How group sourcing benefits small organisations in Uganda: The case of private wholesale and retail pharmacies in Kampala District.

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DEDICATION:

This work is dedicated to my loving parents and all the people who have supported me throughout this struggle. May the almighty reward you abundantly.
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EXECUTIVE SUMMARY:

In the literature of general purchasing, the concept of group sourcing (also called cooperative/joint purchasing) has received a reasonable amount of coverage. While many have written about this concept taking case studies from a developed world, little has been done from a developing world. The general objective of this study was to establish how small organisations benefit from group sourcing, with particular reference to wholesale and retail pharmacies.

The study targeted the purchasing officers of practising pharmacies. The study used exploratory methodology, and propositions as starting point. Design of a survey questionnaire as a primary tool of data collection was largely used. The Study utilised mainly qualitative data and to a lesser extent quantitative data for predicting emerging patterns. This research method was used because of the nature of inquiry in establishing what was happening on the ground. A correspondent whom the researcher contacted provided research assistance.

The study findings discovered some loopholes with existing literature, as information could not be traced on some issues. An example the issue of religion. It was found out that religion does not presently play any role in group sourcing arrangements; something that is not clear whether other research findings have ever investigated this. Its influence in future is more likely to foster smooth operations and more encouragement to group sourcing activities. Because of this analysis, religious -founded drug distributing agents like Joint Medical Stores (Catholics), Uganda Protestant Medical Bureau (Protestants) should be encouraged to closely work together in procuring drugs and encouraging more team procurement within pharmacies.

Study findings further indicated that private hospitals were as well cooperating with pharmacies and even drug shops. This arrangement is made possible where private hospitals recommend acquisition of drugs from such selling points, and this was seen as a way of boosting group sourcing in future. This was the case because ownership was closely connected in both units. Enabling collaborative arrangements easily. It is accordingly recommended that this arrangement be promoted which could easily give way for future group sourcing as well. Also noted was the mainly informal arrangement of group sourcing; no specific requirements are necessary for joining a sourcing group; they enjoy some benefits, although measuring these benefits is not well documented. The majority confessed the concept was new to them, but expressed willingness to join such sourcing groups, should sensitisation be done through their lead sector organisations.
There was a general concern, however, that this kind of arrangement is suitable for big pharmacies with large investments, although how big these pharmacies should be was not very clear.

The report makes recommendations on ways to improve and promote this concept in future. In particular, it recommends initiation of a procurement database unit, under close supervision of the newly established Public Procurement and Disposal of Public Assets Authority (PPDA), or Uganda Bureau of Statistics (UBOS), or Ministry of Finance. These are some organisations concerned with analysing, collecting and publishing data for future use. At the present, there is hardly any dependable purchasing database in many developing countries. Other recommendations include disseminating information to purchasing officers on group sourcing, using either short courses managed and run by Universities or getting access to training through the PPDA’s capacity strengthening department.

The study finally recommends extending further research in the field of group sourcing to cover other sectors of the economy, mainly the private business sector. This is deemed viable and feasible because there are already informal groupings addressing needs similar to group sourcing aspects. Its outcomes based on a questionnaire survey, returned by 25 (71%) pharmacies are used to support the findings and recommendations for improving this practice in Uganda.
CHAPTER ONE: THE STUDY OF GROUP SOURCING IN UGANDA

1.0 Introduction:

In the face of rising profit pressures, pharmaceuticals and other businesses are turning to group sourcing processes as a way to gain innovative new ideas, to maximize the use of existing resources, and to cut expenses (A.T. Kearney, 1992). This innovation of new ideas, that has been described as Value-based purchasing; focuses at the decisions of purchasing professionals on the creation of added value to the purchasing process, rather than on the traditional objectives of cost savings and efficiency (Telgen, 200 I). “If one is able to get very good cost reduction based purchasing to continue overtime, then they would really have to strongly consider group sourcing:” said Rota Zorth, CFO as quoted in A.T. Kearney (2004).

Realising that independent small organisations were increasingly facing stiff challenges during the procurement of materials from within and abroad, they started looking for ways of managing a competitive liberalised market. Small organisations started to explore the potential of group purchasing to increase their negotiation power vis-a-vis their suppliers (Nollet et al., 2005). Looking for more advantageous contractual benefits is the most frequent reason for being part of a sourcing group (Vigoroso, 1998). This leads to cooperation amongst small organisations in order to reduce on the burden encountered during the purchasing process.

There are several group sourcing arrangements, based on literature (see Wooten, 2003), but among these a collaborative arrangement, Kearney noted, is one of the procurement-value capturing processes just beyond simple cost cutting (A.T. Kearney; 1992). Prior to this group collaborative initiative, it was very difficult for a single pharmacy to source reasonable material needs, owing to the huge complexities involved (limited capital, inadequate information about the market, bureaucratic procedures, documentation involved etc) compared to how it would be when done as a group. It is now being realised that by combining resources, these complexities faced in the past are being greatly reduced, although other new challenges keep emerging due to working together. This is one of the factors explaining why more purchasing managers from the private sector are now looking at group purchasing as a means of reducing on the mentioned complexities (Nollet et al, 2005).
This paper tries to address the extent of the benefits involved in working as a group, rather than a single small pharmacy, and it will base on the findings from central Kampala district private wholesale and retail pharmacies in an effort to justify the need for group sourcing. A close examination of key market sectors where there is significant small and medium enterprise presence and its involvement in private investments led to the selection of this sector.

1.1 Background:

Medicines play an important role in public health care programs, saving lives and drawing people to health facilities, where they can also receive preventive treatment, but the high costs of medicines is putting increasing pressure on health care budgets. The private health sector in Uganda is made up of a significant percentage of very small sized drug shops and wholesale and retail pharmacies mainly located in major towns. This sector is one of the promising and fast growing sectors, well supported by the Uganda Government's Health Ministry. Most of the drugs used in Uganda are basically imported from abroad, mainly India, China, South Africa and Japan. The Government, in promoting primary health care, charges a reasonable duty on these imported drug items owing to its contribution in combating malaria, AIDS and other illnesses. The volume trend of the imported drugs therefore is on the increase in the private pharmaceutical dealers in Kampala (see appendix 1).

Previously, the Government would import and stock these items with its body of National Medical Stores-Entebbe (NMS), from where the private dealers would in turn purchase these. But now due to the liberalisation of the economy, dealers are free to look for the drugs from all over, provided they meet the standards of the National Drug Authority (NDA). At first, individual dealers would source these drugs and distribute them among other small traders in the city. The trend now is that there are many dealers who directly source them from outside, where it has been noticed that some are doing it as a group, unlike in the past where it was not permitted to import these before Liberalisation of the economy. These groups, however, are less pronounced because of tax purposes.

1 More information on importation of drugs at http://www.nda.or.ug/imponation.php
2 National Drug Authority is a body authorized by government to regulate and monitor the standards of all drugs in the country.
Sometimes these dealers are confronted with problems when buying and selling to the public sector, like not being able to find out about opportunities, the disproportionate costs and complexity involved in tendering as well as trends towards securing larger and longer contracts. By operating independently in all these mentioned, wholesale and retail dealers are disadvantaged through lack of knowledge of available opportunities and identifying cheaper sources due to lack of strong bargaining ground. Rather than focusing solely on cost reduction, today's retailers see procurement's greatest challenge as capturing value beyond cost from the supply market (A.T. Kearney; 2004). Firms that have embedded basic sourcing approaches are moving to more advanced cost management concepts to capture every possible opportunity to add value, a move that group sourcing embraces. The retail pharmacies are taking a fair share of the market and public sector buyers like big hospitals sometimes do recommend these as potential sources of reliable drug supplies.

East Africans sometimes pay more than twice what Europeans pay for many essential medicines (Medecins sans Frontieres and Health Action International - MSF/HAI 2000). This was confirmed by the preliminary report: compiled by the Ministry of Health, Health Action International and the World Health Organisation (WHO) revealed that prices of human medicine in Uganda were very high compared to developed countries, saying "The key medicines were found to be unaffordable for the poor". This was attributed to high overhead costs paid on importation and the National Medical Stores' verification and licence charges. This information is important in negotiating for favourable purchasing agreements, making domestic distribution better managed and monitoring pricing policies to improve transparency and consider other options like group sourcing to reduce the prices.

These business-oriented wholesale and retail pharmacies have started to realise there may be opportunities to improve their financial position by partnering with other players: some cases manufacturers, health clinics and dispensaries, whole sellers, distributors among others. Distributors are merging to build mega warehouses and achieve economies of scale, product manufacturers are merging to gain market share, so why not retail and wholesale pharmacies also merging resources in the field of sourcing?

3 Titled: Medicine Price Survey in Uganda: how these prices are set right from the manufacturers' selling prices to the patient's price, by the Ministry of Health. Health Action International and the World Health Organisation
In today's hyper competitive environment, retailers need to find ways to create more value, since no company is independently safe! Building a strategic relationship with similar retailers in the field of purchasing practices is one way of achieving this. This is considered as being a strategic weapon, capable of delivering significant competitive advantage. In order for these retailers to match their impressive performance in such a competitive sector, they are now opting for close collaboration in purchasing; but how much benefits can accrue? Most of the purchasing researchers have concluded that purchasing is a strategic contributor to the added value of the organizations; but only a few contributions discuss the possible kinds of “benefits” that the purchasing group could actually add to the organization (Corina, 2001).

It is upon this background that the researcher developed an interest in investigating the growing need for group sourcing in this sector with a view that perhaps there are pursuant benefits in terms of benefits to each of the participants. Therefore this study will focus on benefits accruing from group sourcing, as an opportunity to improve financial and operating performance of pharmacies.

1.2 Statement of the problem:

The private health sector in Uganda is a fast growing sector and many pharmacies, majority of them retail and wholesale, have sprung up in the country to serve the role of ensuring high quality and cost effective medicine are availed to the population of Uganda. However, most of the drugs used in Uganda are imported mainly from India, Pakistan, China, South Africa and Japan.

Meanwhile there is a growing interest for group sourcing in Uganda to harness the benefits of bulk purchasing that accrue. Thus while there is this barmy rush for group sourcing, this study is developed to investigate the value added through group sourcing for wholesale and retail pharmacies in Uganda.

1.3 General purpose of the study:

The general objective of the study is to improve group purchasing and scrutinize conditions and forms of group sourcing helpful for small pharmacies in Uganda, particularly the benefits,
Shortcomings and differences to the participating and non-member wholesale and retail pharmacies in the Kampala district.

Specific objectives will include:
- To examine whether wholesale and retail pharmacies in Kampala have the requisite conditions to effectively practise group sourcing.
- Investigate why some wholesale and retail pharmacies do group sourcing and others don't.
- Establish characteristics of wholesale and retail pharmacies, as well as the structure of group sourcing arrangements.
- Suggest recommendations to relevant authorities in streamlining group purchasing in Uganda.

1.4 Research Question(s):

This study in its attempt to find a satisfying solution to the problem statement, translated objectives into the following research questions:

a) Are there specific requirements/conditions fundamental to the operations of sourcing groups that must be fulfilled in Uganda, and what are they? Do they vary from one sourcing group to the other?

b) What is the significant gains/shortcomings accruing from group sourcing: are they similar to those mentioned in literature?

c) What are the main characteristics of group sourcing in Uganda?

d) What are the significant differences arising from group sourcing between pharmacies that are cooperating and those that do not? Are there other causes of these differences?

e) If some pharmacies are not practising group sourcing, why is this? Is there willingness to become part of sourcing groups in the future? And why?

f) What will be the impact of increasing number of drug manufacturers in Uganda to group sourcing in future?
1.5 Scope of the study:

The discipline of purchasing is quite broad. This study focuses on group sourcing for small pharmacies in Uganda, and what benefits it adds to the bottom line of these companies.

The researcher singled out the private pharmaceutical sector, particularly the wholesale and retail pharmacies in the city centre. It is one of the small but rapidly growing sectors where the majority of drugs are outsourced, and is attracting several practitioners from public services. The research concentrated on group sourcing activities within this promising sector within the area of Kampala city centre, where most of this business is concentrated, as a case study covering both firms that practise group sourcing and those that do not. The researcher could not cover all other districts to establish the extent of cooperation within this private sector due to a short time frame, but rather used this sample district as a base because it has the largest concentration (about 169 pharmacies) of wholesale and retail pharmacies (see appendix 2).

1.6 Why the topic was chosen:

A review of the available literature indicated that, although researchers have been investigating group purchasing business practices in much of the world, a significant gap remains undocumented when it comes to the African Continent and Uganda in particular! Given the economic potential of the continent for a vast array of raw material products and services, Group-sourcing practices can be studied and understood. There is an overwhelming projection that this region and the continent as a whole can offer significant economic opportunities for global procurement firms as well (East African Procurement News, 2003).

Though there is a growing trend in the field of cooperative purchasing in Uganda, little is known in terms of practical benefits, and reference materials are still scanty. In the private sector mostly, traders of general merchandise and pharmaceutical companies have demonstrated willingness to work as groups in importing goods from outside the country. Some small dealers are still not familiar with the “value added” associated with group sourcing. So in order to guide the dealers through studying the usefulness and benefits associated with group sourcing, the researcher attempted to document the group purchasing benefits for small organisations in Uganda.
1.6.1 Why private wholesale and retail pharmacies?

Before the Ministry of Health abolished cost sharing early this year, 83% of the population used to seek first contact treatment from the private sector. That trend is not likely to change, as governmental health facilities frequently fail to supply medicines and the quality of care is generally low. The majority of the population thus certainly continues to receive drugs and first contact health care from the private sector. These major drug-outlets prioritise sales that give maximum profits to the owners, although there are more varieties of private sector drug outlets than only pharmacies and drug shops. So far, we know little of what actually happens in private sector pharmaceutical purchasing process, and comments on these practices are often impressionistic. Drug purchasing indicator surveys have now been carried out in public sector facilities of many countries, but on private sector activities are remarkably few data (Kibumba, 2001)

1.7 Significance of the research:

These findings are significant theoretically, practically and in terms of policy. This study has established that although group sourcing is still not well embraced by small organisations, the willingness in using it in future is increasing, thus reaffirming earlier findings by Quayle (2002). Of course the sample size was small (n<30), but findings were worth noting. Practically, the study was investigating an aspect on ground, and found it is practically applicable. What is important is to disseminate more information about the concept. The policy makers, on the other hand would be interested in reducing costs of operating business in this new era, and one of the ways is promoting group sourcing; and testing whether this concept can be applied in other sectors of the economy.

As mentioned before, very little is known about group sourcing in Africa. This study, designed as an initial step toward closing this knowledge gap in African group sourcing practices, will be the starting point. Based on the findings and recommendations, several other groups stand to benefit from it. The academic community with a bias in the field of procurement, the business community, and other general merchandise dealers that may consider transferring knowledge of joint purchasing to other sections of business, especially the small dealers might find it useful too. The policy

makers may use it to find ways of helping the small and medium enterprises through advocating for
group sourcing arrangements in other organs of state for maximum benefits.

1.8 Structure of the Thesis:

The thesis is divided into five chapters. In order to achieve the study objectives, chapter one gives a
brief introduction, defines the research problem, the purpose of the research, as well as the leading
research questions of the study. Chapter two will deal with a literature review of studies as it
pertains group sourcing and its benefits to the small organisations. Chapter three describes the
research approach and formulates the appropriate roadmap for arriving at the conclusion. Chapter
four will focus on analysis of data and interpretation of the results. Chapter five then concludes the
thesis with deductions from the observed relationship and policy recommendations to government
and pharmacies for improving group-sourcing practices. Finally, together with the conclusions, the
study gives some suggestions for future research. All these will be linked together, as the diagram
suggests below:

Figure 1: Diagrammatic representation of the flow of the Thesis

Chapter 1: Introduction

Chapter 2: Lit. Review

Chapter 5: Recommendations

Conclusions and future research

Chapter 4: Data Analysis

Chapter 3: Research Approach
1.9: Limitations of the study:

During the course of the study, a number of constraints were encountered and in one way or another affected the smooth collection of information. These included:

- Time was not enough to enable a comprehensive analysis every detail
- There was fear of associating research with tax issues, culminating into failure to 'open up'
- Inability by the researcher to adequately get involved in the actual gathering of data since it is expensive to travel back home.
- The concept sounded very technical to the target group of respondents. A lot of expenses were thus incurred while making clarification calls regularly.
CHAPTER TWO: Review of related literature:

2.0 Group sourcing: A historical perspective:

Group sourcing/ cooperative purchasing has its roots in the cooperative movements of early 19th century England (Wooten, 2003). The idea of cooperative purchasing started when several smaller organizations purchasing the same items realized that putting their requests together would then equal the size of a larger organization procuring the same thing; especially in cases where the supply manager would normally go through a competitive bid or RFP process. According to Wooten, these "cooperatives" were roughly designed to gather the power of many small voices to make one big voice in the marketplace. They were generally based on the values of self-help, responsibility, democracy, equality, equity and solidarity (Wooten, 2003).

Tella et al (2004) articulates that cooperatives have been widely used in the public sector and in the retailing sector, but recently also industrial purchasing consortia have emerged. Cooperative purchasing and cooperative purchasing programs are not so much self-help groups, rather than methods for supply managers to more efficiently procure materials. The other values just come along for the ride, Tella argues. Other areas where cooperatives have been used include procurement of commodities such as school supplies, office supplies, and auto parts, as well as large ticket items like cars, fire trucks, and radio systems (Bishop, 2003). Others include electricity, professional services, and insurances. As an example, in 1992 the Peoria Area Labour Management Council (PALM) established a health care purchasing cooperative to harness the purchasing power of the many smaller organizations within PALM, in order to negotiate better rates with the providers.

Group and cooperative sourcing are popular terms. Even suppliers are increasingly showing interest in the process. They see the potential business to be gained by participating in cooperative purchasing ventures, where a single bid response has the potential of reaching hundreds of end users across a regional or nationwide area. However, this concept is many times misunderstood and under-utilised; but just how easy is it to assess the benefits accruing from it? This chapter therefore seeks to venture into previous work done by various scholars in the field of group sourcing, their

5 Request for proposal
analysis of different forms, reasons attributed to why and why may companies not opt for group sourcing and whether these forms are evident in Uganda.

*Group sourcing: Which description is often used?*

In purchasing literature, many terms are used when referring to group sourcing. Despite certain patterns in the use of the terms, the terminology are not yet fully stabilised (Schotanus et al, Virolainen, 2003). The USDA Rural Development Report (2002) defines a cooperative as a business that is owned and controlled by the people who use its services and whose benefits (services received and earnings allocations) are shared on the basis of use. A cooperative or organization is established for the purpose of establishing contracts to aggregate the common requirements of similar institutions for a maximization of economies of scale when soliciting bids or proposals. This concept, when added onto purchasing, however, slightly changes meaning, now focusing on "two or more organisations cooperating in one or more steps of the procurement process to improve the performance of the participating organisations " (Schotanus et al 2005).

Similarly, the International Cooperative Alliance defines a cooperative as an “autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise,” (quoted from the Principles of Cooperatives as revised and adopted in 1995 at the ICA gathering in Manchester, England). Cooperative purchasing is also known as horizontal cooperative purchasing, group purchasing, collaborative purchasing, collective purchasing, combined purchasing, joint purchasing, pooled, consortium, shared, bundled, mutual, and the list still continues; but internet search engine Google gives group and cooperative purchasing as far the most used ones (Schotanus, 2005). Other outstanding descriptions put forward include “The pooling of purchasing related information, experience, resources or volumes between independent organisations to improve their performances (based on Veeke 2002).

All these descriptions above emphasize working and cooperating together and sharing related mutual benefits accruing from cooperating organisations, which the researcher intends to promote in campaigning for group sourcing among pharmacies. This knowledge will be used to assess whether what is being carried out by cooperating pharmacies in Uganda clearly suits the definitions given above.
2.1 Conditions fundamental to operations of effective group sourcing

This section discusses the literature regarding the research question a): Are there specific requirements/conditions fundamental to the operations of sourcing groups that must be fulfilled in Uganda, and what are they? Do they vary from one sourcing group to the other?

There are a number of critical success factors that supply managers (and participating organisations) look for, that a consortium must take into consideration. These may include, among others, the choice of the product to source through groups, trust, commitment, voluntary participation, similarity of organisation and philosophy, costs and gains allocation mechanisms and whether the consortium not being too large or small (Nollet, 2005; Schotanus, 2005b; Kamann, 2004; Hendrick, 1996). For the purpose of this study, however, emphasis will be directed to: trust issues, commitment, and disclosure of sensitive information and mode/form of cooperation adopted. This is because of the nature and size of pharmacies (small and basically privately owned), and since level of involvement with group sourcing processes is mainly assumed informal. The similarity of the sample size of pharmacies selected for analysis, and inability to explicitly measure the costs and gains allocation in Ugandan context, is yet another reason for not investigating these two.

2.1.1 Trust in purchasing:

Doucette (1997) describes trust as "the expectation that another member will provide competent role performance and meet fiduciary obligations within a business relationship". Trust is important in the Ugandan context because of two reasons: First, the informal sector (which comprises unregistered entities that are in most cases not bound by legal instruments) is still very large and there are some small drug outlets that are in this category in Kampala. Secondly, business legislation is still developing in the country and there are almost no anti-trust laws (which are the instrument that would regulate sourcing groups). Therefore business relations rely very much on informal ties; and when performance expectations are met consistently, a gradual expansion of exchange is accompanied by the growth of trust (Blau, 1964 quoted by Doucette, 1997).

Segura et al (2002) defines trust in the context of inter-organisational cooperation as the positive expectation of outcomes when people and groups interact with others under conditions of risk. To maximise cooperation among the partners a trust-based relationship must be developed (Schotanus,
But understanding the influence of trust among organizations requires an understanding of social trust, which is considered the accumulation of trust at a macro-social level (Dasgupta, 1988 cited by Segura et al 2002).

While contrasting the economic and social factors that facilitate the effective working of group sourcing, Segura argues that social trust, is created when human relationships are aligned to expedite performance and it serves as a resource to arrange transactions in the future that cannot be enforced by law or formal sanctions alone (Segura et al 2005). Smooth inter-organizational cooperation would entirely depend on inter-organizational trust for it requires commitment beyond traditional contractual terms, and the terms of agreement required in a close relationship cannot be listed in their entirety in a contract. Thus the desired working relationship need be based on a high level of trustworthiness; and the researcher will investigate the extent of trust as one crucial factor within group sourcing pharmacies in Uganda.

Gray (2002) however, observes that trust cannot be achieved anyhow, unless members view each other as elements of a system or network. Such systems ensure flow of information, goods and money for running the group. A high degree of trust among all participants is most easily established in horizontal consortiums, as members are rarely involved in long time direct competitors. In instances where cooperatives are characterised by speculative short-term gains there could be emergence of predator behaviours likely to 'kill' as many 'preys' as possible (Kamann, 2004). But to allay this concern of prey-predator model, the members of the group can specifically target non-strategic or non-proprietary items for group contracts.

In this case pharmacies are in a vertical consortium. It would therefore follow that in the presence of low levels of trust; the members would be less willing to share sensitive information, which is needed to develop commitment (Scanzoni, 1979, doucette, 1997). On the other hand, a high level of trust can foster a sense of shared identity between members and the purchasing group.

Uganda's case suits this characteristic, given that they trade the same goods and are in long-term competition. The study will therefore try to explore whether this affects trust and the effectiveness on sourcing groups among pharmacies in Kampala.
2.1.2 Commitment among the group members:

Commitment refers to the desire to maintain a valued relationship (Doucette, 1997; Moorman et al, 1992). According to BLight (2000), commitment of key players in the group before and after the formulation of ideas relates to certainty of progress in the organisation. He asserts that unless a measure of certainty on buy-in can be assured, negotiators on behalf of buyers have a weak hand. This idea is further supported by Doucette (1997), who emphasizes the interest of the group organisation's interest in having members committed to using suppliers contracted with it, to realise expected purchase volume. Doucette identifies factors like: satisfaction with the group, perceived commitment with other group members, suitability of alternatives to group members, degree of information exchange and trust, for the success of member commitment in an organisation. Whereas for the most part, the benefits will have to be sufficiently great to attract the loyalty of participants, some measures like monitoring are needed to ensure a high level of participation in the group.

Gray (2002) adds a communication aspect to commitment. To him communication of the ultimate goal of the alliance to the member organizations and gaining commitment to actively participate and add value to the group is essential. The best model for success is to attain upper management understanding and commitment to the mission accomplishment, he further advises.

However, there are significant differences in the level of organizational commitment and support with regard to small, medium and large group members (Rendal 1997). The reasons not to work together are more important to small agencies than larger ones. The small ones highly believe in control and fear dictation and dominance over larger ones. The bigger ones, however, look at the presence of small firms in a cooperation as supplementary complimenting and topping up the would be escalating costs of acquisition, transit charges, storage and clearance on boarders (in case of importation etc). It will be determined whether small firms benefit more from the presence of the big group members because of the economies of scale brought in by the latter.

The study will therefore investigate the importance of trust among Ugandan pharmaceutical firms and what level of it prevails in the process of group buying and will similarly inquire about commitment to the buying group.
2.2 Group sourcing arrangements and forms commonly used:

This section discusses the literature regarding the research question c): what are the main characteristics of group sourcing in Uganda?

Although several studies have been conducted on group sourcing (also called cooperative purchasing), a clear specific classification of group sourcing arrangements is still lacking and not yet very clear! These studies dealing with group sourcing have not clearly defined and classified the studied forms yet (Teigen & Schotanus, 2005). However, most of the related literature discusses mainly informal or formality of these arrangements of group sourcing without classifying them (Ibid.5), they argued while giving their opinion.

Group sourcing has been mainly utilized in public procurement for several years to gain economies of scale (Meyer, 1994). These practices are also increasingly being applied in the private sector. These arrangements can be broadly classified as being ‘formal’ and ‘informal’ sourcing arrangements. With formal group sourcing, each participating organisation must give up its purchasing autonomy to be part of the general agreement and each participant must plan ahead to coordinate the timing.” According to Meyer (1994)7, “The informal method is simple. First, determine if you have the legal authority to buy from someone else's contract. Then, when you are ready to buy particular products, seek organizations that have the products on contract. You merely review the contract to be sure the products, prices and terms meet your needs, and then establish separate billing and delivery requirements with the vendor holding the contract”.

2.2.1 Collaborative model:

The collaborative model of cooperative purchasing, according to Wooten (2003), exists when multiple private-or public-sector entities join together to increase the performance and competitiveness of their organizations and lower operating costs through volume leverage. Generally, this will begin when one organization needs to source and procure a particular product and the supply manager will contact other organizations to see if they have similar needs.

7 Recycle, reuse and reduce: Understanding Cooperatives:
   http://www.recycit/works.org/paper/coop_int.o.html
To him, lead organization will then establish a common specification and procure the product for all, or separate out the award based on the various requirements of the other organizations. Because the lead agency takes on all of the cost and administrative burden of the process, it will then ask that another one of the entities in the group do the procurement for another commonly needed item. To make full use of the collaborative model, most members of the group should take on the responsibility for procuring a different commonly needed product. In the end, each organization obtains the products it needs, but has only gone through one procurement process. This collaborative model works best for commodity-based purchases, where specifications for a group of organizations will be close if not the same.

Other scholars have suggested that a description of classifications be based on unique characteristics involved in its application (see Schotanus & Teigen 2005); whereas others have described this model as a ‘Joint Purchase’ (Purchasing Manual (2000). This is where two or more governments join to purchase one or more goods or services jointly in joint purchases. It may involve each government handling part of the administrative chores or agreeing to have one of the governments handling the transactions under the guidance of the others. Purchasing duties can be rotated periodically, if the arrangement is long-term. All parties to a purchase, however, must agree to the specifications, so that a mutually satisfactory good or service is ordered.

2.2.2 Third-party model:

When purchasing through a third party, several organisations agree to allow an independent agency to do all or part of the purchasing for them (Purchasing Manual, 2000). One entity creates and operates a cooperative purchasing program and allows other entities to purchase through “blanket contracts” that have already been awarded to the program (Wooten, 2003). Oftentimes the entity that organizes the program does not even use the goods and services it is procuring. Rather, it goes through a procurement process and awards a contract for a blanket period of time. Other members of the program can then purchase these items, taking advantage of the fact that the items have already been competitively sourced and bid, and much of the administrative work is complete.

The third party is usually responsible for researching the product area, identifying the major suppliers in the industry, conducting the procurement process (e.g., competitive bid or request for

8 Texas Comptroller of Public Accounts' Model Purchasing Manual for Texas Cities and Counties
proposal), evaluating supplier responses, making awards, and administering the contracts. It's a one-stop shop for an organization interested in procuring a particular good or service. One of the drawbacks, though, is that an organization purchasing through a third-party program has less input in the process. Also, the program may not have procured exactly the type of product an organization needs. Whereas the collaborative model has all members sharing the workload by each procuring a different product, the third-party model is usually more formal in structure.

Because the third-party model involves a host program operating apart from the various members, it can often source and procure relatively quickly. In this sense, it is easier to establish contracts for high-ticket, capital-intensive products requiring lengthy specifications. This model can be attractive for an organization when it is faced with the once-a-decade purchase of something like a fire truck. When comparing the administrative cost of a purchasing department researching, writing specifications, awarding, withstanding grievances, and administering the contract, it is often more cost-effective to eliminate all of that and purchase such an item through a cooperative purchasing program.

One of the drawbacks, though, is that an organization purchasing through a third-party program has less input in the process. Also, the program may not have procured exactly the type of product an organization needs. Whereas the collaborative model has all members sharing the workload by each procuring a different product, the third-party model is usually more formal in structure.

2.2.3 The hybrid model:

This is a combination of both models discussed above. It's when one supplier wants to purchase a good or a service through a contract administered by another organisation (Wooten, 2003). So, one firm makes use of the procurement process of another with an agreement of the supplier. Other authors have described this model as "piggybacking". Piggyback contracts are contracts that allow agencies to use Program Purchase Agreements to "piggyback" on the contract terms and prices. Both organisations in this case should protect themselves by establishing an agreement in writing, even when the arrangement is informal (Purchasing Manual, 2000). This agreement should specify the duties and responsibilities of each party. The advantage of this approach is that it is relatively easy to administer and reduces administrative costs and can result in a significant bid price reduction.
2.2.4: Which joint purchasing model is evident in Uganda?

The operations of NMS, an independent neutral party, agree with the arguments of a third-party model presented by Wooten (2003) since it procures drugs centrally (under Government control) and doesn't use the items. It carries out the purchasing process and the administrative work and preserves quality standards because of the well state-supported structures and financial assistance. It is quicker in procuring drugs compared to those who import directly into Uganda, though specialises. In essential drugs. Its major shortcoming is inability to offer a variety of drugs, particularly the expensive drug types like those stocked in international hospitals, thus creating a gap that is filled by more importation from financially able pharmacies.

Despite the presence of NMS to serve interests of drug dealers in the country, there has been an increased production and importation of specific, particularly expensive commodity-based purchases that NMS doesn't handle. It is in this field where collaborative arrangements are beginning to emerge. The increasing need for Anti-Retroviral Drugs, emergence of private international hospitals, increased production of drugs and other expensive health boosting-related drugs are explaining this arrangement, which is better than NMS because of providing a variety. This is not a nation-wide approach but mostly used by some big Kampala wholesale and retail pharmacies.

2.3 The benefits accruing from group sourcing

This section discusses the literature regarding the research question b). “What are the significant gains/shortcomings accruing from group sourcing; are they similar to those mentioned in literature?

Typical advantages of group sourcing are similar to the benefits of centralised purchasing in an organisation (Kivisto, 2003) and are numerous and rather obvious (Schotanus et al. 2005; Noller, 2002; Karnann, 2004). By pharmacies sourcing goods together, lower prices or better service can be obtained from suppliers (Heijboer, 2003). The following table summarizes the theoretical advantages and disadvantages of group sourcing.
Table 1: Summary of advantages and disadvantages of group sourcing:

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leveraging value-added pricing, reliable supply and technology</td>
<td>Having to communicate, decompose tasks, coordinate, and monitor performance</td>
</tr>
<tr>
<td>Reducing transaction costs, workload, risks, and tender process time</td>
<td>Having to change specifications, suppliers etc.</td>
</tr>
<tr>
<td>Sharing purchasing experiences, information and expertise, and learn each other</td>
<td>Dealing with resistance and in size, commitment, competence, policy and support</td>
</tr>
<tr>
<td>Specialising in purchasing typical products</td>
<td>Loosing (local) existing relations with (small) suppliers</td>
</tr>
<tr>
<td>Gaining better access to more resources</td>
<td>Risking disclosure of sensitive information, fear of 'parasites' and dealing with anti-trust and legal issues</td>
</tr>
<tr>
<td>Standardizing and harmonizing procedures, policies and extending the cooperation to other fields</td>
<td>Lacking enough knowledge, competence or having no opportunity purchase cooperatively.</td>
</tr>
</tbody>
</table>

Indeed with such benefits as cost reduction, increased product availability, and improved efficiencies, some organizations are eager to be 'group members' with other businesses (Gray 2002). However, issues such as trust, cooperation, and a limited supply base instill reluctance from some companies to test the consortium environment. Gray further observes that the largest challenge for these groups, besides getting them off the ground, is intelligently leveraging the collective buying power of the group while tailoring contracts to fit individual member's needs. This may however be on a minimal extent in the case of the pharmaceutical firms in Kampala, which have basically a similar set of product requirements. It nonetheless raises a good research query.
There is also a problem of larger members who often times believe they are the ‘Alpha Dog’ and deserve better pricing and terms than the rest of the group. This thinking is a detriment to these alliances as it impacts heavily on commitment and trust by, especially the smaller members.

2.4 Group sourcing in the Private Health sector in Uganda:

This section discusses the literature regarding the research question f): What will be the impact of increasing number of drug manufacturers in Uganda to group sourcing in future?

Uganda has five active large-scale manufacturers of which two, Rene Pharmaceuticals and Kampala Pharmaceuticals together produce a range of over 50 good quality products. The others UPL, Bychem and Medipharm are coming up with technical assistance from NDA; and Nee10 Pharmaceuticals is in the process of restructuring and re-organisation. Main supplier firms are located in India, Pakistan, Kenya, Germany and Ireland. Kampala district in particular, accommodates 68% of the total number of Pharmacies in the country yet it has 5% of the total national resident population. The two governing bodies: the NDA is mandated to monitor units of drug distribution in the private sector ranging from clinics, nursing homes, hospitals, drug shops and pharmacies and to prevent the circulation of drugs which are unfit for use and the National Drug Policy (NDP) aims to contribute to the attainment of a good standard of health, through ensuring the availability, accessibility and affordability at all times of essential drugs of appropriate quality, safety and efficacy, and by promoting their rational use.

The drug production in Uganda seems to be on an upward trend, with at least one new manufacturer being attracted each year. Table 2 shows the number of retail and wholesale pharmacies are on the increase (figure 2), because of majority participating in direct importation of drugs, or being supported by local producers of drugs. This solves the problem of drug availability as a whole. Although drug shops were closed down in a massive swoop in 1999 due to operating illegally, figures show that they are steadily coming up again in big numbers. Refer to figure 2 for details. Analysis of the trends in facility increases can be more visible from the illustration (figure 2) below. Not that the figures of 2005 are based on estimates, as registration goes all the year around. It can be deduced that after the crackdown of illegal drug establishments at the end of 1999, lead to

9 Uganda Pharmaceuticals Limited; NDA is ational Drug Authority
10 National Executive Corporation-The army pharmaceutical company: manufactures generic drugs-managed by Uganda Peoples’ Defence Forces (UPDF).
closures of several that had been registered. They (drug shops) are however germinating again in numerous locations within the city.

Table 2: Drug facilities licensed by year:

<table>
<thead>
<tr>
<th>Facility</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacies</td>
<td>222</td>
<td>232</td>
<td>146</td>
<td>149</td>
<td>163</td>
<td>194</td>
<td>205</td>
<td>235</td>
</tr>
<tr>
<td>Drug shops</td>
<td>1804</td>
<td>2495</td>
<td>325</td>
<td>430</td>
<td>543</td>
<td>679</td>
<td>800</td>
<td>937</td>
</tr>
<tr>
<td>Large scale Manufacturer</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Small/Medium Scale</td>
<td>4</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Manufacturers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: National Drug Authority (NDA).

Figure 2: Pattern of increasing pharmacies in Uganda: 1998-2005
2.4.1 Drug prices in Uganda: Do member and non-member pharmacies charge different prices?

This section discusses the literature regarding the research question d): What are the significant differences arising from group sourcing between pharmacies that are cooperating and those that do not? Are there other causes of these differences?

Several studies have reported wide variations in the retail prices of several essential drugs among countries (WHO, MOH-Uganda), and concluded that retail prices of several essential drugs are higher in developing countries of Africa and Latin America than in the rich OECD countries. One example is the potent antibiotic ciprofloxacin, which is twice as expensive in Uganda as in Norway (MSF/HAI, 2000) 12. This is attributed to factors like high taxes, copyright laws that prohibit duplication, and the procedural costs of purchasing drugs. Consumers have argued that these wide variations are due to the industry setting prices arbitrarily to maximize their profits (Nazeem. 2002). This claim has been refuted, however, on grounds that the variations are due to economic factors within the country including import duties and wholesale and retail mark-ups.

Research findings from this study seem to support the industry's argument (refer to chapter four). Another evidence from an international Health report noted that, "International price comparisons in the field of pharmaceuticals are subject to many pitfalls and retail prices, in particular, are often a far distant, relative to manufacturer's selling price' (Balasubramaniam, 2000). Wholesale and retail margins can be as high as 150 to 200 percent in some developing countries, the report explains. Distribution margins and taxes can constitute up to 80 percent of the consumer price (WHO/MOH, 2005). Import duties, taxes and wholesale and retail mark-ups, both formal and informal, can double the price of a drug between manufacturer and consumer. The more the distribution drug channels to the final consumer, the higher the final price. These channels are illustrated in diagram 3 below.

It can be concluded that the variations in retail prices are due to variations in the prices set by manufacturers in different markets, and other incremental charges that keep hiking the final price. Incidentally, consumers do not understand how price discounts can be negotiated without knowing the real costs of production and how the industry sets drug prices. In a bid to promote group

1 OECD means 'Organization for Economic Cooperation and Development'.

12 Medecins sans Frontieres and Health Action International - MSF/HAI 2000
sourcing in Uganda, these differences in drug prices between sourcing groups and non-members will be studied. Recommendations on drug prices, and how acquisition costs can further be lowered will be given more emphasis.

2.4.2: The pharmaceutical supplier to customer supply chain:

This section describes drug distribution to the general public in the Ugandan private sector.

In Uganda, drugs can easily be obtained from every professional and licensed health provider, although several illegal outlets exist. In fact, there is unfastened access to medicines, thus promoting several informal collaborations between drug outlets. The majority of pharmacies, drug shops, health clinics, and hospitals seem to be in this arrangement (shown as group sourcing area. Refer to figure I for details).

The sources of drugs to the general public (see also figure 3) include: Health clinics; Drug shops; Pharmacies (wholesale and retail); Private hospitals (which may be called medical centres, nursing homes, etc) and Pharmaceutical manufacturers.

The National Drug Authority (the Drug Regulatory Agency) licenses only drug shops and pharmacies. Clinics are major sources of drug supply to the general public. Private hospitals are also important drug outlets. As part of their response to the growth of consumer power and increased need for health services, wholesale and retail pharmacies and other drug retailers are extending their influence over associated market channel activities. They control key elements of the distribution and marketing system are attempting to control each level of the process up to and including delivery to the consumer, according to Kibumba 13 (1999).

13 He was the Community and Drug Information Pharmacist, Uganda.
As noted from above, the figure reveals potential areas where group sourcing could be practised. Among these, the drug shops, the wholesale/retail pharmacies, the health clinics and private hospitals. This area is characterised by a lot of cooperation, as one entity finds easy to cooperate with one another. The pharmacies are the potential sources of drugs to the drug shops in Kampala, and as well serve the private hospitals. It should be noted that all these entities are very closely connected to the pharmaceutical manufacturers in Uganda, as manufacturers trade drugs direct to them through contract supplies. Interestingly, these drug units are at closer access to the final end user as well, thus explaining the numerous arrows in the figure. So, it can be said that there is no clear channel through which drugs flow to the final end user.

2.5 Why do some firms do not jointly cooperate in purchasing of drugs?

This section discusses the Literature regarding the research question e): If some pharmacies are not practising group sourcing, why is this? Is there willingness to become part of sourcing groups in the future? And why?
Though a lot of benefits have been highlighted, there is empirical evidence that small firms are still reluctant to fully embrace group sourcing (Tella, 2004; Nollet, 2002; Mudambi, 2003), although from a financial point of view of joining a sourcing group is worthwhile (Heijboer, 2003). This reluctance is often hastened by the firm's competitive environment, characterised by sensitive information, supplier resistance and fear of 'parasites'. Where survival and continuity in the same business dictates lower costs, group sourcing need be initiated. Despite joint sourcing being theoretically associated with increased savings and greater control, available by cutting the "middle man" and dealing directly with the foreign supplier, some pharmacies are not yet very keen on joining these sourcing groups! The reasons attributed to this is that pharmacies, City council clinics and other clinics in town can get drugs from the National Medical Stores (NMS) in Entebbe (Government-owned Organization) that purchases/imports in bulk and sell to hospitals, army, police and prison organs at a competitive, but manageable cost. I presume NMS adds on margin to cover their administration, storage and services costs. It should be noted, however, that NMS deals mainly in essential and less expensive drugs, thus not all drugs sold by these pharmacies can be obtained from NMS. Some big pharmacies can import direct from overseas manufacturers if NMS does not have all required stocks; and because of this reason, some pharmacies exist that do not use joint sourcing groups for several products which can be acquired locally. Sometimes, with bulk orders, some items ordered abroad are not the actually delivered ones, yet companies do not find it easy to send them back due to freight and custom regulations.

The presence of NMS, in Entebbe enables pharmacies to buy drugs single handily even without joining hands. This is attributed to the proximity of the facilities in relation to location of major towns in Uganda, the benefits of quality standards already approved by NDA, the well-developed pharmaceutical procurement infrastructure in place, the experience the organisation has built overtime in drug management but more importantly the possibility that it doesn't require a lot of capital. There is no fixed amount of quantity a pharmacy can buy at any moment, but rather depends on financial capacity of the individual pharmacies. This makes them better off dealing individually because of the flexibility of the system employed at NMS.
CHAPTER THREE: STUDY APPROACH:

This section explains a link between the general purpose, research objectives and the transformed research questions that were followed in designing a questionnaire for data collection. It is based on a systematic strategy framework (road map) followed in linking the variables and the relationship between the research questions and accompanying techniques used in the collection of data provided by the informants (respondents) from a broad sample of pharmaceutical dealers in Kampala district. It focused on the study area, study design, subject sampling, instruments/methods to be used, and procedures followed when collecting data as well as methods of data analysis.

3.0 Research design:

This study focused on different pharmacies and how they benefit from group sourcing. The Study utilised mainly qualitative data and to a lesser extent quantitative data. This research method was used because of the nature of inquiry in establishing what was happening on the ground, in the field of group sourcing among the private drug practices in Kampala.

3.1 Area and population of Study:

The study was carried out in Kampala district. A correspondent whom the researcher contacted provided research assistance. The study targeted the purchasing executives on site of their sampled entities. Asking questions as well as searching for any available literature from previous scholars accompanied this. The research problem was studied by making use of primary data sources gathered from the pharmacies, making use of secondary data from published sources, reviewing literature, journals and other publications including online sources. Much emphasis was however set on recent articles on cooperative purchasing, since information is still scanty in this field.

3.2 Research Instruments used:

The survey is embraced mainly qualitative and a little bit of quantitative aspects, and the following methods were used:
g) **Telephone Interview:** Occasionally, the researcher contacted the respondents by directly calling Kampala to clarify on key issues, but it depended on availability of resources. This was meant to guide on filling of questionnaire and giving clarity on respondent queries.

h) **Mail & Post Questionnaire:** Because of the distance existing between the researcher and respondents, use of questionnaire was the major tool for data gathering. Both open and closed questions were used for a more comprehensive data gathering.

i) **Secondary sources:** Any useful document about pharmaceutical dealers especially from the ministry of health and Uganda Joint Medical Stores were explored. These included paper presentations, periodicals, newspapers, and journals among others. The Internet was a useful source for previous research reports and findings, particularly, the previous papers presented in various conferences as these contained up-to-date information on the cooperation around the globe.

A letter of introduction seeking permission accompanied the questionnaires channelled through the contact person to the respondents. To restore confidence and willingness among respondents in giving accurate information, confidentiality was emphasised.

### 3.4 Sample size Selection:

The study utilised a roll of 35 leading wholesale and retail pharmacies around Kampala, and selective random sampling was used to identify respondents. A list of all the companies dealing in pharmaceuticals in Kampala was obtained from Kampala City Council (KCC), the city's business licensing authority, NDA, and the Ministry of Health (MOH). Out of the availed list, a simple random sample of 35 (assumed enough representative of population being studied ($n=35>30$, thus big sample)) leading pharmacies will be picked and to the purchasing executives of these firms, questionnaires were administered.

Simple random sampling was used because the population of pharmacies is a finite population (totalling 169 in Kampala). Each of these pharmacies had equal chance of being selected. Each pharmacy was assigned a number, thus having equal chance of being included in the sample. Sampling without replacement was used, to ensure that the same pharmacy is not selected twice. In the case of public pharmacies that were included, a person more knowledgeable selected these pharmacies, which he felt were most representative of all. This was because these public pharmacies reflected the general opinion of all other public pharmacies.
3.5 Data Collection Procedures:

Because of the knowledge gap and the distance existing between the researcher and the identified area for research, much of the techniques involved sending postal and mail questionnaires (see appendix 4 & 5) to the selected respondents dealing in private pharmaceutical companies in Kampala. Direct one-to-one dialogue with the use of phone services were occasionally used to clarify on the pertinent issues.

In addition, secondary sources were consulted in trying to relate how other researchers have attempted to address the same issues elsewhere in the world. On reporting about the strength of the cooperation, a Likert scale was used from a representative administered survey.

3.6 Proposed activities and time schedule during research process:

The process probably took four to six weeks while carrying out data gathering. The following activities guided smooth collection of data:

a) Visits to the NDA, NMS, JMS Uganda Protestant Medical bureau and Uganda Pharmaceutical Society offices for any available literature/reports operating pharmacies.

b) Field visits for locating the randomly sampled pharmacies and request for permission to interview and gather information from their business outlets.

c) Distribution of questionnaires and interview sessions to respondents.

d) Collection of questionnaires from field.

e) Discussion of responses with some respondents for clarifications.

f) Organisation and postage arrangements,

g) Data classification, tallying, analysis and interpretation. Details are summarised in the table below:
### Table 3: Time schedule showing steps & estimated time during the study.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Activity</th>
<th>Start</th>
<th>End</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.a)</td>
<td>Checking any available literature on pharmacies in Uganda.</td>
<td>July 2005</td>
<td>July 2005</td>
<td>1 Month</td>
</tr>
<tr>
<td>1.b)</td>
<td>Intensive literature study</td>
<td>July 2005</td>
<td>July 2005</td>
<td></td>
</tr>
<tr>
<td>2.a)</td>
<td>Proposal Write up</td>
<td>August 2005</td>
<td>August 2005</td>
<td></td>
</tr>
<tr>
<td>2.b)</td>
<td>Design of Survey questionnaire</td>
<td>August 2005</td>
<td>August 2005</td>
<td></td>
</tr>
<tr>
<td>2.c)</td>
<td>Testing questionnaire for reliability of suggested responses</td>
<td>August 2005</td>
<td>August 2005</td>
<td>1 Month</td>
</tr>
<tr>
<td>2.d)</td>
<td>Proposal Approval</td>
<td>August 2005</td>
<td>August 2005</td>
<td></td>
</tr>
<tr>
<td>3.a)</td>
<td>Data collection, field survey, selection of pharmacies</td>
<td>September 2005</td>
<td>1st 2 WKS- September 2005</td>
<td>2 Weeks</td>
</tr>
<tr>
<td>3.b)</td>
<td>Data Analysis &amp; Presentation</td>
<td>Last two wks- September</td>
<td>End of September</td>
<td>2 Weeks</td>
</tr>
<tr>
<td>4.a)</td>
<td>Recommendations and conclusion</td>
<td>October 2005</td>
<td>1st 2 WKS- October 2005</td>
<td>2 Weeks</td>
</tr>
</tbody>
</table>

#### 3.7 Data analysis and reporting procedures:

This involved the use of analytic, statistical and mathematical tools like percentage changes, and ratio comparisons. Statistically, the use of weighted averages method of assigning weights to
Scores, use of pie charts and bar charts were greatly used to represent response rates. Simple statistical tests of comparing sample to population, as well as proving casual relationships identified in table 4 were also employed, in addition to logical reasoning, descriptions and narrative methods and use of number aggregates.

3.7.1 Suggested roadmap for linking theory to practice within wholesale and retail pharmacies:

The procedure as outlined below summarizes the guide followed throughout the thesis write up. It begun by examining what is happening on the ground: the distribution, nature of operation, sources of drugs and reveals the gaps to investigate further the sourcing of drugs. Specific literature focused on comparison of benefits enjoyed by joint sourcing groups, shortcomings and whether this creates a difference arising from group sourcing from the rest of other pharmacies. The nature of operation of these pharmacies, their source of drugs and their main suppliers gave rise to the type of purchasing model in close comparison with Wooten's (2003) models, among others. A relationship is built up in connection to how one linked to the other. Formulation of research objectives, research questions and the relationship between these in trying to answer the general purpose of the study is closely connected. A survey questionnaire that answered the research questions followed, after being tried on a few individuals to establish the reliability of suggested responses. Distribution of this questionnaire, data collection, analysis and presentation led to suggesting recommendations to relevant authorities, particularly the Government and the pharmaceutical companies on way forward. These focused (but not limited) to the organisation, cooperation, promotion, logistics and operational arrangements to realise more benefits. The following diagram in figure -4 explains this.
Figure 4: Suggested roadmap for improving group sourcing among pharmacies.

- Literature: Which Forms of group sourcing are evident in Uganda?
- Literature: Benefits
- Literature: Shortcomings

- Analysis of cooperative purchasing Literature
- Identifying the Gap between literature and study topic
- Wholesale and Retail Pharmacies selected
- Testing reality of benefits and shortcomings of group sourcing against theory, basing on literature

- Research Objectives
- Research Questions
- Would it work? Testing it
- Questionnaire design

- Data analysis, Presentation and general Recommendations

- Recommendations to Government on Organisation, logistics
- Recommendations to pharmacies on Organisation, logistics, financial arrangements

- Making a follow-up
CHAPTER FOUR: ANALYSIS OF MAJOR STUDY FINDINGS:

4.0 Introduction
Out of the 35 wholesale and retail pharmacies that were sent questionnaires, 25 were returned, indicating a 71% response rate. Of the 25 pharmacies responding to the survey questionnaire, only 5 (20%) were currently involved in practising group sourcing. 12 respondents (48%) indicated to have no idea about group sourcing, but showed strong interest in practising it in the future, once sensitised. This also reaffirms earlier research done [e.g. Quayle (2002) on UK small firms] that organisations are increasingly getting interested in joining group sourcing. Three respondents (12%) showed no immediate interest, but could join group sensitisation as well in the future. The remaining respondents were non-committal on what they do, and what will happen in the near future. It should be noted that the remaining 10 (30%) never submitted questionnaires back, for unknown reasons. Later, the explanations given by the directors of these pharmacies from a follow up, said the questionnaires were too technical to them, thus never wanted to keep guessing; and needed more time to make consultations. Figure 5 summarises these percentages below.

Figure 5: Proportion of group (and non-group) sourcing pharmacies
4.1: Typical characteristics of wholesale and retail pharmacies:

Partnerships and limited liability companies dominate this sub sector (64%); the rest being sole traders (16%) and only one case of a charitable organisation (4%) was involved (figure 6). This is a true representative of the majority of business units in Uganda in general. Sole proprietor businesses are also many, but too small in size and predominantly retailer businesses. In order to make the research more comparative, public pharmacies were also sampled (16%), because it was realised that these were the major drug-distributing agents in Uganda\textsuperscript{14}. The majority of these pharmacies were subsidiary and commercial oriented (60%), and the rest being parent companies (24%) and government owned organisation (16%).

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{Diagram6.png}
\caption{Diagram 6: Pharmacy legal status}
\end{figure}

The responses further proved more reliable as the majority of the respondents (76%) were responsible for drug purchasing decisions in their organisations. Only a meagre 12% were not in control of these decisions; and the remaining 12% showed no response. I was encouraged to discover that a big percentage of our respondents were willing to be contacted for information.

\textsuperscript{14}These comprised of National Medical Stores, Entebbe; Joint Medical Stores, Mulago Hospital Public Pharmacy and Masaka regional Referral Hospital public Pharmacy
4.2: Structure of group sourcing organisations:

Results indicated that there is no formality of existing group sourcing organisations in place among the responding organisations. They further revealed they are involved in a collaborative arrangement, and mainly informal in nature. Once there is a sourcing need of a specific drug(s), one pharmacy will contact others to check if similar needs existed; then go ahead to source the drugs. Five respondents (20%) indicated having an “informal”, and seasoned arrangement, similar to a sourcing group, but some suggested it would qualify as a "purchasing network". This purchasing network arrangement lacks documentation and written agreement in conducting business. It was further revealed that there are no specific requirements necessary for joining such a sourcing group. Only three respondents (12%), however, indicated a move to document their group sourcing needs in the near future, by borrowing a leaf from their overseas parent companies. Private hospitals with big pharmacies were also being enthusiastic in taking part in the joint bulk purchasing system, and willing to document their arrangements. Only two respondents estimated the number of those taking part in informal sourcing group arrangements in place as 9 and 13 members); but said this number keeps changing from time to time, due to variations in drug stocking needs of these pharmacies. This composition of the sourcing group therefore could not be relied upon for serious forecasting.

4.3: Sourcing strategy and purchasing department:

Thirteen respondents (52%) confessed that their pharmacies don't have a documented sourcing strategy that guides them in executing their sourcing needs. Actually, these happened to be the sole traders and some partnerships, which operationally behave as 'one man business'. They however added that this has not affected their operational performance, since they get drugs easily from NMS and other drug-distributing units with ease. Only four responses (16%) reported its existence in their pharmacies, and these happened to be subsidiary pharmacies belonging to major Indian overseas pharmacies overseas. This, in future, would be an interesting area of emphasis during dissemination of information for purchasing officers in the pharmaceutical sector. Purchasing individually was a common response in reaction to sole traders purchasing needs, and claimed they don't need to have a strategy, since they closely monitor the environment; and given their very
Limited capital involved 15; big pharmacies would not easily accommodate them in sourcing together.

On an interesting note, the directors of sole sourcing pharmacies revealed they act as the purchasing department (60%), a move aimed at minimising operational costs. Only 40% reported having a fully operational department, but with ever changing purchasing personnel on a rotational basis. It was discovered that this approach was intended to instil basic skills to all employees of the pharmacies, and minimise fraud and shrewd with drug distributing agents. On occasions when these directors are away, even their pharmacies are ‘away’!

4.4 Experience with group sourcing:

It was reported that no conditions are set, even for those practicing group sourcing informally. There were no requirements for joining, and no penalties for withdrawing from this arrangement, for the five (20%) who reported using this informal arrangement. Of the total 26 frequencies for rating the benefits of group sourcing (question 13, appendix 4), sharing of information and getting a higher quality were singled out (53%) as the basic benefits accruing from this arrangement. The rest of the scores like: lower prices, lower transaction costs, reduced work load and reduced supply risks; were rated ‘moderately evidenced’ as accruing from a sourcing group.

Several observations have been noticed with these scores. With the method of attaching weights from 1 to 5 and using the weighted average method, the average scores for the benefits were relatively low, but ‘sharing information’ and ‘higher quality’ scored highly at 2.9 and 1.9 respectively, compared to others (refer to figure 7). These ratings highly exhibited whether the pharmacy was involved with group sourcing or not, with practicing pharmacies rating these dependent variables highly better than non-sourcing group pharmacies (more details on relationship is in section 4.9.1). The low averages are attributed to the very small number of group practicing pharmacies (20%) out of the total number of respondents. Other low scores could be attributed to unformulated methods of assessing some complicated benefits like transaction costs and supply risks. Sub categories based on size of pharmacies revealed that the respondents from wholesale pharmacies rated these benefits highly, compared to the small retail pharmacies involved.

15 Limited capital to them would be less than 15 Million Uganda Shillings (less than € 7.000)
in the research. Incidentally, only two large public pharmacies and two wholesale large pharmacies could substantially reveal their details on the questionnaires.

Basing on the results, ‘Operational benefits’ was rated highly (50%) as a major category of benefits accruing from group sourcing, in relation to financial benefits (25%), organisational benefits (12%) and logistical benefits (13%). These results in the near future are likely to change, as majority showed willingness to follow group sourcing issues in future. If they form some groups or join the informally operating sourcing groups, perhaps they might have a changed mind in future.

4.5: Do some members dominate because of size, ownership and experience?

Only four large government pharmacies (16%) agreed enjoying special considerations because of their size, and being public in nature. This included influencing the importation of specific drugs, not yet available on the market, as well as enjoying volume discounts and credit terms from suppliers. Clarification sought through a research assistant on this aspect indicated that sometimes it’s a government directive to be implemented by these pharmacies through NMS and NDA. The payments for services for running the informal sourcing groups are basically in form of a percent add-on for each purchase made on their behalf (80%), thus no fixed costs set but rather varies basing on volume ordered.
Typical shortcomings reported by respondents included anti-trust issues and coordination costs as being greatly encountered, with frequency of 3 and 4 (18% and 32% respectively). Figure 8 shows how averagely each was rated. It should be noted that the response scores were few, and unevenly distributed, explaining why the average rating scores were relatively low. Like what other scholars found out, it was also evident that anti-trust issues still hamper group sourcing arrangements, by scoring an average of 1.4 (see figure 8). This average is low, and could probably reduce further if more commitment and use of technology applications for data tracking purposes. Other variables scores meagre values, an indication that the extent of the these shortcomings are greatly reducing, yet those of advantages (figure 7) seem to be on the increase.

Quality, communication, and checking expiry dates were reported as ‘very important’ associated with the characteristics of efficient and effective group sourcing. There was however a high degree of uncertainty or lacking knowledge, as very few filled in this part! Respondents were either ‘definite or probable’ (40%) or ‘not sure’ (57%) in recommending other non-group member pharmacies to joining sourcing groups.

Figure 8: Shortcomings of group sourcing: average scores based on a 1 – 5 scale

4.6: Why are the majority of pharmacies not group-sourcing members?
As already highlighted before, respondents continued emphasising trust laxity (64%) and commitment failure (29%) as the most contributing factors in isolating pharmacies from joining
sourcing groups (*In relation to research question 'e*'). Actually some attributed their reluctance to embrace group sourcing to among others: lack of knowledge, high competition that does not give chance to try new ideas, and a small target group of clients yet the number of drug manufacturers and pharmacies is increasing swiftly; read their specifications. Since the business strategies differ greatly among pharmacies, they fear that their strategies could be copied from information sharing with group sourcing. It was further noted.

While clarifying on phone to the researcher, one respondent supported the idea of sole sourcing, as opposed to group sourcing. He cited the existence of illegal drug sources that make them get access to low-priced and easily accessible drugs, thus claiming to enjoy the expected benefits they would as well enjoy from joining sourcing groups.

4.7: Comparing pharmacies: are those practising group sourcing better off?
This question is divided into eight different questions and received the most commented responses (89 frequencies). This perhaps was a moment of proving that even though one is not a sourcing group member, can take a stand to voice his feelings about whether these differences really exist. *Figure 9 and 10* summarizes the findings below:

*Figure 9: Comparative chart: are group-sourcing pharmacies better off?*
From the illustration above, one can notice the variations in different beliefs for sourcing group and non-sourcing group pharmacies. Not all scoring responses were the same, but at a glance, majority of respondents agreed that in some aspects like procurement strategy, and sales turnover, the group sourcing pharmacies are definitely better. It can as well be stated that some respondents were 'not sure' whether this is actually the reality, like in the case of operational handling. Some variables unanimously gave overwhelming support for group sourcing, particularly with organisational setting, profitability and reducing cost levels.

The average scores were calculated using the weighted average method. Weights of 5, 4, 3, 2 and 1 were assigned to the likert scale used in the questionnaire (see appendix 4, question 25) in order of importance of responses: Definitely better-5; probably better-4; Not sure-3; probably not-2; and definitely not-1. It is these weights that were multiplied with frequencies for respective score variables (see figure 9). The statistical formular used is:

\[ W_i = \left\{ \frac{I \times X_i \times w_i}{L_{w_i}} \right\}; i = 1, 2, 3, 4, 5. \]

where:
- \( W_i \) = Average weighted score for variable i
- \( X_i \) = frequency for variable i
- \( w_i \) = weighted value attached to score positions
- \( L_{w_i} \) = sum of weights (15)
- \( L_{X_i w_i} \) = sum of product of frequency and weights.

A better understanding of the comparison requires another look at figure 10 that averagely places the average scores per variable on a 1-5 point diagram below below.
Figure 10: comparing group sourcing and non-sourcing group pharmacies, is one group better off than the other?
(5-Definitely better; 4-Probably better; 3-Not sure; 2- probably not; 1-Definitely not)

Making comparison using pre-determined scale: Where the average lie on a 1-5 scale?

(i) **Operational handling**: Comparing the number that voted on this aspect, a glance at figure 9 would tell that when combined (first and second segment), a high percentage of respondents believe the group sourcing pharmacies are better. On the other hand, figure 10 supports this view with an average ranking of 2.9 on a 1-5 scale. This scale lies close to the region of ‘probably better off’, which sets group sourcing pharmacies probably better than their counterparts. Generally, one can conclude that group-sourcing pharmacies are better off in operational handling than their counterparts who operate individually, according to the respondents.

(ii) **Sales turnover**: A ‘probably better’ answer scored 50%, and judging from figure 9, it is the largest area of the comparative chart. This suggests that probably group-sourcing pharmacies are more profitable than non-group sourcing members. In investigating why this is the case, respondents talked to attributed it to the size of these group-sourcing pharmacies, and having several branches in other districts of Uganda. This makes them have large stock and serve many clients compared to the rest. The average rating from figure 10 (of 2.8) puts this close to 3, a figure that is biased towards the right of ‘better’ side. Only a very small margin could not ‘definitely agree’ which does not alter the majority view.
(iii) **Employee turnover:** This never received enough responses compared to other responses. 45% rated highly the rate of employee turnover in experienced big pharmacies (as figure 9 shows), which coincidently happen to be the group sourcing pharmacies. This is partly attributed to high flexibility and a skill that makes it easy to switch between jobs. Low turnover is registered with sole trading pharmacies, because even the number employed is too small. The proprietor himself does much of the work. Other reasons for low employee turnover were attributed to few skilled personnel working in this sector, thus replacement, in case of resignation or termination of an employee is not easy and takes some time. Averagely, majority seems not to be aware of this aspect very well, and voted 'not sure' (see figure 10).

(iv) **Productivity:** Ratings indicated a better stand for group sourcing pharmacies, as those who voted 'definitely better' and 'probably better' outweigh other respondents (figure 9). This was attributed to skilled personnel with big pharmacies compared to small retail pharmacies. This is the case particularly with the foreign-owned wholesale pharmacies being more productive than indigenous pharmacies. Averagely, though, a 2.7 scale is not enough to guarantee this result from figure 10.

(v) **Procurement strategy:** This attracted a more reliable rating of a 'definitely better' result of 63%, as figure 9 illustrates. This was closely associated with the large sourcing pharmacies, better connection with drug manufacturing factories and ownership 16. Averagely, a 3.2 rating implies it is tending towards a 'better off side in favour of group sourcing pharmacies. Although this is the case, it was noted that this strategy is in theory, not well written on paper in 1110st pharmacies contacted through phone conversation with the researcher.

(vi) **Organisational selling:** There were varied reactions that could not lead to conclusive deductions in responding to this score variable. Equal scores of 27% rated group- sourcing pharmacies 'better' in this aspect and at the same time the same number 'not sure'? But when first two segments of figure 9 on this issue are combined, the portion gives a higher rating in favour of group sourcing pharmacies compared to non-members. This is because their trading associates are better organised, thus borrowing a leaf from them would be easy than learning from nowhere, in case of individual sourcing pharmacies. Surprisingly however, it scores a miserable 2.8(figure 10), which is not enough to confidently tell whether one group is better than the other.

16 The majority of group sourcing pharmacies are partnerships. Jointly owned by government-experienced pharmacists.
Profitability and cost levels: Economically, the higher the cost levels, the lower the profitability. Group sourcing is viewed as one of the methods of lowering cost levels, thus increasing profitability. No wonder why all these were rated averagely 'better' (54% and 50% respectively) for group sourcing pharmacies than their counterparts. A large number, however were 'not sure', partly because of unwillingness in revealing profit levels in private organisations. Averagely, respondents who were sure and those probable voted profitability (2.9) high for group sourcing pharmacies, than others.

4.8: Major Sources of drug information for practicing pharmacies:
The following were cited as major sources of drug information that guides the pharmacies in purchasing decisions:
- Phone inquiries about cost of drugs to different importers of pharmaceuticals inputs.
- Price lists from different drug whole sellers
- Production list of drugs from the suppliers' websites. This is the case with a few technologically advanced pharmacies, with assistance from NDA and NMS.
- Clients/patients are also main sources of information. Medical personnel prescribe medic to patients, who in turn visit pharmacies asking for the medicine; and as a result, they record what is mostly needed, and that is what is stocked.

4.9: Major sources of drug stockings: Does religion play any role?

There was no specialisation in type of drugs stocked. Both locally produced and imported brands were reported as the major sources of drugs in Uganda (52%). Only 20% of respondents stocked mainly foreign drugs, because of external influence from their parent companies overseas. India was ranked top of the list of drug manufacturing countries, followed by Europe and UK in general. Other countries mentioned included USA, China and South Africa. This would imply therefore that government should strengthen economic and health ties with Indian pharmaceutical drug manufacturers, and persuade them to establish factories in Uganda.

It was pointed out that the sourcing of drugs does not depend on religious affiliations. What was observed, however, was the quality of products and the competitive prices that would highly determine from where to source for drugs. Incidentally, no other study has reported the relationship between religion and group sourcing to compare with! It was observed though, that some clients are
very selective, and show desire in getting drug services from private pharmacies hospitals affiliated to their religious denominations.

The stiff competition reported within the sector (68%) has helped improve the service delivery, thus narrowing the influence of religion. Only public pharmacies involved in the survey reported no competition, because of being public and serving all peoples interests. The source of competition is the increasing number of pharmacies in the city (57%) coupled with struggle to serve a small clientele group (33%), the study revealed. Some respondents were very bitter about the class "C" drug shops operating in fully licensed pharmacy-gazetted areas, and called for NDA to address the issue immediately. The researcher in improving service delivery effectively also upholds this recommendation.

There was controversy when it came to debating the ways of combating stiff competition in drug practitioners. Although group sourcing is theoretically deemed to reduce stiff competition by working as a group, the majority of respondents never agreed (76%) that the sourcing groups could greatly reduce stiff competition (in response to question 39). Only four (19%) reported no difference in prices charged by none and pro-sourcing groups; after all, these are informal sourcing groups without strong roots of influence on economic circumstances.

The only incidental causes for the differences between these groups cited was during the hiking of drug prices when there is shortage, and underselling during plentiful supply. In this case, those under group umbrella may have uniform prices, which affect individual price competition.

4.9.1: Causal relationships between groups of respondents identified:

A close examination of the respondents' views and traces of which pharmacy filled which copy of questionnaire, has led to sound relationships between their responses. These relate right from the legal status of the pharmacy, the sourcing strategy, participation with group sourcing and ownership of these pharmacies (refer to table 4). It was noticed that sole traders never have a sourcing strategy in place, save for limited liability companies and partnerships plus government owned pharmacies. Another interesting evidence is associated with size of pharmacies. The smaller the size, the less attracted to group sourcing; and the larger the size, the more attracted to group sourcing. The findings indicated that for every three large pharmacies, one is a group-sourcing member; whereas for every eight retail (small) pharmacies, only one is a member. Small ones interpret this as a
Mechanism of avoiding extra costs charged by this arrangement, yet they can access the drugs easily from local distributing sources. They also have minimal needs that might compel them to look for drugs from outside the country, because the local distributing units are considered enough to meet their stocking needs. The larger ones, find it fitting because the necessary organisation, large capital investments, access to loanable funds with security, contact with big suppliers among others seem to explain why they are more involved in group sourcing. This issue, however, could be investigated in future using a larger sample for a more concrete relationship.

Another interesting scenario is that of operating department. Small pharmacies tend to be associated with an inexistent sourcing department, with the director doing everything for the pharmacy. For the large ones, they tend to have a fully operational department, but with changing roles and personnel; a technique aimed at minimising fraud and conniving with drug distributing agents with one man-purchasing agent for a pharmacy. Refer to table 4 for a comprehensive analysis.
Table 4: Relationships between different groups of respondents:

<table>
<thead>
<tr>
<th>Legal status of pharmacy</th>
<th>Size</th>
<th>Sourcing Strategy</th>
<th>Participation In group purchasing sourcing</th>
<th>Operational purchasing department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sole Trader</td>
<td>Very small (based on capital investments)</td>
<td>No (One man does it all)</td>
<td>Not Common (Normally buy in small quantities)</td>
<td>No (operate without departments-one man's business)</td>
</tr>
<tr>
<td>Partnership</td>
<td>Big (large capital investment above € 7000)</td>
<td>Yes (Have connections to drug factories and decide on stock levels)</td>
<td>Common (perceived as strategy to get access to more drugs)</td>
<td>Yes (big enough to have several departments working closely together)</td>
</tr>
<tr>
<td>Limited Liability Company</td>
<td>Big (similar to partnership)</td>
<td>Yes (some small, some big having several establishments)</td>
<td>Common (especially with big ones, Sourcing for other branches as well)</td>
<td>Yes (necessary to coordinate branch sourcing and distribution)</td>
</tr>
<tr>
<td>Charity</td>
<td>Small (non-profit making organisation)</td>
<td>Sometimes Yes (deal in variety of items to source, thus necessary to coordinate them)</td>
<td>Not Common (normally use parent company's policy, sometimes depend on donations)</td>
<td>Sometimes Yes/No (because rarely actively source at branch level, but rather done at parent level, except for a few items)</td>
</tr>
<tr>
<td>Public owned</td>
<td>Large (are large government drug warehouses for all public pharmacies and hospitals)</td>
<td>Yes (and Guided from above from the MOH and NDA, depending on the country's needs)</td>
<td>Common (especially with several sectors and sometimes small countries neighboring can source together particular products)</td>
<td>Yes (normally centralised sourcing is conducted, because it serves several public Pharmacies. At regional level, only concerned with receiving/making orders but not actual purchase)</td>
</tr>
</tbody>
</table>
Access to a sustained supply of good-quality medicines is a critical part of addressing the long-term quality of life and productivity of people throughout the world. The government of Uganda continues to move forward in its determination to address these difficult issues. This investigative research has provided insights into group sourcing practices among wholesale and retail pharmacies in Uganda. Findings indicated that group-sourcing arrangements are still very informal in nature, and are practiced by a few pharmacies. Some preliminary findings indicated some relationships as explained in table 4, but it's too early to confidently confirm these until a thorough coverage of other districts are covered. Part of this could be explained by the fact that most pharmacies in this sample were smaller in size and sole traders, with minimal capital/finances, which made them, think that perhaps the practice is more suited for those pharmacies with reasonable capital.

The majority, in their suggestions to improving group sourcing in Uganda, recommended a thorough sensitisation about the concept, as they exhibited lack of understanding of the arrangement. They agreed, however, that there are several benefits associated to this arrangement, and given chance, they would be willing to practice it. They called upon the National Drug Authority and Uganda Pharmaceutical Society to make arrangements and efforts to provide training to improve their skills and knowledge in their purchasing needs. This could be viable, given the fact that these organisations already offer training in various aspects, thus incorporating this would not be a problem.

This was particularly evident in analysing the knowledge they felt would be required of pharmacy-purchasing managers. They also called on becoming more knowledgeable on governmental regulations and safety issues concerning drug management. They also noted that it would not matter where a pharmacy bought drugs as long as they are of good and dependable quality, in disputing the notion that some could not be allowed to stock drugs from those distributing agents affiliated to religious denominations.
Increasing professionalism provided by training and the desirability of attaining Certified Purchasing Managers (say graduates of CIPS 17), as well as an advanced certification program, were viewed as very important for the success of this arrangement. These factors might provide the impetus necessary to move group sourcing to a high status level, which all respondents predicted, would occur, with increased importation of drugs in the country. Currently, based on the 70% response rate, only five of the 25 pharmacies were practicing group sourcing, while eleven (44%) thought group sourcing would be embraced in high status, come the next century.

To accomplish this higher status and attain organizational goals, pharmacies visualize a need to increase their training efforts and transforming informal arrangements into more formal through education including certification programs such as attending formal refresher courses on purchasing related disciplines. Finally, they felt technical knowledge in operational and general purchasing aspects of business were very important but felt that purchasing managers should possess a certain amount of purchasing knowledge to be effective in the realisation of group purchasing objectives.

5.1: RECOMMENDATIONS:

The recommendations and conclusions in this study are based on the findings presented in chapter four. As already noted, theoretical arguments from general purchasing literature highly correlates with the findings. An important element in this section therefore will be offering possible suggestions to organisations that are directly (legally and operationally) concerned with general management of pharmacies. These include the National Drug Authority, the Uganda Pharmaceutical Society, Uganda Drug Manufacturers Association and the Ministry of Health (government).

5.2: Recommendations to the Government:

The government’s desire and willingness to create a long-term sustainable solution to improve affordability and accessibility to all essential drugs necessary in meeting the essential needs of the people is the background to these suggestions. Based on this, I recommend that:

17CIPS means Chartered Institute of Purchasing and Supplies Management.
Government should get ready to assist investors in setting up drugs manufacturing industries. This is based on the few drug factories identified in chapter two (section 2.4). These new firms might introduce some new techniques of operations, which will eventually be expanded to their target market: the pharmacies. This will increase the collaborative arrangement identified in chapter two, and will help reduce of drug acquisition, hence increasing availability of drugs from within the country. Already, it was noted in chapter 4, the major source of drugs being India. This will be a way of reversing the trend. Already, there are some efforts from the government to persuade drug manufactures from India to invest in drug manufacturing in Uganda, so this would have a starting point e.g. Cipla Ltd has 30 drug manufacturing plants in India producing world standard range of human and animal drugs and exporting to over 172 countries. Already Cipla exports a range of drugs to Uganda.

This drug availability cannot be realised without the blessing from the government, through its arms of NDA and NMS and MOH particularly investing more into health facilities and personnel especially in purchasing the right drugs. The time and money to be invested cannot however be easily estimated, as it may involve several stakeholders. This is being tried at the moment, as can be realised from the following persuasive quotation:

“Manufacturers will not only benefit from Uganda and the East African market but Africa as a whole. There is a jump-start fund to actualise this initiative based on the public-private partnership model." 18

Equally important is considering the establishment of a procurement data section to serve as a national procurement data bank (probably under management of PPDA 19) to gather data regularly and disseminate information to future researchers on procurement trends. Presently, one can hardly find reliable sources of data on purchasing operations in many developing countries.

This is possible to be implemented by PPDA staff, upon further recruitment of more personnel to strengthen it because government is investing heavily in human resource personnel who could

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18 Vice president Dr. Gilbert Bukenya was quoted while attending a medical research and development retreat in Geneva, Switzerland.

Professionally run this unit. Besides this proposition, all government departments are (by law) required to advertise all their purchases through PPDA website, so gathering information will be easy. It could help in carrying out periodic purchasing reviews, as well as disseminating information on procurement related aspects among the business community. This would help in restoring professionalism in the purchasing and general procurement function and increasing financial resources for purchasing training for purchasing departments. Other suggestions would include:

- Establish a Logistics Management Information System (LMIS) and a Medicines and Health Supplies Tracking System to monitor drug utilization, facilitate accurate quantification, and harmonize procurement. This would be central to eliminating shortages as pointed out occasionally in chapter 4. This would benefit both the government and the pharmacies as well; as it saves on time spent on making abrupt order processing during scarcity. It was also noted that sharing information was very crucial (section 4.4 above). This would be one of the ways of strengthening this aspect of using LMIF to share information concerning the would-be group purchased drugs. The use of computerised technology in operations is more reliable in eliminating anti-trust issues pointed out in chapter two (section 2.1.1 and 4.6).

This recommendation should start with the NMS and NDA, and should be supported by the pharmaceutical organisation to keep up with international standards. With support from MOH and several donor agencies in the Health sector like DANIDA and DISH and government, it will be possible. Small pharmacies may however find this difficult, so could concentrate on sourcing from within the country.

- Preserve training in pharmacy training institutions and continuing in-service purchasing training; and strengthened supervision, audit, and regulation of the activities of all actors involved in the use of medicines. This could be done together with PPDA’s department for capacity strengthening, that is engaged in training personnel in purchasing/procurement related aspects aimed at professionalising the activity. This department is in place already, and pharmacies expressed willingness for training (see section 2.5; 4.0; 4.2 and dealing with issues raised in 4.6).
5.3: Recommendations to the wholesale and retail Pharmacies:

It is undisputed that universities are the major sources of knowledge, as University professionals did previous research in this field. The several organisations bringing together private and government owned pharmacies’ could team up with university procurement and marketing departments and formulate tailor-made courses that could improve pharmacies’ purchasing techniques. This will be easy to implement, as majority of the pharmacies were most likely (responding to questions 29, 30 and 31; appendix 4) to follow group-sourcing practices in future. in fact centrally located universities could use this as an opportunity to introduce short courses for such groups. This observation of short-tailored courses is not new in Uganda, especially after introduction of ‘cost sharing’ in higher institutions. Several big Universities are already having such courses like MUBS, KYU, UMI, and MUK21. Others would include:

Embark on an attempt to professionalizing the purchasing activity, rather than doing it by directors of sole trader businesses. This will also make them achieve improvements in procurement strategy, because of learning from other pharmacies during collaborations. In doing this, they will begin realising the benefits of learning from their counterparts who are sourcing collectively; like organisation, logistics, size expansions, confidence build up, among others.

Desist from stocking counterfeit drugs, as this will tarnish the image of private pharmacies. This is on the increase because of illegal drug markets in the city; Embrace sensitisation through attending workshops on group sourcing, and improve on their operating techniques and ensuring timely payment of their suppliers, as this will promote friendship to boost their purchasing practices by borrowing a leaf from them. On religion, close working relationship, coupled with attractive drug prices and better customer care could help in minimising chances of its influence.

Below is a summary of more specific recommendations to government and pharmacies (table 5) aimed at improving the group sourcing arrangements within the pharmaceutical sector.

20 These organisations include: Pharmacy council; Uganda Pharmaceutical promoters Association (Importers): Uganda Pharmaceutical Manufacturers Association and Uganda Pharmaceutical Society.
21 These are: Makerere University Business School; Kyambogo University; Uganda Management Institute and Makerere University, Kampala.
Table 5: Summary of recommendations to different organs concerned:

<table>
<thead>
<tr>
<th>Recommendations to Pharmaceutical Society</th>
<th>Recommendations to Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sensitisation of all stakeholders about group sourcing, especially private Pharmacies.</td>
<td>• Practice ideal for primary health care drugs, not for specialised drugs, which are rare and very expensive.</td>
</tr>
<tr>
<td>• Advise on how to begin joint sourcing with other pharmacies', through participation in workshops, seminars courses organised between their organisations and training institutions KYU, UMI, MUBS and MUK</td>
<td>• Should encourage group by empowering the sector</td>
</tr>
<tr>
<td>• Should analyse benefits and introduce</td>
<td>• Should encourage joint ventures, other than looking at grouping as political challenge, for fear of dominancy.</td>
</tr>
<tr>
<td>• Treatment of all pharmacies equally (some could be enjoying operational advantages now)</td>
<td>• Service providers should be clustered, such that groups are formed according to these e.g. 'not for profit', 'private', 'public organisation'</td>
</tr>
<tr>
<td>• Advocating for uniformity in pharmaceutical prices</td>
<td></td>
</tr>
</tbody>
</table>

5.4: Areas for future research:

Although this study received a 71% response rate, it concentrated on what is happening in Kampala district, because of resource and time constraints. This suggests that a more comprehensive deduction could not be made basing on only one district. In the future, more studies could include wholesale and retail pharmacies throughout the country side, as well as covering the whole region of Africa as a whole; since what is happening in Uganda could not be an exception.

22 Interesting challenging question raised by a non group-sourcing respondent!
This study also discovered some loose relationships between several variables (as discussed in table 4). It is my wish that a more concrete correlation between these variables be investigated in the future, as it will act as sound evidence in this field of group sourcing with pharmacies as a focus.

Perhaps one interesting area that was not addressed by the questionnaire is the aspect of 'how to identify a trusted pharmacy, and how to join a sourcing group'. This would serve as a starting point while strongly considering sensitisation of all pharmacies on the need for group sourcing. The majority were not sure, although indicated that sourcing groups were better off in several aspects. The point of doubt could be reduced while conducting future research on when and how are they better off, and by how much. Transforming this research study to being more quantitative in nature would help in spreading the concept much faster on the African continent.

This study largely concentrated on the purchasing activities of pharmacies, but never handled in great detail their drug suppliers. Thus an extension of this study would be good by looking at what happens at the source of the drugs centres. Since majority of pharmacies identified trust as an obstacle to joining group sourcing, more work could be done to determine which aspects of trading relations contribute to development of trust as well.
References:

Asa Hagberg-Andersson, (2001), Managing Buyer-Supplier Relationships In A Supply Network - The Buyer’s Perspective, Swedish School of Economics and Business Administration


Blight Denis, (2000), Purchasing Consortia: How To Make Friends And Save Money, IOP Education Series, Australia.


Schotanus, F, (2005a), *Implications Of A Classification Of Forms Of Cooperative Purchasing*, University of Twente.


Schotanus F., Teigen J. & Luizten de Boer, (2005), *Unfair Division Of Gains Under Equal Price In Cooperative Purchasing*, University of Twente, The Netherlands.


## Appendix 1: Imports of Pharmaceuticals (by value): 1997-2000

### Appendix 1 UGANDA: IMPORTS OF PHARMACEUTICALS (by value: 1997-2000)

<table>
<thead>
<tr>
<th>ISIC ODES</th>
<th>Item</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>0101 2500</td>
<td>Extracts of glands or other organs or their secretions</td>
<td>1262525</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0101 2600</td>
<td>glands and other organs dried</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0101 3000</td>
<td>Substances of human or animal origin for prophylactic uses</td>
<td>209849275</td>
<td>157039537</td>
<td>6371883</td>
<td>7149557</td>
</tr>
<tr>
<td>0102 2000</td>
<td>Antiseptics and other blood fractions</td>
<td>27000000</td>
<td>15554399</td>
<td>58422229</td>
<td>19046802</td>
</tr>
<tr>
<td>0102 3000</td>
<td>Antiseptics</td>
<td>2505954205</td>
<td>2552018893</td>
<td>2411444193</td>
<td>2102928695</td>
</tr>
<tr>
<td>0102 3100</td>
<td>Antiseptics for veterinary medicine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0102 3200</td>
<td>Anesthetics</td>
<td>80922452</td>
<td>75785414</td>
<td>73840646</td>
<td>12555555</td>
</tr>
<tr>
<td>0103 2000</td>
<td>Human and animal blood and related substances</td>
<td>363078526</td>
<td>628185587</td>
<td>32419899</td>
<td>149360840</td>
</tr>
<tr>
<td>0103 3100</td>
<td>Medicaments of other therapeutic use</td>
<td>128171944</td>
<td>20707949</td>
<td>9094774</td>
<td></td>
</tr>
<tr>
<td>0103 3300</td>
<td>Medicaments of other therapeutic use</td>
<td>67804672</td>
<td>449360942</td>
<td>206987385</td>
<td>289405011</td>
</tr>
<tr>
<td>0103 3400</td>
<td>Medicaments of other therapeutic use</td>
<td>25787348</td>
<td>3221387</td>
<td>37323676</td>
<td>193986310</td>
</tr>
<tr>
<td>0103 3500</td>
<td>Medicaments of other therapeutic use</td>
<td>28249698</td>
<td>385438066</td>
<td>123403247</td>
<td>127574244</td>
</tr>
<tr>
<td>0103 4000</td>
<td>Medicaments of other therapeutic use</td>
<td>70276972</td>
<td>2441664</td>
<td>47475076</td>
<td></td>
</tr>
<tr>
<td>0103 5000</td>
<td>Medicaments of other therapeutic use</td>
<td>290357835</td>
<td>1889425754</td>
<td>2350276011</td>
<td>17148506</td>
</tr>
<tr>
<td>0104 2000</td>
<td>Medicaments of other therapeutic use</td>
<td>26550206</td>
<td>9157342012</td>
<td>111935309</td>
<td>26714921</td>
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<tr>
<td>0104 3000</td>
<td>Medicaments of other therapeutic use</td>
<td>329013170</td>
<td>901476453</td>
<td>159814909</td>
<td>145512803</td>
</tr>
<tr>
<td>0104 4000</td>
<td>Medicaments of other therapeutic use</td>
<td>8946791</td>
<td>89425375</td>
<td>78135257</td>
<td>41094569</td>
</tr>
<tr>
<td>0104 5000</td>
<td>Medicaments of other therapeutic use</td>
<td>25783124</td>
<td>18452162</td>
<td>43172</td>
<td>9066063</td>
</tr>
<tr>
<td>0104 6000</td>
<td>Medicaments of other therapeutic use</td>
<td>352387131</td>
<td>1095739454</td>
<td>209272424</td>
<td>424490754</td>
</tr>
<tr>
<td>0105 4000</td>
<td>Medicaments of other therapeutic use</td>
<td>19180878</td>
<td>1062759736</td>
<td>1107289856</td>
<td>53402525</td>
</tr>
<tr>
<td>0105 5000</td>
<td>Medicaments of other therapeutic use</td>
<td>26867260</td>
<td>974086725</td>
<td>352411232</td>
<td>374342610</td>
</tr>
<tr>
<td>0105 6000</td>
<td>Medicaments of other therapeutic use</td>
<td>4025312240</td>
<td>3542255897</td>
<td>1029944242</td>
<td>310761857</td>
</tr>
<tr>
<td>0105 7000</td>
<td>Medicaments of other therapeutic use</td>
<td>78759726</td>
<td>96056061</td>
<td>987733967</td>
<td>26580852</td>
</tr>
<tr>
<td>0108 5000</td>
<td>Medicaments of other therapeutic use</td>
<td>90981284</td>
<td>106672603</td>
<td>110287952</td>
<td>358538262</td>
</tr>
<tr>
<td>0108 6000</td>
<td>Medicaments of other therapeutic use</td>
<td>53457247</td>
<td>527468594</td>
<td>447221922</td>
<td>21594778</td>
</tr>
<tr>
<td>0109 2000</td>
<td>Medicaments of other therapeutic use</td>
<td>56113490</td>
<td>853456406</td>
<td>689362951</td>
<td>101290368</td>
</tr>
<tr>
<td>0109 3000</td>
<td>Medicaments of other therapeutic use</td>
<td>21442331</td>
<td>11808936</td>
<td>152388004</td>
<td>40622336</td>
</tr>
<tr>
<td>0109 4000</td>
<td>Medicaments of other therapeutic use</td>
<td>48748910</td>
<td>284837565</td>
<td>245098423</td>
<td>30045878</td>
</tr>
<tr>
<td>0109 5000</td>
<td>Medicaments of other therapeutic use</td>
<td>72702345</td>
<td>39845238</td>
<td>343194780</td>
<td>347924315</td>
</tr>
<tr>
<td>0109 6000</td>
<td>Medicaments of other therapeutic use</td>
<td>428585938</td>
<td>396149274</td>
<td>301282209</td>
<td></td>
</tr>
</tbody>
</table>

**Total US$**

<table>
<thead>
<tr>
<th>Item</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>6607697538</td>
<td>6179871741</td>
<td>6132967611</td>
<td>5740728456</td>
</tr>
</tbody>
</table>

*Source: Uganda Revenue Authority*
## Appendix 2: List of Pharmaceutical Manufacturers in Uganda

<table>
<thead>
<tr>
<th>Name of Manufacturer</th>
<th>Physical Address</th>
<th>Box No</th>
<th>Tel</th>
<th>Type</th>
<th>District</th>
</tr>
</thead>
<tbody>
<tr>
<td>BYCHEM Laboratories Ltd.</td>
<td>Plot 1098/1099 Jinja Road</td>
<td>11635</td>
<td>286377</td>
<td>LSM</td>
<td>KAMPALA</td>
</tr>
<tr>
<td>G.K.O Medicine</td>
<td>Plot 1289 Port Bell Rd. Kampala</td>
<td>21603</td>
<td>223277</td>
<td>SSM</td>
<td>KAMPALA</td>
</tr>
<tr>
<td>Joint Medical Store</td>
<td>Gogonya Road NSAMBYA</td>
<td>4501</td>
<td>268482</td>
<td>SSM</td>
<td>KAMPALA</td>
</tr>
<tr>
<td>Kisakye Pharmaceuticals Ltd.</td>
<td>Plot 13 William Street</td>
<td>30219</td>
<td>251767</td>
<td>SSM</td>
<td>KAMPALA</td>
</tr>
<tr>
<td>MAVID Pharmacy</td>
<td>Plot 39 Luwum Street Kampala</td>
<td>886</td>
<td>254036</td>
<td>SSM</td>
<td>KAMPALA</td>
</tr>
<tr>
<td>MediPharm Industries</td>
<td>Plot 65 Kakaok Rd.</td>
<td>6218</td>
<td>285451</td>
<td>LSM</td>
<td>KAMPALA</td>
</tr>
<tr>
<td>Rene Industries Ltd.</td>
<td>Plot 680 Kamuli Kireka</td>
<td>6034</td>
<td>286103</td>
<td>LSM</td>
<td>WAKISO</td>
</tr>
<tr>
<td>Uganda Kwefuga African Ind. Ltd</td>
<td>Plot 256 Kigala Rd. Natete</td>
<td>15065</td>
<td>272951</td>
<td>SSM</td>
<td>KAMPALA</td>
</tr>
</tbody>
</table>

Appendix 4: survey questionnaire used for gathering information

Survey Questionnaire for Wholesale and Retail Pharmacies:

Dear Respondent:
Thank you for taking your valuable time and interest to fill this questionnaire. A candidate on Masters Programme is carrying out this study as part of the academic requirements. It has been designed to establish the value companies gain when they jointly source for drugs. The topic under investigation is:
“How Group Sourcing benefits small organisations in Uganda: The case of private Wholesale and Retail Pharmacies in Kampala District.”

Group sourcing defined: An arrangement, either formal or informal, where two or more organizations, who are separate legal entities, collaborate among themselves, or through a third party, to combine their individual needs for goods and services from suppliers so as to gain the increased pricing, quality, and service advantages associated with volume buying.

As a pharmacy involved in routine purchasing of drugs either jointly or not, your contributions are very valuable in achieving the objectives set for the study. Please take a short moment to answer the questions. Your identification will remain anonymous, as you are not obliged to submit your particulars (name, designation, etc) in this questionnaire. Together, let’s make a contribution to the fascinating world of Purchasing Management.

Thank you,
Charlie, MsM
Lead Researcher.

GENERAL INFORMATION:

1. What is the legal status of your Organisation?
   ☐ Sole Trader ☐ Partnership ☐ Limited Liability Co. ☐ Charity

2. Is your organisation part of a:
   ☐ Commercial group. ☐ Subsidiary company. ☐ Parent company.

3. Are you responsible for purchasing decisions of your organisation?
   ☐ Yes ☐ To some extent ☐ No

4. Are you willing to be contacted afterwards by the researchers who are studying joint sourcing in case of clarification? ☐ Yes ☐ No

GROUP SOURCING KNOWLEDGE:

5. Are you practicing group purchasing in your procurement requirements?
   ☐ Yes ☐ Not yet but interested ☐ No and not interested
6. Is your organisation for group sourcing formally documented and recognised or still informal?
   □ Yes  □ In the process  □ Mainly Informal

7. If you are part of the group sourcing, give the number of the associates

8. Does your organisation have a sourcing strategy well written and clear to employees?  □ Yes  □ No

9. How were you responding to calls/drive for group sourcing before you joined the group?

10. What kinds of arrangement do other companies uses that are not part of your group?

11. How long have you been involved in group sourcing arrangements?

EXPERIENCE WITH GROUP SOURCING:

12. Are there any conditions/ requirements that members must fulfil at all times; and what are these conditions?

13. How would you rate the following benefits the organisation has enjoyed as a result of close cooperation within the joint sourcing organisation, on a scale of 1 - 5 where 1 being No evidence and 5 being highly evidenced:

<table>
<thead>
<tr>
<th>Scores:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower transaction costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced workload</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced Supply risks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharing Information with Other members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (Please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
14. In your experience with group sourcing, by ranking the following on a scale of 1 - 5, with 1 being least encountered and 5 being greatly encountered, Which shortcomings have been evident in your operating spheres?

<table>
<thead>
<tr>
<th>Scores:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set-up costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coordination costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loosing flexibility/control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplier resistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anti-trust Issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (Please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. How can you best categorise the nature of benefits from group sourcing (tick all that apply)?
- Operational benefits e.g. access to information, negotiation power, more sourcing contacts, increased efficiency, standardisation
- Financial Benefits e.g. increased profits, access to loans as group, volume discounts,
- Organisational Benefits e.g. suitable location, better management skills
- Logistical Benefits e.g. reduced combined transit costs

16. Does your company enjoy any special considerations arising from membership/being active/large/small size pharmacy e.g. purchase volume or in terms of attention (priority in service) from the group?
- Yes
- No
- Applies to whole group

17. If yes, which ones are those?

18. Is there too much dictation/dominance by seemingly large-sized firms on: terms/ rules/ requirements and other conditions binding all?

19. How are you paying for the cost of services associated with group purchasing, and how would you like to pay in future?

<table>
<thead>
<tr>
<th>Now</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>An annual fixed fee for the service</td>
<td></td>
</tr>
<tr>
<td>A fixed monthly fee based on percentage of purchasing spend</td>
<td></td>
</tr>
<tr>
<td>Performance related charges</td>
<td></td>
</tr>
</tbody>
</table>
20. How would you rate the importance of the following in your joint sourcing organisation, on a 1 - 5 scale, with 1 being Not Important at all, 3 being Neutral and 5 being Very Important:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed of response</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery to you</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Checking Expiry Drug Dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

21. Based on your experience as a group member, would you recommend other non-members to join joint sourcing groups?
- [ ] Definitely
- [ ] Probably
- [ ] Not sure
- [ ] Probably not
- [ ] Definitely not

22. What specific suggestions do you have that will help improve the group sourcing initiatives within pharmaceutical sector?

N CASE YOU ARE NOT A MEMBER OF ANY GROUP SOURCING TEAM:

23. What is still making your pharmacy keep a distance from group sourcing arrangements? Is it:
- [ ] Trust issues?
- [ ] Commitment issues?
- [ ] Level of organisation of existing groups?
- [ ] Charges levied for functioning of association?
- [ ] Any other, Please specify

24. Is there any fear that intellectual and operational techniques may be lost in process of sharing technical and operational information?

25. How do you compare the following between those pharmacies carrying out group sourcing and your pharmacy:

<table>
<thead>
<tr>
<th></th>
<th>Definitely better</th>
<th>Probably better</th>
<th>Not sure</th>
<th>Probably not</th>
<th>Definitely not</th>
</tr>
</thead>
</table>

62
26. Do you have a purchasing Department within your organisation?

☐ Yes    ☐ No

27. If “NO”, do you or a designated employee carry out the buying activity?


28. What is the main source of information that guides you in your drug purchasing decisions?
☐ News papers    ☐ Uganda Pharmaceutical Society    ☐ JMS
☐ Other (explain/mention)


29. Would you wish to use services of joint sourcing for all or part of your purchasing requirements even when you are not a member of any?

☐ Most Likely    ☐ Likely    ☐ Never    ☐ Not likely
☐ Least likely

30. How likely are you to continue following the trends of joint sourcing whether you are a member of any joint sourcing organisation or not?

☐ Most Likely  ☐ Likely  ☐ Never  ☐ Not likely  ☐ Least likely

31. Would your organisation be interested in taking a leadership position or participating in group purchasing training exercise?

☐ Most Likely  ☐ Likely  ☐ Never  ☐ Not likely  ☐ Least likely

FOR ALL PHARMACIES:

32. What are the top Key Performance Indicators your company primarily uses to measure procurement performance?

☐ Spend as percentage of revenue
33. Does your company mainly stock locally produced drugs or imported drugs?

☐ Mainly Foreign  ☐ Both  ☐ Mainly Local  ☐ Locally Produced

34. If mainly local, which of the following is the major source of drugs for pharmacies in Kampala?

☐ NMS\textsuperscript{23} Entebbe  ☐ JMS\textsuperscript{24}  ☐ UPMB\textsuperscript{25}  ☐ Local Producers

35. If mainly foreign, which countries are the main sources of drugs to pharmacies?

☐ India  ☐ Pakistan  ☐ China  ☐ South Africa  ☐ Other

36. Does it matter whether you obtained drugs from a catholic or protestant founded drug-purchasing organisation when your pharmacy or retail drug shop is governed or managed by religious groups? Please explain__________________________

__________________________

37. In your view, is there stiff competition in the operations of pharmacies today?

☐ Yes & stiff  ☐ Not very stiff  ☐ No competition

38. If yes, what could be the leading cause of this competition? Tick all that apply

☐ Government pressure to reduce prices of drugs  ☐ Increasing number of pharmacies in the city  ☐ Struggle to serve small target group  ☐ Increase in licence fees by City Council and NDA  ☐ Increased taxes on Imported drugs

☐ Other (Please specify)__________________________

__________________________

\textsuperscript{23} National Medical Stores -Entebbe

\textsuperscript{24} Joint Medical Stores

\textsuperscript{25} Uganda Protestant Medical Bureau
39. Does this create any difference arising from group sourcing between those pharmacies cooperating in purchasing processes in containing these and those that do not?
☐ Difference is clear  ☐ Not physically seen  ☐ don’t agree

40. What could be other incidental causes that may create a difference between group sourcing pharmacies and the rest?

41. Are there significant price differences between directly imported drugs by group sourcing pharmacies and prices for locally sourced drugs?
☐ Absolutely  ☐ Yes but not very big  ☐ Same prices

42. Based on your answer above, do you believe there will be increasing need for group sourcing to minimise pressures in previous question above?

43. What, if any thing do you feel isn’t addressed by this questionnaire for your sourcing needs?

Thank you for your participation in this study.
Appendix 5: Questionnaire used for government owned pharmacies

(As a sample of Drug distributing agents)

Dear Respondent:
Thank you for taking your valuable time and interest to fill this questionnaire. A candidate on Masters Programme is carrying out this study as part of the academic requirements. It has been designed to establish the benefits pharmacies gain when they jointly source for drugs. The topic under investigation is:
“How Group Sourcing benefits small organisations in Uganda: The case of Wholesale and Retail Pharmacies.”

Group sourcing defined: An arrangement, either formal or informal, where two or more organizations, who are separate legal entities, collaborate among themselves, or through a third party, to combine their individual needs for goods and services from suppliers so as to gain the increased pricing, quality, and service advantages associated with volume buying.

As a Government pharmacy/hospital involved in routine purchasing of drugs either jointly or not, your contributions are very valuable in achieving the objectives set for the study. Please take a short moment to answer the questions. Your identification will remain anonymous, as you are not obliged to submit your particulars (name, designation, etc) in this questionnaire. Together, let’s make a contribution to the fascinating world of Purchasing Management.

Thank you,
Charlie, MsM
Lead Researcher.

1. Are you responsible for purchasing decisions of your organisation
☐ Yes ☐ To some extent ☐ No

2. Are you willing to be contacted afterwards by the researchers who are studying group sourcing in case of clarification? ☐ Yes ☐ No

3. How many pharmacies/Drug stores do you deal with in drug purchasing needs? ☐ do you supply?

__________________________________________________________________________
__________________________________________________________________________

4. What is the main source of information that guides you in your drug purchasing decisions?
☐ News papers ☐ Uganda Pharmaceutical Society ☐ JMS
5. Does your company mainly stock locally produced drugs or imported drugs?
   - Mainly Foreign    - Both    - Mainly Local    - Locally Produced

6. If mainly local, which of the following is the major source of drugs for pharmacies in Uganda?
   - NMS\textsuperscript{26} - Entebbe    - JMS\textsuperscript{27}    - UPMB\textsuperscript{28}    - Local Producers

7. If mainly foreign, which countries are the main sources of drugs to pharmacies?
   - India    - Pakistan    - China    - South Africa    - Other

8. Does it matter whether you obtained drugs from a catholic or protestant founded drug-purchasing organisation when your pharmacy or retail drug shop is governed or managed by religious groups or the Government? Please explain

9. How familiar are you with group/Joint/ Cooperative purchasing practices, particularly in this drug procurement business?

10. Are these buying drugs as a group or as individual pharmacies/drug stores?

11. Have you witnessed some group/cooperative/Joint purchasing practices emerging in their buying practices?

\textsuperscript{26} National Medical Stores - Entebbe
\textsuperscript{27} Joint Medical Stores
\textsuperscript{28} Uganda Protestant Medical Bureau
12. Is this practice identified above (question 5) more formal (with established organisation with some documentation) or informally done (without any document in place)?

13. Are there some incentives in place (like price, volume discounts and any other special considerations) offered to these pharmacies in case they buy in bulk or because of their size? Please explain.

14. As a Government-aided unit, would you be willing to engage in group sourcing practices, if not doing it already? And what reasons would you advance for this?

15. Does your organisation have a sourcing strategy well written and clear to employees? □ Yes □ No

16. What is still making your pharmacy keep a distance from group sourcing arrangements? Is it:
   □ Trust issues?
   □ Commitment issues?
   □ Level of organisation of existing groups?
   □ Charges levied for functioning of association?
   □ Any other, Please specify

12. How do you compare the following between those pharmacies carrying out group sourcing and those that do not?

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<th>Definitely better</th>
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17. Would you wish to use services of joint sourcing for all or part of your purchasing requirements even when you are not a member of any?

☐ Most Likely ☐ Likely ☐ Never ☐ Not likely ☐ Least likely

18. How likely are you to continue following the trends of joint sourcing whether you are a member of any joint sourcing organisation or not?

☐ Most Likely ☐ Likely ☐ Never ☐ Not likely ☐ Least likely

19. In your view, is there stiff competition in the operations of pharmacies today?

☐ Yes & stiff ☐ Not very stiff ☐ No competition

20. If yes, what could be the leading cause of this competition? Tick all that apply

☐ Government pressure to reduce prices of drugs
☐ Increasing number of pharmacies in the city
☐ Struggle to serve small target group
☐ Increase in licence fees by City Council and NDA
☐ Increased taxes on Imported drugs
☐ Other (Please specify)

21. Based on your answers above, do you believe there will be increasing need for group sourcing to minimise these causes of competition?

22. What recommendations/advice would you give to the Uganda pharmaceutical society in promoting group sourcing in pharmaceutical sector?

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23. Any recommendation/advice to the Government on group sourcing in Uganda, particularly in the pharmaceutical sector?

24. Are there suggestions you would like to offer to wholesale and retail pharmacies, in streamlining their operations in regard to pricing, quality, cost of drugs, accessibility, operational capacity, profitability, among others?

Thank you for your participation in this study.