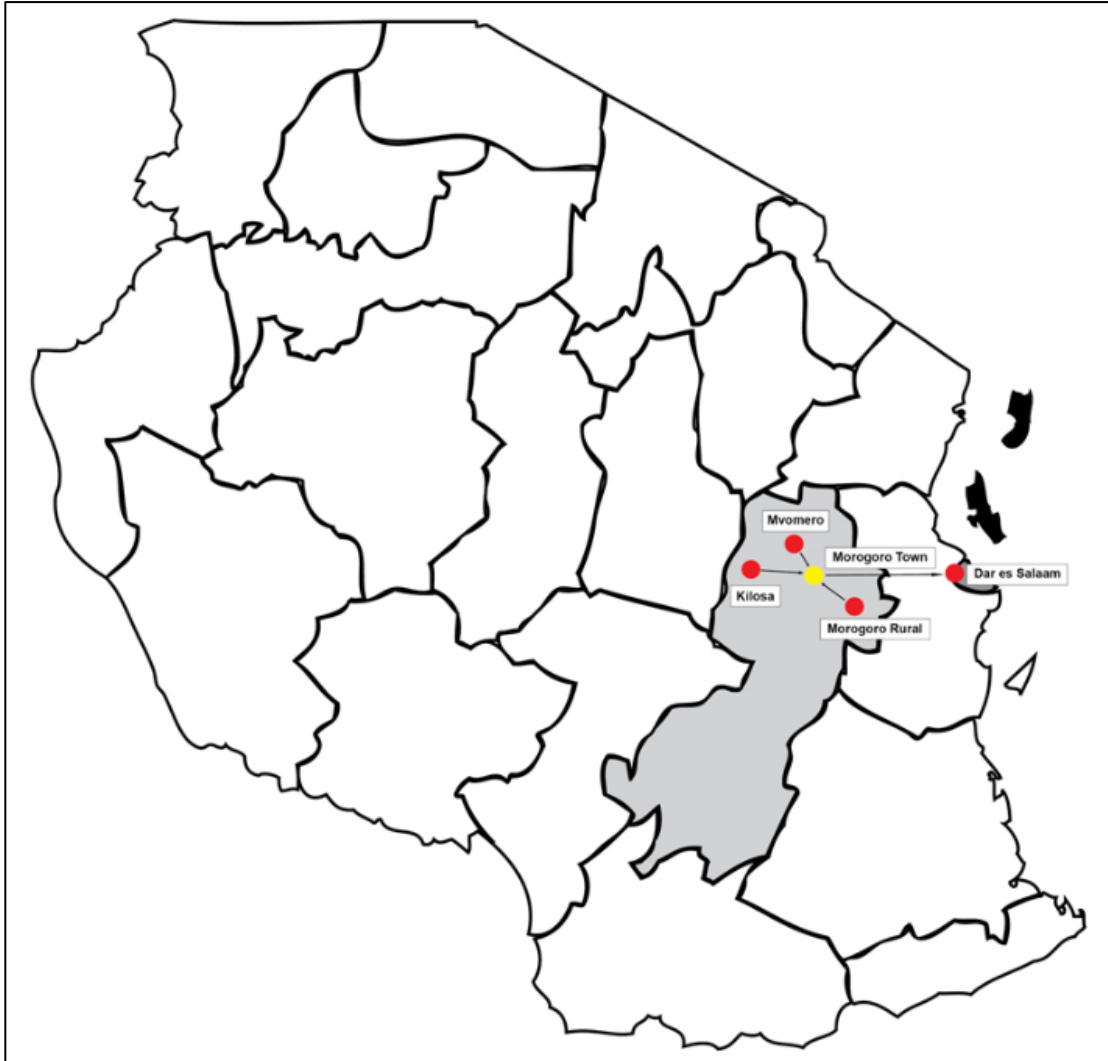
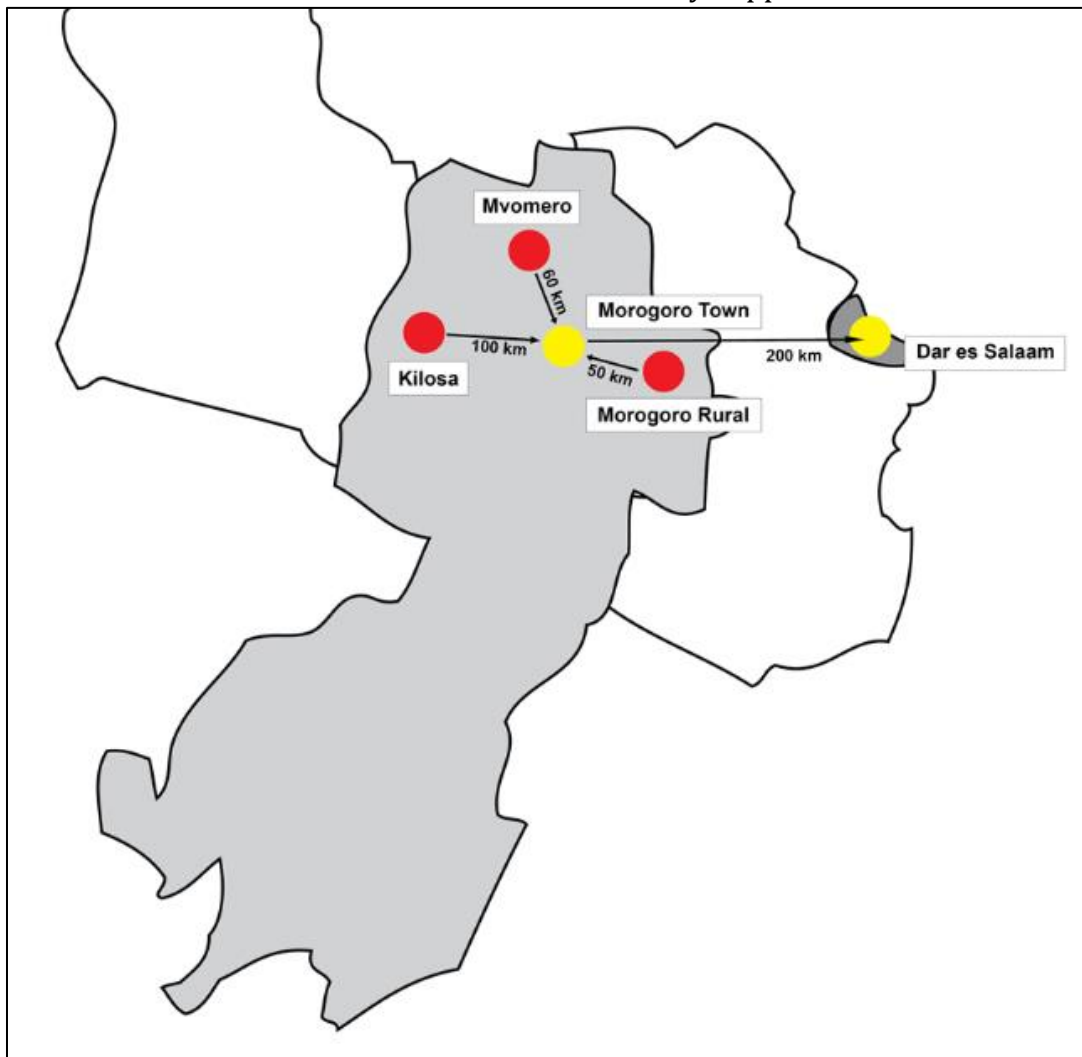


Figure 2: Distance between ADDO Locations and Primary Suppliers in Tanzania



Of these ADDOs, 76% (n=16) cited more than one supply source for medicines. The majority of the secondary sources (either sub-wholesalers or wholesalers) of medicine supply were also located in Morogoro region, with 63% (n=10) reporting suppliers in Morogoro Town, and 13% (n=3) reporting a supplier in Kilosa Town (Table 3).

**Table 2: Location of Primary Supplier for ADDOs**

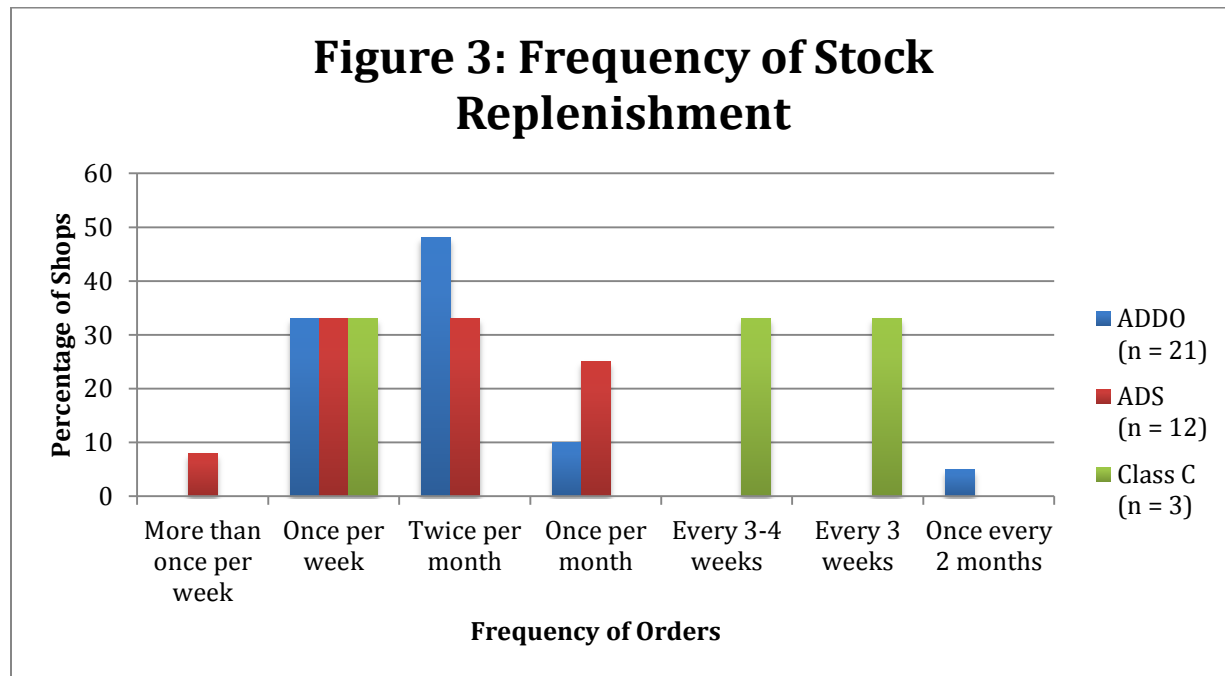
n=21	Frequency	Percent
Own town/village	2	9.52%
Morogoro Town	16	76.19%
Dar es Salaam	3	14.29%

**Table 3: Location of Secondary Supplier for ADDOs**

n=16	Frequency	Percent
Morogoro Town	10	63%
Kilosa Town	3	19%
Dar es Salaam	2	13%
Own town/village	1	6%

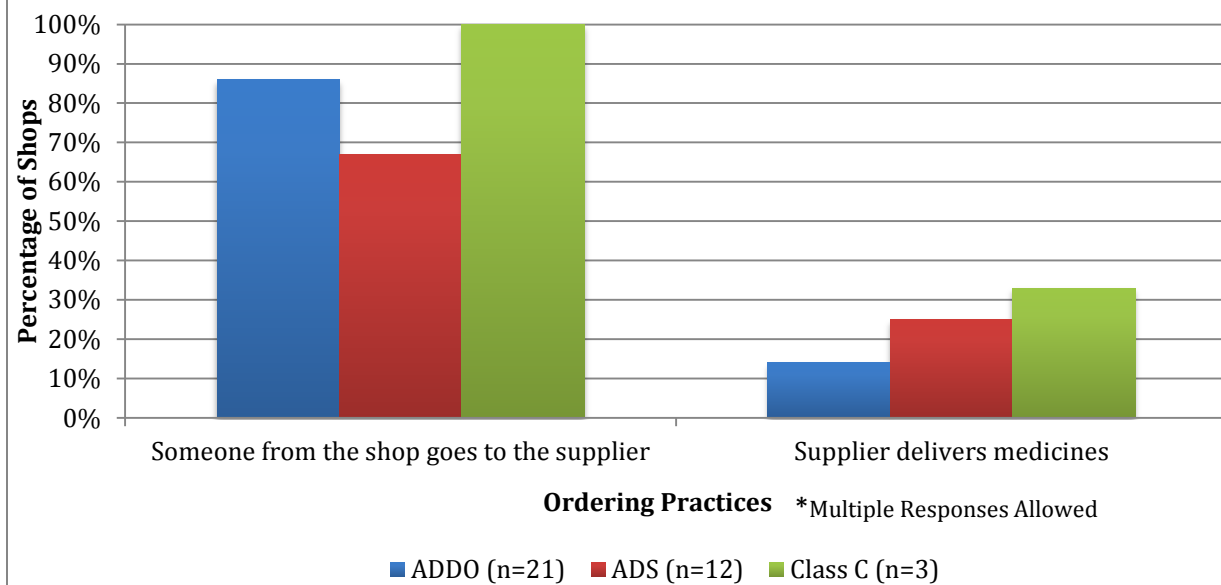
Half of the ADSs surveyed (n=6, 50%) reported purchasing medicines from a primary supplier located in Kampala, with Kagadi serving as the second most common supplier location (n=4, 33%). Of the ADSs, 58% (n=7) cited more than one supply source for medicines.

Figure 3 shows that most ADDOs ordered their medicines once every 2 weeks (n=10, 48%) or once per week (n=8, 38%). For ADSs, a third of owners order supplies once a week and another third sourced their medicines twice a month (n=4, 33%).

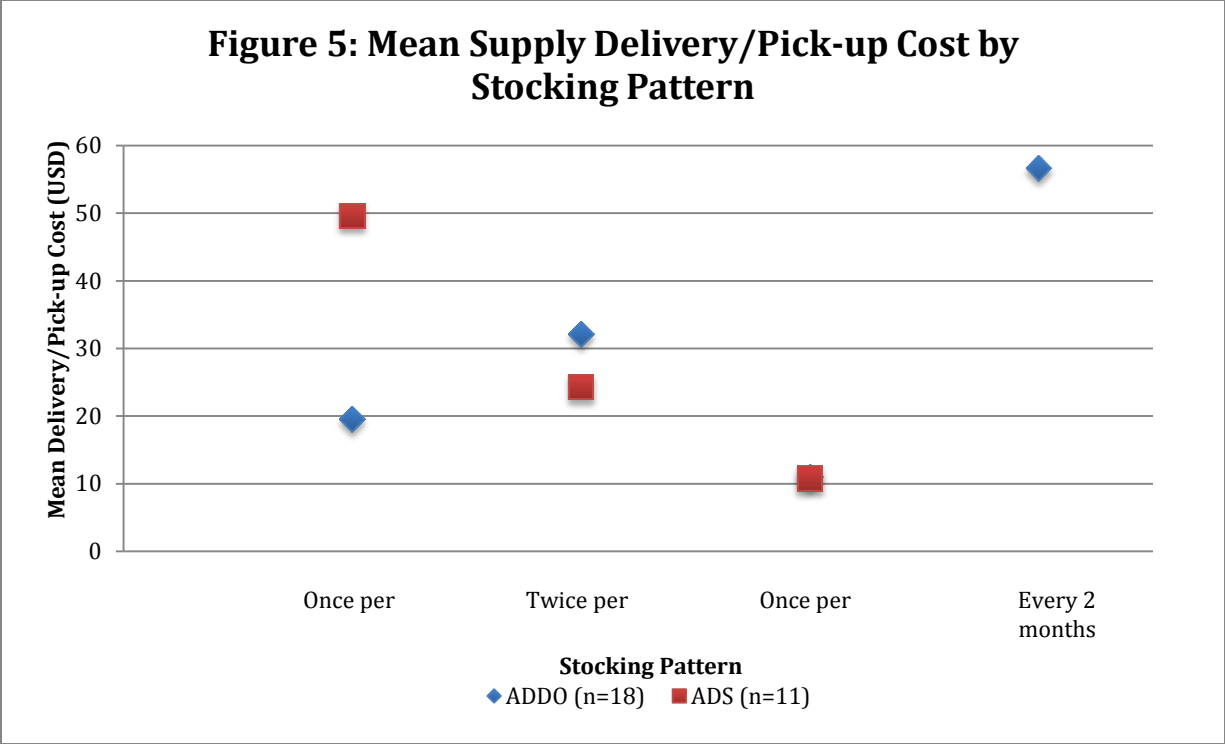


Survey responses regarding monthly expenses revealed that 86% (n=18) of all ADDOs surveyed and 92% (n=11) of all ADSs reported a monthly pick-up/delivery cost for purchasing medicines from each shop's sub-wholesaler/wholesaler.

### Figure 4: Shop Ordering Practices



Of the ADDOs that incur pick-up/delivery expenses, pick-up/delivery costs are on average 22% of total operating costs. For ADSs the pick-up/delivery costs are 17% of the total operating costs. When comparing pick-up/delivery costs relative to a shop’s stocking pattern (i.e., the frequency at which they purchase supplies) it appears that as ADS shops stock more frequently, their pick-up/delivery related expenses increase. The results for ADDOs were less consistent, with one large expensive outlier for a shop stocking every two months. Figure 5 plots the mean pick-up/delivery expenses for each reported stocking pattern by shop type – ADDO or ADS. Information obtained regarding pick-up and delivery costs was self-reported and therefore subject to the survey respondent’s interpretation of what costs are incurred related to “pick-up” and “delivery”.

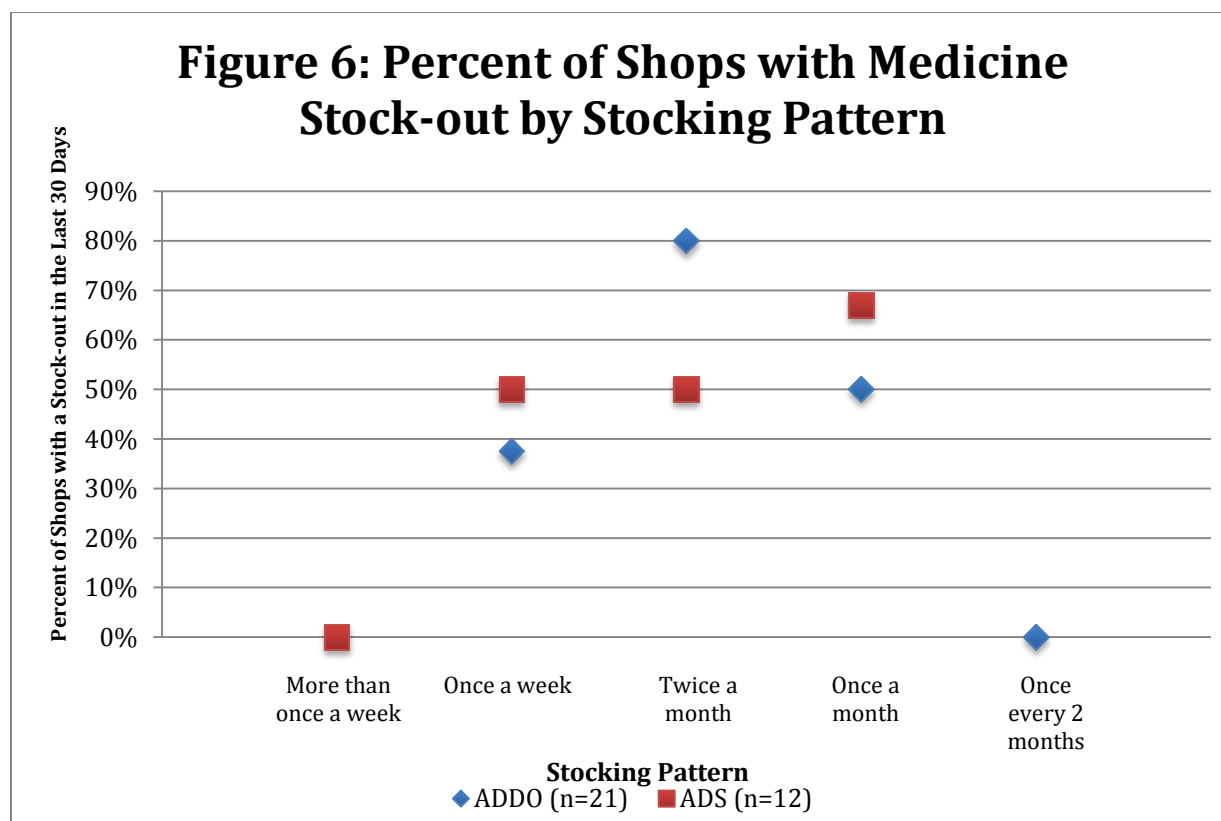


It is possible that shops that stock less frequently may be at a higher risk for product expiration than those who stock more regularly. However, as per TFDA regulations pharmaceutical products should have three-fourths of the product shelf life remaining at the time of import limiting the chances of product expiration when replenishment frequency changes from twice every month to once every two months. Shops that collect supplies more often may do so because they are operating with limited working capital, which prevents them from making larger purchases, less often. These findings may suggest that limited access to working capital may be impacting the cash flow of shops negatively as they are incurring greater pick-up/delivery costs, particularly for the ADS shops, associated with more frequent supplies ordering. Another study found that ADDOs in remote regions in Tanzania tend to order more frequently and lesser volumes as compared to ADDOs in less remote regions. This ordering behavior was attributed to a lack of working capital (Larson et al, 2012).

Of the ADDOs surveyed, 57% reported a stock-out of one or more medicines in the last thirty days. ADSs surveyed reported similarly with 50% of shops having a stock-out of medicines in the last thirty days.

<b>Table 4: Medicines Stocked Out in Last Month (Y/N)</b>			
	<b>ADDO (n=21)</b>	<b>ADS (n=12)</b>	<b>Class C (n=3)</b>
Yes	57%	50%	67%
No	43%	50%	33%

Stocking pattern also appears to impact the percentage of ADS shops that have a monthly stock-out. Figure 6 shows the relationship between frequency of stocking and the percent of shops with medicine stock-outs for ADS.



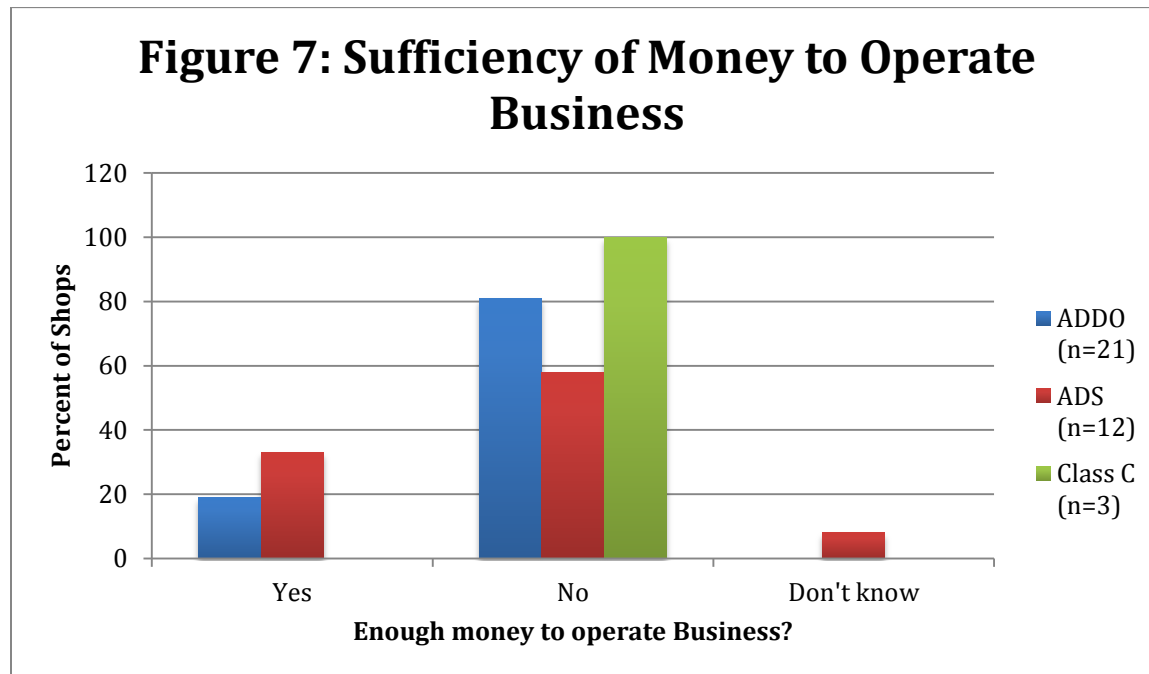
*Access to Capital and other shop constraints*

69% (n=18) of the ADDO owners and 67% (n=12) of ADS owners surveyed used their own personal savings to establish their drug shop.

**Table 5: Source(s) of Capital to Establish Business**

*Multiple responses allowed	ADDO (n=21)	ADS (n=12)	Class C (n=3)
Owner's personal savings	69%	67%	33%
Borrowing from friends or family	15%	0%	0%
Borrowing from SACCOs or small scale community lending organizations	0%	25%	0%
Borrowing from banks or other formal lending institutions	8%	8%	33%
Inheritance	4%	0%	0%
Joining funds and a foreign grant	0%	0%	33%
Don't know	4%	8%	0%

81% (n=17) of ADDO owners and 58% (n=9) of ADS owners indicated that they did not have enough money to operate their business. This reported lack of funds does not indicate the business may no longer be in operation, but rather may be an indication of shops not having enough money to grow their business. It may be that some shop owners are cross-subsidizing their business with other sources of income in order to keep the shop in operation.



Specifically, 48% of ADDOs and 75% of ADSs stated not having enough money to conduct business as their greatest challenge. Comparatively, 29% of ADDOs (25% of ADSs) said not having enough customers was their greatest challenge and 19% of ADDOs (16% of ADSs) said sensitization of patients to the medicines (i.e., the patients’ relative familiarity to a medicine(s)) was their biggest challenge. 43% ADDOs and 42% of ADSs stated that not having enough capital was constraining them from stocking “enough” medicines, 52.4% of ADDOs (50% of ADSs) stated that lack of capital was not allowing them to keep their shop in good condition.<sup>4</sup>

<b>Table 6: Impact of Not Having Enough Capital for ADDOs</b>		
<b>n=17</b> *Multiple responses allowed	<b>Frequency</b>	<b>Percent</b>
I cannot keep the shop in good condition	11	41%
I cannot stock enough quantity of each medicine	9	33%

<sup>4</sup> Specific information was not obtained regarding the magnitude of this problem and/or what risks shop owners face due to this stated challenge. However, future research could collect information on outcomes of challenges as it relates to continued licensure and accreditation.

Inability to sustain business (loss of business, loss of revenue)	3	11%
Failure to meet customer expectations/loss of customers	2	7%
I cannot stock some more expensive items	1	4%
Difficulty paying staff salaries	1	4%

When shop owners were asked about access to credit from their medicines supplier, 48% of ADDO owners and 25% ADS owners reported their supplier offers no credit. 24% of ADDO owners reported use of some form of credit from their supplier for most or all products. 58% of ADS owners reported extension and use of credit from their supplier on most or all products. Of the ADSs that are offered credit by their supplier, 43% had no repayment period set with their supplier. As seen in Table 8 below, credit repayment periods to suppliers varied between both ADDOs and ADSs. There appears to be no set repayment schedule across shops, which may be an indication of the current informality of credit provisioning when available to shops.

**Table 7: Does Medicine Supplier Offer Credit to Your Drug Shop? (Y/N)**

	<b>ADDO (n=21)</b>	<b>ADS (n=12)</b>	<b>Class C (n=3)</b>
No, the supplier never sells anything on credit to me	48%	25%	0%
Yes, credit is offered on most or all products	24%	58%	67%
Don't know	14%	0%	33%
Supplier offers credit, but the shop does not accept it	9%	17%	0%
Refused	5%	0%	0%
Sometimes credit is offered on new or promotional products	0%	0%	0%

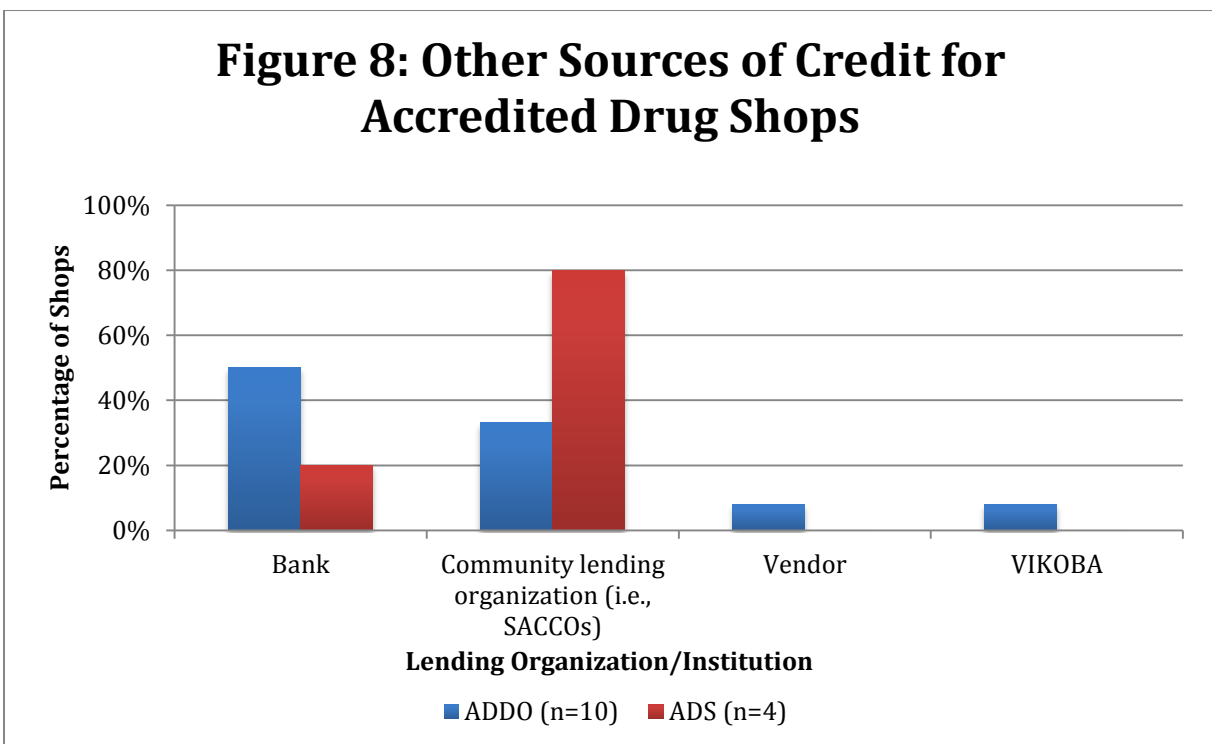
**Table 8: If Credit Offered by Medicine Supplier to Drug Shops, How is the Money Paid Back?**

	<b>ADDO (n=5)</b>	<b>ADS (n=7)</b>	<b>Class C (n=2)</b>
Next time I go to purchase drugs	60%	0%	0%
Two to three weeks later	20%	0%	0%
Make a deposit to supplier's bank account	20%	0%	0%
No set repayment period	0%	43%	0%
One week	0%	29%	0%
Between two to four weeks	0%	14%	0%
One month	0%	58%	100%



In addition to credit provisions from medicine suppliers, a smaller portion of both ADDOs and ADSs utilized credit from alternative sources. 5 ADDO owners (50%, n=10) and 1 ADS owner (20%, n=4) reported use of a bank loan and 3 ADDO owners (33%, n=10) and 3 ADS owners (80%, n=4) reported financing through a community lending organization.

	<b>ADDO (n=21)</b>	<b>ADS (n=12)</b>	<b>Class C (n=3)</b>
Yes	48%	33%	0%
No	19%	58%	100%
Don't know	33%	8%	0%



In total, 57% of ADDOs and 58% of ADSs reported receiving credit from either their supplier or another source (i.e., bank, community lending organization, etc.). In turn, a greater number of shop owners extend credit to their customers to purchase medicines. 71% of ADDO owners and 83% of ADS owners offer credit to their customers. One third of ADS and ADDO owners reported that they had no set repayment date for any credit provided to customers. Informal credit provisioning to customers illustrates an additional variable of financial uncertainty and potential shop constraint for owners.

	<b>ADDO (n=21)</b>	<b>ADS (n=12)</b>	<b>Class C (n=3)</b>
Yes	71%	83%	100%
No	29%	17%	0%

In addition to outstanding credit utilized by customers and credit due to suppliers, many owners manage personal withdrawals of money from their business on a daily or monthly basis. 67% of ADDO owners withdraw money from their business on a daily basis and 76% withdraw on a monthly basis. 75% of ADSs withdraw money from their business on a daily basis and nearly all, 92%, of ADSs withdraw on a monthly basis. A large number of ADDO owners decide what amount to withdraw on an ad hoc basis (50% for daily withdrawals, 38% for monthly withdrawals). Similarly, ADS owners typically withdraw money based on their current needs (56% for daily withdrawals, 55% for monthly withdrawals). Both predominant decision-making methods may be variable and subject to other personal financial constraints the shop owners face.

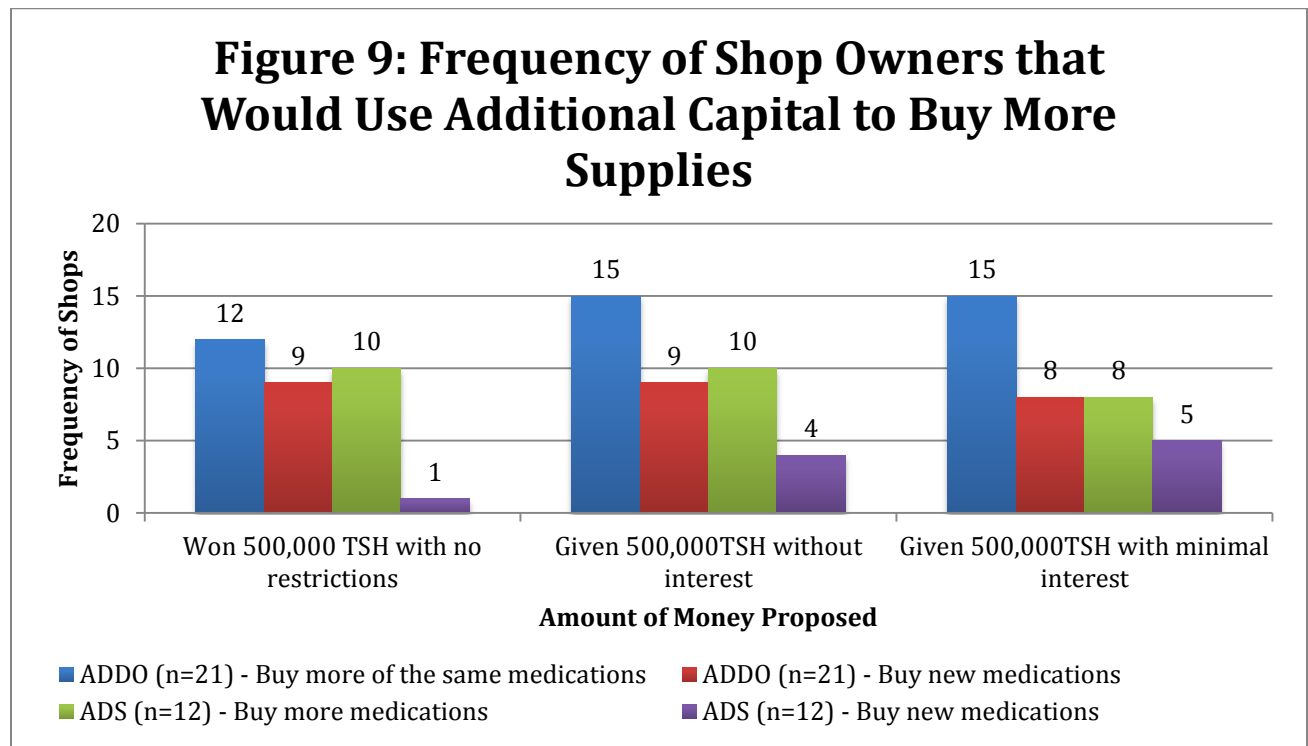
<i>*Multiple responses allowed</i>	<b>ADDO (n=14)</b>	<b>ADS (n=9)</b>	<b>Class C (n=3)</b>
Owner draws on an ad hoc basis	50%	0%	0%
Owner reconciles accounts at the end of the day and determines an amount	19%	11%	33%
Owner calculates how much he/she can draw	13%	22%	0%
Owner draws according to his/her needs	13%	56%	33%
Owner knows profit margin and draws accordingly	6%	11%	33%
Owner draws when other businesses need to be supported	0%	11%	0%
Owner draws on a regular, weekly basis	0%	11%	0%

<i>*Multiple responses allowed</i>	<b>ADDO (n=16)</b>	<b>ADS (n=11)</b>	<b>Class C (n=3)</b>
Owner draws on an ad hoc basis	38%	0%	0%
Owner calculates how much he/she can draw	21%	0%	0%
Owner reconciles accounts at the end of the day and determines an amount	13%	9%	33%
Owner knows profit margin and draws accordingly	13%	9%	0%
Owner draws according to his/her needs	13%	55%	33%

Refused	4%	0%	0%
I calculate how much I can draw at the end of the month	0%	36%	0%
Business partners have agreed on a ceiling	0%	0%	33%

*Use of Additional Credit*

To examine shop owner interest in additional credit resources, survey questions were framed using multiple hypothetical credit provisioning scenarios. An overwhelming majority of shop owners responded to these questions indicating they would use additional funds/credit, if available, to purchase more medications or new medications they are not currently stocking. When asked, “what would you do if additional credit (with interest) was provided to your business” approximately 71% of ADDOs and 69% of ADSs mentioned they would purchase more of the same medicines and 38% ADDOs and ADSs said they would start stocking new medicines which they currently don’t stock.



While not specific to the type of supplies the owner would purchase (i.e., the same medications or new medications not previously stocked), 16 (76%) and 11 (52%) ADDO owners indicated they would buy more medicines if they were able to obtain larger sums of money such as 2 million TSH or 10 million TSH, respectively. Improving shop profitability by adding to or increasing current stock levels aligns well with the reported use of hypothetical, additional capital fund by shop owners.

### Assortment Planning Decisions

Survey respondents cited community demand as the main driver for medicines stocking behaviors, with 32% (n=17) of ADDOs and 42% (n=5) of ADSs stocking medicines that their customers ask for, and 25% (n=13) of ADDOs and 42% (n=5) of ADSs stock the medicines that treat diseases in the community (Table 13). While the number was small (n=2, 4%), it was interesting to note that 2 ADDOs in close proximity to a hospital/health center were regularly checking on the availability of medicines in the public sector and were additionally stocking medicines that were out of stock at these health facilities. To note, customer demand at shops may have also reflected stock-outs of medicines in nearby health facilities as they were unable to get the treatments at the facility and so requested the same drugs at the ADDOs. Information regarding the number of customers that came to ADDOs or ADSs to purchase medicines because they were unable to obtain them at a public health facility was not collected as a part of this data set.

*Multiple responses allowed	<b>ADDO (n=21)</b>	<b>ADS (n=12)</b>	<b>Class C (n=3)</b>
Order what customers ask for	32%	42%	33%
Order what treats diseases in the community	25%	42%	100%
Order products that sell quickly	17%	25%	67%
Order products that are low in stock	9%	33%	-
Order products on the ADDO/ADS list <sup>5</sup>	8%	17%	33%
Order products that are out of stock	6%	17%	-
Order products that are out of stock at the nearby hospital	4%	-	-
Order products based on efficacy, quality and price	-	8%	-
Order depending on available resources	-	8%	-

Product categories that were found to be in stock in 100% of the ADDO and ADS shops (i.e., carrying one or more drug within that specific category) included: anti-malarials, disinfectants/antiseptics, cold/flu preparations, antiworm, antibacterial/antibiotic, antifungal, antianaemia/vitamins & minerals/supplements, and antacid/anti-flatulent/anti-peptic ulceration. Product categories that were available in less than 50% of ADDO shops included: oxytocics, laxatives, anti-diarrheals (specifically loperamide), anti-convulsants, anti-epileptics and anesthetics. Categories such as oxytocics, loperamide are not stocked by ADDOs even though they are authorized to stock these medicines. For ADSs, with consideration for the smaller sample size, dental products (i.e., toothpaste, toothbrushes) were available in less than 50% of shops despite the approval to stock such products.

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<sup>5</sup> Category indicates that shop owners may use the ADDO/ADS lists to guide their purchasing and stocking decisions.

Stocking information across shops surveyed for the following, specific sub-categories, anti-malarials, antibiotics and non-drugs, are provided below. Anti-malarials and antibiotics represent two frequently requested and recommended essential medicines for patients. Information included for anti-malarials and antibiotics is only listed for approved products for ADDOs or ADSs, however, it should be noted that many shops stocked a larger variety than just the approved listing for these product categories. Non-drugs represent a range of diverse product offerings which not stocked in large amounts, however, may present a potential area of revenue and profit growth (i.e., the US retail pharmacy model)<sup>6</sup>, for accredited drug shops.

<b>Antibiotic Product Sub-Categories</b>	<b>% of ADDO Stocking Sub-Category (n=18)</b>	<b>% of ADS Stocking Sub-Category (n=12)</b>
Amoxicillin (Capsules, Syrup)	94%	100%
Benzyl penicillin (Injection)	17%	-
Chloramphenicol (Tablets, Syrup, Cream)	44%	8%
Ciprofloxacin (Tablets)	-	75%
Co-trimoxazole (Tablets, Syrup)	94%	100%
Doxycycline (Capsules)	61%	75%
Erythromycin (Tablets, Syrup)	94%	100% <sup>8</sup>
Metronidazole (Tablets, Syrup)	100%	100%
Nitrofurantoin (Tablets)	39%	33%
Oxytetracycline hydrochloride (Cream)	17%	-
Penicillin (Tablets, Syrup, Injection)	94%	92%

<b>Antimalarial Product Sub-Categories</b>	<b>% of ADDO Stocking Sub-Category (n=18)</b>	<b>% of ADS Stocking Sub-Category (n=12)</b>
WHO Prequalified ACT (Tablets)	83%	92%
Non-WHO Prequalified ACT (Tablets)	28%	67%
SP (Tablets, Syrup)	83%	-
Quinine (Tablets, Syrup, Injection)	94%	100%
Amodiaquine (Tablets, Syrup)	67%	-

<sup>6</sup> The US retail pharmacy model refers to pharmacies like Walgreen's, CVS or Rite Aid, which are sources of essential prescription and over-the-counter medications, as well as general merchandise including batteries, toothpaste, etc.

<sup>7</sup> Items with no percent or a "-" represent products that are not authorized for stocking according to the respective country's accredited medicines list. A "0%" indicates the product was allowed to be stocked, however, no shops are stocking this product.

<b>Non-Drug Product Sub-Categories</b>	<b>% of ADDO Stocking Sub-Category (n=18)</b>	<b>% of ADS Stocking Sub-Category (n=12)</b>
Baby powder	17%	17%
Body cream	11%	25%
Cleaning supplies/antiseptic	67%	67%
Diapers	11%	17%
Film	-	8%
Food (prepackaged)	6%	17%
Glycerin	-	8%
Hair Clipper Blade	-	8%
Hair Product	-	17%
Herbal Jelly	-	17%
Lip Balm	-	8%
Lubricant	6%	-
Medicated oil/balm	11%	-
Mosquito repellent	28%	8%
Mouthwash	50%	-
Perfume	-	17%
Petroleum Jelly	6%	8%
Sanitary pads	39%	58%
Shampoo	6%	-
Soap	67%	33%
Stationary	11%	-
Toilet paper	22%	8%
Toothbrush	6%	-
Toothpaste/Balm	33%	42%
Bottled Water	28%	-
Water treatment/disinfectant	50%	50%

Of the aforementioned sub-categories, a sub-set of products was examined to determine their assortment across shops. Penicillin injections, a high value product for most shops, were stocked in 67% of the 21 ADDOs surveyed. Doxycycline, an essential antibiotic medication, was stocked in 61% of ADDOs. These products were used to conduct a what-if analysis, on a specific subset of shops (five ADDO shops total).

#### *Sufficiency of Inventory Stocked<sup>9</sup>*

For each shop, the months of stock on-hand was estimated based on the units of stock on hand and the total units of stock sold in the last thirty days. Inventory data at specific shops, including physical counts of products in stock and self-reported sales information for the last 30 days provided at the time of inventorying, was utilized to conduct this analysis. A detailed analysis by specific product types and subcategories including select

<sup>8</sup> In this report we assume that ADDOs and ADSs can stock general sales items as long as they do not include items such as insecticide, pesticide and unpackaged food, which may present risks when stored together with pharmaceuticals, general medicines and medical devices.

<sup>9</sup> The sufficiency of inventory stocked pertains only to the ADDOs as the sample size for ADS was not sufficient to conduct this analysis.

anti-malarials, antibiotics, anti-fungals, anthelmintic, ORS and bottled water was carried out. On an average the shops stocked 1.5 months of stock of medicines and their average replenishment frequency was twice a month. For each shop the amount of inventory required to meet one cycle of demand and the buffer inventory to hedge against demand uncertainty was estimated based on average sales, replenishment frequency, and number of customers. This estimate was then compared against the inventory on-hand as obtained in the physical inventory count to assess sufficiency of stock

This analysis reveals that while on average shops seem to be stocking enough of each of the medicines they stock, there are significant variations across shops and across specific product categories and sub-categories. Findings revealed certain shops for which the inventory on hand was significantly less than what was estimated in the above analyses. Therefore, it is unclear if all shops are keeping sufficient stock of all essential medicines to satisfy overall demand. There are specific product categories such as certain antibiotics where the quantity stocked is much lower than the average monthly demand and may be insufficient to meet the demand with a high service level. Findings suggest that shop owners struggle to manage their stocking effectively, which might point to a lack of capital to carry sufficient stock of all medicines for which there is demand in the community and/or the need for additional training to address stocking challenges.

On average, shops with inventory data in this subset analysis of products stocked 58% of the products at less than sufficient levels. However, it should be noted that while several shops stocked all 29 products included in this sub-analysis at less than sufficient levels, there were some shops e.g. shop 12, which was stocking only 5% of products in this subset at less than sufficient levels. The overarching conclusion from this analysis was that shops are stocking insufficient inventory for many items relative to the typical community demand for these items. A business stocks lower than sufficient inventory either due to lack of inventory planning skills or lack of capital to purchase more inventory. Both of these factors appear to be at play in this context.

#### *Cash Flow Analysis*

Detailed cash flow analyses were run for a subset of ADDO and ADS shops for which complete survey and inventory data had been collected (see Appendix 3). Of the five ADDOs analyzed, cumulative net cash flow was positive for 3 of 5 shops. With the two ADS analyzed, both shops revealed a negative cumulative net cash flow. The two ADDOs with a negative net cash flow were also the two shops with the lowest percentage of medicines stocked in quantities less than sufficient to meet demand. This may be an indication that the two shops with a negative net cash flow were over-stocking their medicines on a monthly basis, which is consistent with the owner's reported stocking pattern (i.e., once a week and twice a month). This might be a reflection of poor inventory management and business management training.

### *What-if analysis from stocking additional products<sup>10</sup>*

Retail pharmacies in OECD countries routinely use categorical historical data for sales, price, cost, and replenishment frequency to make decisions surrounding assortment breadth and depth in order to maximize overall gross margins and minimize costs. A key component of such analysis is ABC classification and product assortment simulation to understand the net revenue and profit contribution of each product/category, and to make decisions about the category assortments. Such analysis helps retail pharmacies gain insights into the main products that drive their revenue and analyze the effect on overall profitability of adding new product lines or dropping some product lines. We have used similar analysis to first understand what products are the main revenue and profit drivers in ADDOs then estimate the impact on revenue and profitability when products that are currently not stocked by many ADDOs are included in their stocking assortment.

For each shop we first classify all items stocked into A, B and C categories based on the reported sales revenue from those products. We then estimate the percentage of shops in which the items would be categorized as “A”, “B” or “C”. This allows knowing the overall sales potential for each item (in the current market). Shops that are not stocking items that are classified as A items in a number of other shops may be losing potential revenue from stocking those products. Using this analysis doxycycline and penicillin injections were identified as product categories that are not consistently stocked by all ADDOs, but have good market potential in shops that are stocking them. A what-if analysis is conducted to emulate the revenue and gross profit increase that would result when a shop starts stocking an item that is currently not stocking. The average sales, retail price, and cost of purchase of the product are estimated from shops that are currently stocking and selling that product. This information is used to estimate the revenue and gross profit increase from stocking an additional product. This analysis is conducted for doxycycline and penicillin injections.

Each of these products was added (if the shop was not already stocking) to the cash flow and the net cash flow with the new product(s) was simulated. On average, cumulative net profits increased by 8.26% for doxycycline and 1.13% for penicillin injection. It is possible that stocking more of specific, high value, essential medicines and/or diverse products may increase the net cash flow of shops positively, however, the limitations of this analysis show only narrow changes in cash flow.

### *Percentage Mark-Ups*

Average percentage mark-up for all products was determined after additional review of product price data. The percentage mark-up ranges from -7.69% to over 4000% across the product categories. The range in mark-ups suggests that some shops are making a loss on certain products because of poor pricing practices. This trend often occurred for bulk items that were split and sold at a value less than the purchase price for the entire bulk package (i.e., condoms). Negative mark-ups on certain products and very

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<sup>10</sup> The what-if analysis pertains only to the ADDOs as the sample size for ADSs was not sufficient to conduct a meaningful analysis. Additionally, it should be noted that penicillin injection are not included on the list of approved medicines for ADSs.

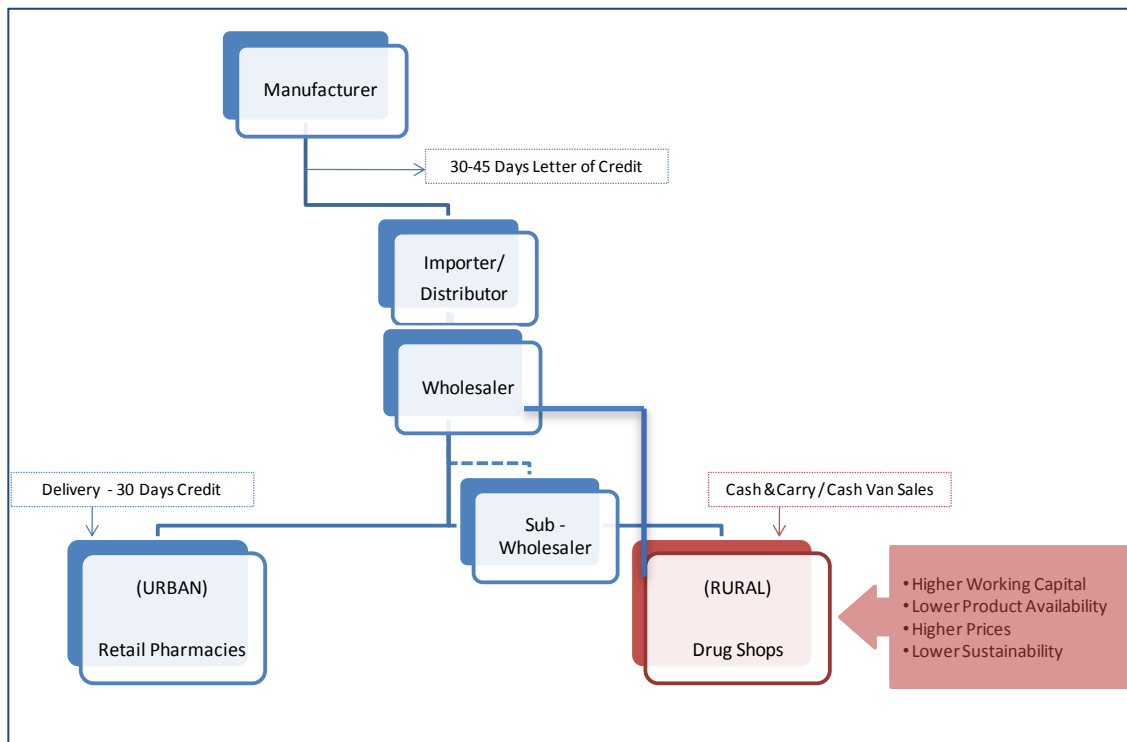


high markups on others could be leading to some type of cross subsidization. If properly designed, cross subsidization can help reduce the costs of medicines that are of highest public health benefit. However, cross subsidization also creates sustainability risks if the demand side market dynamics change. For this reason, cross subsidization is not recommended as a long-term strategy.

## SYNTHESIS OF FINDINGS

Unlike OECD countries, the structure of the network of pharmaceutical distributors, wholesalers and sub-wholesalers supplying retail drug shops is organized in slightly different ways across low-income countries. In almost all cases products flow from manufacturer (typically located outside the country) to independent retail pharmacies, private clinics, and small drug shops through a network of pharmaceutical distributors, wholesalers and sub-wholesalers. In urban and large peri-urban areas, where the points of access are mostly formal retail pharmacies, the wholesalers provide a distribution, stockholding, and credit-provisioning role in the supply network. This enables retail pharmacies in cities and large towns to carry minimal inventory on their books and their need for working capital is low. Typically, pharmaceutical wholesalers extend 30-45 days of credit to large pharmacies with good past credit standing. The urban pharmacies also receive deliveries from the wholesaler/distributor of the stock they order on a frequent basis. The high frequency of delivery and the lower need of working capital due to wholesaler credit allow large urban pharmacies to stock sufficient quantities of a wide assortment of pharmaceutical products.

Figure 10: Current structure of trade credit and distribution to rural vs. urban points of sales



However, the geographical reach of direct distribution/deliveries of most pharmaceutical wholesalers and distributors is limited to cities and large towns. ADDO/ADS face unique circumstances to maintain a profitable business.

To understand the impact of additional working capital credit, this study utilized direct responses from shop owners, sufficiency of stock analysis, and what-if analyses from stocking additional products. Each of these approaches provided unique information regarding the ways in which shop cash-to-cash cycles are managed, stock decision making is practiced and the role of working capital credit in the accredited drug shop network. In combination, the aforementioned analyses provide insights into the business management practices of ADDOs and ADSs as well as some understanding of the role of capital in shop stocking behavior. The assortment breadth analysis and stock sufficiency analysis revealed that while the majority of shops were stocking essential medicine categories, these categories were not always stocked optimally, with some shops overstocking product types and others at risk for stock outs. While stocking more frequently may improve the sufficiency of stock as well as prevent drug expiration and associated project loss, it may increase the costs associated with travel to or delivery from a sub-wholesaler or wholesaler. Pick-up/delivery costs among ADDOs represented approximately 22% of monthly operating costs. For ADSs this cost was approximately 17% of each shop's monthly operating costs.

The analysis of ADDO and ADS shops suggests that accredited drug shop owners generally feel they would benefit from additional working capital to stock the optimal quantity of currently under stocked medicines. In instances where medicine suppliers offer credit to drug shops, lending practices between shop owners and sub-wholesalers/wholesalers are based on informal terms and conditions. Repayment periods tend to vary across shops. Additionally, retail drug shops may take loans from local finance institutions to maintain their cash-to-cash cycle. Local banking institutions lend credit to drug shop owners only after they have guaranteed, as much as is possible, the borrower's reputation and credit worthiness. With limited understanding of the functioning of the retail drug shop business, local banks are cautious in lending working capital credit to shops or offer it at high interest rates.

Community sensitization to currently unstocked products remains an important component to understand, as increasing credit and the ability to purchase new medications may not be enough to incentivize shop owners to stock them if they feel there will be no or little demand. Finally, findings concerning overstocking of certain products and under stocking of others, suggests that inventory management is poorly practiced among shop owners.

## **RECOMMENDATIONS**

### *Blueprint for Creating the Appropriate Financing Mechanism*

Access to fixed and working capital are two amongst the many challenges facing accredited drug shop owners. Long-term strategies to improve sustainability as well as encourage

growth, should consider the multi-faceted constraints facing these small businesses and work to address them in an integrated fashion. However, the role of additional financing does appear to be a significant lever within this sample of accredited drug shops and will be the focus of the following recommendations. To create a financial enhancement that improves sustainability, by addressing sufficient stocking, new product offerings and inventory management, several strategies must be employed. Those recommendations are presented in the sections that follow.

As a prerequisite to any of recommendations, integrated training opportunities will supplement financial enhancements provided to shop owners. The assortment breadth and sufficiency analysis demonstrated that many drug sellers, despite their constraints with working capital, are not able to manage their medicine assortment and business profits and expenditures in the most efficient manner. Additionally, very few drug shop owners had recently (within the last 12 months) received health or business training. To address this challenge, a new form of ongoing training opportunities is proposed in combination with a new working capital mechanism.

It is recommended that these training opportunities serve as applied exercises to develop routine-stocking strategies as well as consistent cash flow management. Training will place specific emphasis on practical exercises for determining the use of funds as well as planning for their repayment overtime. Training opportunities might also provide support to shop owners to plan for credit provisions and completing funding applications.

#### *Access to Fixed Capital Resources*

As noted earlier in this analysis, most drug sellers identified large challenges with maintaining the condition of their drug shops or renovating their shops to remain competitive within communities. Additionally, only a third of the ADDOs and ADSs applied for bank loans to receive access to fixed capital funds. Potentially linking accredited drug sellers to local credit sources to enable them to invest in their business' sustainability by upgrading their shop appearance and identifying new ways to maintain a competitive advantage within the local business context, etc. One particular area of investment might be in purchasing shop building/land in order to move away from ongoing lease payments. 33% of ADDO owners and 58% of ADS owners did not own their shop building and 43% of ADDOs and 75% of ADSs did not own the land on which their building stood. This appears to be a specific area where fixed capital could prove beneficial.

A fixed capital provisioning method for drug shops needs to be envisaged leveraging local banking institutions. A portion of the local banks risks from lending fixed capital to ADDOs or ADSs can be covered using collateral guarantees thereby making the case stronger for the banks to lend to drug shops and reducing the interest rates. Starting a fixed capital mechanism may automatically prime the system so that as banks begin to understand the drug shops business model better and can assess the credit worthiness of the drug shops, they might also start offering working capital credit lines to the drug shops.

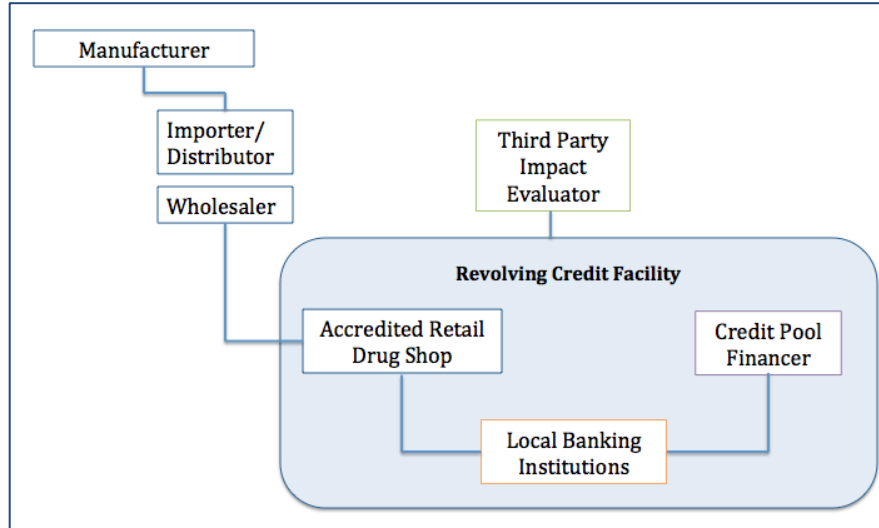
### *Working Capital Mechanism*

This small-scale, in-depth analysis of access to working capital and its impact on the availability of medicines in remote areas reveals that working capital constraints appear to be an impediment to running a sustainable business. To address this specific challenge designing a working capital fund may provide an innovative solution for financing drug shops while also encouraging the appropriate use of funds by prioritizing use of funds on essential medicines and health products. As was simulated with the cash flow product addition analysis, identifying products that are of high value to communities (and are currently unstocked or stocked insufficiently) will improve the cash to cash cycle of drug shops in a strategic fashion and also improve public health in the communities. The successful completion of supplemental business training for shop owners that focuses on inventory management and cash flow management should be a prerequisite for the provision of additional working capital.

Two potential scenarios are outlined for the working capital mechanism proposed. The first involves developing a credit facility through local banking institutions (as with the fixed capital funds) and the second involves developing a working capital facility through a shop owner community accountability model. The two different scenarios are depicted in diagram form in conjunction with their respective descriptions below.

### *Local Banking Institution Credit Provision System*

Figure 11: Local Banking Institution Credit Provision Model

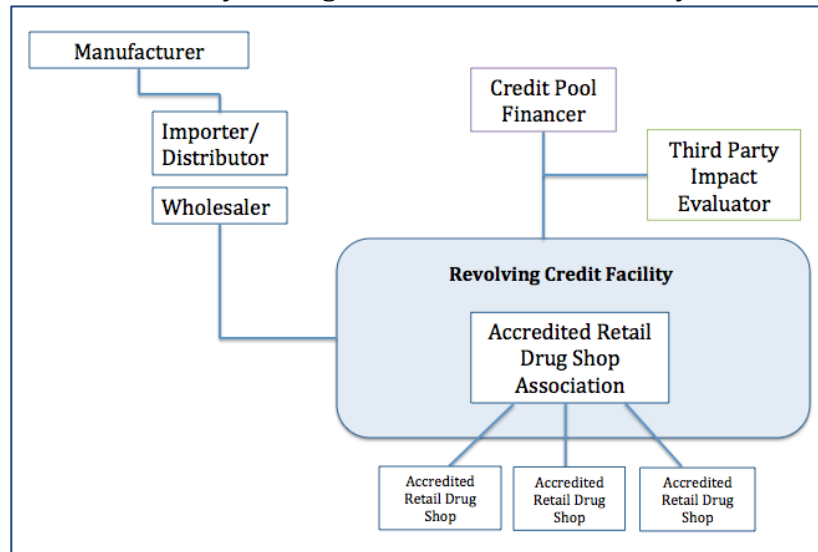


In scenario one, accredited drug shops are receiving both working capital and fixed capital loans through local banking institutions. Banking institutions serve as on-the-ground partners that manage the logistical aspects of lending money and receiving payment on balances as was mentioned in the description of fixed capital funds. Banking institutions will receive collateral guarantees directly from the investment fund supporting both forms of capital and will report directly to fund managers regarding the ongoing use of such a guarantees pool. This type of collateral provides a certain level of risk assurance to banking

institutions to mitigate any hesitancy to lend to smaller business owners like the ADDO and ADS owners.

### *Community Management Credit Provision System*

Figure 12: Community Management Credit Provision System



The second working capital mechanism recommended involves a credit facility that is managed by a community of accredited retail shop owners. Shop owners from regional accredited drug shops will be provided an initial investment of capital by an external funder (donor, investor or mix of both types of funds) that can be utilized in a revolving fashion. Certain portions of the revolving credit facility will be loaned to shop owners who identify a need for additional capital and are approved to use by the regional accredited retail drug shop association. Accountability will stem from the group structure, mirroring the commonly utilized microfinance model, which is also based on community accountability. This type of financing will empower shop owners to not only manage the use of their own loans, but to also review the feasibility of proposed uses for the allocation of resources to other local shops.

### *Role of Technology in Credit Provision System*

A final component to consider with each of the aforementioned credit facility models is the role of technology. In each scenario, technology is assumed to play an integral role in the transfer of information and funds. As with other technology-based finance models, particularly mobile banking, providing a credit provision whether through a bank directly to a retail shop, or through multiple stakeholders as with the pre-wholesaler model, will need assurances against misuse and theft. Providing funds in an electronic format improves the tracking of resource allocation to the shop owner as well as confirmation of how and when funds are spent.

Outside of reductions in transaction costs, using a technology-based transfer of funds may enable a system for introducing product-specific incentives. As shown by the what-if

analysis, adding specific products currently unstocked by shop owners may provide incremental increases in the net profit of that shop. However, despite access to working capital, shop owners may not choose to stock a new product, particularly if their perceived patient demand for the product is low. Incentivizing the shop owner, through a credit facility, to stock a product and then later promote its sale will help sensitize the community to new, effective treatments as well as other, less well known essential medicines. To encourage community sensitization, a technology-based system can efficiently provide vouchers for the purchase of specific sub-set of high value, profitable products. Such a technology-based voucher transfer may serve as powerful tools for encouraging appropriate stocking, treatment practices and changes in both of these things overtime.

*Additional credit to wholesalers and “trickle-down” effects*

In addition to the mechanisms described above, if credit to the national wholesalers becomes cheaper or their need for working capital decreases, wholesalers may be better positioned to lend working capital credit to the drug shop owners. Wholesalers’ need for working capital might decrease as a result of their credit terms with the pharmaceutical manufacturer or due to the creation of pre-wholesaling operations by the manufacturer. More favorable cash to cash cycles for the wholesaler may lead to a “trickle-down” effect where wholesalers begin extending similar credit terms to drug shops as they do for urban and peri-urban pharmacies.

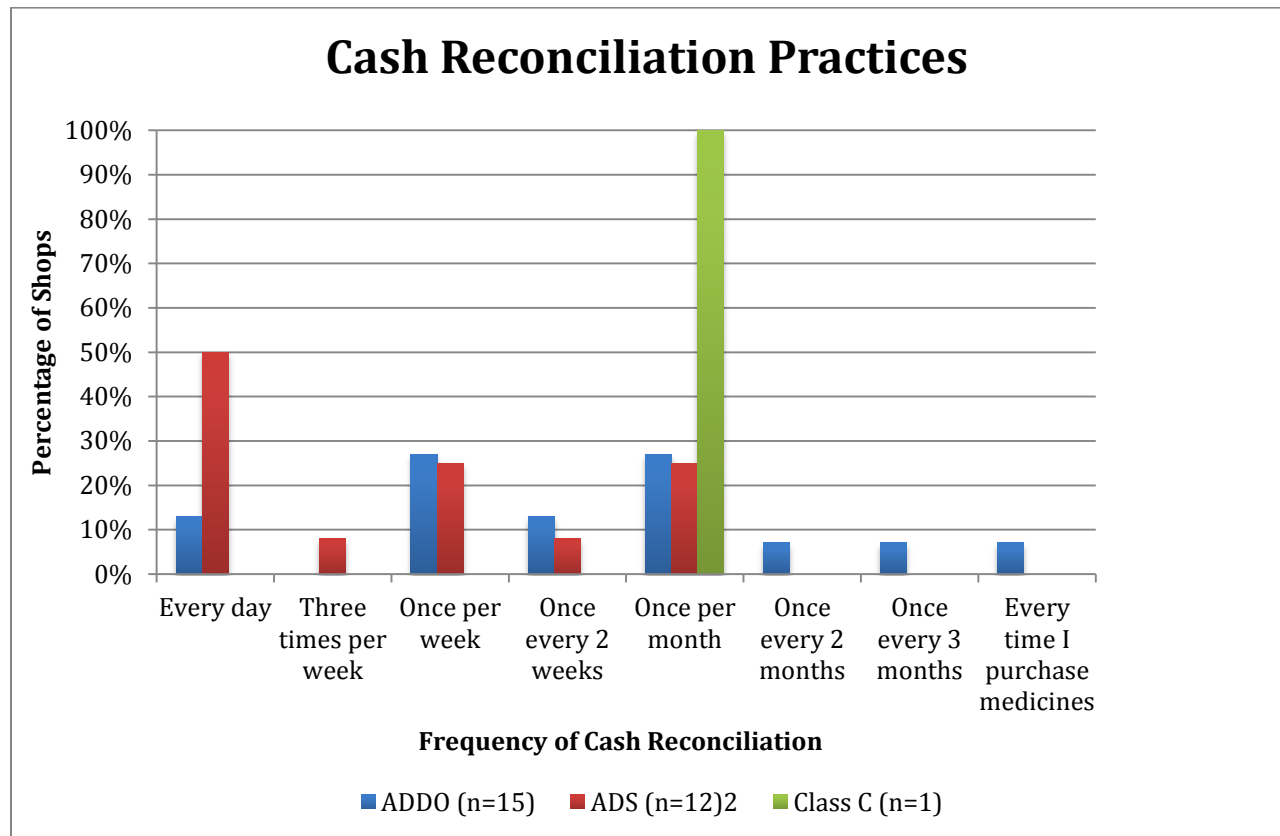
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## ANNEX 1: ADDO & ADS FIRST LEVEL ANALYSES

### CASH RECONCILIATION:

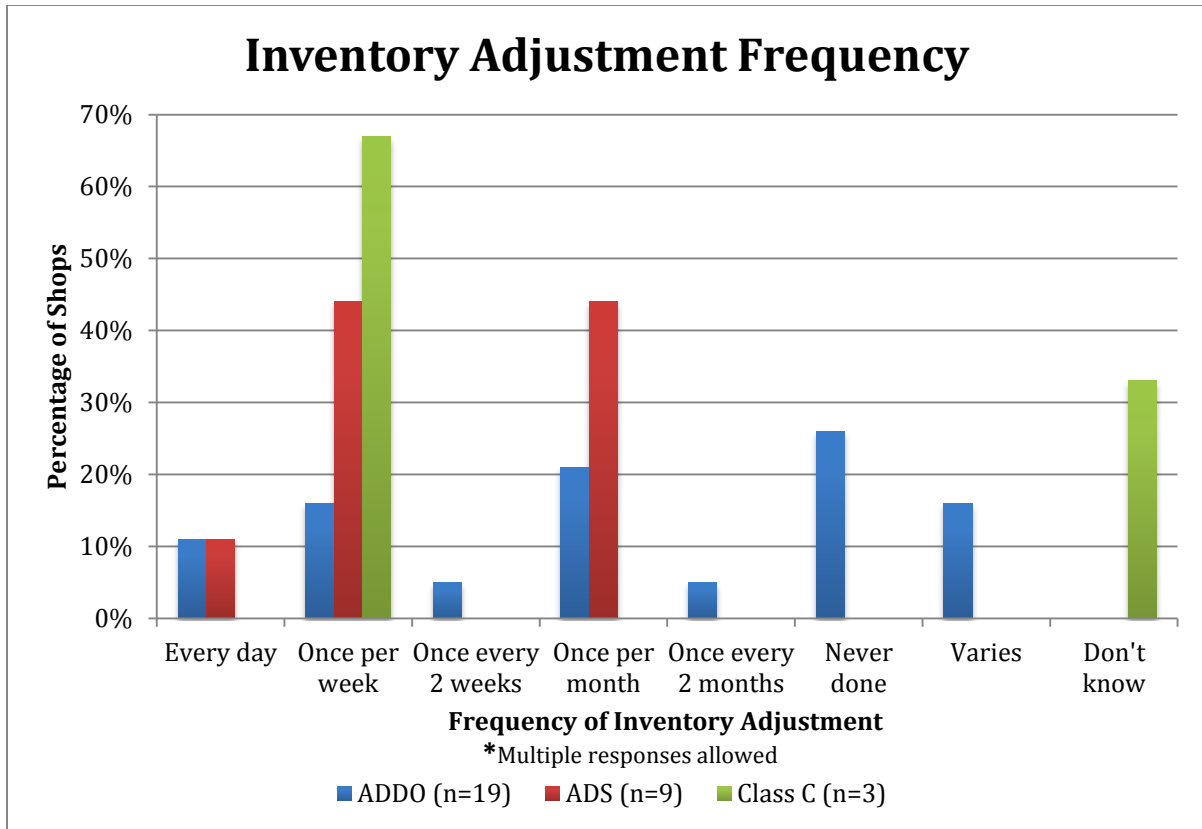
<b>Cash Reconciliation Y/N</b>			
	<b>ADDO (n=21)</b>	<b>ADS (n=15)</b>	<b>Class C (n=3)</b>
Yes	71%	100%	33%
No	29%	0%	67%



### RECORD KEEPING:

<b>Inventory Record Adjustment Y/N</b>			
	<b>ADDO (n=21)</b>	<b>ADS (n=12)</b>	<b>Class C (n=3)</b>
Yes	90%	67%	33%
No	10%	33%	33%
Don't know	0%	0%	33%





**TRAININGS ATTENDED:**

<b>Attended Health Training in the Last 12 Months Y/N</b>			
	<b>ADDO (n=21)</b>	<b>ADS (n=12)</b>	<b>Class C (n=3)</b>
Yes	24%	67%	67%
No	76%	33%	33%

<b>Attended Business Training in the Last 12 Months Y/N</b>			
	<b>ADDO (n=21)</b>	<b>ADS (n=12)</b>	<b>Class C (n=3)</b>
Yes	0%	25%	33%
No	100%	75%	67%

**ORDERING SUPPLIES:**

<b>ADDO Frequency of Medicine Orders</b>			
	<b>ADDO (n=21)</b>	<b>ADS (n=12)</b>	<b>Class C (n=3)</b>
More than once per week	0%	8%	0%
Once per week	38%	33%	33%

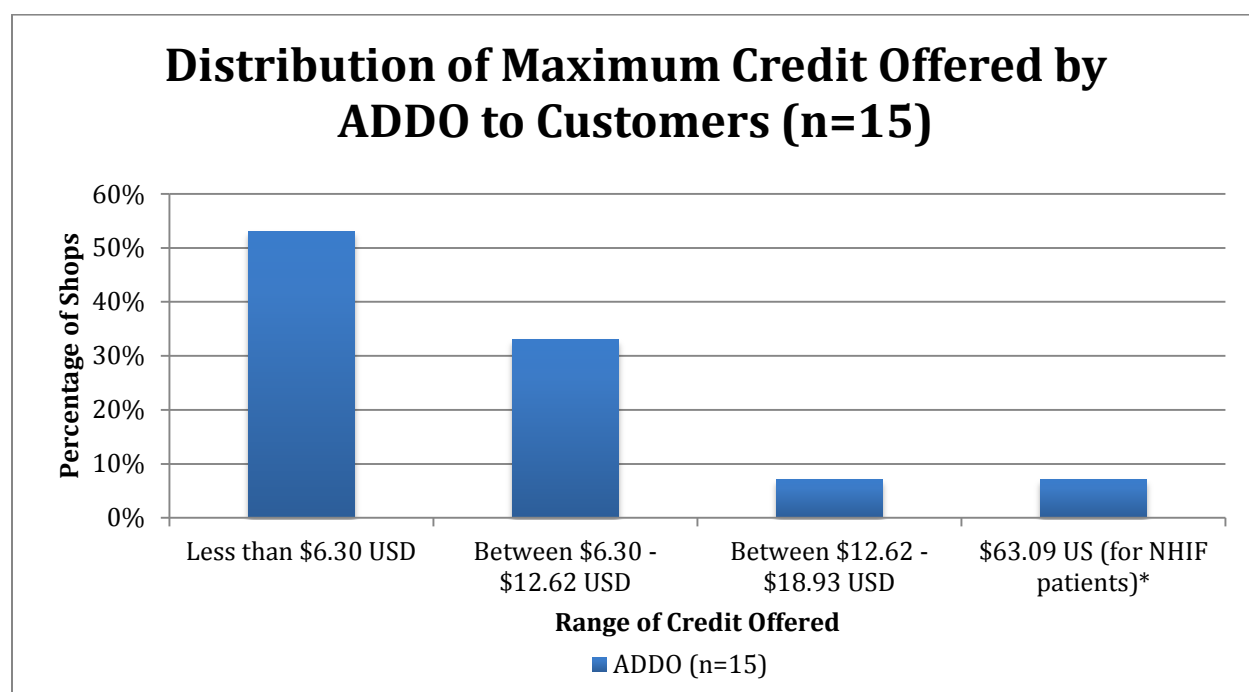
Once every 2 weeks	48%	33%	0%
Once every 3 weeks	0%	0%	33%
Once every 3-4 weeks	0%	0%	33%
Once per month	10%	25%	0%
Once every 2 months	5%	0%	0%

ACCESS TO FINANCIAL SERVICES:

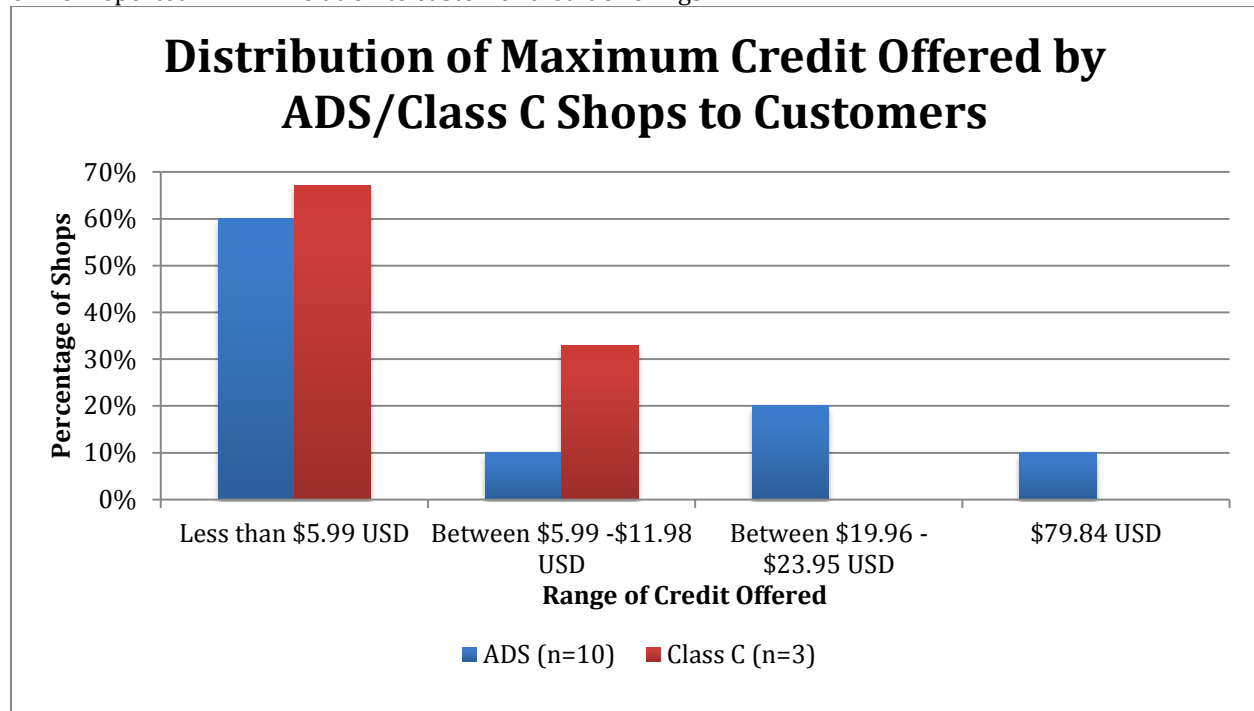
<b>Bank Account Open in Name of Business (Y/N)</b>			
<b>n=21</b>	<b>ADDO (n=21)</b>	<b>ADS (n=12)</b>	<b>Class C (n=3)</b>
Yes	10%	50%	67%
No	86%	50%	33%
Don't Know	5%	0%	0%

<b>Bank Account Open in the Owner's Name (Y/N)</b>			
<b>n=18</b>	<b>ADDO (n=18)</b>	<b>ADS (n=12)</b>	<b>Class C (n=3)</b>
Yes	78%	83%	67%
No	17%	8%	0%
Don't Know	6%	8%	33%

CREDIT PROVISION FOR CUSTOMERS:



\*Specific NHIF and ADDO-related information was not collected as a part of this report, however, one ADDO owner reported NHIF in relation to customer credit offerings.



#### DRAWING PERSONAL EXPENSES FROM BUSINESS:

Does owner draw money from their business for personal expenses? (Y/N)			
	ADD0 (n=21)	ADS (n=12)	Class C (n=3)
Yes	95%	92%	100%
No	5%	8%	0%

#### INVESTMENTS INTO BUSINESS:

Investments into ADDO Business in the Last 12 Months		
n=20 *Multiple responses allowed	Frequency	Percent
Stocking more medicines	16	64%
Renovating shop	4	16%
Couldn't make any additional investments	3	12%
Attending health training	1	4%
Expanding size of shop	1	4%

ANNEX 2: ADDO MONTHS OF STOCK ANALYSIS

S H O P I D	Frequency of Stocking	Expected MoS	Ave. Adjusted MOS on Hand																													
			OR S 1 sac het (7 obs)	alb end azo le 10 ml (5 obs)	alb end azo le 2 tab s (6 obs)	me ben dazole 100 0 tab s (2 obs)	Wa ter 500 ml (2 obs)	clot rim azo le 15 grams (7 obs)	clot rim azo le 6 tab s (6 obs)	am oxi cill in 10 0 ml (10 obs)	am oxi cill in 10 0 tab s (6 obs)	co- tri mo xazole 10 0 ml (6 obs)	co- tri mo xazole 10 0 tab s (4 obs)	eryt hro myc in 100 ml (4 obs)	eryt hro myc in 100 tab s (3 obs)	met roni dazole 100 ml (5 obs)	met roni dazole 100 tab s (9 obs)	pe ni cil lin 10 0 tab s (5 obs)	pe ni cil lin inj ect ion (8 obs)	AL 24 tab s (9 obs)	AL 6 tab s (2 obs)	Am odi aqu ine 100 0 tab s (2 obs)	Am odi aqu ine 60 ml (4 obs)	SP 2 tab s (4 obs)	SP 3 tab s (5 obs)	SP 20 tab s (2 obs)	SP 90 tab s (2 obs)	SP 30 ml (2 obs)	Qui nine 100 ml (5 obs)	Qui nine 100 tab s (5 obs)	Qui nine Inj ec tion (4 obs)	
1	Once a Week	0.5	6	2.00	4.00			0.2	0.25	0.043	0.042	1	1	0.25	0.552	0.714	1	1.703	9.333	0.395		1.778	4	1.308	4.455	1.5		1	1	0.481	0.613	
2	Once every 2 weeks	0.75	0.605		0.48	0.48					0.196			0.186		0.295	0.317		0.190						0.228	0.223				0.318		0.184
4	Once a Week	0.5	0.09	0.07	1.05	5.00		0.6	0.8	2.333	6			0.241		0.1	3	0.356	0.48	0.304			0.538	1.308				1	0.5	0.19		
5	Once a Week	0.5	1.06		1.01	0.01	0.069	2.5		1.786		0.756		0.367		1.048		2.5	17													
6	Once a Week	0.5	1.9							0.7		0.353		0.143		2.5	0.45		0.333										0.75	1		
7	Once per month	1.5	0.778	1.29	1.23	4.49		0.669	0.227		0.792			0.393			0.272	0.011		0.042	0.048		0.416	0.123	1.633				0.681	1.556		
8	Once every 2 weeks	0.75	0.75	0.70	1.14	0.01			1.333	0.8	3.571	1.167	2.235	0.5	0.017	0.333	0.38	0.667	1.75	1.733	4			1.3	3.4				0.333	0.67	0.111	
9	Once every 2 weeks	0.75	0	0.10				1.5		4	4	0.667		0	0.111	0.333	0.242			1.818		0.053	1.5						0.667	0.136	5.667	
10	Once every 2 weeks	0.75			2.14	0.00		0.5		0.35			0							0	0					2	0					

12	Once every 2 weeks	0.75	2.017	5.46	3.99	8.00		7.666		2.619	13.089	3.033	6.979	3.568	2.183	7.979	2.112		2.945		0.361		0.808	3.534				6.875	2.647	18.15	9.477
14	Once every 2 weeks	0.75		0.30			0.027	0.216	0.227							0.333															
15	Once every 2 weeks	0.75	1.125	2.00	1.00		0.409	1		2.5		3.5		1.5	0		4	0.006	1.333	0.7			0.6							1.5	
16	Once every 2 weeks	0.75	0.130	0.03				0.188		0.041	0.112	0.598		0.053	0.075	0.295	0.068	0.375					0.111	0.333	0.095				0.170	0.830	
17	Once a Week	0.5	0.088	0.15		1.66	0.307			0.2		3.4		0.039		0.304	0.026				0.081	0.039		0.040	0.175				0.370		0.190
18	Once a Week	0.5	3.333	0.05	2.49	5.20		0.542	0.795	0.086		0.098	1.507	0.279	0.471	0.383	0.380	0.209	6												
19	Once per month	1.5	5.185651353	0.27	0.07			1.267	1.249	1.469	0.396	1.440		0.160		0.505		0.5													
20	Once every 2 weeks	0.75	1.037130271	0.47	1.23	3.70		0.880	0.568	1.408	0.118	1.14	0.153		0.056	0.032	0.075	0.020	6.601	0.796	1.224	8.025	0.208	0.212	0.599				0.596	1.245	
21	Once a Week	0.5	0.724		1.06		1.684	0.560		1.891	0.408	2.224	1.109	0.575	0.231	0.520	1.258	0.231	0.799		0.604		0.138	1.198	1.029	0.819			0.350		0.71

### ANNEX 3: ADDO BREADTH ANALYSIS

PRODUCT ASSORTMENT WIDTH ACROSS ADDOs	SHOP ID																		% of Shops Stocking Product Category
	1	2	4	5	6	7	8	9	10	12	14	15	16	17	18	19	20	21	
PRODUCT CATEGORY																			
Act	2	1	1	10		10	2	2	2	4	1	4	3	6	2	1	3	2	94%
Anesthetic	1	1					1				1						1		28%
Antacid/anti-flatulent/anti-peptic ulcer	2	3	3	9	4	7	4	3	3	3	5	4	6	7	5	2	1	6	100%
Anti-allergy	1	1		2	1	5	2	1	1	1	1	1	1	2		1		4	83%
Anti-anemia/vitamins & minerals/supplement	10	3	10	14	8	10	4	10	3	9	17	6	10	9	13	6	5	10	100%
Anti-asthmatic	3	2	1	2	3	5	3	4		1	3	2	2	3	2		3	2	89%
Anti-convulsant	1			1	1	1		1				4		1				1	44%
Anti-diarrheal				1	2	2					1								22%
Anti-emetic	2	2		1	1	2	1	1		1	2	3	1		2	1	2	1	83%
Anti-epileptic						2		1				1	1	2			1	1	39%
Anti-fungal	10	1	6	12	4	12	3	4	1	5	12	3	6	5	8	8	11	9	100%
Anti-inflammatory/analgesic	20	12	20	26	11	37	10	13	3	9	37	21	14	16	28	7	12	16	100%
Anti-uric acid				1															6%
Anti-viral					1	1				2							1		22%
Antibacterial/antibiotic	14	8	11	29	10	15	18	16	4	17	25	12	15	13	16	12	12	15	100%
Antidepressant				1	1														11%
Anthelmintic	3	3	4	8	4	12	3	2	3	6	9	3	4	6	10	5	5	4	100%
Antihistamine	2	1	2	1	2	2	1				3		1		2				56%
Antispasmodics		1	1	2	2	1	2	1		1	3	1		3	2	1	2	2	83%
Cardiovascular	1	1		2	3	3		1	1	1	1	1					1	1	67%

Cold/cough/flu preparation	9	8	9	12	5	25	8	6	1	3	24	5	9	15	20	11	6	17	100%
Cosmetics						3								4					11%
Dental/mouth preparation	1		4	3		3				2	2			1	2	1	1	1	61%
Dermatological	5	1	7	10	6	16	4	8		13	8	8	5	9	7	9	6	10	94%
Disinfectant/antiseptic	10	4	6	10	2	18	6	4	2	10	8	4	3	7	11	8	6	1	100%
Diuretic	3		1		2	2	1	1		1	2	2	1				1	2	67%
Eye/ear/nasal preparation	2		3	14	8	13		1		2	6	3	5	1	3	1	2	2	83%
Female condom						1		1				1							17%
Feminine hygiene	1					1						1		1	2	2	1		39%
Fluids and electrolytes	4	4	4	1	1		3			1	7	2		2	7	4	1	5	78%
Food											1								6%
Herbal remedy						2	1												11%
Laxative			2	1	1	2					1		1				1		39%
Male condom	1			1		4	1		1	2	5	1	1		5	1	1	3	72%
Medical/surgical supplies	5	2	4	9	5	3	12	4	2	3	9	5	2	1	8		6	6	94%
Non-act	10	4	8	9	3	10	8	7	4	6	11	2	6	6	6	2	7	8	100%
Non-drug	1		1	3	1	5				3	3	2	1	7	2	2	2	2	78%
Obstetrics/delivery				1														1	11%
Oral contraceptive	2	1	1	2		2	1		1	1	1	2	1		2	2	2	3	83%
Ors	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	94%
Oxytocic	1		1		1		1			1		1						1	39%
Plaster/gauze/cotton	2	1	3	6		3	6	2		7	9	2	1	1	3	2	2	3	89%
Zinc	1	1	1	2		1	1	2			2			1	1	1		1	67%

### ANNEX 3: ADS BREADTH ANALYSIS

PRODUCT ASSORTMENT WIDTH ACROSS ADS	SHOP ID												% of Shops Stocking Product Category
	22	23	24	25	26	27	28	30	31	33	35	36	
Act	2	3	4	2	4	2	1	1	4	1	9	1	100%
Antacid/antiflatulent/anti-peptic ulcer	5	12	8	9	8	5	7	7	3	5	6	3	100%
Anti-allergy	3	7	6	2	4	3	3	6	2		3	1	92%
Anti-anemia/vitamins & minerals/supplement	16	13	16	12	9	4	5	13	8	8	20	8	100%
Anti-asthmatic	2	1	2		1	1		2	1	2	2	1	83%
Anti-convulsant			2	1	1		1	3		3	2		58%
Anti-depressant								1					8%
Anti-diarrheal		1		1		1	1	1		1		1	58%
Anti-emetic		1	2	1									25%
Anti-epileptic								1					8%
Anti-fungal	8	10	6	5	7	1	3	5	13	8	12	5	100%
Anti-inflammatory/analgesic	22	25	25	14	13	10	10	16	11	14	17	22	100%
Anti-psychotic			1										8%
Anti-viral		2			1								17%
Antibiotic	16	19	23	21	19	20	11	21	10	17	18	11	100%
Antidote	1		1		1		1	1	1	1	1	1	75%
Anthelmintic	6	6	6	3	2	1	3	4	5	6	4	3	100%
Cardiovascular								1					8%
Cold/cough/flu preparation	12	26	10	8	8	7	3	10	10	7	7	13	100%
Condom		2	2	2	1	1	1	1		2	3	1	83%
Cosmetics		2			39						20		25%
Dental/mouth preparation		2			1			1			3	1	42%
Dermatological	13	19	10	2	5		1	9	9	3	7	5	92%
Disinfectant/antiseptic	1	7	4		6	2	2		3	1	7	1	83%
Diuretic			1					1		1			25%
Eye/ear/nasal preparation	8	7	9	3	5	4	4	5	6	6	4	2	100%
Feminine hygiene	1			1	1			1	1		5	1	58%



Food							2				2		17%
Herbal remedy		1		2	1								25%
Injectable contraceptive				1									8%
Laxative		2					1			1			25%
Medical/surgical supplies	1	3	2	1	1		1		1	3	2		75%
Non-act	3	5	6	3	4	1	2	5	4	2	4	2	100%
Non-drug	3				11						5		25%
Oral contraceptive	2	1	4	1			1	1			1		58%
Ors	1		2	1	1			1	1	1	1		67%
Plaster/gauze/cotton	2	7	4	1			2		1		4		58%
Sexual dysfunction				1									8%
Zinc	1	1		1	1	1	1	1	1	1	2	1	92%

## ANNEX 4: ADDO/ADS ABC Analysis

Retail pharmacies in OECD countries routinely use categorical historical data for sales, price, cost, and replenishment frequency to decide on assortment breadth and depth in order to maximize overall gross margins and minimize costs. A key component of such analysis is ABC classification and product assortment simulation to understand the net revenue and profit contribution of each product/category, and to make decisions about the category assortments. Such analysis helps retail pharmacies gain insights into the main products that drive their revenue and analyze the effect on overall profitability of adding new product lines or dropping some product lines. We have used similar analysis to first understand which products are the main revenue and profit drivers in ADDOs and ADSs and then estimate the impact on revenue and profitability when products that are currently not stocked by many ADDOs and ADSs are included in their stocking assortment.

ABC Analysis is a method of classifying items involved in a decision situation based on their relative importance to revenue, profitability or other metrics. ABC Analysis allows inventory/purchasing managers to segregate and manage the overall inventory/suppliers by separating the critical few products from the trivial many. "A" Category items generally represent 15%-20% items, that represent approximately 80% of the \$ sales. "B" Category items represent 25%-35% items that represent 15% of the sales value. "C" Category items represent 50% or more items that contribute to approximately 5% of the sales revenue.

For each shop we first classify all items stocked into A, B and C categories based on the reported sales revenue from those products. We then estimate the percentage of shops in which the items would be categorized as "A", "B" or "C". This allows knowing the overall sales potential for each item (in the current market). Shops that are not stocking items that are classified as A items in a number of other shops may be losing potential revenue from stocking those products. Using this analysis doxycycline, penicillin injections and antiseptics were identified as product categories that are not consistently stocked by all shops but have good market potential in shops that are stocking them. A what-if analysis is conducted to emulate the revenue and gross profit increase that would result when a shop starts stocking an item that is currently not stocking. The average sales, retail price, and cost of purchase of the product are estimated from shops that are currently stocking and selling that product. This information is used to estimate the revenue and gross profit increase from stocking an additional product. This analysis is conducted for doxycycline, penicillin injections and antiseptics.

**ABC Analysis for ADSs**

Item#	Product	Category (A, B, C)	
		Shop 23	Shop 25
1	SP	C	C
2	WHO PQ act	A	B
3	chloroquine	C	C
4	non-WHO PQ act	B	C
5	quinine	A	A
6	amoxicillin	A	A
7	ampicillin	C	B
8	ampicillin-cloxacillin	B	C
9	cefalexin	C	C
10	ceftriaxone	C	C

11	chloramphenicol	C	C
12	ciprofloxacin	C	B
13	cloxacillin	C	C
14	co-trimoxazole	A	B
15	doxycycline	C	A
16	erythromycin	B	A
17	metronidazole	B	A
18	nalidixic acid	C	C
19	nitrofurantoin	C	C
20	pefloxacin	C	C
21	pen-v	C	C
22	tetracycline	C	C
23	tinidazole	C	C
24	baby powder	C	C
25	body cream	C	C
26	cosmetic	C	C
27	diapers	C	C
28	film	C	C
29	food	C	C
30	glycerine	C	C
31	hair clipper blade	C	C
32	hair product	C	C
33	herbal jelly	C	C
34	lip balm	B	C
35	mosquito repellent	C	C
36	panty liner	C	C
37	perfume	C	C
38	petroleum jelly	C	C
39	sanitary pads	C	B
40	sim card	C	C
41	soap/antiseptic	C	C
42	toilet paper	C	C
43	tooth balm	C	C
44	toothpaste	C	C
45	water disinfectant	C	C

**ABC Analysis for ADDOs**

Item#	Product	Category (A, B, C)				
		Shop 1	Shop 4	Shop 8	Shop 9	Shop 15
1	SP	A	A	A	C	A
2	WHO PQ act	A	B	B	B	A
3	amodiaquine	B	B	B	A	C
4	chloroquine	C	C	C	C	C
5	mefloquine	C	C	C	C	C

6	non-WHO PQ act	C	C	C	C	C
7	quinine	A	A	A	A	B
8	amoxicillin	A	B	A	A	B
9	amoxicillin + bromnexine	C	C	C	C	C
10	ampicillin	C	C	C	C	C
11	ampicillin cloxacillin	C	C	C	C	C
12	azithromycin	C	C	C	C	C
13	bacitracin, neomycin	C	C	C	C	C
14	benzyl penicillin	C	B	C	C	C
15	cefalexin	C	C	C	C	C
16	chloramphenicol	B	C	C	C	B
17	ciprofloxacin	C	C	C	B	C
18	cloxacillin	C	C	C	B	C
19	co-trimoxazole	B	C	A	B	B
20	doxycycline	B	C	C	A	C
21	doxycycline hyclate	C	C	C	C	C
22	erythromycin	A	A	B	B	B
23	gentamicin	C	C	C	C	C
24	lomefloxacin hydrochloride	C	C	C	C	C
25	metronidazole	A	A	A	A	A
26	nitrofurantoin	B	C	C	C	C
27	norfloxacin + tindazole	C	C	C	C	C
28	ofloxacin	C	C	C	C	B
29	oxytetracycline hydrochloride	C	B	C	C	C
30	penicillin	B	A	B	B	C
31	penicillin injection	B	B	B	C	A
32	secnidazole	C	C	C	C	C
33	tetracycline	C	C	C	C	C
34	tinidazole	C	B	C	C	C
35	baby powder	C	C	C	C	C
36	body cream	C	C	C	C	C
37	cleaning supplies/antiseptic	B	B	B	C	C
38	diapers	C	C	C	C	C
39	food	C	C	C	C	C
40	insecticide for nets	C	C	C	C	C
41	lubricant	C	C	C	C	C
42	medicated oil/balm	C	B	C	C	C
43	mosquito repellent	C	C	C	C	C
44	mouthwash	B	B	C	C	C
45	sanitary pads	B	C	C	C	A
46	shampoo	C	C	C	C	C
47	soap	B	C	C	C	C
48	stationary	C	C	C	C	C

49	toilet paper	B	C	C	C	C
50	toothbrush	C	C	C	C	C
51	toothpaste	C	A	C	C	C
52	vaseline	C	C	C	C	C
53	water	C	C	C	C	A
54	water treatment	B	B	C	C	C

**ABC Analysis: Summary Across All ADDOs**

Item#	Product	Percentage of ADDOs that classify the product as		
		A	B	C
1	SP	80%	0%	20%
2	WHO PQ act	40%	60%	0%
3	amodiaquine	20%	60%	20%
4	chloroquine	0%	0%	100%
5	mefloquine	0%	0%	100%
6	non-WHO PQ act	0%	0%	100%
7	quinine	80%	20%	0%
8	amoxicillin	60%	40%	0%
9	amoxicillin + bromnexine	0%	0%	100%
10	ampicillin	0%	0%	100%
11	ampicillin cloxacillin	0%	0%	100%
12	azithromycin	0%	0%	100%
13	bacitracin, neomycin	0%	0%	100%
14	benzyl penicillin	0%	20%	80%
15	cefalexin	0%	0%	100%
16	chloramphenicol	0%	40%	60%
17	ciprofloxacin	0%	20%	80%
18	cloxacillin	0%	20%	80%
19	co-trimoxazole	20%	60%	20%
20	doxycycline	20%	20%	60%
21	doxycycline hyclate	0%	0%	100%
22	erythromycin	40%	60%	0%
23	gentamicin	0%	0%	100%
24	lomefloxacin hydrochloride	0%	0%	100%
25	metronidazole	100%	0%	0%
26	nitrofurantoin	0%	20%	80%
27	norfloxacin + tindazole	0%	0%	100%
28	ofloxacin	0%	20%	80%
29	oxytetracycline hydrochloride	0%	20%	80%
30	penicillin	20%	60%	20%

31	penicillin injection	20%	60%	20%
32	secnidazole	0%	0%	100%
33	tetracycline	0%	0%	100%
34	tinidazole	0%	20%	80%
35	baby powder	0%	0%	100%
36	body cream	0%	0%	100%
37	cleaning supplies/antiseptic	0%	60%	40%
38	diapers	0%	0%	100%
39	food	0%	0%	100%
40	insecticide for nets	0%	0%	100%
41	lubricant	0%	0%	100%
42	medicated oil/balm	0%	20%	80%
43	mosquito repellent	0%	0%	100%
44	mouthwash	0%	40%	60%
45	sanitary pads	20%	20%	60%
46	shampoo	0%	0%	100%
47	soap	0%	20%	80%
48	stationary	0%	0%	100%
49	toilet paper	0%	20%	80%
50	toothbrush	0%	0%	100%
51	toothpaste	20%	0%	80%
52	Vaseline	0%	0%	100%
53	water	20%	0%	80%
54	water treatment	0%	40%	60%

## ANNEX 5: ADDO CASH FLOW ANALYSIS

ADDO Cash Flow Analysis					
SHOP ID #	1	4	8	9	15
Location	Morogoro Rural	Morogoro Rural	Kilosa	Kilosa	Mvomero
Owner's Year of Management Experience	4	17	4	11	11
Percentage Income from Drug Shop	40%	70%	30%	40-45%	100%
Average Customers	49	50	60	45	70
<b>CASH INFLOW</b>					
<b>BUSINESS REVENUE</b>					
Total Revenue from Products/Medicines (Monthly)	1,286,000	2,912,010	978,180	935,919.9	293,118
<b>TOTAL MONTHLY CASH INFLOW</b>	<b>1,286,000</b>	<b>2,912,010</b>	<b>978,180</b>	<b>935,919.9</b>	<b>293,118</b>
<b>CASH EXPENDITURES</b>					
<b>PERSONAL EXPENSES</b>					
Personal Expenses (Monthly)	100,000	-	20,000	20,000	200,000
Personal Expenses (Daily)*	90,000	60,000	-	90,000	-
<b>NON-CURRENT ASSETS</b>					
Building Mortgage (Monthly)	-	-	-	-	-
Building Rent (Monthly)	-	20,000	20,000	6,000	-
Property Mortgage (Monthly)	-	-	-	-	-
Property Rent (Monthly)	-	-	-	-	-
Vehicle Rent/Payment (Monthly)	-	-	-	-	-
<b>MONTHLY BUSINESS EXPENSES</b>					
Employee Salaries (Monthly)	-	240,000	85,000	-	-
Number of Employees	2**	2	2	1	1
Electricity Payment (Monthly)	40,000	30,000	-	-	-
Fuel Payment (Monthly)	-	30,000	-	10,500	-
Distribution Costs (Monthly)	-	-	-	-	-
Delivery/Pick-up Costs (Monthly)	30,000	-	40,000	25,000	20,000
Communication Costs (Monthly)	-	40,000	5,000	-	5,000
Security Costs (Monthly)	-	-	-	-	-
Other Shop Expenses (Monthly)	100,000	23,000	10,000	30,000	-
<b>INVENTORY</b>					
Total Expenses for Products/Medicines Purchased	1,580,944	873,830	275,725	344,740	256,899

(Monthly)					
Frequency Ordering Product/Medicines	Every week	Every week	Every other week	Every other week	Every other week
<b>TOTAL MONTHLY CASH EXPENDITURES</b>	1,940,944	1,316,830	455,725	526,240	481,899
<b>CUMULATIVE NET CASH FLOW</b>	-654,944	1,595,180	522,455	409,680	-188,781
Reported Access to Enough Money to Operate Business?	Yes	No	No	No	No

\*Each value multiplied by 30 to represent the daily personal expenses withdrawn in a month.

\*\*Husband and Wife own drug shop together and so all money goes back into the business.



## ANNEX 5: ADDO CASH FLOW ANALYSIS

<b>ADD0 Cash Flow Analysis with Product Addition: Doxycycline</b>					
SHOP ID #	1	4	8	9	15
Location	Morogoro Rural	Morogoro Rural	Kilosa	Kilosa	Mvomero
Owner's Year of Management Experience	4	17	4	11	11
Percentage Income from Drug Shop	40%	70%	30%	40-45%	100%
Average Customers	49	50	60	45	70
<b>CASH INFLOW</b>					
<b>BUSINESS REVENUE</b>					
Total Revenue from Products/Medicines (Monthly)	1,286,000	2,912,010	978,180	935,919.9	293,118
Average Additional Revenue from Doxycycline	Already Stocking	38,298	45,957	Already Stocking	53,617
<b>TOTAL MONTHLY CASH INFLOW</b>	1,286,000	2,950,308	1,024,137	935,919.9	346,735
<b>CASH EXPENDITURES</b>					
<b>PERSONAL EXPENSES</b>					
Personal Expenses (Monthly)	100,000	-	20,000	20,000	200,000
Personal Expenses (Daily)*	90,000	60,000	-	90,000	-
<b>NON-CURRENT ASSETS</b>					
Building Mortgage (Monthly)	-	-	-	-	-
Building Rent (Monthly)	-	20,000	20,000	6,000	-
Property Mortgage (Monthly)	-	-	-	-	-
Property Rent (Monthly)	-	-	-	-	-
Vehicle Rent/Payment (Monthly)	-	-	-	-	-
<b>MONTHLY BUSINESS EXPENSES</b>					
Employee Salaries (Monthly)	-	240,000	85,000	-	-
Number of Employees	2**	2	2	1	1
Electricity Payment (Monthly)	40,000	30,000	-	-	-
Fuel Payment (Monthly)	-	30,000	-	10,500	-
Distribution Costs (Monthly)	-	-	-	-	-
Delivery/Pick-up Costs (Monthly)	30,000	-	40,000	25,000	20,000
Communication Costs (Monthly)	-	40,000	5,000	-	5,000
Security Costs (Monthly)	-	-	-	-	-
Other Shop Expenses (Monthly)	100,000	23,000	10,000	30,000	-
<b>INVENTORY</b>					

Total Expenses for Products/Medicines Purchased (Monthly)	1,580,944	873,830	275,725	344,740	256,899
Average Additional Expense from Doxycycline	Already Stocking	14,323	17,188	Already Stocking	20,053
Frequency Ordering Product/Medicines	Every week	Every week	Every other week	Every other week	Every other week
<b>TOTAL MONTHLY CASH EXPENDITURES</b>	1,940,944	1,331,153	472,913	526,240	501,952
<b>CURRENT CUMULATIVE NET CASH FLOW</b>	-654,944	1,595,180	522,455	409,680	-188,781
<b>PROJECTED CUMULATIVE NET CASH FLOW</b>	-654,944	1,619,155	551,224	409,680	-155,217
Absolute % Profit Increase from Stocking Doxycycline	-	1.50%	5.51%	-	17.78%
Reported Access to Enough Money to Operate Business?	Yes	No	No	No	No

\*Each value multiplied by 30 to represent the daily personal expenses withdrawn in a month.

\*\*Husband and Wife own drug shop together and so all money goes back into the business.

## ANNEX 5: ADDO CASH FLOW ANALYSIS

<b>ADD0 Cash Flow Analysis with Product Addition: Penicillin Injection</b>					
SHOP ID #	1	4	8	9	15
Location	Morogoro Rural	Morogoro Rural	Kilosa	Kilosa	Mvomero
Owner's Year of Management Experience	4	17	4	11	11
Percentage Income from Drug Shop	40%	70%	30%	40-45%	100%
Average Customers	49	50	60	45	70
<b>CASH INFLOW</b>					
<b>BUSINESS REVENUE</b>					
Total Revenue from Products/Medicines (Monthly)	1,286,000	2,912,010	978,180	935,919.9	293,118
Average Additional Revenue from Penicillin Injection	Already Stocking	Already Stocking	Already Stocking	7,664.0	Already Stocking
<b>TOTAL MONTHLY CASH INFLOW</b>	1,286,000	2,912,010	978,180	943,583.9	293,118
<b>CASH EXPENDITURES</b>					
<b>PERSONAL EXPENSES</b>					
Personal Expenses (Monthly)	100,000	-	20,000	20,000	200,000
Personal Expenses (Daily)*	90,000	60,000	-	90,000	-
<b>NON-CURRENT ASSETS</b>					
Building Mortgage (Monthly)	-	-	-	-	-
Building Rent (Monthly)	-	20,000	20,000	6,000	-
Property Mortgage (Monthly)	-	-	-	-	-
Property Rent (Monthly)	-	-	-	-	-
Vehicle Rent/Payment (Monthly)	-	-	-	-	-
<b>MONTHLY BUSINESS EXPENSES</b>					
Employee Salaries (Monthly)	-	240,000	85,000	-	-
Number of Employees	2**	2	2	1	1
Electricity Payment (Monthly)	40,000	30,000	-	-	-
Fuel Payment (Monthly)	-	30,000	-	10,500	-
Distribution Costs (Monthly)	-	-	-	-	-
Delivery/Pick-up Costs (Monthly)	30,000	-	40,000	25,000	20,000
Communication Costs (Monthly)	-	40,000	5,000	-	5,000
Security Costs (Monthly)	-	-	-	-	-
Other Shop Expenses (Monthly)	100,000	23,000	10,000	30,000	-
<b>INVENTORY</b>					
Total Expenses for Products/Medicines Purchased	1,580,944	873,830	275,725	344,740	256,899

(Monthly)					
Average Additional Expense from Penicillin Injection	Already Stocking	Already Stocking	Already Stocking	3,036	Already Stocking
Frequency Ordering Product/Medicines	Every week	Every week	Every other week	Every other week	Every other week
<b>TOTAL MONTHLY CASH EXPENDITURES</b>	1,940,944	1,316,830	455,725	529,276	481,899
<b>CURRENT CUMULATIVE NET CASH FLOW</b>	-654,944	1,595,180	522,455	409,680	-188,781
<b>PROJECTED CUMULATIVE NET CASH FLOW</b>	-654,944	1,595,180	522,455	414,308	-188,781
Absolute % Profit Increase from Stocking Penicillin Injection	-	-	-	1.13%	-
Reported Access to Enough Money to Operate Business?	Yes	No	No	No	No

\*Each value multiplied by 30 to represent the daily personal expenses withdrawn in a month.

\*\*Husband and Wife own drug shop together and so all money goes back into the business.

## ANNEX 4: ADDO CASH FLOW ANALYSIS

<b>ADDO Cash Flow Analysis with Total Product Package</b>					
SHOP ID #	1	4	8	9	15
Location	Morogoro Rural	Morogoro Rural	Kilosa	Kilosa	Mvomero
Owner's Year of Management Experience	4	17	4	11	11
Percentage Income from Drug Shop	40%	70%	30%	40-45%	100%
Average Customers	49	50	60	45	70
<b>CASH INFLOW</b>					
<b>BUSINESS REVENUE</b>					
Total Revenue from Products/Medicines (Monthly)	1,286,000	2,912,010	978,180	935,919.9	293,118
Average Additional Revenue from Penicillin Injection	Already Stocking	Already Stocking	Already Stocking	7,664	Already Stocking
Average Additional Revenue from Doxycycline	Already Stocking	38,298	45,957	Already Stocking	53,617
<b>TOTAL MONTHLY CASH INFLOW</b>	<b>1,398,156</b>	<b>2,950,308</b>	<b>1,024,137</b>	<b>943,583.9</b>	<b>346,735</b>
<b>CASH EXPENDITURES</b>					
<b>PERSONAL EXPENSES</b>					
Personal Expenses (Monthly)	100,000	-	20,000	20,000	200,000
Personal Expenses (Daily)*	90,000	60,000	-	90,000	-
<b>NON-CURRENT ASSETS</b>					
Building Mortgage (Monthly)	-	-	-	-	-
Building Rent (Monthly)	-	20,000	20,000	6,000	-
Property Mortgage (Monthly)	-	-	-	-	-
Property Rent (Monthly)	-	-	-	-	-
Vehicle Rent/Payment (Monthly)	-	-	-	-	-
<b>MONTHLY BUSINESS EXPENSES</b>					
Employee Salaries (Monthly)	-	240,000	85,000	-	-
Number of Employees	2**	2	2	1	1
Electricity Payment (Monthly)	40,000	30,000	-	-	-
Fuel Payment (Monthly)	-	30,000	-	10,500	-
Distribution Costs (Monthly)	-	-	-	-	-
Delivery/Pick-up Costs (Monthly)	30,000	-	40,000	25,000	20,000
Communication Costs (Monthly)	-	40,000	5,000	-	5,000
Security Costs (Monthly)	-	-	-	-	-
Other Shop Expenses (Monthly)	100,000	23,000	10,000	30,000	-

INVENTORY					
Total Expenses for Products/Medicines Purchased (Monthly)	1,580,944	873,830	275,725	344,740	256,899
Average Additional Expense from Penicillin Injection	Already Stocking	Already Stocking	Already Stocking	3,036	Already Stocking
Average Additional Expense from Doxycycline	Already Stocking	14,323	17,188	Already Stocking	20,053
Frequency Ordering Product/Medicines	Every week	Every week	Every other week	Every other week	Every other week
<b>TOTAL MONTHLY CASH EXPENDITURES</b>	2,013,804	1,331,153	472,913	529,276	501,952
<b>PROJECTED CUMULATIVE NET CASH FLOW</b>	-654,944	1,595,180	522,455	409,680	-188,781
<b>CURRENT CUMULATIVE NET CASH FLOW</b>	-654,944	1,619,155	551,224	414,308	-155,217
Absolute % Profit Increase from Stocking Penicillin Injection	0%	1.50%	5.51%	1.13%	17.78%
Reported Access to Enough Money to Operate Business?	Yes	No	No	No	No

\*Each value multiplied by 30 to represent the daily personal expenses withdrawn in a month.

\*\*Husband and Wife own drug shop together and so all money goes back into the business.

## ANNEX 6: ADDO CASH FLOW SHOP CONTEXT ANALYSIS

### Contextual Information for Five ADDO Cash Flow Shops

<b>SHOP 1 LEGEND</b>	
<b>SHOP LOCATION</b>	
Village	Ngerengere
Ward	Ngerengere
District	Morogoro Rural
Distance from Morogoro Town	1.5 hours
<b>SHOP DESCRIPTORS</b>	
Ave. Customer	49
Shop Building Type	1- good store, had electricity
Other Comments	Well organized, no medications expired, both owner and dispenser husband/wife were knowledgeable about the pricing and business; wouldn't accept a loan if it had interest
Challenges Noted	Using retirement funds to support funds; poor record keeping no standardization--everything was from memory
<b>SUPPLY</b>	
Name of supplier	Marhaba Pharmacy
Location of supplier	Morogoro Town
Frequency stocking	Once a week
Self-reported product/medicine stock-out(s)	None

<b>SHOP 4 LEGEND</b>	
<b>SHOP LOCATION</b>	
Village	N/A/Mtamba
Ward	Intamba/Kisemu
District	Morogoro Rural
Distance from Morogoro Town	2 hours
<b>SHOP DESCRIPTORS</b>	
Ave. Customer	50
Shop Building Type	2- no electricity or generator
Other Comments	N/A
Challenges Noted	Dispenser did not provide patients with information about drugs; poor record keeping; NHIF owed him 430,000
<b>SUPPLY</b>	
Name of supplier	White Gate Pharmacy
Source of supply	Morogoro Town
Frequency stocking	Once a week
Self-reported product/medicine stock-out(s)	None

<b>SHOP 8 LEGEND</b>	
<b>SHOP LOCATION</b>	
Village	N/A
Ward	Kidodi
District	Kilosa
Distance from Morogoro Town	3 hours
<b>SHOP DESCRIPTORS</b>	
Ave. Customer	60
Shop Building Type	2- no electricity
Other Comments	Great record keeping; dispenser does record-keeping; good working relationship and response between 2 women owner and dispenser
Challenges Noted	Owner is a clinical officer working at the hospital so doesn't spend much time at the shop
<b>SUPPLY</b>	
Name of supplier	Marhaba Pharmacy
Source of supply	Morogoro Town
Frequency stocking	Twice a month
Self-reported product/medicine stock-out(s)	Erythromycin (tabs)

<b>SHOP 9 LEGEND</b>	
<b>SHOP LOCATION</b>	
Village	N/A/Mhenda
Ward	Ulaya/Ulaya
District	Kilosa
Distance from Morogoro Town	4 hours
<b>SHOP DESCRIPTORS</b>	
Ave. Customer	45
Shop Building Type	3- poor storage conditions, no electricity or generator
Other Comments	Some of the drugs were expired, poor record keeping; surrounding community was very poor --mud huts; dispenser did not provide information to patients
Challenges Noted	Did not mention capital as a problem; mentioned a lot of drugs that were out of stock
<b>SUPPLY</b>	
Name of supplier	Marhaba Pharmacy
Source of supply	Morogoro Town
Frequency stocking	Twice a month
Self-reported product/medicine stock-out(s)	Erythromycin, Safe Plan, MES Cough Syrup



<b>SHOP 15 LEGEND</b>	
<b>SHOP LOCATION</b>	
Village	Vianzi
Ward	Melela
District	Mvomero
Distance from Morogoro Town	0.5 hour
<b>SHOP DESCRIPTORS</b>	
Ave. Customer	70
Shop Building Type	3
Other Comments	Lots of expiry and low stock of drugs; poor record keeping; supplier offers credit but owner does not accept it; kept expired drugs on shelf with boxes x'd out just so it looked like shop had more items
Challenges Noted	Still a lot of unregistered drug shops that sell a lot of medicines and provide competition to her drug shop; access to low interest loans to boost capital would be a good thing; more trainings for continuing education would be of benefit
<b>SUPPLY</b>	
Name of supplier	Marhaba Pharmacy
Source of supply	Morogoro Town
Frequency stocking	Twice a month
Self-reported product/medicine stock-out(s)	Pen-V Tablets, Hedex Tablets, Amoxicillin Tablets, plus others that could not be recalled

## ANNEX 7: TFDA ADDO PRESCRIPTION LIST

### MINISTRY OF HEALTH AND SOCIAL WELFARE TANZANIA FOOD AND DRUGS AUTHORITY



#### HUMAN ADDO PRESCRIPTION MEDICINES

S/N	Drug and Form	Strength
	<i>Anti-Asthmatics</i>	
1.	Aminophylline injection (ampoules)	25mg/mL in 10mL
	<b>Antibacterial /Antibiotics</b>	
2.	Amoxicillin trihydrate capsules	250mg, 500mg
3.	Amoxicillin trihydrate oral suspension	125mg/5ml, 250mg/ml
4.	Benzyl Penicillin powder for injection	3gm (500,000 IU) in vial
5.	Co-trimoxazole suspension	240mg/5ml in 100 mL Bottle
6.	Co-trimoxazole tablets	480mg
7.	Doxycycline capsules/tablets	100mg
8.	Erythromycin oral suspension	125mg/5ml, 250mg/5ml.
9.	Erythromycin tablets	250mg, 500mg
10.	Metronidazole tablets	200mg, 250mg, 400mg,
11.	Metronidazole suspension	200mg/5ml in 100mL
12.	Metronidazole injection	
13.	Nitrofurantoin tablets	50mg, 100mg
14.	Oxytetracycline Hydrochloride eye ointment	5% (w/v), 10% (w/v)
15.	Phenoxymethyl Penicillin suspension	125mg/5ml, 250mg/5ml in 100mL
16.	Phenoxymethyl Penicillin tablets	250mg
17.	Procaine Penicillin Fortified	4g (400,000IU) - 4MU
18.	Silver sulfadiazine cream	10mg
19.	Chloramphenicol eye drops/ointment	
	<i>Anti-Inflammatory/Analgesics</i>	
20.	Diclofenac sod. Tablets	25mg, 50mg
21.	Indomethacin capsules	25mg
22.	Hydrocortisone ointment/cream	1%, 0.5%
23.	Annusol suppositories	
	<i>Anaesthetics, local</i>	
24.	Lignocaine injection	1% in 10ml vial, 2% in 30ml vial
	<i>Anti-Fungal</i>	
25.	Nystatin oral suspension	100,000IU/ml in 30mL Bottle
26.	Nystatin pessaries	100,000IU
27.	Nystatin skin Ointment	100,000IU/gm
28.	Nystatin tablets	500,000IU
29.	Ketoconazole tablets	
	<b>Anti Malarials</b>	
30.	Quinine tablets (sulphate or bisulphate)	300mg
31.	Quinine injection (as dihydrochloride)	300mg/ml in 2mL
32.	Artemether + Lumefantrine tablets/ACT	Artemether 20 mg Lumefantrine 120 mg
	<i>Cardiovascular (Anti-arrhythmic drugs)</i>	
33.	Propranolol tablets (Hydrochloride)	10mg, 40mg, 80mg
	<b>Diuretics</b>	
34.	Bendrofluazide tablets	5mg
	<i>Oxytocics</i>	
35.	Ergometrine Injection (maleate)	0.2mg/mL in 1mL ampoule, 0.5mg/mL in 2mL ampoule

	<b>Laxative</b>	
36.	Bisacodyl tablets	5 mg
	<b>Antihistamines</b>	
37.	Cetirizine hydrochloride tablets	10 mg
38.	Cetirizine hydrochloride oral solution	5mg/5ml
	<b>antispasmodics</b>	
39.	Hyoscine butylobromide tablets	10 mg
40.	Hyoscine butylobromide injection	20mg/ml
	<i>Oral Contraceptives</i>	
41.	Ethinylestradiol (0.03mg) + Novethisterone (0.3mg)	
42.	Ethinylestradiol (0.03mg)+ Levonorgestrel (0.15mg)	
	<b>Minerals/vitamins</b>	
43.	Neurobion Forte	
44.	Zinc sulfate tablets	20mg
	<i>Anti Emetic</i>	
45.	Promethazine Hydrochloride Injection	25mg/ml in 2mL ampoule
	<i>Fluids and Electrolytes</i>	
46.	Dextrose	5%
47.	Normal Saline Injection	0.9%
48.	Water for Injection	
	<i>Anti-Epileptic</i>	
49.	Phenytoin tablets/capsules (Sodium salt)	50mg, 100mg

#### HUMAN NON-PRESCRIPTION MEDICINES

S/N	Drug and form	Strength
	<b>Analgesics; antipyretics</b>	
1.	Paracetamol liquid	120mg/5ml
2.	Paracetamol tablets	500mg
3.	Acetylsalicylic Acid tablets	300mg
4.	Ibuprofen syrup	100mg/5ml
5.	Ibuprofen tablets	200mg; 400mg
6.	various generics and brands of paracetamol in immediate release formulation (up to 500 mg per unit)	Various
7.	Diclofenac gel	0.5%; 1.16%
8.	Etofenamate gel	10%w/w
9.	Indomethacin capsules	25mg
10.	Mefenamic Acid tablets	250
11.	Meloxicam tablets	7.5mg
12.	Methyl Salicylate liquid	22.06%w/w
13.	Piroxicam capsules	20mg
14.	Liniments and muscle rubs gel	5mg
	<b>Antacids, antiflatulents and anti-peptic ulceration</b>	
15.	Aluminium Hydroxide tablets	216mg
16.	various generics and brands containing Aluminium Hydroxide and Magnesium trisilicate/Dimethicone/Simethicone	various
17.	Gripe water liquid	
18.	Calcium Carbonate tablets	750mg
19.	Citric Acid + Sodium Bicarbonate + Tartaric Acid effervescent granules	
20.	Magnesium Hydroxide suspension, tablets	
21.	Magnesium Sulphate + Sodium Bicarbonate (Andrews Liver Salts Regular) powder	
22.	Sodium Bicarbonate granules	
23.	Sodium Bicarbonate liquid	

	<b>Anthelmintics</b>	
24.	Albendazole suspension	200mg/5ml
25.	Albendazole tablets	200mg; 400mg
26.	Levamisole syrup	40mg/5ml
27.	Levamisole tablets	40, 50, 150 mg
28.	Mebendazole suspension	100mg/5ml
29.	Mebendazole tablets	100mg; 500mg
30.	Praziquantel tablets	600mg
31.	Niclosamide tablets	500 m g
	<b>Antianaemic preparations</b>	
32.	Ferrous Fumarate + Folic Acid tablets	
33.	Ferrous Hydroxide + Folic Acid chewable tablets	
34.	Ferrous Hydroxide + Folic Acid drops	50mg/5ml
35.	Ferrous Hydroxide + Folic Acid syrup	50mg/5ml
36.	Ferrous Sulphate + Folic Acid capsules, tablets	
37.	Folic Acid tablets	5mg
	<b>Anti-asthmatics</b>	
38.	Aminophylline tablets	100mg
39.	Ephedrine + Theophylline expectorant	
40.	Guaiphenesin + Theophylline syrup	
41.	Salbutamol suspension	2mg/5ml ; 4mg/5ml
42.	Salbutamol tablets	2mg ; 4mg
43.	Salbutamol + Guaiphenesin suspension	
	<b>Dermatologicals</b>	
44.	Chlorhexidine + Silver Sulfasalazine cream	NA
45.	Sodium Fusidate cream/ointment	2%w/w
46.	Benzoic Acid + Salicylic Acid ointment	3% + 6%
47.	Benzoic Acid + Salicylic Acid +Sulphur lotion/lotion/ointment	
48.	Benzoyl Peroxide gel	2.5% ; 5%
49.	Benzoyl Peroxide lotion	5%; 10%
50.	Bifonazole gel	150mg
51.	Bifonazole solution	1gm/15ml
52.	Bifonazole solution	10mg/10ml
53.	Clotrimazole cream; dusting	1%, 2%,10%
54.	Clotrimazole mouth paint	1%w/w
55.	Clotrimazole powder	1%w/w
56.	Clotrimazole solution	0.01gm; 0.01gm/ml
57.	Gentian Violet liquid	0.50%
58.	Miconazole cream	20mg/gm
59.	Miconazole cream	2%w/w
60.	Miconazole oral gel	20mg/g
61.	Miconazole powder	20mg
62.	Ketoconazole cream, shampoo, powder, solution	
63.	Tetracycline skin ointment ointment	
64.	Salicylic Acid + Benzoic Acid lotion, cream	
65.	Tioconazole cream	1%
66.	Undecenoic Acid cream	
67.	Undecenoic Acid powder	
68.	Benzyl Benzoate emulsion	25%
69.	Lindane lotion	1%w/w
70.	Bismuth Subgallate ointment	10mg/g
71.	Cod Liver Oil + White Petrolatum ointment	
72.	Camphor + Eucalyptus + Levomenthol ointment	
73.	Salicylates cream	
74.	Salicylates	0.56%w/w
	Methyl Salicylate + Oleoresin Capsicum liniment	
75.	Tolnaftate solution	10mg/ml
76.	Methylated spirit solution	
77.	Undecenoic Acid cream	
78.	Antidandruff ointment, shampoo	
79.	medicated shampoos shampoo	
80.	Fresh wound plasters	
	<b>Antidiarrhoea</b>	
81.	ORS powder	

	<b>Anti-allergies</b>	
82.	Chlorpheniramine syrup	2mg/5ml
83.	Chlorpheniramine tablets	4mg
	<b>Antimalarial</b>	
84.	Amodiaquine oral suspension	50mg/5ml
85.	Amodiaquine tablets	200mg
86.	Pyrimethamine + Sulafmethopyrazine tablets	525mg
87.	Pyrimethamine + Sulfadoxine tablets	525mg
	<b>Antipruritics, incl. antihistamines, anaesthetics</b>	
88.	Mepyramine cream	2%w/w
89.	Promethazine tablets	25mg
90.	Pseudoephedrine + Triprolidine tablets	
	<b>Antiseptic and disinfectants</b>	
91.	Boric Acid + Chlorinated Lime solution	
92.	Calamine + Zinc Oxide lotion	
93.	Cetrimide cream	0.5%w/w
94.	Cetrimide + Chlorhexidine solution	1.5% + 1.0%
95.	Hydrogen Peroxide solution	6%
96.	Povidone Iodine solution	10%w/v
97.	Povidone Iodine gargle	1%w/v
98.	Povidone Iodine solution	10%
99.	Allantoin cream	
100.	Allantoin solution	5%w/w
	<b>Cough and cold preparations</b>	
101.	Cough preparations containing ammonium chloride, Mist Expectorant Sed (Morphine should not exceed 0.2%), triprolidine, diphenhydramine, dextromethorphan, ipecacuanha, guaiphenesin, bromhexine,	
102.	Eucalyptus Oil + Levomenthol lozenges	
103.	Amyl m cresol + Dichlorobenzyl Alcohol lozenges and tablets	
104.	Carbocisteine syrup	2% ; 5%
105.	Glycyrrhiza + Volatile Oil tablets & syrup	
106.	menthol products	
	<b>Laxative</b>	
108.	Glycerine liquid	100%v/v
109.	Liquid Paraffin liquid	100%v/v
110.	Sena tablets	6mg
	<b>Ear drops</b>	
111.	Boric Acid ear drops	
112.	Arachis Oil + Chlorbutanol + Paradichlorobenzene ear drops	
	<b>Nasal preparations</b>	
113.	Dimethidene + Phenylephrine drops	
114.	Ephedrine nasal drops	5mg/ml
115.	Oxymethazoline nasal spray	7.5mg/15ml
116.	Xylometazoline nasal drops	0.5mg/ml
117.	Xylometazoline spray	1%
	<b>Stomatologicals, mouth preparations</b>	
118.	Sensodyne Daily Fluoride mouthrinse liquid	0.05%w/w

119.	Arachis oil preparations liquid	
120.	Mouthwashes liquid	
<b>Vitamins, minerals</b>		
121.	Ascorbic Acid tablets	100mg
122.	Cod liver Oil emulsion	
123.	Vitamin B Complex tablets	
	Tocopherol capsules	
125.	vitamin A preparations containing not more than 5,000 i.e. per capsule or 5ml	Various
126.	Calcium capsules	
127.	Multivitamin syrup	Various

#### VETERINARY ADDO PRESCRIPTION MEDICINES

S/N	Drug and form	Strength
<b>Anti- bacterial/ antibiotics</b>		
1.	Oxtetracycline injectable solutions	10%
2.	Oxtetracycline injectable solutions	20% LA
3.	Sulfadimidine injectable solutions	33%w/v, 33.3%
4.	Gentamycin injectable solutions	10%
5.	Pen streptomycin injectable solutions	20%
<b>Anti-helminthic drugs</b>		
6.	Levamisole hydrochloride injections	7.5%w/v, 10%w/v
7.	Nitroxynil Eglumine injection	34%
<b>Endectins</b>		
8.	Ivermectin injectable solutions	10mg/ml
<b>Anti- mycoplasmal drugs</b>		
9.	Tylosin injectable solutions	200mg/ml
<b>Anti- protozoal drugs</b>		
10.	Imidocarb Dipropionate injectable solutions	121.5 mg/ml
11.	Buparvaquone injectable solutions	50mg/ml
12.	Parvaquone injectable solutions	50mg/ml
13.	Sulfadimidine injectable solutions	33.3%
<b>Anti-trypanosomiasis</b>		
14.	Homidium chloride tablets	250mg
15.	Isometamidium chloride injectable soluble powders	1g
16.	Diminazene aceturate injectable soluble granules	445mg/gm
17.	Diminazene Diaceturate injectable soluble granules	7gm/100ml
<b>Local anesthetic agent</b>		
18.	Lignocaine injection	20%w/v
<b>Vitamins/Minerals</b>		
19.	Multivitamin injectable solutions	Various
20.	Iron dextran injectable solutions	100mg/ml

21.	Calcium Borogluconate solutions	Calcium Gluconate 249mg/ml, Caffeine 0.915mg/ml Boric Acid 51mg/ml
	<b>Anti-inflammatory</b>	
22	Dexamethasone solutions	0.2%w/v
	<b>Vaccines</b>	NA
23	Newcastle virus	NA
24	Gumboro IBD,GEB-Strains Cu IM,1/65PV strain	NA
<b>VETERINARY ADDO GENERAL SALES MEDICINES</b>		
<b>S/N</b>	<b>Drug and form</b>	<b>Strength</b>
	<b>Anti- bacterial/ antibiotics</b>	
25	Chlortetracycline powder	CTC 20
26	Ox tetracycline + Vitamins powder	NA
27	Tylosin Suspension	NA
28	Sulfadiazine + Trimethoprim powder	NA
29	Chlortetracycline spray	3.21gm/270ml
30	Sulfaquinoxaline + Trimethoprim powder	NA
31	Ox tetracycline powder	20
32	Amprolium powder	20
33	Toltrazuril solution	2.5%w/v
34	Dressings powder	NA
35	Oxtetracycline aerosol spray	2%w/v
36	Flumequine powder	100mg/ml
37	Norfloxacin	10%
38	Sulfaclozine powder	NA
	<b>Anti-helminthic drugs</b>	
39	Albendazole tablets	2500mg,1500mg,
40	Albendazole suspensions	2.5%w/v, 10%w/v,100mg/ml
41	Piperazine citrate tablets	275mg
42	Piperazine citrate soluble powders	
43	Levamisole + Oxyclozanide suspension	NA
44	Levamisole + Oxyclozanide bolus	NA
45	Ivermectin liquid	0.5%w/v,0.08%w/v
46	Levamisole drench	NA,7.5%w/v,1.5mg/ml
47	Fenbendazole suspension	5%w/v
48	Mebendazole suspension	NA
49	Praziquantel + Pyrantel Pamoate tablets	NA
	<b>Vitamins/Minerals</b>	
50.	Multivitamin soluble powders	Various
51.	Multivitamin + Minerals powders	Various
	<b>Intramammary infusion drugs/Topical applications</b>	
52.	Mastitis intramammary (Benzyl penicillin) infusion, ointments	300,000IU
53	Mastitis intramammary (Neomycin Sulphate) infusion, ointments	500,000IU

54.	Dichlorophen cream	0.55%w/v
	<b>Ophthalmologic drug</b>	
55.	Opticlox 21.37 % w/w, eye ointment	21.37% w/v



## ANNEX 7: NDA ADS PRESCRIPTION MEDICINE LIST

The list has been drawn up taking into consideration the prescribing levels in line with the national Standard Treatment Guidelines. A consideration has also been made to ensure that the public receives reasonable access to the most essential (key) drugs needed to treat the common diseases found in the community.

DRUG AND FORM	INTENDED AILMENTS
<b>Anti-Asthmatics &amp; Cough Preparations</b>	
Aminophylline tablet 100mg	Wheezing and bronchitis
Salbutamol tablet 4mg	Wheezing and bronchitis
Non-narcotic cough preparations (e.g. cough linctus, s, expectorants and herbal)	Symptomatic relief of dry and chesty cough
<b>Anti-Bacterials/Antibiotics</b>	
Amoxicillin capsules/tablets 250mg & 500mg	Upper respiratory tract infections (URTIs), urinary tract infections (UTIs)
Amoxicillin oral suspension 125mg/5ml & 250mg/5ml	URTIs, UTIs, skin infections
Co-trimoxazole suspension 240mg/5ml	URTIs
Co-trimoxazole tablets 480mg and 960mg	URTIs
Doxycycline capsules/tablets 100mg	UTIs
Erythromycin oral suspension 125mg/5ml	URTIs, UTIs,
Erythromycin tablets 250mg	URTIs, UTIs
Metronidazole tablets 200mg	Amoebiasis, trichomoniasis
Metronidazole suspension 200mg/5ml & 125mg/5ml	Amoebiasis
Nitrofurantoin tablets 100mg	UTIs
Phenoxymethyl Penicillin suspension 125mg/5ml	URTIs
Phenoxymethyl Penicillin tablets 250mg	URTIs
Ciprofloxacin 250mg & 500mg tablet	Gonorrhoea and other UTIs
<b>Dermatological Products</b>	
Silver sulfadiazine cream 1% w/w	Wounds and burns
Iodine tincture 2%	Wounds
Calamine lotion 15%	Anti-inflammatory and Pruritus
Benzyl benzoate lotion 25%	Scabies
Malathion lotion aqueous 0.5%	Pediculosis
Hydrocortisone cream 1%	
<b>Anti-Helminthics</b>	
Mebendazole tablet 100mg	Intestinal worms
Mebendazole suspension 100mg/5ml	Intestinal worms
Albendazole tablets 200mg & 400mg	Intestinal worms
Albendazole suspension 100mg/5ml & 200mg/5ml	Intestinal worms

<b>Anti-Inflammatory/Analgesics</b>	
Diclofenac sod. tablets 50mg & 100mg	Musculo-skeletal pain and fever
Ibuprofen tablet 200mg & 400mg	Musculo-skeletal pain and fever
Ibuprofen syrup 100mg/5ml	Musculo-skeletal pain and fever
Acetylsalicylic acid tablet 300mg	Musculo-skeletal pain and fever
Paracetamol tablet 500mg	Musculo-skeletal pain and fever
Paracetamol suspenson 120mg/5ml	Musculo-skeletal pain and fever
<b>Anti-Allergic</b>	
Chlorpheniramine tablet 4mg	Pruritus and allergy
Chlorpheniramine syrup 2mg/5ml	Pruritus and allergy
Promethazine tablet 25mg	Pruritus and vomiting
Promethazine syrup 5mg/5ml	Pruritus and vomiting
Cetirizine tablet 10mg	Pruritus and allergy
Cetirizine syrup 5mg/5ml	Pruritus and allergy
<b>Anti-Fungal</b>	
Nystatin oral suspension 100,000 IU/5ml & 100,000 IU/ml	Oral candidiasis
Nystatin tablets 100,000 IU & 500,000 IU	Oral candidiasis
Nystatin lozenges 100,000 IU	Oral candidiasis
Nystatin pessaries 100,000 IU	Vaginal candidiasis
Clotrimazole pessaries 100mg	Vaginal candidiasis
Clotrimazole cream 1%	Skin infections (e.g., ringworm)
Sulphur ointment 10%	Skin infections (e.g., ringworm)
Benzoic acid + salicylic acid ointment 6% + 3%	Skin infections (e.g., ringworm)
<b>Anti-Malarial Medicines</b>	
Artemether /Lumefantrine Tablet 20/120 mg & 40/240mg	Uncomplicated malaria
Artesunate/Amodiaquine tablet 50/200 mg and other ACTs	Uncomplicated malaria
Quinine tablet 300mg	
Quinine suspension 100mg/5ml	
<b>Disinfectants &amp; Antiseptics</b>	
Cetrimide + chlorhexidine solution 0.5% + 0.05%	Skin wounds antiseptic
Chlorhexidine gluconate solution 20%	Skin wounds
Hydrogen peroxide solution 6%	Skin wounds and mouth gargle
Calcium or sodium hypochlorite solution 5%	Disinfectant
<b>Oral Contraceptives</b>	
Ethinylestradiol + Norethisterone	Combined contraceptive
Ethinylestradiol + Levonorgestrel	Combined contraceptive

<b>Anti-Diarrhoea</b>	
Zinc Sulphate tablets	Diarrhoea in children
ORS	Diarrhoea in children
<b>Anti-Convulsant</b>	
Diazepam rectal tube 2mg/mL	Convulsions in children
<b>Antidotes</b>	
Charcoal activated tablet 250mg	Food poisoning
<b>Eye/Ear/Nasal Preparations</b>	
Chloramphenicol eye ointment 1%	Eye infections
Chloramphenicol eye/ear drops 0.5%	Eye infections
Tetracycline eye ointment 1%	Eye infections
Combined antibiotic plus steroid eye/ear/nasal drops	Eye infections
<b>Anti-Anaemia Medicines, Vitamins &amp; Minerals</b>	
Ferrous salt tablet 60mg	Anaemia
Folic acid tablet 5mg	Anaemia
Ferrous/Folic acid 200mg/0.5mg & 100mg/0.5mg	Anaemia
Multivitamin tablets and suspensions	Appetite
Vitamin A capsules	
Vitamin C tablets 100mg	

## ANNEX 8: TANZANIA SURVEY TOOL

INTERVIEWER NAME	
DATE: /Tarehe	
INTERVIEW START TIME:/Muda wakuanza mahojiano	INTERVIEW END TIME: /Muda wa kumaliza mahojiano
<b>SECTION 1. CONTACT INFO</b>	<b>RESPONSE</b>
Shop ID	
District/Wilaya	1. <input type="checkbox"/> Kilombero 2. <input type="checkbox"/> Kilosa 3. <input type="checkbox"/> Morogoro Municipal 4. <input type="checkbox"/> Morogoro Rural 5. <input type="checkbox"/> Mvomero 6. <input type="checkbox"/> Ulanga
Ward/Kata	(write name)
Village/Kijiji	(write name)
<b>SECTION 2. FOMU YA RIDHAA</b> Habari, Jina langu ni (Jina la anayehoji) nafanya kazi katika taasisi ya Kitafiti ya WDI -the William Davidson Institute, ya Chuo kikuu cha Michigan. Kwa kushilikiana na Management Sciences for Health, shirika lisilo la kiserikari (NGO) tunafanya utafiti ili kupata ufahamu wa sababu zinazochangia upatikanaji wa dawa kwenye maduka ya dawa muhimu nchini. Matokeo ya utafiti huu yatatumika kubuni mpango mkakati wa kuboresha upatikanaji wa dawa katika maduka ya dawa muhimu kama hili lako. Nitauliza maswali kadhaa kuhusu mahesabu ya mali (dawa) na hali ya kifedha kwasasa. Napenda kukuhakikishia ya kwamba taarifa yako itakua ya siri na haitahusisha ushirikishwaji wa Taasisi ya serikari kwa namna yoyote ile. Taarifa itakayopatikana hapa haitasambazwa kwa mtu mwingine yoyote zaidi ya wahusika wa utafiti huu tu. Taarifa zote zitawekewa namba za siri kuzuia wasiohusika na utafiti huu kulitambua duka lako. Dodoso hili litachukua kwa makadilio kiasi cha saa mja hivi kukamilika. Tutakua tukisimamisha mahojiano ili uwahudumie wateja wako pindi wanapohitaji huduma hapa dukani. Kumbuka ushiriki katika utafiti huu ni wa hiari na unaweza kuamua kutokujibu swali lolote au kutoridhia kushiliki katika utafiti pia. Lakini ni matumaini yangu utatoa ushirikiano katika utafiti huu kwani maoni yako ni muhimu sana. Je, mpaka wakati huu kuna swali lolote unalotaka kuuliza kuhusiana na utafiti huu? Kwa maswali yoyote hapo baadae unaweza kuwasiliana nasi kupitia mfamasia wa wilaya na kumbuka hakuna jibu sahihi wala lisilosahihi. Tafadhari uwe huru kutupa habari za ukweli ili kufanikisha usanifu wa matokeo ya utafiti huu.	
May I begin the interview now?/ Je, naweza kuanza mahojiano sasa?	1. <input type="checkbox"/> YES/ NDIO 2. <input type="checkbox"/> NO/ HAPANA
<b>SECTION 3. ADDO CHARACTERISTICS/DRUG SHOP MANAGEMENT</b>	
<b>PROMPT: I would like to ask you some questions about your drug shop/ Ningependa kuuliza maswali kuhusu duka lako la dawa muhimu</b>	
Are you the owner of this outlet?/ Je, wewe ni mmiliki wa sehemu hii ya huduma (duka la dawa)?	1. <input type="checkbox"/> YES/ NDIO 2. <input type="checkbox"/> NO/ HAPANA 98. <input type="checkbox"/> Refused/ Amekataa kujibu
If no, what is your position in this drug shop?/ Kama hapana, kazi yako ni nini katika duka hili?	1. <input type="checkbox"/> Medicine dispenser/ Mtoa dawa 2. <input type="checkbox"/> Shop manager/ Meneja wa duka 3. <input type="checkbox"/> Shop attendant/ Mhudumu wa duka 96. <input type="checkbox"/> Other (specify)/ Mengine (eleza) _____ 98. <input type="checkbox"/> Refused/ Amekataa kujibu

What month/year was the business established/purchased/acquired by the current owner(s)?/Mwezi/Mwaka gani biashara hii ilianzishwa na mmiliki wa sasa?	1. ____ (mm) ____ (year) 98. <input type="checkbox"/> Refused/ Amekataa kujibu 99. <input type="checkbox"/> Don't know/ Sijui
How many people own this shop?/ Je, ni watu wangapi wanamiliki duka hili?	1. ____ 98. <input type="checkbox"/> Refused/ Amekataa kujibu 99. <input type="checkbox"/> Don't know/ Sijui
How many people are responsible for the day to day management of this shop (dispensing medicines, managing inventory, ordering supplies, bookkeeping)? Je, ni watu wangapi wanashughulikia usimamizi wa kila siku wa duka (Kutoa dawa, kusimamia mahesabu ya mali, kumbukumbu za fedha n.k)	1. ____ 98. <input type="checkbox"/> Refused/ Amekataa kujibu 99. <input type="checkbox"/> Don't know/ Sijui
Including yourself (and the owner), how many people work at this outlet (all staff)?/ Ukijijumuisha wewe (pamoja na mmiliki) kwa ujumla ni watu wangapi wanaofanya kazi hapa (wafanyakazi wote)?	1. ____ 98. <input type="checkbox"/> Refused/ Amekataa kujibu 99. <input type="checkbox"/> Don't know/ Sijui
*Note for each employee listed in the question above, fill in the name, highest level of education attained, and health training and qualification	
a. Employee 1(name)_____	b. Employee 1: Highest Level of Education Attained 0. ___ No formal education/ Hajasoma kabisa 1. ___ P1 2. ___ P2 3. ___ P3 4. ___ P4 5. ___ P5 6. ___ P6 7. ___ P7 8. ___ S1 9. ___ S2 10. ___ S3 11. ___ S4 12. ___ S5 13. ___ S6 14. ___ Post primary specialized training certificate/ cheti cha ufundi 15. ___ Diploma / Stashahada 16. ___ University degree / Shahada 17. ___ Masters / Shahada ya udhamivu 18. ___ PhD / Shahada ya udaktari wa falsafa 99. ___ Don't know/ Sijui

<p>c. Employee 1 Health Training/Qualification/ ana Ujuzi kwenye taaluma ya afya</p> <p>0. ___ Does not have any health training or qualification/ Hana ujuzi wowote wa taaluma ya afya</p> <p>1. ___ Pharmacist / mfamasia</p> <p>2. ___ Pharmacy Technician/ fundi dawa sanifu</p> <p>3. ___ Pharmacy Assistant/ msaidizi wa famasia</p> <p>4. ___ Medical Doctor/ daktari</p> <p>5. ___ Nurse/Midwife/ Nesi</p> <p>6. ___ Clinical Officer/ Afisa mganga msaidizi</p> <p>7. ___ Other (Specify)</p> <p>1 _____</p> <p>8. ___ Other (Specify)</p> <p>2 _____</p>	<p>d. Employee 1: Position in this Drug Shop</p> <p>1. Owner</p> <p>2. ADDO Dispenser</p> <p>3. Shop manager</p> <p>96. Other (specify)</p> <p>98. Refused</p> <p>99. Don't know</p>
<p>Employee 2(name)_____</p>	<p>b. Employee 2: Highest Level of Education Attained</p> <p>0. ___ No formal education/ Hajasoma kabisa</p> <p>1. ___ P1</p> <p>2. ___ P2</p> <p>3. ___ P3</p> <p>4. ___ P4</p> <p>5. ___ P5</p> <p>6. ___ P6</p> <p>7. ___ P7</p> <p>8. ___ S1</p> <p>9. ___ S2</p> <p>10. ___ S3</p> <p>11. ___ S4</p> <p>12. ___ S5</p> <p>13. ___ S6</p> <p>14. ___ Post primary specialized training certificate/ cheti cha ufundi</p> <p>15. ___ Diploma / Stashahada</p> <p>16. ___ University degree / Shahada</p> <p>17. ___ Masters / Shahada ya udhamivu</p> <p>18. ___ PhD / Shahada ya udaktari wa falsafa</p> <p>99. ___ Don't know</p>

<p>c. Employee 2 Health Training/Qualification</p> <p>0. ___ Does not have any health training or qualification</p> <p>1. ___ Pharmacist / mfamasia</p> <p>2. ___ Pharmacy Technician/ fundi dawa sanifu</p> <p>3. ___ Pharmacy Assistant/ msaidizi wa famasia</p> <p>4. ___ Medical Doctor/ daktari</p> <p>5. ___ Nurse/Midwife/ Nesi</p> <p>6. ___ Clinical Officer/ Afisa mganga msaidizi</p> <p>7. ___ Other1 (specify) _____</p> <p>8. ___ Other (Specify) 2 _____</p>	<p>d. Employee 3: Position in this Drug Shop</p> <p>1. Owner</p> <p>2. ADDO Dispenser</p> <p>3. Shop manager</p> <p>96. Other (specify)</p> <p>98. Refused</p> <p>99. Don't know</p>
<p>Employee 3 Health Training/Qualification</p> <p>0. ___ Does not have any health training or qualification</p> <p>1. ___ Pharmacist / mfamasia</p> <p>2. ___ Pharmacy Technician/ fundi dawa sanifu</p> <p>3. ___ Pharmacy Assistant/ msaidizi wa famasia</p> <p>4. ___ Medical Doctor/ daktari</p> <p>5. ___ Nurse/Midwife/ Nesi</p> <p>6. ___ Clinical Officer/ Afisa mganga msaidizi</p> <p>7. ___ Other (Specify) 1 _____</p> <p>8. ___ Other (Specify) 2 _____</p>	<p>d. Employee 3: Position in this Drug Shop</p> <p>1. Owner</p> <p>2. ADDO Dispenser</p> <p>3. Shop manager</p> <p>96. Other (specify)</p> <p>98. Refused</p> <p>99. Don't know</p>
<p>a. Employee 3(name) _____</p>	<p>Employee 3: Highest Level of Education Attained</p> <p>0. ___ No formal education/ Hajasoma kabisa</p> <p>1. ___ P1</p> <p>2. ___ P2</p> <p>3. ___ P3</p> <p>4. ___ P4</p> <p>5. ___ P5</p> <p>6. ___ P6</p> <p>7. ___ P7</p> <p>8. ___ S1</p> <p>9. ___ S2</p> <p>10. ___ S3</p> <p>11. ___ S4</p> <p>12. ___ S5</p> <p>13. ___ S6</p> <p>14. ___ Post primary specialized training certificate/ cheti cha ufundi</p> <p>15. ___ Diploma / Stashahada</p> <p>16. ___ University degree / Shahada</p> <p>17. ___ Masters / Shahada ya udhamivu</p> <p>18. ___ PhD / Shahada ya udaktari wa falsafa</p> <p>99. ___ Don't know</p>

<p>a. Employee 4 (name) _____</p>	<p>b. Employee 4: Highest Level of Education Attained</p> <p>0. ___ No formal education/ Hajasoma kabisa</p> <p>1. ___ P1</p> <p>2. ___ P2</p> <p>3. ___ P3</p> <p>4. ___ P4</p> <p>5. ___ P5</p> <p>6. ___ P6</p> <p>7. ___ P7</p> <p>8. ___ S1</p> <p>9. ___ S2</p> <p>10. ___ S3</p> <p>11. ___ S4</p> <p>12. ___ S5</p> <p>13. ___ S6</p> <p>14. ___ Post primary specialized training certificate/ cheti cha ufundi</p> <p>15. ___ Diploma / Stashahada</p> <p>16. ___ University degree / Shahada</p> <p>17. ___ Masters / Shahada ya udhamivu</p> <p>18. ___ PhD / Shahada ya udaktari wa falsafa</p> <p>99. ___ Don't know</p>
<p>c. Employee 4 Health Training/Qualification</p> <p>0. ___ Does not have any health training or qualification</p> <p>1. ___ Pharmacist / mfamasia</p> <p>2. ___ Pharmacy Technician/ fundi dawa sanifu</p> <p>3. ___ Pharmacy Assistant/ msaidizi wa famasia</p> <p>4. ___ Medical Doctor/ daktari</p> <p>5. ___ Nurse/Midwife/ Nesi</p> <p>6. ___ Clinical Officer/ Afisa mganga msaidizi</p> <p>7. ___ Other (Specify)</p> <p>1 _____</p> <p>8. ___ Other (Specify)</p> <p>2 _____</p>	<p>d. Employee 4: Position in this Drug Shop</p> <p>1. Owner</p> <p>2. ADDO Dispenser</p> <p>3. Shop manager</p> <p>96. Other (specify)</p> <p>98. Refused</p> <p>99. Don't know</p>
<p>In this shop, who is responsible for dispensing medicines?/ Katika duka hili nani anashughulika na kutoa dawa?</p>	<p>1. <input type="checkbox"/> Drug Shop owner/ Mwenye duka</p> <p>2. ADDO dispenser/ Mtoa dawa aliyepitia mafunzo maalum</p> <p>3. <input type="checkbox"/> Other (specify)/ mengine eleza _____</p> <p>98. <input type="checkbox"/> Refused/ Amekataa kujibu</p> <p>99. <input type="checkbox"/> Don't know/ Sijui</p>



<p>In this shop, who is responsible for bookkeeping?/ Katika duka hili ni nani anashughulika na utuzaji wa kumbukumbu za taarifa za fedha?</p>	<p>1. <input type="checkbox"/> Drug Shop owner/ Mwenye duka  2. ADDO dispenser/ Mtoa dawa aliyepitia mafunzo maalum  3. <input type="checkbox"/> Other (specify)/ mengine eleza _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>In this shop, who is responsible for day to day financial management?/ Katika duka hili ni nani anayewajibika na kusimamia matumizi ya fedha?</p>	<p>1. <input type="checkbox"/> Drug Shop owner/ Mwenye duka  2. ADDO dispenser/ Mtoa dawa aliyepitia mafunzo maalum  3. <input type="checkbox"/> Other (specify)/ mengine eleza _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>Does this person reconcile the cash?/ Je, ni muhusika huyu anayeonisha mahesabu ya fedha na mali (dawa) hapa dukani?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>How often does this person reconcile cash?/ Je ni mara ngapi mahesabu ya pesa yanaoanishwa na mali(dawa) iliyopo dukani?</p>	<p>1. <input type="checkbox"/> Every day/ Kila siku  2. <input type="checkbox"/> Once per week/ mara moja kwa wiki  3. <input type="checkbox"/> Once every 2 weeks/ Kila baada ya wiki mbili  4. <input type="checkbox"/> Once a month/ mara moja kwa mwezi  5. <input type="checkbox"/> Other (specify)/ mengine (eleza) _____</p>
<p><b>DO NOT SAY OUT LOUD:</b> *enumerator to verify frequency of cash reconciliation; Does the drug shop reconcile cash at the frequency they have answered in the question above?/ Usisome kwa sauti: Hakikisha ni mara ngapi mahesabu ya pesa yanaoanishwa na mali (dawa) yaliyopo dukani?</p>	<p>1. <input type="checkbox"/> Yes/ Ndio  2. <input type="checkbox"/> No/ hapana  3. <input type="checkbox"/> Cannot tell / Haiwezekani kuelezea</p>
<p>In this shop, who is responsible for inventory management?/ Katika duka hili ni nani anayewajibika na usimamizi wa hesabu ya mali (dawa)?</p>	<p>1. <input type="checkbox"/> Drug Shop owner/ Mwenye duka  2. ADDO dispenser/ Mtoa dawa aliyepitia mafunzo maalum  3. <input type="checkbox"/> Other (specify)/ mengine eleza _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>Does this person (who manages inventory) adjust the drug shop's records to show the amount of each product currently in stock at the drug shop?/ Je, muhusika huyu ndiye anaefanya marekebisho ya kumbukumbu ya kiasi cha mali (dawa) kilichopo dukani?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>

<p>How often does someone adjust the drug shop's records to show the amount of inventory currently in stock? Ni mara ngapi kunafanyika marekebisho ya kumbukumbu kuendana na kiasi cha mali (dawa) kilichopo dukani?</p>	<p>1. <input type="checkbox"/> Every day / kila siku  2. <input type="checkbox"/> Once per week/ Mara moja kwa wiki  3. <input type="checkbox"/> Once every 2 weeks/ Mara moja kila baada ya wiki mbili  4. <input type="checkbox"/> Once a month/ mara moja kwa mwezi  5. Never done  96. <input type="checkbox"/> Other (specify) /mengineyo (eleza) _____  98. Refused  99. Don't know</p>
<p>Can we see your inventory records (books/ files etc)? / Je, tunaweza kuona kitabu cha kutunzia kumbukumbu za mali (dawa)</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p><b>DO NOT SAY OUT LOUD:</b> *Enumerator to verify if inventory records are kept</p>	<p>1. <input type="checkbox"/> Yes records are kept/ Ndio  2. <input type="checkbox"/> No records are not kept/ hapana  3. <input type="checkbox"/> Cannot tell / Haiwezekani kuelezea</p>
<p>In this shop, who is responsible for preparing the list of medicines to order? Katika duka hili ni nani anayewajibika kuandaa orodha ya dawa za kuagiza?</p>	<p>1. <input type="checkbox"/> Drug Shop owner/ Mwenye duka  2. ADDO dispenser/ Mtoa dawa aliyepitia mafunzo maalum  96. <input type="checkbox"/> Other (specify)/ mengine eleza _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>Has anyone at this outlet received any kind of health related training during the last 12 months? (Include pre-service and stand-alone workshops)/ Je, katika kipindi miezi 12 iliyopita kuna yeyote anayefanyakazi katika duka hili aliyepata mafunzo yoyote (ya muda mfupi au mrefu) juu ya afya/tiba?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>If yes, what did the training cover specifically?/ Kama ndiyo, mafunzo yalikusisha masuala gani zaidi?</p>	<p>1. ADDO dispenser training  2. IMCI training  3. ACT use training  96. Other (specify) mengine eleza _____  98. Refused  99. Don't know</p>
<p>Has anyone at this outlet received any kind of business management related training during the last 12 months?/ Je, katika miezi 12 iliyopita kuna yeyote katika duka hili aliyepata mafunzo juu ya usimamizi wa biashara?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>If yes, what did the training cover specifically?/ Kama ndiyo, mafunzo yalikusisha masuala gani zaidi?</p>	<p>1. General ADDO training  2. Accounting  96. Other (specify) mengine eleza _____  98. Refused  99. Don't know</p>

<b>OBSERVE (do not say aloud):</b> Is an ADDO Certificate Visible on the drug shop wall? Tazama kama kuna cheti cha ADDO.	1. <input type="checkbox"/> YES/ Ndio 2. <input type="checkbox"/> NO/ Hapana
What is the legal status of this drug shop?/ Je, duka limesajiliwa kufanya biashara ya dawa?	1. <input type="checkbox"/> DLDM 2. <input type="checkbox"/> DLDB 96. <input type="checkbox"/> Other (specify) mengine eleza _____ 98. <input type="checkbox"/> Refused/ Amekataa kujibu 99. <input type="checkbox"/> Don't know/ Sijui
Does this drug shop use a computer for any business purposes?/ Je, hili duka la dawa hutumia kompyuta kwa ajili ya matumizi ya kibiashara yoyote?	1. <input type="checkbox"/> YES/ Ndio 2. <input type="checkbox"/> NO/ Hapana 98. <input type="checkbox"/> Refused/ Amekataa kujibu 99. <input type="checkbox"/> Don't know/ Sijui
Does the drug shop use a computer to perform any of the following tasks (select all that apply):/ Duka linatumia kompyuta kufanya kazi zifuatazo: (Chagua)	1. <input type="checkbox"/> Online banking/ Huduma za benki kwa mtandao 2. <input type="checkbox"/> Manage inventory/ Kusimamia hesabu ya mali (dawa) 3. <input type="checkbox"/> Email 4. <input type="checkbox"/> Place orders / kuagiza dawa 5. <input type="checkbox"/> Manage accounts/ kusimamia masuala ya fedha 6. <input type="checkbox"/> Book-keeping/ Kutunza kumbukumbu ya fadha 96. <input type="checkbox"/> Other (Specify)/ mengine eleza _____
What is the average number of customers at this drug shop per week?/Kwa makadilio ni wastani wa wateja wangapi kwa wiki wanapata huduma kwenye duka lako la dawa?	1. (specify) _____ 98. Refused 99. Don't know
<b>PROMPT:</b> I would like to now ask a few questions about the owners of this drug shop. Can you please provide me with the following information about the owner who owns the largest percentage of this drug shop/ Tafadhali ningependa kufahamu taarifa kuhusu mwenye asilimia kubwa ya umiliki wa duka hili	
Does the owner(s) of this drug shop own other drug shops? Je, mmliki wa duka hili anamiliki maduka mengine ya dawa?	1. <input type="checkbox"/> YES/ Ndio 2. <input type="checkbox"/> NO/ Hapana 98. <input type="checkbox"/> Refused/ Amekataa kujibu 99. <input type="checkbox"/> Don't know/ Sijui
Other than this drug shop(s), does this owner own or manage any other businesses or have any other sources of income? Je, mwenye duka anamiliki au kusiamamia au anachanzo kingine cha mapato zaidi ya hili duka la dawa?	1. <input type="checkbox"/> YES/ Ndio 2. <input type="checkbox"/> NO/ Hapana 98. <input type="checkbox"/> Refused/ Amekataa kujibu 99. <input type="checkbox"/> Don't know/ Sijui

<p>If yes, what type of businesses (other than drug shops) does this drug shop owner own, manage or derive other income from? (enumerator to select all that apply)/ Kama jibu ni ndio ni aina gani ya biashara au shughuri gani aliyo nayo inayomwingizia kipato? (chagua yanayohusu)</p>	<p>1. <input type="checkbox"/> Farming/Agriculture/ Mkulima  2. <input type="checkbox"/> Livestock husbandry/ Mfugaji  3. <input type="checkbox"/> Small Shop/ Duka dogo  4. <input type="checkbox"/> Trucking/ Biashara ya malori  5. <input type="checkbox"/> Construction/ Ujenzi  6. <input type="checkbox"/> Working at Government Health Facility/ Mtumishi katika kituo cha afya cha serikali  7. <input type="checkbox"/> Working at Private health facility/ Mtumishi wa kituo cha afya cha binafsi  8. <input type="checkbox"/> Working at Faith-based/NGO run Health Facility/ mtumishi wa kituo cha afya cha kidini  9. <input type="checkbox"/> Mining/ Mfanyakazi wa migodini  10. <input type="checkbox"/> Other 1 (specify) mengine eleza _____  11. <input type="checkbox"/> Other 2 (specify) mengine eleza _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>Of this drug shop owner's total personal income last year, what percentage was derived from this drug shop? Je ni asilimia ngapi kutoka kwenye duka la dawa imechangia kipato cha mmiliki wa duka kwa mwaka uliopita?</p>	<p>1. <input type="checkbox"/> 10%  2. <input type="checkbox"/> 25%  3. <input type="checkbox"/> 50%  4. <input type="checkbox"/> 75%  5. <input type="checkbox"/> 100%  6. <input type="checkbox"/> Other (specify) mengine eleza _____  98. <input type="checkbox"/> Refused/ amekataa kujibu  99. <input type="checkbox"/> Don't know/ sijui</p>
<p>How many years of experience does this owner have managing a business? Je mmiliki ana uzoefu wa miaka mingapi ya usimamizi wa biashara?</p>	<p>1. _____  98. <input type="checkbox"/> Refused/ amekataa kujibu  99. <input type="checkbox"/> Don't know/ sijui</p>
<p>Age/ Umri</p>	<p>1. _____  98. <input type="checkbox"/> Refused/ amekataa kujibu  99. <input type="checkbox"/> Don't know/ sijui</p>
<p>Gender/Jinsia</p>	<p>1. <input type="checkbox"/> MALE/ Kiume  2. <input type="checkbox"/> FEMALE/ Kike</p>
<p>Marital Status/ Hali ya ndoa</p>	<p>1. <input type="checkbox"/> Married - monogamous/ Ameoa/ameolewa (ndoa ya mke mmoja)  2. <input type="checkbox"/> Married - polygamous/ Ameoa/ameolewa (ndoa ya wake wengi)  3. <input type="checkbox"/> Widowed/ mjane  4. <input type="checkbox"/> Divorced / Separated/ ametalikiana or wametengengana  5. <input type="checkbox"/> Cohabiting/ anaishi na mpenzi  6. <input type="checkbox"/> Never married and not cohabitating (Single)/ we  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>How many people usually sleep at your home? / Je, kwa kawaida ni watu wangapi hulala kwenye kaya yako?</p>	<p>1. _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>

<p>How much land in acres does your household own? (In acres, including the land the house sits on)/ Je, ni ekari ngapi za ardhi kaya yako inamiliki kwa ujumla?</p>	<p>1. _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>Do you have a title deed for this land?/ Je, mnayo hati miliki ya ardhi hii?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>What is the main source of water for drinking in your household? <b>PROMPT</b>/ Je, kipi ni chanzo kikuu cha maji ya kunywa kwenye kaya yako?</p>	<p>1. <input type="checkbox"/> Piped into dwelling/ bomba ndani ya makazi  2. <input type="checkbox"/> Piped into plot/yard/ bomba katika yadi  3. <input type="checkbox"/> Public tap water/ maji ya bomba kwa jumuiya  4. <input type="checkbox"/> Borehole or well/ kisima cha muda mfupi  5. <input type="checkbox"/> Protected well (concrete top)/ kisima cha kudumu  6. <input type="checkbox"/> Unprotected du well (no concrete on top)/Spring/ chemichemi  7. <input type="checkbox"/> Rain water/ maji ya mvua  8. <input type="checkbox"/> Surface water (stream, river, pond, lake, dam)/ maji ya mto, bwawa au ziwani  9. <input type="checkbox"/> Brought-in (jerry can, tanker truck)/ maji ya kununua kwenye madumu  10. <input type="checkbox"/> Kaveera Water/ maji ya viroba  11. <input type="checkbox"/> Bottled Water/ maji ya chupa  96. <input type="checkbox"/> Other (specify) mengine eleza _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>What is the main type of fuel used by your household for cooking? Is it...? <b>PROMPT</b>/ Je, nini ni chanzo kikubwa cha nishati kitumikacho kwa mapishi kwenye kaya yako?</p>	<p>1. <input type="checkbox"/> Electricity/ Umeme  2. <input type="checkbox"/> Natural gas / Liquid petroleum gas/ gesi  3. <input type="checkbox"/> Kerosene / Paraffin/ mafuta ya taa  4. <input type="checkbox"/> Charcoal/ Mkaa  5. <input type="checkbox"/> Firewood collected/ kuni za kuokota  6. <input type="checkbox"/> Firewood Purchased/ kuni za kununua  7. <input type="checkbox"/> Straw / shrubs / grass/ majani  8. <input type="checkbox"/> Dung/ vinyesi vya ng'ombe au wanyama wengine  9. <input type="checkbox"/> Coal/ makaa ya mawe  10. <input type="checkbox"/> Solar/ nguvu ya jua  11. <input type="checkbox"/> Crop Residuals/ makapi ya mazao  12. <input type="checkbox"/> No food cooked in the household/ hakuna mapishi yafanyikayo nyumbani  96. <input type="checkbox"/> Other (specify)/ mengine eleza _____</p>

<p>What is the main kind of toilet facility that your household uses?/ Je, ni aina gani ya choo inatumiwa na kaya yako?</p>	<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Flush Toilet owned/ choo cha kuvuta (Cha binafsi)</li> <li>2. <input type="checkbox"/> Flush Toilet Shared/ Choo cha kuvuta (Cha kuchangia)</li> <li>3. <input type="checkbox"/> Pit latrine owned/ Choo cha shimo (Cha binafsi)</li> <li>4. <input type="checkbox"/> Pit latrine shared/ Choo cha shimo (Cha kuchangia)</li> <li>5. <input type="checkbox"/> Ventilated improved pit latrine owned/ choo cha shimo kilichoboreshwa kwa hewa (cha binafsi)</li> <li>6. <input type="checkbox"/> Ventilated improved pit latrine shared/ choo cha shimo kilichoboreshwa kwa hewa (cha kuchangia)</li> <li>7. <input type="checkbox"/> Bush / field / forest/ Kujisaidia vichakani</li> <li>8. <input type="checkbox"/> Composting toilet/ Kujisaidia kwenye mashimo ya muda (choo mbolea)</li> <li>9. <input type="checkbox"/> Bucket/ Ndoo</li> <li>96. <input type="checkbox"/> Other (specify) mengine eleza _____</li> <li>98. <input type="checkbox"/> Refused/ Amekataa kujibu</li> <li>99. <input type="checkbox"/> Don't know/ Sijui</li> </ol>
<p>In your household, is there electricity?/ Je, kwenye kaya yako kuna umeme?</p>	<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Yes, main grid/ Ndio umeme wa gridi kuu ya taifa</li> <li>2. <input type="checkbox"/> Yes, generators/ Ndio umeme wa jenereta</li> <li>3. <input type="checkbox"/> Yes, solar panels/ Ndio umeme wa nguvu za jua</li> <li>4. <input type="checkbox"/> No/ Hapana</li> <li>98. <input type="checkbox"/> Refused/ Amekataa kujibu</li> <li>99. <input type="checkbox"/> Don't know/ Sijui</li> </ol>
<p>What type of walls are there in the house? Je, ni aina gani ya kuta zipo kwenye kaya yako?</p>	<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Stone/ mawe</li> <li>2. <input type="checkbox"/> Baked bricks/ matofali ya kuchoma</li> <li>3. <input type="checkbox"/> Concrete/Cement/ matofali ya udingo ulaya (simenti)</li> <li>4. <input type="checkbox"/> Sundried bricks/mud/ Matofali ya matope/ udongo</li> <li>5. <input type="checkbox"/> Poles and mud/ tope</li> <li>6. <input type="checkbox"/> Wood/ fimbo</li> <li>7. <input type="checkbox"/> Iron sheets/ nondo</li> <li>8. <input type="checkbox"/> Palm / bamboo / thatch / straw/ matawi ya miti/mianazi</li> <li>9. <input type="checkbox"/> Cardboard/Timber/ mbao</li> <li>10. <input type="checkbox"/> No walls/ hakuna kuta</li> <li>96. <input type="checkbox"/> Other (specify)/ mengine (eleza)</li> <li>98. <input type="checkbox"/> Refused/ Amekataa kujibu</li> <li>99. <input type="checkbox"/> Don't know/ Sijui</li> </ol>
<p>What type of flooring is there in the house? Je, ni aina gani ya sakafu iliyopo kwenye kaya yako?</p>	<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Finished floor: cement, tiles, linoleum, carpet, polished wood or stones/ Sakafu iliyotengenezwa kwa simenti (udongo ulaya, kapeti n.k)</li> <li>2. <input type="checkbox"/> Rudimentary floor: wooden planks, palm or bamboo/ Sakafu iliyotengenezwa kwa mbao</li> <li>3. <input type="checkbox"/> Natural Floor: earth, sand, dung or clay/ sakafu asilia</li> <li>4. <input type="checkbox"/> Iron sheets/ Nondo</li> <li>96. <input type="checkbox"/> Other (specify)/ mengine (eleza) _____</li> <li>98. <input type="checkbox"/> Refused/ Amekataa kujibu</li> <li>99. <input type="checkbox"/> Don't know/ Sijui</li> </ol>

What type of roof does the house have? Je, ni aina gani ya paa iliyopo kwenye kaya yako?	1. <input type="checkbox"/> Tiles/ malumalu 2. <input type="checkbox"/> Iron sheets / Tin/ Nondo 3. <input type="checkbox"/> Grass or thatch/ Vioo 4. <input type="checkbox"/> Wood/ Mbaao 5. <input type="checkbox"/> Shingles 6. <input type="checkbox"/> Cement/ Udongo ulaya 7. <input type="checkbox"/> Mud/ Tope 8. <input type="checkbox"/> No roof/ hakuna paa 96. <input type="checkbox"/> Other (specify)/ mengine (eleza) _____ 98. <input type="checkbox"/> Refused/ amekataa kujibu 99. <input type="checkbox"/> Don't know/ sijui
<b>READ OUT:</b> In your household, how many of the following are there?	
Radio/cassette/CDPlayer/ Radio/Kaseti/ CD pleya	
Electric/charcoal iron/ Pasi umeme/mkaa	
Refridgerator/ Friji/Jokofu	
Bicycle/ Baiskeli ya mtu mzima	
Motorcycle or scooter/ Pikipiki	
Large livestock (like cows, oxen)/ Mifugo kubwa	
Bank account/ Akaunti ya benki	
Mobile Phone/ Simu za mkononi	
Television	
Computer/ Kompyuta	
Car/ Gari	
Others	
Does your household have access to a mobile bank account (ie. M-Pesa, Z-Pesa)? Je, kaya yako inatumia simu kufanya shughuri za kibenki (M-pesa, Tigo pesa, NMB mobile)?	1. <input type="checkbox"/> YES/ Ndio 2. <input type="checkbox"/> NO/ Hapana 98. <input type="checkbox"/> Refused/ Amekataa kujibu 99. <input type="checkbox"/> Don't know/ Sijui
<b>PROMPT: I would now like to ask some questions about this drug shops inventory and source of medicine supply/ Ningependa kuuliza maswali kadhaa kuhusu hesabu ya dawa na chanzo kikuu cha kusambazia dawa hapa dukani.</b>	
Where does this drug shop purchase most of its medicines from?/ Je, ni wapi duka hili hufanya manunuzi ya dawa?	1. <input type="checkbox"/> Own town/village 2. <input type="checkbox"/> Morogoro town 3. <input type="checkbox"/> Dar es Salaam 96. <input type="checkbox"/> Other location (specify) mengine eleza _____ 98. <input type="checkbox"/> Refused /Amekataa kujibu 99. <input type="checkbox"/> Don't know/ Sijui

<p>What is the name of this drug shop's main medicine supplier?/ Jina la wasambazaji ya dawa ni nani?</p>	<p>1. <input type="checkbox"/> Marhaba Pharmacy  2. <input type="checkbox"/> Morogoro Medical Stores  3. <input type="checkbox"/> Morogoro Pharmacy  4. <input type="checkbox"/> Bahari Pharmacy  5. <input type="checkbox"/> Salama Pharmacy  6. <input type="checkbox"/> Astra Pharma  7. <input type="checkbox"/> Pyramid Pharma  96. <input type="checkbox"/> Other (specify) mengine eleza _____  98. <input type="checkbox"/> Refused /Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>Does the drug shop purchase medicines from other medicine suppliers? Je, kuna manunuzi mengine ya dawa yanafanyika kutoka kwa msambazaji mwingine zaidi ya waliotajwa hapo juu?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>If yes, why? (select all that apply)/ Kama jibu ndio, Unaweza kueleza ni kwanini?</p>	<p>1. My main supplier does not have all of the products I need for my shop/ Chanzo kikuu cha dawa hakikua na mahitaji yangu yote  2. I go to the suppliers that sell the cheapest medicines/ Naenda kwa msambazaji mwenye unafuu wa bei  3. Other (specify)/ mengine (eleza) _____  98. Refused  99. Don't know</p>
<p>Where is the drug shop's other medicine supplier located? / Je, ni mahali gani msambazaji wa dawa huyu anapofanyia biashara zake?</p>	<p>1. <input type="checkbox"/> Own town/village  2. <input type="checkbox"/> Morogoro town  3. <input type="checkbox"/> Dar es Salaam  96. <input type="checkbox"/> Other location (specify) mengine eleza _____  98. <input type="checkbox"/> Refused  99. <input type="checkbox"/> Don't know</p>
<p>What is the name of this drug shop's other medicine supplier?/ Unaweza kunitajia jina la duka linawasambazia dawa hapa dukani?</p>	<p>1. <input type="checkbox"/> Marhaba Pharmacy  2. <input type="checkbox"/> Morogoro Medical Stores  3. <input type="checkbox"/> Morogoro Pharmacy  4. <input type="checkbox"/> Bahari Pharmacy  5. <input type="checkbox"/> Salama Pharmacy  6. <input type="checkbox"/> Astra Pharma  7. <input type="checkbox"/> Pyramid Pharma  96. <input type="checkbox"/> Other (specify) mengine eleza _____  98. <input type="checkbox"/> Refused  99. <input type="checkbox"/> Don't know</p>
<p>How often does this person responsible for ordering medicines, place orders for medicines for your shop? Ni mara ngapi muhusika anaagiza dawa kwa matumizi ya dukani?</p>	<p>1. <input type="checkbox"/> More than once a week/ Zaidi ya mara moja kwa wiki  2. <input type="checkbox"/> Once a week/ mara moja kwa wiki  3. <input type="checkbox"/> Once every 2 weeks/ Mara mbili kwa wiki  4. <input type="checkbox"/> Once per month/ mara moja kwa mwezi  5. <input type="checkbox"/> Once every 2 months/ mara moja kila baada ya miezi miwili  96. <input type="checkbox"/> Other (specify) mengine eleza _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. Don't know/ Sijui</p>



<p>When the drug shop needs more medicines which one of the following do you do most often/ Pindi dawa zaid yanapohitajika ni kitu gani hufanyika mara nyingi zaidi kati ya vifuatavyo?</p>	<p>1. <input type="checkbox"/> Someone from the shop goes to the supplier / muhusika mmoja huenda kwa msambazaji wa dawa  2. <input type="checkbox"/> Place order by phone, and supplier delivers product directly to the shop/ Kuagizia dawa kwa kutumia simu na msambazaji huleta dawa moja kwa moja dukani  3. <input type="checkbox"/> Place order by phone, and supplier sends product to another location and someone from the shop goes to pick it up/ Kuagiza dawa kwa simu kwa msambazaji amaye hutuma dawa sehemu ambayo muhusika wa dukani huzufuata  96. <input type="checkbox"/> Other (specify)/ mengine (elezea) _____  98. <input type="checkbox"/> Refused/ Amekaa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>How long after placing the order does the supplier usually deliver the order? Je Inachukua muda gani kupokea dawa kutoka kwa msambazaji dawa tokea kuagizwa kwa dawa hizo?</p>	<p>1. <input type="checkbox"/> 24 hours (1 day) later/ Ndani ya masaa 24  2. <input type="checkbox"/> 2-3 days later/ kati ya siku 2 mpaka 3  3. <input type="checkbox"/> 4-5 days later/ kati ya siku 4 mpaka 5  4. <input type="checkbox"/> 1 week later/ Baada ya wiki 1  5. <input type="checkbox"/> 2 weeks later/ Baada ya wiki 2  6. <input type="checkbox"/> 1 month later/ Baada ya mwezi 1  96. <input type="checkbox"/> Other (specify)/ mengine eleza _____  98. <input type="checkbox"/> Refused/ Amekaa kujibu  99. Don't know/ Sijui</p>
<p>How frequently do you go to the supplier to pick up the drug supplies? Je, ni mara ngapi unakwenda kwa msambazaji dawa kufuata mzigo wa dawa?</p>	<p>1. Once per week  2. Once every 2 weeks  3. Once per month  4. Other (specify) mengine eleza _____  98. Refused  99. Don't know</p>
<p>How do you decide which products to stock (select all that apply)? Je ni kwa namna gani unamua aina ya bidhaa (dawa) ya kuhifadhi dukani kwa ajili ya mauzo?</p>	<p>1. <input type="checkbox"/> Stocks same products as last month/ Salio la bidhaa la mwezi uliotangulia  2. <input type="checkbox"/> Order what products that are low in stock/ Kuagiza salio pungufu zaidi dukani  3. <input type="checkbox"/> Order products that are out of stock/ dawa zinazokosekana dukani  4. <input type="checkbox"/> Order what customers ask for/ dawa yanayo uliziwa na wateja  5. <input type="checkbox"/> Order products that treat diseases in this community/ dawa ya kutibu magonjwa yasumbuayo jamii ya eneo hili  6. <input type="checkbox"/> Order products that sell quickly/ Dawa zinazonunulika kwa haraka  7. Stock what is on the ADDO medicine list/ Kutunza dawa zilizopo kwenye orodha ya dawa za duka muhimu la dawa  96. <input type="checkbox"/> Other (specify)/ mengine eleza _____  98. <input type="checkbox"/> Refused /Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>

<p>How do you decide what quantities of the products to order/buy? Je ni kwa namna gani unamua kiasi cha bidhaa (dawa) cha kununua?</p>	<p>1. <input type="checkbox"/> Orders same quantities as last month/ Kiasi kilichoagizwa mara ya mwisho  2. <input type="checkbox"/> Looks at sales of the products in previous month and forecast my needs for the period I'm buying for/ Kupitia mauzo ya dawa ya mwezi uliopita na kufanya makadilio ya mahitaji y kipindi chote nachofanyia manunuzi  3. <input type="checkbox"/> Buys based on money available/ Kufanya manunuzi kulingana na kiasi cha fedha kilichopo  96. <input type="checkbox"/> Other (specify)/ Mengine (Elezea) _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>Are there any products that were in stock in the last month that are not in stock today? Je, kuna dawa ambayo kwa kawaida unahifadhi dukani kwa ajili ya mauzo ambayo leo haipo?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>If yes, which products/type are out of stock?/ Kama jibu ni ndio unaweza kunitajia ni dawa zinazokosekana?</p>	<p>1. Other 1(specify) _____  2. Other 2 (specify) _____  3. Other 3 (specify) _____  98. Refused /Amekataa kujibu  99. Don't know/ Sijui</p>
<p>What is the reason why the products are not in stock? Je, unaweza nielezea sababu ya kukosekana kwa dawa dukani kwako?</p>	<p>1. <input type="checkbox"/> Didn't have enough money to buy amount required to meet demand/ Kukosa fadha ya kutosha kununulia dawa kadri ya mahitaji  2. <input type="checkbox"/> Demand was higher than expected and I have not been able to place another order yet/ Mahitaji yamezidi makisio na kukosa muda wa kuagiza dawa  3. <input type="checkbox"/> My supplier did not have the product in stock/ Msambasaji dawa hana dawa kwenye hifadhi  4. <input type="checkbox"/> Slow moving products and decided not to reorder/ Dawa isiyonunulika kwa haraka nikaamua kuacha kuiagiza  5. <input type="checkbox"/> Special order for specific customer/ Ni agizo maalum la mteja  96. <input type="checkbox"/> Other (specify)/ mengine (eleza) _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p><b>SECTION 6. ACCESS TO FINANCIAL SERVICES &amp; LINES OF CREDIT/ FURSA KWENYE HUDUMA ZA KIFEDHA NA MIKOPO</b></p>	
<p><b>PROMPT: I would now like to ask you a few questions about your access to financial services and credit to operate your business/ Ningependa kupata taarifa kuhusu fursa ulizonazo kwenye huduma za kifedha na mikopo</b></p>	
<p>Is there a bank account open in the name of the drug shop/business (not the owner's name?)/ Kuna akaunti ya benki ambayo ina jina la duka hili (na siyo jina la mmiliki)?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>

<p>If no, is there a bank account open in the name of the owner?/ Kama jibu ni hapana, je kuna akaunti ya benki ambayo ina jina la mmiliki?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>Where did the owner get the capital to establish this drug shop? Je, mmiliki alipata wapi mtaji wa kufungua duka la dawa? Ni wapi kama mmiliki umepata mtaji wa kuanzisha duka la dawa?</p>	<p>1. <input type="checkbox"/> From owner's own savings/ Kutokana na akiba ya mmiliki  2. <input type="checkbox"/> Borrowings from friends or family/ Kuazimwa na rafiki au ndugu  3. <input type="checkbox"/> Borrowings from other duka owners/ kuazima kutoka kwenye mwenye duka lingine  4. <input type="checkbox"/> Borrowings from Banks or other formal lending institutions/ Kuazimishwa na benki au taasisi nyingine za kukopesha  5. <input type="checkbox"/> SACCOs or Community small scale lending organizations / SAACOs or jumuiya dogodogo za kukopesha  96. <input type="checkbox"/> Other (specify)/ mengine (eleza) _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>When you need more capital to stock more supplies who do you turn to?/ Unapohitaji mtaji zaidi ili kuongeza dawa kwa kawaida unatafuta msaada kwa nani?</p>	<p>1. <input type="checkbox"/> Friends or family/ Rafiki au ndugu  2. <input type="checkbox"/> Other duka owners/ wenye maduka mengine  3. <input type="checkbox"/> Banks or other formal lending institutions/ benki au taasisi nyingine za kukopesha  4. <input type="checkbox"/> Community small scale lending organizations / Jumuiya dogodogo za kukopesha  5. <input type="checkbox"/> Your own other sources of income/ Chanzo binafsi cha mapato  96. <input type="checkbox"/> Other (specify)/ mengine (eleza) _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>Has this drug shop ever applied for a bank loan?/ Hili duka la dawa limewahi kuomba mkopo benki?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>How much was the loan request? (in TSH)/ Je, uliombea mkopo wa kiasi cha shilingi ngapi?</p>	<p>1. _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>Was the loan approved or denied?/ Je ombi la mkopo huo ulikubaliwa au ulikataliwa?</p>	<p>1. <input type="checkbox"/> APPROVED/ IMEKUBALIWA  2. <input type="checkbox"/> DENIED/ IMEKATALIWA  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>Did the drug shop accept the loan?/ Duka la dawa walikubali huo mkopo?</p>	<p>1. <input type="checkbox"/> Yes/ Ndio  2. <input type="checkbox"/> No, I chose not to accept the loan because the terms were unfavorable/ Hapana, nilikataa mkopo kwa sababu masharti yalikua magumu  3. <input type="checkbox"/> No, other (specify) / Hapana, mengine (eleza)  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>

<p>What was the duration of the bank loan?/ Je, ni muda gani wa mkopo wa benki unatakiwa kuwa umerudishwa?</p>	<p>1. <input type="checkbox"/> 1 month/ mwezi mmoja  2. <input type="checkbox"/> 3 months/ miezi mitatu  3. <input type="checkbox"/> 1 year/ mwaka mmoja  4. <input type="checkbox"/> More than 1 year/ zaidi ya mwaka mmoja  96. <input type="checkbox"/> Other (specify)/ mengine (eleza) _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>What was the frequency of of return payments?/ Je ni kila baada ya muda gani unatakiwa kurudisha mkopo?</p>	<p>1. <input type="checkbox"/> Every month/ Kila mwezi  2. <input type="checkbox"/> Every 3 months/ Kila baada ya miezi mitatu  3. <input type="checkbox"/> Every 6 months/ Kila baada ya miezi sita  4. <input type="checkbox"/> One time lump sum retrun of loan amount/ kurudisha mkopo wote kwa mara moja  96. <input type="checkbox"/> Other (specify)/ mengine (eleza) _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>If the loan was denied, what reason was cited for the denial of the loan?/ Kama mkopo ulikataliwa, je sababu za kukataliwa kwa mkopo ulifanikiwa kuzifahamu?</p>	<p>1. <input type="checkbox"/> Bank does not consider my business credit worthy/ Benki haiamini biashara yangu inakizi vigezo kupata mkopo  2. <input type="checkbox"/> Bank needs collateral/ Benki ilihitaji dhamana  3. <input type="checkbox"/> Too much other paperwork that I could not furnish/ Mlolongo mrefu mpaka kupata mkopo ulinishinda kuukamilisha  4. <input type="checkbox"/> They didn't give a reason/ Hawakutoa sababu  96. <input type="checkbox"/> Other (specify)/ mengine (eleza) _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ sijui</p>
<p>Does your supplier offer you any credit?/ Je, msambazaji wa dawa anatoa mikopo ya dawa?</p>	<p>1. <input type="checkbox"/> Yes, my wholesaler sells most products on credit to me / Ndio, muuza dawa wa jumla unikopesha mara kwa mara  2. <input type="checkbox"/> Sometimes the wholesaler sells new products or promotional items on credit/ Muuza dawa wa jumla anatoa mkopo ili kukuza dawa mpya sokoni  3. <input type="checkbox"/> No, the wholesaler nevers sells anything on credit to me / Hapana, Muuza dawa wa jumla hakopeshi  98. <input type="checkbox"/> Refused/ amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>If yes, what is the maximum amount of credit offered to you by your supplier?/ kama ni ndio, unaweza kukopeshwa kiasi gani cha juu zaidi?</p>	<p>1. Amount (TZS) _____  98. Refused/ Amekataa kujibu  99. Don't know/ Sijui</p>
<p>If the answer to the above is yes, how do you pay your supplier back?/ kama jibu ni ndio, Je ni kwa namna gani unamlipa msambazaji madai lake?</p>	<p>1. <input type="checkbox"/> Next time when I go to purchase drugs/ Nitakapo kwenda nunua dawa kwa mara nyingine  2. <input type="checkbox"/> Supplier sends someone to collect the amount due/ Msambazaji huagizia wakala wake kuja kukusanya malipo  96. <input type="checkbox"/> Other (specify)/ mengine (eleza) _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>

<p>Does ([FIRM]) have any lines of credit from places like banks, SACCOs, microfinance institutions and/or relationships with vendors &amp; businesses where my drug shop incurs expenses?/ Je biashara ya duka ina nafasi ya kupata mkopo wowote wa kibiashara?</p>	<p>1. <input type="checkbox"/> YES  2. <input type="checkbox"/> NO  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>"If yes, which expenses are not paid in full?"   If yes, where does the drug shop have lines of credit?/ Kama jibu ni ndio wapi kuna hiyo nafasi ya kupata mkopo wa kibiashara?</p>	<p>1. <input type="checkbox"/> _____  2. <input type="checkbox"/> _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>What is the credit limit at the place mentioned?/ Je ni kipi kikomo cha mkopo kwa sehemu uliyoitaja?</p>	<p>1. _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>What is your biggest challenge operating your business? Ni nini changamoto kubwa kabisa katika kuendesha biashara ya duka la dawa?</p>	<p>1. Not enough money/ Kukosa fedha ya kutosha  2. Not enough customers/ Kukosa wateja wa kutosha  3. Heavy taxes/ Makato makubwa ya kodi  4. Regulatory challenges (with TFDA, etc)/ Changamoto za kisheria  5. I wish I had more training  6. Other (Specify)/ mengine eleza _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>Do you have enough access to money to operate your business as you would like to?/ Je una unachanzo cha kutosha cha fedha kuendesha biashara ya duka kama unavyopendelea?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>What is the impact of not having enough money to operate your business? Je, Kitatokea nini ukikosa fedha za kutosha kuendesha biashara yako?</p>	<p>1. <input type="checkbox"/> I cannot stock enough quantity of each medicine/ Kushindwa kutunza kiasi cha kutosha cha dawa  2. <input type="checkbox"/> I cannot stock some more expensive items/ Kushindwa kutunza dawa zenye bei kubwa  3. <input type="checkbox"/> I cannot keep the shop in good condition/ kushindwa kutunza duka  96. <input type="checkbox"/> Other (specify)/ Mengine (eleza) _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p><b>SECTION 7. DRUG SHOP NON-CURRENT ASSETS</b></p>	
<p>Is the building in which this drug shop exists owned or leased by the owners of the drug shop?/ Je, jengo na mali zilizomo dukani vinamilikiwa na mwenye duka au vimekodishwa?</p>	<p>1. <input type="checkbox"/> OWNED/ Nalimiliki  2. <input type="checkbox"/> LEASED/ Nimekodishwa  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>

<p>If the drug shop building is owned, are there any outstanding payments due (i.e. a mortgage?)/ Kama jengo na mali zilizomo ndani ya duka ni mali ya mmiliki wa duka kuna malipo ambayo bado hayajakamilishwa?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>If yes, how much are the monthly payments? Kama jibu ni ndio ni kiasi gani cha malipo kinachofanyika kila mwezi?</p>	<p>1. _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>Is the property on which this drug shop exists owned or leased by the owners of the drug shop?/ Je, ardhi ambayo jengo la duka lipo inamilikiwa na mmiliki wa duka au imekodishwa</p>	<p>1. <input type="checkbox"/> OWNED/ Nalimiliki  2. <input type="checkbox"/> LEASED/ Nimekodishwa  3. Not applicable/ Haihusiki  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>If the property is owned, are there any outstanding payments due (i.e. a mortgage)?/ Je, kama unamiliki ardhi kuna malipo yoyote ambayo hayajakamilika?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>If yes, how much are the monthly payments? Kama jibu ni ndio ni kiasi gani cha malipo kinachofanyika kila mwezi?</p>	<p>1. _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>If the building is leased, how much are the monthly payments?/ Kama jengo na mali zilizomo dukani ni za kukodisha, kodi ya kila mwezi ni kiasi gani?</p>	<p>1. _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>If the property is leased, how much are the monthly payments? Kama ardhi ni ya kukodisha, je ni kiasi gani unalipia kwa mwezi?</p>	<p>1. _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>Does the drug shop, as a business entity, own or lease any vehicles? (i.e. cars, trucks, motorbikes)?/ Je, biashara ya duka la dawa yenyewe ina mali yoyote inayomiliki (Kama Magari, Pikipiki, n.k)?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>If yes, how many? Kama jibu ni ndio, mangapi?</p>	<p>1. _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>Are the vehicles owned or leased?/ Je, magari ni mali ya mmiliki wa duka au yamekodishwa?</p>	<p>1. <input type="checkbox"/> OWNED/ Nalimiliki  2. <input type="checkbox"/> LEASED/ Nimekodishwa  3. <input type="checkbox"/> Not applicable  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>

<p>If the drug shop's vehicles are owned, are there any outstanding payments due? Kama magari ni mali ya mmiliki wa duka, je kuna malipo ambayo bado hayajakamilishwa?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>If yes, how much are the monthly payments? Kama jibu ni ndio ni kiasi gani cha malipo kinachofanyika kila mwezi?</p>	<p>1. _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>If the vehicles are leased, how much are the monthly payments?/ kama magari ni ya kukodi je, ni kiasi gani cha kodi kinalipwa kila mwezi?</p>	<p>1. _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>What is the total amount spent each month on employee salaries?/ Je, ni kiasi gani kwa ujumla kinatumika kulipia mishahara ya wafanyakazi kwa mwezi?</p>	<p>1. _____  2. <input type="checkbox"/> This is not an expense incurred by this drug shop/ Mshahara hautokani na mapato ya duka la dawa  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>What is the total amount spent each month on electricity?/ Je ni kiasi gani kwa ujumla kinatumika kila mwezi kwa kulipia umeme?</p>	<p>1. _____  2. <input type="checkbox"/> This is not an expense incurred by this drug shop/ malipo ya umeme hayafanyiki kutokana na mapato ya duka  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>What is the total amount spent each month on Fuel for company vehicles/generator? / Ni kiasi gani kwa ujumla kinatumika kila mwezi kununulia mafuta kwa matumizi ya genereta au magari?</p>	<p>1. _____  2. <input type="checkbox"/> This is not an expense incurred by this drug shop/ manunuzi ya mafuta hayatokani na mapato ya dukani  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>What is the total amount spent each month on distribution costs to customers?/ Je, kwa ujumla inakugharimu kiasi gani kwa mwezi kusambazia wateja wako mahitaji yao?</p>	<p>1. _____  2. <input type="checkbox"/> This is not an expense incurred by this drug shop  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>What is the total amount spent each month on cost of picking up/arranging delivery for inventory from supplier?/ Je, kwa ujumla inakugharimu kiasi gani kwa mwezi kupanga na kuchukua dawa (mahitaji) kutoka kwa msambazaji?</p>	<p>1. _____  2. <input type="checkbox"/> This is not an expense incurred by this drug shop/ Matumizi hayatokani na mapato ya dukani  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>

<p>What is the total amount spent each month on communication (i.e. phone credit)? Je, Kwa ujumla unatumia kiasi gani kwa mwezi kwa mawasiliano (mfano ya simu)?</p>	<p>1. _____  2. <input type="checkbox"/> This is not an expense incurred by this drug shop/ matumizi ya mawasiliano hayatokani na mapato ya dukani  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>How much is spent each month on other drug shop expenses? / Je ni kwa ujumla kila mwezi unatumia unagharamia kiasi gani kwa ajili ya matumizi mengine ya duka la dawa?</p>	<p>1.(Specify Expense1/Amount1) _____  2. Specify (Expense 2/Amount2) _____  3. <input type="checkbox"/> This drug shop does not have any other monthly expenses/ Duka la dawa halina matumizi mengine ya ziada kwa mwezi  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p><b>SECTION 8. DRUG SHOP ACCOUNTS RECEIVABLES</b></p>	
<p>Do you offer credit to any of your customers? Je una utaratibu wa kutoa mikopo kwa wateja wako?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>What is the maximum amount of credit you offer to any customer? Je ni kiasi gani cha juu kabisa unachoweza kukopesha wateja wako?</p>	<p>1. <input type="checkbox"/> Less than 10,000 TSH/ Chini ya shilingi elfu kumi  2. <input type="checkbox"/> Between 10,000 TSH- 20,000 TSH/ kati ya elfu kumi na elfu ishirini  3. <input type="checkbox"/> Between 20,000 TSH-30,000 TSH/ kati ya elfu ishirini na elfu thelathini  96. <input type="checkbox"/> Other (specify range)/ mengine (eleza kiwango) _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>What are the repayment terms for the loans to customers? / Je wateja waliokopa wanatakiwa kulipa madeni baada ya muda gani?</p>	<p>1. <input type="checkbox"/> 2 weeks/ wiki mbili  2. <input type="checkbox"/> 1 month/ mwezi mmoja  3. <input type="checkbox"/> The next time they come to purchase something from my shop/ Wakirudi mara nyingine kufuata mahitaji dukani  4. <input type="checkbox"/> No set repayment date/ Hakuna tarehe ya kurudisha malipo  96. <input type="checkbox"/> Other (specify)/ mengine (eleza) _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>As of today, how much money is currently owed to this drug shop (TSH)?/ Mpaka hivi sasa ni kiasi gani cha fedha unachodai hapa dukani?</p>	<p>1. _____  2. <input type="checkbox"/> No money is owed to this drug shop/ Hakuna fedha inayodaiwa dukani  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>



<p>When you extend credit to your customers, how often do they default on their loans?/ Je, unapooonjeza mkopo kwa wateja wako, ni mara ngapi wameshindwa kulipa?</p>	<p>1. <input type="checkbox"/> Always/ Kila mara  2. <input type="checkbox"/> Sometimes/ mara moja moja  3. <input type="checkbox"/> Rarely/ mara chache  4. <input type="checkbox"/> Never/ Hata mara moja  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p><b>INVENTORY</b>  * ENUMERATOR to record inventory on separate sheet</p>	
<p><b>SECTION 9. DRUG SHOP/OWNER EXPENDITURES</b></p>	
<p>Do you draw money for personal expenses from the revenues of this drug shop?/ Je, mmiliki anatumia fedha kutokana na mapato ya duka la dawa kwa ajili ya matumizi binafsi?</p>	<p>1. <input type="checkbox"/> YES/ Ndio  2. <input type="checkbox"/> NO/ Hapana  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>How much money do you draw from your business for personal expenses each day? Je, ni kiasi gani cha fedha anachotoa kwa matumizi binafsi kwa siku?</p>	<p>1. Amount (TZS) _____  98. Refused  99. Don't know</p>
<p>How do you decide how much money to take for personal expenses on a daily basis?/ Je ni kwa namna gai unaamua kiasi cha fedha cha kutoa kwa ajili ya matumizi binafsi?</p>	<p>1. <input type="checkbox"/> I reconcile accounts at end of the day and figure it out  2. <input type="checkbox"/> I draw on an ad hoc basis / Ninatoa fedha bila utaratibu  3. <input type="checkbox"/> I know my profit margin so I draw accordingly/ Nafahamu faida nipatayo hivyo natoa hiyo tu  4. <input type="checkbox"/> I calculate how much I can draw at the end of each month/ Napiga mahesabu ya kiasi gani cha kutoa  5. <input type="checkbox"/> I draw according to my daily/monthly needs/ Natoa kufuatana na matumizi ya kila siku  96. <input type="checkbox"/> Other (specify)/ Mengine (eleza) _____  98. <input type="checkbox"/> Refused/ Amekataa kujibu  99. <input type="checkbox"/> Don't know/ Sijui</p>
<p>How much money do you draw from your business for personal expenses per month? Je, ni kiasi gani cha fedha kutoka kwenye biashara ya dawa unachokitumia kwenye shughuri binafsi?</p>	<p>1. Amount (TZS) _____  98. Refused  99. Don't know</p>

<p>How do you decide how much money to take for personal expenses each month?</p>	<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> I reconcile accounts at end of the month and figure it out/ Naoanisha mahesabu ya fedha na mali kila mwisho wa mwezi</li> <li>2. <input type="checkbox"/> I draw on an ad hoc basis / Ninatoa fedha bila utaratibu</li> <li>3. <input type="checkbox"/> I know my profit margin so I draw accordingly/ Nafahamu faida nipatayo hivyo natoa hiyo tu</li> <li>4. <input type="checkbox"/> I calculate how much I can draw at the end of each month/ Napiga mahesabu ya kiasi gani cha kutoa</li> <li>5. <input type="checkbox"/> I draw according to my daily/monthly needs/ Natoa kufuatana na matumizi ya kila siku</li> <li>96. <input type="checkbox"/> Other (specify)/ Mengine (eleza)_____</li> <li>98. <input type="checkbox"/> Refused/ Amekataa kujibu</li> <li>99. <input type="checkbox"/> Don't know/ Sijui</li> </ol>
<p>In order to grow your business in the last year, have you spent money on the following: (select all that apply)/ Je, katika jitihada za kuendeleza biashara ya dawa mwaka uliopita ulitumia fedha kwenye mambo yafuatayo?</p>	<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Stocking more medicines / Kuongeza dawa za kutunza</li> <li>2. <input type="checkbox"/> Purchasing/leasing a vehicle / Kununua au kukodisha gari</li> <li>3. <input type="checkbox"/> Hiring more employees/ Kuajili wafanyakazi zaidi</li> <li>4. <input type="checkbox"/> Attending health training/ Kuhudhuria mafunzo</li> <li>5. <input type="checkbox"/> Attending business management training/ Kuhudhuria mafunzo ya usimamizi wa biashara</li> <li>6. <input type="checkbox"/> Renovating shop/ kulifanyia duka ukarabati</li> <li>7. <input type="checkbox"/> Expanding size of shop/ Kuongeza ukubwa wa duka</li> <li>8. <input type="checkbox"/> Couldn't do do anything to expand my business/ Kutofanya chochote</li> <li>98. <input type="checkbox"/> Refused/ Amekataa kujibu</li> <li>99. <input type="checkbox"/> Don't know/ Sijui</li> </ol>
<p>If you won 500,000 TSH today with no restrictions, how would you spend it? Ukijishindia kiasi cha shilingi laki tano leo, bila masharti yoyote utazitumiaje?</p>	<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Buy more of the same drugs I usually stock/ kununua dawa zilezile nazotunza siku zote</li> <li>2. <input type="checkbox"/> Stock drugs that I do not currently stock/ kununua dawa zinzokosekana dukani</li> <li>3. <input type="checkbox"/> Pay rent/ Kulipia kodi</li> <li>4. <input type="checkbox"/> Pay employee salaries/ kulipa wafanyakazi mshahara</li> <li>5. <input type="checkbox"/> Give myself a bonus/ kujilipa mwenyewe</li> <li>6. <input type="checkbox"/> Pay my suppliers/ kununua vifaa vya dukani</li> <li>7. <input type="checkbox"/> Renovate my shop/ kukarabati duka</li> <li>8. <input type="checkbox"/> Save it/ kutunza</li> <li>96. <input type="checkbox"/> Other (specify)/ mengine (eleza)_____</li> <li>98. <input type="checkbox"/> Refused/ Amekataa kujibu</li> <li>99. <input type="checkbox"/> Don't know/ Sijui</li> </ol>

<p>If you were given 500,000 TSH today to use for your drug shop without interest, how would you spend it? (select all that apply)/ Je kama ukipata mkopo wa shilingi laki tano usiokuwa na riba kwa matumizi ya duka la dawa, utazitumiaje?</p>	<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Buy more of the same drugs I usually stock/ kununua dawa zilezile nazotunza siku zote</li> <li>2. <input type="checkbox"/> Stock drugs that I do not currently stock/ kununua dawa zinzokosekana dukani</li> <li>3. <input type="checkbox"/> Pay rent/ Kulipia kodi</li> <li>4. <input type="checkbox"/> Pay employee salaries/ kulipa wafanyakazi mshahara</li> <li>5. <input type="checkbox"/> Give myself a bonus/ kujilipa mwenyewe</li> <li>6. <input type="checkbox"/> Pay my suppliers/ kununua vifaa vya dukani</li> <li>7. <input type="checkbox"/> Renovate my shop/ kukarabati duka</li> <li>8. <input type="checkbox"/> Save it/ kutunza</li> <li>96. <input type="checkbox"/> Other (specify)/ mengine (eleza)_____</li> <li>98. <input type="checkbox"/> Refused/ Amekataa kujibu</li> <li>99. <input type="checkbox"/> Don't know/ Sijui</li> </ol>
<p>If you were given 500,000 TSH today to use for your drug shop with minimal interest, how would you spend it? (select all that apply)/ ukipata mkopo wa laki tano wenye riba ndogo kwa matumizi ya duka la dawa, utazitumiaje?</p>	<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Buy more of the same drugs I usually stock/ kununua dawa zilezile nazotunza siku zote</li> <li>2. <input type="checkbox"/> Stock drugs that I do not currently stock/ kununua dawa zinzokosekana dukani</li> <li>3. <input type="checkbox"/> Pay rent/ Kulipia kodi</li> <li>4. <input type="checkbox"/> Pay employee salaries/ kulipa wafanyakazi mshahara</li> <li>5. <input type="checkbox"/> Give myself a bonus/ kujilipa mwenyewe</li> <li>6. <input type="checkbox"/> Pay my suppliers/ kununua vifaa vya dukani</li> <li>7. <input type="checkbox"/> Renovate my shop/ kukarabati duka</li> <li>8. <input type="checkbox"/> Save it/ kutunza</li> <li>96. <input type="checkbox"/> Other (specify)/ mengine (eleza)_____</li> <li>98. <input type="checkbox"/> Refused/ Amekataa kujibu</li> <li>99. <input type="checkbox"/> Don't know/ Sijui</li> </ol>
<p>What do you do with the profits and income from your business (select all that apply)? Je unafanyia nini mapato na faida ya biashara yako?</p>	<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Pay bills/ kulipa kodi</li> <li>2. <input type="checkbox"/> Re-invest in drug shop/ kuwekeza kwenye duka la dawa</li> <li>3. <input type="checkbox"/> Re-invest in other business/ Kuwekeza kwenye biashara nyingine</li> <li>4. <input type="checkbox"/> Save/ kutunza</li> <li>96. <input type="checkbox"/> Other (specify)/mengine (eleza)_____</li> <li>98. <input type="checkbox"/> Refused/ Amekataa kujibu</li> <li>99. <input type="checkbox"/> Don't know/ Sijui</li> </ol>
<p>If you were given 20,000 TSH would you buy food or "pay bills" ? Je, ukipewa shilingi elfu ishirini utazitumia kwa kununulia chakula au kulipia kodi?</p>	<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Buy food/ Kununua chakula</li> <li>2. <input type="checkbox"/> Pay bills/ Kulipia kodi</li> <li>3. <input type="checkbox"/> Both / kulipia kodi na kununua chakula)</li> <li>98. <input type="checkbox"/> Refused/ Amekataa kujibu</li> <li>99. <input type="checkbox"/> Don't know/ Sijui</li> </ol>

<p>What months of the year are you most capital constrained (select all that apply)? Ni mwezi gani katika mwaka ambapo mtaji wako kibiashara unakua mgumu?</p>	<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> January</li> <li>2. <input type="checkbox"/> February</li> <li>3. <input type="checkbox"/> March</li> <li>4. <input type="checkbox"/> April</li> <li>5. <input type="checkbox"/> May</li> <li>6. <input type="checkbox"/> June</li> <li>7. <input type="checkbox"/> July</li> <li>8. <input type="checkbox"/> August</li> <li>9. <input type="checkbox"/> September</li> <li>10. <input type="checkbox"/> October</li> <li>11. <input type="checkbox"/> November</li> <li>12. <input type="checkbox"/> December</li> <li>98. <input type="checkbox"/> Refused/ Amekataa kujibu</li> <li>99. <input type="checkbox"/> Don't know/ Sijui</li> </ol>
<p>If you could obtain 2 million TSH for your business what would you do with it? (select up to 2 responses) ? / Kama utapata kiasi cha shilingi milioni mbili za biashara utazifanyia nini?</p>	<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Buy more medicines each month/ kununua dawa zaidi kila mwezi</li> <li>2. <input type="checkbox"/> Buy furniture/shop accessories/ kununua funicha na vifaa vingine vya dukani</li> <li>3. <input type="checkbox"/> Painting/construction work on the shop/ kukarabati duka</li> <li>4. <input type="checkbox"/> Take more days off/ close shop early/ kufunga duka mapema</li> <li>5. <input type="checkbox"/> Buy a vehicle/ kununua gari</li> <li>6. <input type="checkbox"/> Hire more employees/ Kuajiri wafanyakazi zaidi</li> <li>7. <input type="checkbox"/> Attend a training/short course_____</li> <li>96. <input type="checkbox"/> Other (specify)/ mengine (eleza)_____</li> <li>98. <input type="checkbox"/> Refused/ Amekataa kujibu</li> <li>99. <input type="checkbox"/> Don't know/ Sijui</li> </ol>
<p>If you could obtain 10 million TSH for your business what would you do with it? (select up to 2 responses) ? / Kama utapata kiasi cha shilingi milioni kumi za biashara utazifanyia nini?</p>	<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Buy more medicines each month/ kununua dawa zaidi kila mwezi</li> <li>2. <input type="checkbox"/> Buy furniture/shop accessories/ kununua funicha na vifaa vingine vya dukani</li> <li>3. <input type="checkbox"/> Painting/construction work on the shop/ kukarabati duka</li> <li>4. <input type="checkbox"/> Take more days off/ close shop early/ kufunga duka mapema</li> <li>5. <input type="checkbox"/> Buy a vehicle/ kununua gari</li> <li>6. <input type="checkbox"/> Hire more employees/ Kuajiri wafanyakazi zaidi</li> <li>7. <input type="checkbox"/> Attend a training/short course_____</li> <li>96. <input type="checkbox"/> Other (specify)/ mengine (eleza)_____</li> <li>98. <input type="checkbox"/> Refused/ Amekataa kujibu</li> <li>99. <input type="checkbox"/> Don't know/ Sijui</li> </ol>
<p><b>ADDITIONAL INTERVIEWER COMMENTS:/MAONI YA ZIADA</b></p>	
<p><b>THANK RESPONDENT AND END INTERVIEW</b></p>	

## ANNEX 8: UGANDA SURVEY TOOL

INTERVIEWER NAME:	
DATE:	
INTERVIEW START TIME:	
SECTION 1. CONTACT INFO	RESPONSE
1.1	Shop ID
1.2	County 1. <input type="checkbox"/> Buyaga 2. <input type="checkbox"/> Bugangaizi 3. <input type="checkbox"/> Buyanja 96. <input type="checkbox"/> Other (specify)_____
1.3	Sub-county (write name)
1.4	Parish (write name)
1.5	Village (write name)
2.1	<p><b>SECTION 2. CONSENT PROMPT</b></p> <p>Hello, My name is (Interviewer Name) and I am working for WDI -the William Davidson Institute, a US based research institute at the University of Michigan. Together we are working with Management Sciences for Health, a US based NGO to better understand factors influencing the availability of medicines in ADS. The results of this will be used to design interventions to improve the availability of medicines in drug shops like yours. I will be asking a variety of questions including some about your current inventory and financial position. I want you to assure you that this information will NOT be shared with any government related authority or agency and will be kept strictly confidential. Specific information shared with me today, will not be shared with anyone beyond the study team. All of the identifying information will be coded so no one outside of the study team will be able to identify your shop. This survey will take approximately 1 hour to complete. Additionally, we would like to conduct a complete inventory of the products you are stocking in your store. Due to the length of this interview, we will take pauses when you have customers to serve and will stay out of your way until they have been served. Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important. At this time, do you want to ask me anything about the survey?</p> <p>Even if you have any questions later on, you can always contact us through the District Pharmacist.</p>
2.1	May I begin the interview now? 1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO
<b>SECTION 3. ADS CHARACTERISTICS/DRUG SHOP MANAGEMENT</b>	
<b>PROMPT: I would like to ask you some questions about your drug shop</b>	
3.1	Are you the owner of this outlet? 1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused
3.2	If no, what is your position in this drug shop? 1. <input type="checkbox"/> Drug seller 2. <input type="checkbox"/> Shop manager 3. <input type="checkbox"/> Shop attendant 96. <input type="checkbox"/> Other (specify)_____ 98. <input type="checkbox"/> Refused
3.3	What month/year was the business established/purchased/acquired by the current owner(s)? 1. ____ (mm) ____ (year) 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

3.3a	What are the days of operations of this drug shop?	1. <input type="checkbox"/> Monday 2. <input type="checkbox"/> Tuesday 3. <input type="checkbox"/> Wednesday 4. <input type="checkbox"/> Thursday 5. <input type="checkbox"/> Friday 6. <input type="checkbox"/> Saturday 7. <input type="checkbox"/> Sunday 96. <input type="checkbox"/> Other (Specify) Describe any variation in the days of operation _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.3b	What are the hours of operation of this drug shop	1. _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.4	How many people own this shop?	1. _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
<b>PROMPT:</b> I would like to now ask a few questions about the owners of this drug shop. Can you please provide me with the following information about the owner who owns the largest percentage of this drug shop		
3.5	Does the owner(s) of this drug shop own other drug shops?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.6	Other than this drug shop(s), does this owner own or manage any other businesses or have any other sources of income?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.7	If yes, what type of businesses (other than drug shops) does this drug shop owner own, manage or derive other income from? (Enumerator to select all that apply)	1. <input type="checkbox"/> Farming/Agriculture 2. <input type="checkbox"/> Livestock husbandry 3. <input type="checkbox"/> Small Shop 4. <input type="checkbox"/> Trucking 5. <input type="checkbox"/> Construction 6. <input type="checkbox"/> Working at Government Health Facility 7. <input type="checkbox"/> Working at Private health facility 8. <input type="checkbox"/> Working at Faith-based/NGO run Health Facility 9. <input type="checkbox"/> Mining 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.8	Of this drug shop owner's total personal income last year, what percentage was derived from this drug shop?	1. <input type="checkbox"/> 10% 2. <input type="checkbox"/> 25% 3. <input type="checkbox"/> 50% 4. <input type="checkbox"/> 75% 5. <input type="checkbox"/> 100% 6. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.9	How many years of experience does this owner have managing a business?	1. _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.10	Age	1. _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

3.11	Gender	1. <input type="checkbox"/> Male 2. <input type="checkbox"/> Female
3.12	Marital Status	1. <input type="checkbox"/> Married - monogamous 2. <input type="checkbox"/> Married - polygamous 3. <input type="checkbox"/> Widowed 4. <input type="checkbox"/> Divorced / Separated 5. <input type="checkbox"/> Cohabiting 6. <input type="checkbox"/> Never married and not cohabiting (Single) 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.13	How many people usually sleep at your home?	1. _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.14	How much land in acres does your household own? (In acres, including the land the house sits on)	1. _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.15	Do you have a title deed for all of this land? (Clarify that "this land" refers to the land where your household is, not where the drug shop is located.)	1. <input type="checkbox"/> YES, I have a title deed for all of the land 2. <input type="checkbox"/> NO, I have a title deed for only a portion of this land 3. <input type="checkbox"/> NO, I don't have a title deed 96. <input type="checkbox"/> Other 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.16	What is the MAIN source of water for drinking in your household? <b>PROMPT</b>	1. <input type="checkbox"/> Piped into dwelling 2. <input type="checkbox"/> Piped into plot/yard 3. <input type="checkbox"/> Public tap water 4. <input type="checkbox"/> Borehole or well 5. <input type="checkbox"/> Protected well (concrete top) 6. <input type="checkbox"/> Unprotected du well (no concrete on top)/Spring 7. <input type="checkbox"/> Rain water 8. <input type="checkbox"/> Surface water (stream, river, pond, lake, dam) 9. <input type="checkbox"/> Brought-in (jerry can, tanker truck) 10. <input type="checkbox"/> Kaveera Water 11. <input type="checkbox"/> Bottled Water 96. <input type="checkbox"/> Other (specify) 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.17	What is the MAIN type of fuel used by your household for cooking? Is it...? <b>PROMPT</b>	1. <input type="checkbox"/> Electricity 2. <input type="checkbox"/> Natural gas / Liquid petroleum gas 3. <input type="checkbox"/> Kerosene / Paraffin 4. <input type="checkbox"/> Charcoal 5. <input type="checkbox"/> Firewood collected 6. <input type="checkbox"/> Firewood Purchased 7. <input type="checkbox"/> Straw / shrubs / grass 8. <input type="checkbox"/> Dung 9. <input type="checkbox"/> Coal 10. <input type="checkbox"/> Solar 11. <input type="checkbox"/> Crop Residuals 12. <input type="checkbox"/> No food cooked in the household 96. <input type="checkbox"/> Other (specify) 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

3.18	What is the MAIN kind of toilet facility that your household uses?	1. <input type="checkbox"/> Flush Toilet owned 2. <input type="checkbox"/> Flush Toilet Shared 3. <input type="checkbox"/> Pit latrine owned 4. <input type="checkbox"/> Pit latrine shared 5. <input type="checkbox"/> Ventilated improved pit latrine owned 6. <input type="checkbox"/> Ventilated improved pit latrine shared 7. <input type="checkbox"/> Bush / field / forest 8. <input type="checkbox"/> Composting toilet 9. <input type="checkbox"/> Bucket 96. <input type="checkbox"/> Other (specify) 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.19	In your household, is there electricity?	1. <input type="checkbox"/> Yes, main grid 2. <input type="checkbox"/> Yes, generators 3. <input type="checkbox"/> Yes, solar panels 4. <input type="checkbox"/> No 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.20	What type of walls are there in the house?	1. <input type="checkbox"/> Stone 2. <input type="checkbox"/> Baked bricks 3. <input type="checkbox"/> Concrete/Cement 4. <input type="checkbox"/> Sundried bricks/mud 5. <input type="checkbox"/> Poles and mud 6. <input type="checkbox"/> Wood 7. <input type="checkbox"/> Iron sheets 8. <input type="checkbox"/> Palm / bamboo / thatch / straw 9. <input type="checkbox"/> Cardboard/Timber 10. <input type="checkbox"/> No walls 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.21	What type of flooring is there in the house?	1. <input type="checkbox"/> Finished floor: cement, tiles, linoleum, carpet, polished wood or stones 2. <input type="checkbox"/> Rudimentary floor: wooden planks, palm or bamboo 3. <input type="checkbox"/> Natural Floor: earth, sand, dung or clay 4. <input type="checkbox"/> Iron sheets 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
3.22	What type of roof does the house have?	1. <input type="checkbox"/> Tiles 2. <input type="checkbox"/> Iron sheets / Tin 3. <input type="checkbox"/> Grass or thatch 4. <input type="checkbox"/> Wood 5. <input type="checkbox"/> Shingles 6. <input type="checkbox"/> Cement 7. <input type="checkbox"/> Mud 8. <input type="checkbox"/> No roof 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

**READ OUT:** In your household, how many of the following are there?

3.23	Radio/cassette/CDPlayer/ Radio	
3.24	Electric/charcoal iron	
3.25	Refridgerator	
3.26	Bicycle	



3.27	Motorcycle or scooter	
3.28	Large livestock (like cows, oxen)	
3.29	Bank account	
3.30	Mobile Phone	
3.31	Television	
3.32	Computer	
3.33	Car	
3.34	Does your household have access to a mobile bank account (ie. MTN Mobile money, Warid Pesa, Airtel money)?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

#### SECTION 4

4.1	How many people are responsible for the day to day management of this shop (dispensing medicines, managing inventory, ordering supplies, bookkeeping)?	1. _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
4.2	Including yourself (and the owner), how many people work at this outlet (all staff)?	1. _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

\*Note for each employee listed in the question above, fill in the name, highest level of education attained, and health training and qualification

	4.3.1 Employee 1(name)_____	4.3.2 Employee 1: Highest Level of Education Attained 0. ___ No formal education 1. ___P1 2. ___P2 3. ___P3 4. ___P4 5. ___P5 6. ___P6 7. ___P7 8. ___S1 9. ___S2 10. ___S3 11. ___S4 12. ___S5 13. ___S6 14. ___ Post primary specialized training certificate 15. ___Diploma 16. ___University degree 17. ___Masters 18. ___PhD 99. ___Don't know
	4.3.3 Employee 1 Health Training/Qualification 0. ___ Does not have any health training or qualification 1. ___ Pharmacist 2. ___ Pharmacy Technician 3. ___ Medical Doctor 4. ___ Nurse/Midwife 5. ___ Nurse assistant 6. ___ Clinical Officer	4.3.4 Employee 1: Position in this Drug Shop 1. Owner 2. Drug Seller 3. Shop manager 96. Other (specify) 98. Refused 99. Don't know

	96. ___Other (Specify) _____	
	4.3.1 Employee 2(name)_____	<p>4.3.2 Employee 2: Highest Level of Education Attained</p> <p>0. ___No formal education</p> <p>1. ___P1</p> <p>2. ___P2</p> <p>3. ___P3</p> <p>4. ___P4</p> <p>5. ___P5</p> <p>6. ___P6</p> <p>7. ___P7</p> <p>8. ___S1</p> <p>9. ___S2</p> <p>10. ___S3</p> <p>11. ___S4</p> <p>12. ___S5</p> <p>13. ___S6</p> <p>14. ___Post primary specialized training certificate</p> <p>15. ___Diploma</p> <p>16. ___University degree</p> <p>17. ___Masters</p> <p>18. ___PhD</p> <p>99. ___Don't know</p>
	<p>4.3.3 Employee 2 Health Training/Qualification</p> <p>0. ___Does not have any health training or qualification</p> <p>1. ___ Pharmacist</p> <p>2. ___Pharmacy Technician</p> <p>3. ___Medical Doctor</p> <p>4. ___Nurse/Midwife</p> <p>5. ___Nurse assistant</p> <p>6. ___Clinical Officer</p> <p>96. ___Other (Specify) _____</p>	<p>4.3.4 Employee 2: Position in this Drug Shop</p> <p>1. Owner</p> <p>2. Drug Seller</p> <p>3. Shop manager</p> <p>96. Other (specify)</p> <p>98. Refused</p> <p>99. Don't know</p>

	<p>4.3.1 Employee 3(name)_____</p>	<p>4.3.2 Employee 3: Highest Level of Education Attained</p> <p>0. ___No formal education</p> <p>1. ___P1</p> <p>2. ___P2</p> <p>3. ___P3</p> <p>4. ___P4</p> <p>5. ___P5</p> <p>6. ___P6</p> <p>7. ___P7</p> <p>8. ___S1</p> <p>9. ___S2</p> <p>10. ___S3</p> <p>11. ___S4</p> <p>12. ___S5</p> <p>13. ___S6</p> <p>14. ___Post primary specialized training certificate</p> <p>15. ___Diploma</p> <p>16. ___University degree</p> <p>17. ___Masters</p> <p>18. ___PhD</p> <p>99. ___Don't know</p>
	<p>4.3.3 Employee 3 Health Training/Qualification</p> <p>0. ___Does not have any health training or qualification</p> <p>1. ___ Pharmacist</p> <p>2. ___Pharmacy Technician</p> <p>3. ___Medical Doctor</p> <p>4. ___Nurse/Midwife</p> <p>5. ___Nurse assistant</p> <p>6. ___Clinical Officer</p> <p>96. ___Other (Specify) _____</p>	<p>4.3.4 Employee 3: Position in this Drug Shop</p> <p>1. Owner</p> <p>2. Drug Seller</p> <p>3. Shop manager</p> <p>96. Other (specify)</p> <p>98. Refused</p> <p>99. Don't know</p>
	<p>4.3.1 Employee 4 (name)_____</p>	<p>4.3.2 Employee 4: Highest Level of Education Attained</p> <p>0. ___No formal education</p> <p>1. ___P1</p> <p>2. ___P2</p> <p>3. ___P3</p> <p>4. ___P4</p> <p>5. ___P5</p> <p>6. ___P6</p> <p>7. ___P7</p> <p>8. ___S1</p> <p>9. ___S2</p> <p>10. ___S3</p> <p>11. ___S4</p> <p>12. ___S5</p> <p>13. ___S6</p> <p>14. ___Post primary specialized training certificate</p> <p>15. ___Diploma</p> <p>16. ___University degree</p> <p>17. ___Masters</p> <p>18. ___PhD</p> <p>99. ___Don't know</p>

	<p>4.3.3 Employee 4 Health Training/Qualification</p> <p>0. ___ Does not have any health training or qualification</p> <p>1. ___ Pharmacist</p> <p>2. ___ Pharmacy Technician</p> <p>3. ___ Medical Doctor</p> <p>4. ___ Nurse/Midwife</p> <p>5. ___ Nurse assistant</p> <p>6. ___ Clinical Officer</p> <p>96. ___ Other (Specify) _____</p>	<p>4.3.4 Employee 4: Position in this Drug Shop</p> <p>1. Owner</p> <p>2. Drug Seller</p> <p>3. Shop manager</p> <p>96. Other (specify)</p> <p>98. Refused</p> <p>99. Don't know</p>
4.4	In this shop, who is responsible for dispensing medicines?	<p>1. <input type="checkbox"/> Drug Shop owner</p> <p>2. <input type="checkbox"/> Drug Seller</p> <p>96. <input type="checkbox"/> Other (specify) _____</p> <p>98. <input type="checkbox"/> Refused</p> <p>99. <input type="checkbox"/> Don't know</p>
4.5	In this shop, who is responsible for bookkeeping?	<p>1. <input type="checkbox"/> Drug Shop owner</p> <p>2. <input type="checkbox"/> Drug Seller</p> <p>96. <input type="checkbox"/> Other (specify) _____</p> <p>98. <input type="checkbox"/> Refused</p> <p>99. <input type="checkbox"/> Don't know</p>
4.6	In this shop, who is responsible for day to day financial management?	<p>1. <input type="checkbox"/> Drug Shop owner</p> <p>2. <input type="checkbox"/> Drug Seller</p> <p>3. <input type="checkbox"/> Other (specify) _____</p> <p>98. <input type="checkbox"/> Refused</p> <p>99. <input type="checkbox"/> Don't know</p>
4.7	Does this person reconcile the cash?	<p>1. <input type="checkbox"/> YES</p> <p>2. <input type="checkbox"/> NO</p> <p>98. <input type="checkbox"/> Refused</p> <p>99. <input type="checkbox"/> Don't know</p>
4.8	How often does this person reconcile cash?	<p>1. <input type="checkbox"/> Every day</p> <p>2. <input type="checkbox"/> Once per week</p> <p>3. <input type="checkbox"/> Once every 2 weeks</p> <p>4. <input type="checkbox"/> Once a month</p> <p>96. <input type="checkbox"/> Other (specify) _____</p>
4.9	<b>DO NOT SAY OUT LOUD:</b> *enumerator to verify frequency of cash reconciliation; Does the drug shop reconcile cash at the frequency they have answered in the question above?	<p>1. <input type="checkbox"/> Yes</p> <p>2. <input type="checkbox"/> No</p> <p>3. <input type="checkbox"/> Cannot tell</p>
4.10	In this shop, who is responsible for inventory management?	<p>1. <input type="checkbox"/> Drug Shop owner</p> <p>2. <input type="checkbox"/> Drug Seller</p> <p>3. <input type="checkbox"/> Other (specify) _____</p> <p>98. <input type="checkbox"/> Refused</p> <p>99. <input type="checkbox"/> Don't know</p>
4.11	Does this person (who manages inventory) adjust the drug shop's records to show the amount of each product currently in stock at the drug shop?	<p>1. <input type="checkbox"/> YES</p> <p>2. <input type="checkbox"/> NO</p> <p>98. <input type="checkbox"/> Refused</p> <p>99. <input type="checkbox"/> Don't know</p>

4.12	How often does someone adjust the drug shop's records to show the amount of inventory currently in stock?	1. <input type="checkbox"/> Every day 2. <input type="checkbox"/> Once per week 3. <input type="checkbox"/> Once every 2 weeks 4. <input type="checkbox"/> Once a month 6. <input type="checkbox"/> Never done 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
4.13	Can we see your inventory records (books/ files etc)?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
4.14	<b>DO NOT SAY OUT LOUD:</b> *enumerator to verify if inventory records are kept	1. <input type="checkbox"/> Yes records are kept and updated regularly 2. <input type="checkbox"/> Yes, records are kept but not updated regularly 3. <input type="checkbox"/> No records are not kept 4. <input type="checkbox"/> Cannot tell
4.15	In this shop, who is responsible for preparing the list of medicines to order?	1. <input type="checkbox"/> Drug Shop owner 2. <input type="checkbox"/> Drug Seller 3. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
4.16	Has anyone at this outlet received any kind of health related training during the last 12 months including pre-service and stand-alone workshops or seminars?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
4.17	If yes, what did the training cover specifically?	1. <input type="checkbox"/> Drug Seller training 2. <input type="checkbox"/> IMCI training 3. <input type="checkbox"/> ACT use training 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
4.18	Has anyone at this outlet received any kind of business management related training during the last 12 months including stand-alone workshops or seminars?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
4.19	If yes, what did the training cover specifically?	1. <input type="checkbox"/> General ADS training 2. <input type="checkbox"/> Accounting 3. <input type="checkbox"/> Inventory management 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
4.20	OBSERVE (do not say aloud): Is an ADS Certificate Visible on the drug shop wall?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO
4.21	OBSERVE (do not say aloud): Is a license visible on the drug shop wall?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO
4.22	What is the legal status of this drug shop?	1. <input type="checkbox"/> Accredited Drug Shop 2. <input type="checkbox"/> Class C Drug Shop 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
4.23	Does this drug shop use a computer for any business purposes?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

4.24	Does the drug shop use a computer to perform any of the following tasks (select all that apply):	1. <input type="checkbox"/> Online banking 2. <input type="checkbox"/> Manage inventory 3. <input type="checkbox"/> Email 4. <input type="checkbox"/> Place orders 5. <input type="checkbox"/> Manage accounts 6. <input type="checkbox"/> Book-keeping 96. <input type="checkbox"/> Other (Specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
4.25	What is the average number of customers at this drug shop per week?	1. <input type="checkbox"/> (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

**SECTION 5. DRUG SHOP'S MEDICINE SUPPLY**

**PROMPT: I would now like to ask some questions about this drug shops inventory and source of medicine supply**

5.1	Where does this drug shop purchase most of its medicines from?	1. <input type="checkbox"/> Own town/village 2. <input type="checkbox"/> Kibale Town 3. <input type="checkbox"/> Kagadi Town 4. <input type="checkbox"/> Hoima Town 5. <input type="checkbox"/> Mubende Town 6. <input type="checkbox"/> Kampala 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
5.2	What is the name of this drug shop's MAIN medicine supplier?	1. <input type="checkbox"/> SA & EM Pharmacy 2. <input type="checkbox"/> Community Pharmacy 3. <input type="checkbox"/> Tumwebaze Pharmacy 4. <input type="checkbox"/> Bugolo Pharmacy 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused /Amekataa kujibu 99. <input type="checkbox"/> Don't know
5.3	Does this supplier deliver drugs directly to your store?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
5.3a	Does the drug shop purchase medicines from other medicine suppliers?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
5.4	If yes, why? (select all that apply)	1. <input type="checkbox"/> My main supplier does not have all of the products I need for my shop 2. <input type="checkbox"/> I go to the suppliers that sell the cheapest medicines 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

5.5	Where is the drug shop's other medicine supplier located?	1. <input type="checkbox"/> Own town/village 2. <input type="checkbox"/> Kibale Town 3. <input type="checkbox"/> Kagadi Town 4. <input type="checkbox"/> Hoima Town 5. <input type="checkbox"/> Mubende Town 6. <input type="checkbox"/> Kampala 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
5.6	What is the name of this drug shop's other medicine supplier?	1. <input type="checkbox"/> SA & EM Pharmacy 2. <input type="checkbox"/> Community Pharmacy 3. <input type="checkbox"/> Tumwebaze Pharmacy 4. <input type="checkbox"/> Bugolo Pharmacy 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused /Amekataa kujibu 99. <input type="checkbox"/> Don't know
5.6b	Does this supplier deliver drugs directly to your store?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
5.7	How often does this person responsible for ordering medicines, place orders for medicines for your shop?	1. <input type="checkbox"/> More than once a week 2. <input type="checkbox"/> Once a week 3. <input type="checkbox"/> Once every 2 weeks 4. <input type="checkbox"/> Once per month 5. <input type="checkbox"/> Once every 2 months 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. Don't know
5.8	When the drug shop needs more medicines which one of the following do you do most often:	1. <input type="checkbox"/> Someone from the shop goes to the supplier 2. <input type="checkbox"/> Place order by phone, and supplier delivers product directly to the shop 3. <input type="checkbox"/> Place order by phone, and supplier sends product to another location and someone from the shop goes to pick it up 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
5.9	How long after placing the order does the supplier usually deliver the order?	1. <input type="checkbox"/> 24 hours (1 day) later 2. <input type="checkbox"/> 2-3 days later 3. <input type="checkbox"/> 4-5 days later 4. <input type="checkbox"/> 1 week later 5. <input type="checkbox"/> 2 weeks later 6. <input type="checkbox"/> 1 month later 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. Don't know
5.10	How frequently do you go to the supplier to pick up the drug supplies?	1. <input type="checkbox"/> Once per week 2. <input type="checkbox"/> Once every 2 weeks 3. <input type="checkbox"/> Once per month 4. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

5.11	How do you decide which products to stock (select all that apply)?	1. <input type="checkbox"/> Stocks same products as last month 2. <input type="checkbox"/> Order what products that are low in stock 3. <input type="checkbox"/> Order products that are out of stock 4. <input type="checkbox"/> Order what customers ask for 5. <input type="checkbox"/> Order products that treat diseases in this community 6. <input type="checkbox"/> Order products that sell quickly 7. Stock what is on the ADS medicine list 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
5.12	How do you decide what quantities of the products to order/buy?	1. <input type="checkbox"/> Order same quantities as last month/ Kiasi kilichoagizwa mara ya mwisho 2. <input type="checkbox"/> Look at sales of the products in previous month and forecast my needs for the period I'm buying for 3. <input type="checkbox"/> Purchase based on money available 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
5.13	Are there any products that were in stock in the last month that are not in stock today?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
5.14	If yes, which products/type are out of stock?	1. <input type="checkbox"/> Other 1 (specify) _____ 2. <input type="checkbox"/> Other 2 (specify) _____ 3. <input type="checkbox"/> Other 3 (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
5.15	What is the reason why the products are not in stock?	1. <input type="checkbox"/> Didn't have enough money to buy amount required to meet demand 2. <input type="checkbox"/> Demand was higher than expected and I have not been able to place another order yet 3. <input type="checkbox"/> My supplier did not have the product in stock 4. <input type="checkbox"/> Slow moving products and decided not to reorder 5. <input type="checkbox"/> Special order for specific customer 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

## SECTION 6. ACCESS TO FINANCIAL SERVICES & LINES OF CREDIT

**PROMPT: I would now like to ask you a few questions about your access to financial services and credit to operate your business**

6.1	Is there a bank account open in the name of the drug shop/business (not the owner's name?)	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.2	If no, is there a bank account open in the name of the owner?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know



6.3	Where did the owner get the capital to establish this drug shop?	1. <input type="checkbox"/> From owner's own savings 2. <input type="checkbox"/> Borrowings from friends or family 3. <input type="checkbox"/> Borrowings from other drug shop owners/ADS 4. <input type="checkbox"/> Borrowings from Banks or other formal lending institutions 5. <input type="checkbox"/> SACCOs or Community small scale lending organizations 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.4	When you need more capital to stock more supplies who do you turn to?	1. <input type="checkbox"/> Friends or family 2. <input type="checkbox"/> Other drug shop owners/ADS 3. <input type="checkbox"/> Banks or other formal lending institutions 4. <input type="checkbox"/> Community small scale lending organizations 5. <input type="checkbox"/> Your own other sources of income 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.5	Has this drug shop ever applied for a bank loan?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.6	How much was the loan request?	1. <input type="checkbox"/> _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.7	Was the full amount of the loan request approved or denied?	1. <input type="checkbox"/> Full amount APPROVED 2. <input type="checkbox"/> Lesser amount APPROVED 3. <input type="checkbox"/> DENIED 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.7a	What was the loan amount that was approved?	1. <input type="checkbox"/> _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.8	Did the drug shop accept the loan?	1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No, I chose not to accept the loan because the terms were unfavorable 3. <input type="checkbox"/> No, other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.9	What was the duration of the bank loan?	1. <input type="checkbox"/> 1 month 2. <input type="checkbox"/> 3 months 3. <input type="checkbox"/> 1 year 4. <input type="checkbox"/> More than 1 year 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.9b	What was the interest rate on the loan?	1. <input type="checkbox"/> _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.10	What was the frequency of of return payments?	1. <input type="checkbox"/> Every month 2. <input type="checkbox"/> Every 3 months 3. <input type="checkbox"/> Every 6 months 4. <input type="checkbox"/> One time lump sum retrun of loan amount 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

6.11	If the loan was denied, what reason was cited for the denial of the loan?	1. <input type="checkbox"/> Bank does not consider my business credit worthy 2. <input type="checkbox"/> Bank needs collateral 3. <input type="checkbox"/> Too much other paperwork that I could not furnish 4. <input type="checkbox"/> They didn't give a reason 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.12	Does your medicine supplier offer you to make purchases on credit?	1. <input type="checkbox"/> Yes, my wholesaler sells most products on credit to me 2. <input type="checkbox"/> Yes, my wholesaler has offered me credit, but I do not accept it 3. <input type="checkbox"/> Sometimes the wholesaler sells new products or promotional items on credit 4. <input type="checkbox"/> No, the wholesaler never sells anything on credit to me 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.13	Why don't you accept the credit offered to you by your wholesaler?	1. <input type="checkbox"/> I don't need credit from my wholesaler 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.14	What is the maximum amount of credit offered to you by your supplier?	1. <input type="checkbox"/> Amount (UG Shs) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.15	What is the repayment period for credit extended to you by your supplier?	1. <input type="checkbox"/> One Week 2. <input type="checkbox"/> Two Weeks 3. <input type="checkbox"/> 1 month 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.15b	If you purchase medicines on credit from your supplier, how do you pay your supplier back?	1. <input type="checkbox"/> Next time when I go to purchase drugs 2. <input type="checkbox"/> Supplier sends someone to collect the amount due 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.15c	How much (if any) do you currently owe to your supplier?	1. <input type="checkbox"/> Amount (UG Shs) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.16	Does ([FIRM]) have any lines of credit from places like banks, SACCOs, microfinance institutions and/or relationships with vendors & businesses where your drug shop incurs expenses?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.17	If yes, where does the drug shop have lines of credit?	1. <input type="checkbox"/> Vendor 2. <input type="checkbox"/> SACCOs/community lending organizations 3. <input type="checkbox"/> Bank 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.18	What is the credit limit at the place mentioned?	1. <input type="checkbox"/> _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

6.19	What are the challenges you face operating your business (select all that apply)?	1. <input type="checkbox"/> Not enough money 2. <input type="checkbox"/> Not enough customers 3. <input type="checkbox"/> Heavy taxes 4. <input type="checkbox"/> Regulatory challenges (with NDA, etc) 5. <input type="checkbox"/> Difficult to find trained staff (i.e. drug sellers) 96. <input type="checkbox"/> Other _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.20	Of the challenges you have mentioned above, which is your biggest challenge (select only one)?	1. <input type="checkbox"/> Not enough money 2. <input type="checkbox"/> Not enough customers 3. <input type="checkbox"/> Heavy taxes 4. <input type="checkbox"/> Regulatory challenges (with NDA, etc) 5. <input type="checkbox"/> Difficult to find trained staff (i.e. drug sellers) 96. <input type="checkbox"/> Other _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.21	Do you have enough access to money to operate your business as you would like to?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
6.22	What is the impact of not having enough money to operate your business?	1. <input type="checkbox"/> I cannot stock enough quantity of each medicine 2. <input type="checkbox"/> I cannot stock some more expensive items 3. <input type="checkbox"/> I cannot keep the shop in good condition 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

#### SECTION 7. DRUG SHOP NON-CURRENT ASSETS

7.1	Is the building in which this drug shop exists owned or leased by the owners of the drug shop?	1. <input type="checkbox"/> OWNED 2. <input type="checkbox"/> LEASED 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.2	If the drug shop building is owned, are there any outstanding payments due (i.e. a mortgage?)	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.3	If yes, how much are the monthly payments?	1. <input type="checkbox"/> _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.4	Is the property on which this drug shop exists owned or leased by the owners of the drug shop?	1. <input type="checkbox"/> OWNED 2. <input type="checkbox"/> LEASED 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.5	If the property is owned, are there any outstanding payments due (i.e. a mortgage)?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.6	If yes, how much are the monthly payments?	1. <input type="checkbox"/> _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.7	If the building is leased, how much are the monthly payments?	1. <input type="checkbox"/> _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.8	If the property is leased, how much are the monthly payments?	1. <input type="checkbox"/> _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

7.9	Does the drug shop, as a business entity, own or lease any vehicles? (i.e. cars, trucks, motorbikes)?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.10	If yes, how many?	1. <input type="checkbox"/> _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.11	Are the vehicles owned or leased?	1. <input type="checkbox"/> OWNED 2. <input type="checkbox"/> LEASED 3. <input type="checkbox"/> Not applicable 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.12	If the drug shop's vehicles are owned, are there any outstanding payments due?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.13	If yes, how much are the monthly payments?	1. <input type="checkbox"/> _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.14	If the vehicles are leased, how much are the monthly payments?	1. <input type="checkbox"/> _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.15	What is the estimated total amount spent each month on inventory for this drug shop?	1. <input type="checkbox"/> _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.16	What is the total amount spent each month on employee salaries?	1. <input type="checkbox"/> _____ 2. <input type="checkbox"/> This is not an expense incurred by this drug shop 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.17	What is the total amount spent each month on electricity?	1. <input type="checkbox"/> _____ 2. <input type="checkbox"/> This is not an expense incurred by this drug shop 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.18	What is the total amount spent each month on Fuel for company vehicles/generator?	1. <input type="checkbox"/> _____ 2. <input type="checkbox"/> This is not an expense incurred by this drug shop 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.19	What is the total amount spent each month on distribution costs to customers?	1. <input type="checkbox"/> _____ 2. <input type="checkbox"/> This is not an expense incurred by this drug shop 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.20	What is the total amount spent each month on cost of picking up/arranging delivery for inventory from supplier?	1. <input type="checkbox"/> _____ 2. <input type="checkbox"/> This is not an expense incurred by this drug shop 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.21	What is the total amount spent each month on communication (i.e. phone credit)?	1. <input type="checkbox"/> _____ 2. <input type="checkbox"/> This is not an expense incurred by this drug shop 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

7.22	What is the total amount spent each month on security for this drug shop?	1. <input type="checkbox"/> _____ 2. <input type="checkbox"/> This is not an expense incurred by this drug shop 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
7.23	How much is spent each month on other drug shop expenses?	1. <input type="checkbox"/> (Specify Expense1/Amount1) _____ 2. <input type="checkbox"/> Specify (Expense 2/Amount2) _____ 3. <input type="checkbox"/> This drug shop does not have any other monthly expenses 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

### SECTION 8. DRUG SHOP ACCOUNTS RECEIVABLES

8.1	Do you offer credit to any of your customers?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
8.2	What is the maximum amount of credit you offer to any customer?	1. <input type="checkbox"/> Less than 15,000 UGX 2. <input type="checkbox"/> Between 15,000 UGX- 30,000 UGX 3. <input type="checkbox"/> Between 30,000 UGX-45,000 UGX 96. <input type="checkbox"/> Other (specify range) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
8.3	What are the repayment terms for the loans to customers?	1. <input type="checkbox"/> 2 weeks 2. <input type="checkbox"/> 1 month 3. <input type="checkbox"/> The next time they come to purchase something from my shop 4. <input type="checkbox"/> No set repayment date 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
8.4	As of today, how much money is currently owed to this drug shop (UGX)?	1. <input type="checkbox"/> _____ 2. <input type="checkbox"/> No money is owed to this drug shop 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
8.5	When you extend credit to your customers, how often do they default on their loans?	1. <input type="checkbox"/> Always 2. <input type="checkbox"/> Sometimes 3. <input type="checkbox"/> Rarely 4. <input type="checkbox"/> Never 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

8.6 **INVENTORY**  
\* ENUMERATOR to record inventory on separate sheet

### SECTION 9. DRUG SHOP/OWNER EXPENDITURES

9.1	Do you draw money for personal expenses from the revenues of this drug shop?	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
9.2	How much money do you draw from your business for personal expenses <b>each day</b> ?	1. <input type="checkbox"/> Amount (UG Shs) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

9.3	How do you decide how much money to take for personal expenses on a <b>daily basis</b> ?	1. <input type="checkbox"/> I reconcile accounts at the end of the day and figure it out 2. <input type="checkbox"/> I draw on an ad hoc basis 3. <input type="checkbox"/> I know my profit margin so I draw accordingly 4. <input type="checkbox"/> I calculate how much I can draw at the end of each month 5. <input type="checkbox"/> I draw according to my daily/monthly needs 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
9.4	How much money do you draw from your business for personal expenses <b>per month</b> ?	1. <input type="checkbox"/> Amount (UG Shs) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
9.5	How do you decide how much money to take for personal expenses <b>each month</b> ?	1. <input type="checkbox"/> I reconcile accounts at end of the month and figure it out 2. <input type="checkbox"/> I draw on an ad hoc basis 3. <input type="checkbox"/> I know my profit margin so I draw accordingly 4. <input type="checkbox"/> I calculate how much I can draw at the end of each month 5. <input type="checkbox"/> I draw according to my daily/monthly needs 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
9.6	In order to grow your business in the last year, have you spent money on the following: (select all that apply)	1. <input type="checkbox"/> Stocking more medicines 2. <input type="checkbox"/> Purchasing/leasing a vehicle 3. <input type="checkbox"/> Hiring more employees 4. <input type="checkbox"/> Attending health training 5. <input type="checkbox"/> Attending business management training 6. <input type="checkbox"/> Renovating shop 7. <input type="checkbox"/> Expanding size of shop 8. <input type="checkbox"/> Couldn't do do anything to expand my business 96. <input type="checkbox"/> Other (Specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
9.7	If you won 750,000 UGX today with no restrictions, how would you spend it?	1. <input type="checkbox"/> Buy more of the same drugs I usually stock 2. <input type="checkbox"/> Stock drugs that I do not currently stock 3. <input type="checkbox"/> Pay rent 4. <input type="checkbox"/> Pay employee salaries 5. <input type="checkbox"/> Give myself a bonus 6. <input type="checkbox"/> Pay my suppliers 7. <input type="checkbox"/> Renovate my shop 8. <input type="checkbox"/> Save it 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

9.8	If you were given 750,000 UGX today to use for your drug shop without interest, how would you spend it? (select all that apply)	1. <input type="checkbox"/> Buy more of the same drugs I usually stock 2. <input type="checkbox"/> Stock drugs that I do not currently stock 3. <input type="checkbox"/> Pay rent 4. <input type="checkbox"/> Pay employee salaries 5. <input type="checkbox"/> Give myself a bonus 6. <input type="checkbox"/> Pay my suppliers 7. <input type="checkbox"/> Renovate my shop 8. <input type="checkbox"/> Save it 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
9.9	If you were given 750,000 UGX today to use for your drug shop with minimal interest, how would you spend it? (select all that apply)	1. <input type="checkbox"/> Buy more of the same drugs I usually stock 2. <input type="checkbox"/> Stock drugs that I do not currently stock 3. <input type="checkbox"/> Pay rent 4. <input type="checkbox"/> Pay employee salaries 5. <input type="checkbox"/> Give myself a bonus 6. <input type="checkbox"/> Pay my suppliers 7. <input type="checkbox"/> Renovate my shop 8. <input type="checkbox"/> Save it 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
9.10	What do you do with the profits and income from your business (select all that apply)?	1. <input type="checkbox"/> Pay bills 2. <input type="checkbox"/> Re-invest in drug shop 3. <input type="checkbox"/> Re-invest in other business 4. <input type="checkbox"/> Save 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
9.11	If you were given 30,000 UGX would you buy food or "pay bills" ?	1. <input type="checkbox"/> Buy food 2. <input type="checkbox"/> Pay bills 3. <input type="checkbox"/> Both 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
9.12	What months of the year are you most capital constrained (select all that apply)?	1. <input type="checkbox"/> January 2. <input type="checkbox"/> February 3. <input type="checkbox"/> March 4. <input type="checkbox"/> April 5. <input type="checkbox"/> May 6. <input type="checkbox"/> June 7. <input type="checkbox"/> July 8. <input type="checkbox"/> August 9. <input type="checkbox"/> September 10. <input type="checkbox"/> October 11. <input type="checkbox"/> November 12. <input type="checkbox"/> December 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

9.13	If you could obtain 3 million UGX for your business what would you do with it? (select up to 2 responses) ?	1. <input type="checkbox"/> Buy more medicines each month 2. <input type="checkbox"/> Buy furniture/shop accessories 3. <input type="checkbox"/> Painting/construction work on the shop 4. <input type="checkbox"/> Take more days off/ close shop early 5. <input type="checkbox"/> Buy a vehicle 6. <input type="checkbox"/> Hire more employees 7. <input type="checkbox"/> Attend a training/short course _____ 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know
9.14	If you could obtain 15 million UGX for your business what would you do with it? (select up to 2 responses)?	1. <input type="checkbox"/> Buy more medicines each month 2. <input type="checkbox"/> Buy furniture/shop accessories 3. <input type="checkbox"/> Painting/construction work on the shop 4. <input type="checkbox"/> Take more days off/ close shop early 5. <input type="checkbox"/> Buy a vehicle 6. <input type="checkbox"/> Hire more employees 7. <input type="checkbox"/> Attend a training/short course _____ 96. <input type="checkbox"/> Other (specify) _____ 98. <input type="checkbox"/> Refused 99. <input type="checkbox"/> Don't know

INTERVIEW END TIME:

**ADDITIONAL INTERVIEWER COMMENTS: /MAONI YA ZIADA**

1. Driving Distance from Kampala
2. Rate condition of shop 1 (best) 2 (ok) 3 (poor)
3. Comments on challenges seen but not mentioned by shop owner

**THANK RESPONDENT AND END INTERVIEW**



# ANNEX 8: TANZANIA & UGANDA INVENTORY TOOL

**INVENTORY SHEET**  
**SHOP ID:**

Drug Category	Brand Name	Manufacturer Name	Country of Manufacture	Expiry Month	Expiry Year	Pack Size Unit 1. Box 2. Bottle 3. Jar/Tin 4. Vial/Ampoule 5. Tube 6. Syringe	Pack Size # of tablets/ml/mg/g ranule packs/supposito ries in each package (bottle, box, jar, vials)	Stock on Hand (# of units)	Purchase Price Per Pack Size Unit (TSH)	Purchase Unit Pack Size (specify pack size if different from pack size counted in the inventory)	Units Purchased in Last 30 Days	Retail Price Per Unit	Retail Unit Pack Size (specify pack size if different from pack size counted in the inventory)	Units Sold in Last 30 Days	Stock Out Y/N