A COMPREHENSIVE REPRODUCTIVE HEALTH COMMODITY SECURITY (RHCS) ASSESSMENT IN TANZANIA MAINLAND

A DRAFT REPORT

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By

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ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
CIDA	Canadian International Development Agency
DMOs	District Medical Officers
DHS	Directorate of Hospital Services
DFID	Department for International Development, UK
EPI	Expanded Program for Immunization
FP	Family Planning
FHI	Family Health International
FWC	Frame Work Contract
GMP	Good Manufacturing Practices
HIV	Human Immunodeficiency Virus
HPI	Health Policy Initiatives
HSSP	Health Sector Strategic Plan
ILS	Integrated Logistics System
IMR	Infant Mortality Rate
ICPD	International Conference on Population and Development
JSI	John Snow, Inc.
LMIS	Logistics Management Information System
LGAs	Local Government Authorities
MDGs	Millennium Development Goals
MSD	Medical Stores Department
MOHSW	Ministry of Health and Social Welfare
M&E	Monitoring and Evaluation
MMAM	Primary Health Services Development Programme
MMR	Maternal Mortality Ratio
MTEF	Medium Term Expenditure Framework
NSGRP	National Strategy for Growth and Poverty Reduction
NHSSP	National Health Sector Strategic Plan
NACP	National Aids Control Program
NGO	Non-government Organization
OPRAS	Open Performance Review and Appraisal System
PHSDP	Primary Health Services Development Programme
PHSD	Primary Health Services Development
PMU	Procurement Management Unit
PMO-RALG	Prime Minister's Office – Regional Administration and Local Government
PSU	Pharmaceutical Services Unit
PSI	Population Services International
PPA	Public Procurement Act
PPRA	Public Procurement Regulatory Authority
RHCS	Reproductive Health Commodity Security
RCHS	Reproductive and Child Health Section
RH	Reproductive Health
RMOs	Regional Medical Officers
TDHS	Tanzania Demographic and Health Survey
TFDA	Tanzania Food and Drug Authority
TPMNCH	Tanzania Partnership for Maternal, Newborn, and Child Health
UNFPA	United Nations Population Fund
URT	United Republic of Tanzania
USAID	United States Agency for International Development
VICOBA	Village Community Banks
WB	World Bank
NS	

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EXECUTIVE SUMMARY

This study assessed the supply chain of the Family Planning (FP) and other Reproductive Health Commodities (RHCs) in Tanzania Mainland. Specifically, it explored policy environment and institutional arrangement of the FP and other RHCs; financing system for the commodities; quantification and forecasting of the commodities in the supply chain; storage, distribution, Information Logistic System (ILS), Logistic Management Information System (LMIS) in the supply chain; the situation of the commodities (i.e. their supply and demand); and human resource capacity. The study was conducted in two phases: phase-one, at national level, which involved 25 key stakeholders from the Ministry of Health and Social Welfare (MoHSW), from the Medical Stores Department (MSD), and from development partners; and phase-two at zonal, regional, district, and facility levels from seven out of nine MSD zones, which involved 387 interviewees constituting Zonal MSDs, District Medical Officer (DMOs), health facility in-charges, and clients, resulting in a total sample of 412 for the whole study.

The results indicated that from the policy perspective, Tanzania has shown a high level of commitment in promoting reproductive health services, as evidenced by the various policies developed hitherto, and as witnessed by many policy agreements the country is signatory to, internationally. In achieving the Millennium Development Goals (MDGs), to which the country shows evidence of great devotion, the government has taken several measures to translate the goals into implementable national policies, for example, development of the Tanzania Development Vision (TDV) 2025 and the National Strategy for Growth and Reduction of Poverty (NSGRP) I&II, in which both of them give emphasis on reproductive health.

Institutional framework, one of the pillars in achieving reproductive health programs, is constituted by several organs, and internal as well as external stakeholders. Internally, the framework is composed of a chain of government units charged with different functions in the supply of these commodities, for example, the MoHSW itself, the Reproductive and Child Health Section (RCHS), the Pharmaceutical Services Unit (PSU), Tanzania Food and Drug Authority (TFDA), Medical Stores Department (MSD), district hospitals, and finally health facilities, which have direct contacts with clients. In this system, the MSD is the Ministry's main agent for ordering and supplying medical items in the country using procurement procedures that are governed by Public Procurement Act of 2004 and its regulations along with Food and Drug Act, on the safety side. The external stakeholders comprised development partners providing financial and technical support to the government in the supply chain. However, interviewees felt the institutional framework in the Ministry might be having too many units with similar tasks and answerability was a problem. The overlapping units were cited as Safe Motherhood Initiative, PMCTC, and Family Planning Unit, which were addressing more or less similar things.

Funding for medical supplies were from three sources: the central government; development partners; and to some degree, the districts through their own sources or through cost-sharing. While most medical supplies were funded by the government using what is called Block Grants or the Budget, FP and other RHCs, were funded through Basket Fund, a fund that the government and partners agreed to contribute to. However, a few development partners did not contribute to this Basket Fund but instead purchased the commodities themselves and sent them to the MSD for delivery to the DMOs and health facilities. Funds meant for all medicines, whether they were from government coffers or from the partners, were kept at the MSD while those for other charges were sent to the districts through the PM-RALG, or directly, if they were for vertical programs. However, data showed that FP commodities were solely financed by development partners' funds while the contribution of the government was said to be in human resource and infrastructure. Data

indicated that funds from the government that were kept at the MSD were generally low. For example, a dispensary was allocated Tshs 390,000 for medical supplies in a month while a health centre got Tshs 810,000. Except for hospitals whose amounts were flexible depending on the level of health facility and other factors, all lower level health facilities got fixed amounts, something which the interviewees at various levels considered unfair because not all such health facilities had same burden of disease or had the same number of people to serve. The fixed budgets and the ceilings imposed by the central government on the MoHSW's and on the districts' financial plans, by and large, went contrary to the whole purpose of quantification.

Generally, data on financing for RHCs showed that funding for the commodities was low, as reflected by the difference between what was estimated, what was allocated, and what was released. For example, the amount allocated for 2006/07 was 70% of what was requested in that year. In 2007/08, allocated amount was only 67% of the requested amount while what was actually released turned out to be only 30%. In 2008/09, allocated amount was 49% of the requested, though it turned out that 78% was finally released; and in 2010/11 allocated amount was 15% of the requested though what came to be released finally was 62%. Distinct data on funding for FP were not easily available. But stakeholders noted that development partners were now taking more interest in HIV and thus committing more funds towards that area than they did to family planning. Generally, comparing monetary contribution between the government and development partners, data indicated that the government was increasingly dependent on development partners even in the financing of other RHCs. For example, while government's contribution to the Basket Fund in 2007/08 was 38%, in 2010/11 it went down to 9%, implying that the bulk of this fund was borne by development partners, although some stakeholders argued that the government was contributing much in terms of salaries and other charges.

At the lower level, particularly in the districts, funding of FP and other RHCs still depended on the same two main sources: government and development partners, though Local Government Authorities (LGAs) could raise their own resources to finance the commodities. Even if LGAs were allowed to make budget estimates for their needs, they had budget ceilings to adhere to, including the money that was put in the MSD. As already observed, this contradicted the whole essence of the quantification exercise. Worse still, when LGAs were able to raise funds for medical supplies, priority was given to other RHCs on grounds that lack of these other RHCs had immediate consequences than lack of FP services. Once these commodities were acquired, they were supposed to be distributed freely at health facilities while other medicines especially those supplied through government budget were accessed by requiring clients to pay out of pocket or by through health insurance in what is called cost-sharing or revolving fund. However, special groups of people such as pregnant women, children <5, and the elderly, who were supposed to access the services freely. But data indicated that in practice, because of scarcity of supplies, such groups of people were paying for RHCs indirectly. Women for example, were asked to bring their own gloves, cotton wool, or gauze during deliveries. As to why there were times it was necessary to pay for these services when they were supposed to be free, one provider asked, *"which is better, to turn away a delivering mother at critical times because you do not have gloves or to tell her to bring those items with her at her own cost so that she can be served?"* Under the same pretext, it was reported that there were instances patients had to pay for registration cards as a means of raising some money to run refrigerators

Based on little financing to FP services by government, many stakeholders considered that FP services received low priority by the government. Main source of this low priority was reported as low awareness among policy makers and decision makers on the importance of FP to the welfare of the people and the country as a whole in the long run, as one key stakeholder at national level noted. *"Many people including policy makers see FP as only having to do with child spacing and nothing else. They have no*

idea of the social and economic implications of checking their family sizes and the population as a whole in bettering health services, education, and the future quality of life of the young generation. They do not see if there is an inverse relationship between population growth and development. They have no idea that the resources we have are limited and are going to get depleted such that they will soon cease to support the fast growing population". Yet another one at regional level added, *"When it comes to funding between FP and other RHCs, other RHCs receive priority because their absence has an immediate effect on patients. If a delivering mother dies for lack of medical supplies, the providers will be regarded negligent and will be put to task. But for FP, this is secondary; many policy makers and many people in general see that Tanzania has plenty of land and enough resources to sustain any level of population we may have*".

Quantification and forecasting of commodities was an important complement in the financing of these commodities. Data indicated that although the role of quantifying these commodities rested with RCHS, an arm of the MoHSW responsible for these commodities, which was to be assisted by JSI-Deliver, this task was left to JSI-Deliver, with very little involvement of most other stakeholders. The JSI-Deliver used experts from Washington, and there was little effort in building local capacity for this exercise. Whether this arose from the JSI-Deliver not being willing to share their expertise with local counterparts or the local counterparts did not take interest in it, this was not clear. The quantification process used three types of data: consumption or historical data; population-based data, along with some epidemiological information; and the rational method, which combined the two approaches above with a mark-up of 10% to accommodate underestimation errors that might occur in the process. But generally, the quantification process was faced with a host of problems. One was the lack of involvement of other stakeholders, as already pointed out. All three approaches were faced with data problem. For example, consumption data were only good when they were based on actual demand. But in this case, real demand was not reflected because supply of these commodities was unreliable and full of stock-outs. On the whole, data availability is a national problem. The R&R forms which were to feed the quantification process were not being filled properly for lack of training. In some cases, some of the providers used new forms while others used the old ones. These forms also never reached the MoHSW for lack of responsible personnel to maintain data and hence the JSI-Deliver depended on data from the MSD or from those they collected themselves. There were also cases of these forms being submitted untimely to the respective places. But even with the combination of the three approaches in quantifying the commodities, there was no agreed formula of how the quantities would be reached at different levels.

The quantification and forecasting exercise was conducted in February and March when the national budget was also being prepared. While the role of the quantification should have been to feed into the MTEF so that the commodities are integrated into the national budget, one wonders when these data could have fed into that system when the two were being prepared concurrently. This means the quantification process was detached from the MTEF and the national budget process as a whole. For this reason, it was not surprising to find that at lower levels, FP and other RCHs were not being budgeted in some of districts and health facilities. For example, only 17(28%) of the interviewed health facilities said they included FP and other RHCs in their budgets, while 43(72%) said they did not. One reason for these commodities not being included in the budget was that they would be funded by development partners!

Interviewees' opinions were that the quantification process for the commodities probably required to undergo too many steps from the JSI-Deliver and RCHS to the PSU and then to the Procurement Management Unit (PMU) and finally to the MSD, which caused some delays in acquiring the commodities. This was besides meetings to share and agree on what was quantified, and besides procurement procedures for the commodities. On answerability problem, the head of

the Reproductive Health Commodity Security, for example, a section of the Family Planning Unit under the RCHS, was responsible to the Chief Medical Officer instead of being answerable to the RCHS or to the Director of Preventive Services.

Worse still, the quantified data by the JSI-Deliver were supposed to be presented in joint meetings where the information would be shared with other stakeholders for increased advocacy on the commodities. Unfortunately, the meetings were not regularly attended by key policy makers such as the Permanent Secretary, the Chief Medical Officer, or the Director of Preventive Services who were supposed to chair those meetings through which they could also show government's commitment to the services but instead, they left them to be chaired by their assistants who did not have a lot of decisive power. This made the whole issue appear to receive secondary priority.

Procurement of the commodities needed to follow International Competitive Bidding (ICB) system and various procedures according to Public Procurement Act, and the MSD was the sole agent for ordering medical supplies for the government as well as an agent for distributing the commodities for the MoHSW and development partners once they were acquired. But the procedures for procuring the commodities were just too long, at times, taking up to a year or even two to get the items acquired. Data indicated that the MSD needed to undergo a long consultative process with various stakeholders in getting the commodities purchased, especially using the basket funds. It also took long because the system required time to prepare bidding documents, time to advertise the tender, time to receive the applications and sort them, and then time to select the winner, a process that was full of back and forth course between the MSD, the MoHSW, and the development partners, particularly the World Bank, which was acting on behalf of development partners. In some cases, the process got stuck by some of the bidders appealing if one of them suspected a foul play somewhere. The outcome of this was not only in causing delays in the acquisition of commodities, but also delays in the release of funds that had already been committed for acquiring the items. The bureaucratic process also resulted in unused funds being released in huge amounts at the end of the year, lest it goes back to the funding source. Long and bureaucratic procedures were reported by the MSD to be some of the major causes for some of the items reaching their expiry date within a short time after they would be received or being received when they had expired.

Distribution of the commodities was left to the MSD using its own transportation, but whose costs were covered by the government or by those who wished to have their items shipped, by providing 15% of the value of the commodities to be transported. The only complaint raised by the MSD about transportation of these commodities was that the government did not release this money in full and in time such that there were outstanding arrears of Tshs 7b that the government had to clear with the MSD at the time of the study.

Distribution of the RHCs was divided into two: a two-level system and a three-level system. The two-level system involved the MSD HQs delivering the commodities to the MSD zone and the MSD zone delivering the items directly to health facilities, as in the case of Tanga region, which was on experimental basis, while the three-level system involved the MSD HQs delivering the commodities to the MSD zone, which also delivered them to the DMOs, who then delivered them to health facilities. In all regions, in all districts, and in all health facilities, stock-outs of various commodities and the duration of those stock-outs were similar. Most places reported stock-outs lasting 3-12 months, with remote areas bearing a greater burden than less remote areas. Despite untimely payment of money for transportation to MSD by MoHSW and huge outstanding arrears, nowhere in this study were stock-outs attributed to poor distribution system; instead, data showed they were associated with unavailability of supplies at the source, that is, the MSD not having the items; which for the most part, was affected by the cumbersome procurement procedures, shortage

of funds, and untimely release of funds. Participation of faith-based health facilities in distributing FP commodities to clients varied from those that did not get involved at all, that insisted on only traditional methods of birth control, mainly those belonging to Roman Catholic; to those that were liberal, largely Protestant-affiliated facilities that considered FP services like any other health service. In places where only conservative health facilities existed, that is, where only conformist and restrictive health facilities existed, people's access to FP services became automatically limited.

The procurement and distribution of supplies were supposed to be strengthened by the ILS, which required goods being ordered and sent in an integrated way instead of separately, to reduce costs. In reaching this goal, R&R forms were developed, a system which was well received by various stakeholders at all levels. However, for lack of training, a substantial number of health facilities had not adopted the system. For example, while the ILS required the use of new R&R forms, only 65% of the health facilities were using them while the other 32% continued using the old system and the another 3% used the new as well as the old system (n=98), suggesting that in those districts where the R&R forms were not being used, the commodities were being ordered separately instead of jointly. A specific example of such a case was Tanga where despite the region having been identified a special model for direct delivery by MSD to health facilities, the items were still being ordered separately by two different people, one having received training and thus using the new R&R forms, and another who was not trained, using the old forms.

For the FP and RHCs supply chain to work smoothly, an effective LMIS was necessary. To that effect, effort had been made to develop the ILS whereby goods would be ordered jointly, as already said, thus promoting an integrated information flow; which was the reason for developing the new R&R forms. In addition, a computerized system, the ORION, was developed for the MSD to track the flow of information on the commodities. In spite of these efforts, record keeping was generally a big problem. In nearly all government departments we visited, hard data were difficult to get. Also, the stock balances on the ORION system did not match physical counts. In some occasions, some of the supplies were termed as missed items although in actual sense they were available in warehouses. In other cases, the items were regarded as missing while they were available only that the system did not identify the exact location of such supplies whether they were in the same zone, nearby zone, or a distant zone. It would seem that the main cause for data not being readily available was absence of responsible people for data management. In general, the LMIS was faced with R&R forms not being filled accurately by 29% of the health facilities. Even if they would have been filled correctly, the information in these forms did not reflect clients' real demand because of insufficient and fluctuating supply of the commodities that affected demand. Worse, the ORION system was not accessible to DMOs who continued using the R&R forms manually. On the other hand, the JSI-Deliver was developing a mobile-based system of communication but which would only feed into their computerized data system.

Storage did not seem to be a problem at all levels of the supply chain. Largely this was because there was no excess supply of the items; but deficits. One best practice noted in case of excess supply was that in-charges of health facilities communicated among themselves and redistributed the commodities to the needy facilities using an established internal mechanism.

Human resource at national level was reported not to be a problem, particularly at the MSD HQs, even if deficiency in personnel to handle data was seen by the researchers a big problem. Rather, what was considered to be a problem by the stakeholders at the MSD was limited skills of health providers to handle advanced FP methods such as the IUSD, especially in rural areas, limiting demand for such services and hence their supply, since nobody could be ordering items that were not being used. This necessitated such organizations as Marie Stopes to come in and provide

technical assistance to the districts in some areas, using its personnel. Consistent with what was noted at national level on the dearth of human resources for health, deficiency in the number of health providers in RHCs at health facility level was noted by 74% of the interviewed people while deficiency in the skills to provide advanced services in FP was mentioned by more about 50% of them. It was noted in the study that with limited supply of health providers to handle certain types of health services, the supply of those services would obviously be restricted.

In assessing the situation of FP and other RHCs, the supply and demand for the commodities was examined. In general, because of all the above limitations, the implementation of FP and other RHCs could not be smooth. During the study, 87% of the people interviewed at various levels had experienced stock-outs of some commodities in their places that lasted 3-12 months, as reported above. Stock-outs were almost uniform for various commodities at all levels. The leading FP commodities to be in greatest shortage, which reflectively could also be the commodity in greatest demand, were injectables (64%), followed by implant or implanon (59%). Compared to other RHCs, FP were in greater shortages because, as one Hospital Reproductive and Child Health Coordinator explained, *"If a mother dies for lack of RHCs, providers will be put to task. But when there is lack of FP services, the consequences are far fetched and therefore there is no pressure on them"*. Stock-outs were noted almost uniformly across all regions, including Tanga, which was a special model in distributing the commodities. Remote areas were likely to suffer greater shortages for the commodities, even if Moshi Urban and Mwanza City, which were located closer to MSD office, were among districts with the highest shortage also. One reason for these districts to experience high shortages of the commodities was its high contraceptive consumption rate. The National Family Planning Costed Implementation Program shows Moshi Urban having the highest demand for contraceptives, at 69.6%, against, for example, Tabora, whose demand is only 34.8%.

Demand for FP as exhibited by responses from exit interviews indicated that it was high, with 30% of the clients reporting to be first timers in seeking the services. But unfortunately, of the 173 who had gone for the services, 32% of them missed what they had wanted, epitomizing the level of unmet demand, against 22% from national statistics. Of those who went for the services, 92% (n=173) had gone for child spacing while only 2% of them had gone for stoppage of fertility, suggesting that the perception of many people on the role of FP was on postponing child-bearing than limiting the number of children to have. However, data showed that for those who wanted to have fertility stoppage, the driving factor was higher numbers of children they had, starting with four children, with demand becoming more pressing for those with 10 or more children. Among those who went for the services, married were 180(82%) while singles were 39(18%). Surprisingly, out of the 173 exit interviews, only one was male who had gone for FP services, implying that FP services were still perceived as having to do with women than with both sexes.

In summary, government's commitment in the promotion of FP and RH from the policy viewpoint is high. However, this commitment was not backed by financial commitment, mainly, in FP commodities. The supply chain had an established institutional framework comprising a number of organs, stakeholders, and regulations governing the procurement process of the commodities. However, the procurement procedures were rather cumbersome, resulting in delays and insufficient supplies of the commodities, which in turn created shortages of the commodities at health facility level. Indeed, efforts had been established to ensure a good distribution system of the commodities, along with a strengthened information flow through the development of R&R forms for an integrated ordering system and keeping information on the supply chain of the commodities. However, the LMIS is still weak for lack of responsible personnel for data management and also because the R&R forms had only been partially adopted, with little training provided to health providers. The ORION, an online system developed for tracking data on the commodities, was

only confined to the MSD without DMOs having access to it. Worse, its impact in storing data was generally not seen, as this did not improve the supply chain of the commodities. Skilled human resource was a problem for services demanding advanced skills in FP, mainly in rural areas.

Based on the above findings, the study recommends the following:

- It was found in this study that policy commitment on the FP and RH commodities was not backed by financial commitment and that funding for FP was left to development partners instead of the government taking a leading role. The study suggests that the government demonstrates its commitment by putting resources to these services and emphasizes for the implementation of the Abuja Declaration to have the health sector receive 15% of the budget.
- Data from the study indicated there was tendency for the government and development partners to divert their attention and resources to HIV more than to FP and RHCs. The study proposes for a redress of this trend towards a balanced focus for the FP and RHCs to receive a proportionate share
- Findings from the study indicated that the quantification and forecasting processes by the JSI-Deliver did not fully involve the stakeholders except when sharing their output. It is suggested that the process involve the RCHS as well as other stakeholders and also that the RHCS and other stakeholders take interest in the matter for them to be involved fully
- If was established from this study that the quantification of the RHCs was done in February and March of each year at the time when the national budgetary process was also taking place. As such, the quantified information could not be integrated in the MTEF, which was the main budgetary tool. It is suggested that for the purpose of making use of the quantified data, efforts be made to ensure that the exercise is made to feed into the MTEF
- Because of budget ceilings that were usually imposed by the central government, the essence of the quantification exercise was generally watered down. It is suggested that the budget process honors what the quantification says. To make this effective, let the budgeting process be based on available evidence or on what data say
- It was seen from this study that in joint meetings in which various stakeholders were involved, in which FP services could have received more advocacy, the attendance of such key policy makers as the Permanent Secretary, the Chief Medical Officer, and the Director of Preventive Services who were supposed to chair the meetings was not regular, leaving this role to their assistants, something that generally relegated the position of FP services. For FP and RH services to receive the weight and advocacy they deserve, it is suggested that these meetings be chaired by key people. Similarly, let the Director of Preventive Services chair the Quarterly Contraceptive Security Meeting instead of the RCHS Assistant Director.
- It was definite from the findings of this study that FP received less weight. Largely, this was attributable to low awareness among policy makers on the consequences of growing population on limited resources. On this basis, it is suggested that raising policy makers' and other key stakeholders' awareness is imperative if a healthy population and sustainable economy are to be continued. Also, let there be advocacy to such key stakeholders as the parliamentarians and CSOs on the importance of FP in promoting a healthy population and a sustainable economy
- Findings from this study showed that procurement procedures were cumbersome, causing delays in acquiring the FP and RH commodities. But since some development partners had shown efficiency in ordering these commodities directly using their own systems, the government could consider learning something from this practice and where possible, use one of the partners or its system to have its commodities ordered timely. But in addition to that, the MSD system of singing framework agreements of two to three years with renowned

suppliers for the supply of medical supplies within such period without having to undertake further tendering process in those two years was something commendable and should be continued in minimizing problems that arise from long tendering process.

- In ensuring smooth and speedy supply of the commodities, not only should there be increased advocacy for more resources for FP and RHCs, but also there is need for the government to look into the issues of taxation, customs, clearing, and procurement requirements. For all these aspects to be achieved smoothly, concerted efforts are important not only from the RCHS or the MoHSW, but also from various stakeholders such as the MOFEA in allocating and releasing funds timely, from the TRA in looking into the question of taxes, and from the Customs and PPRA in ensuring speedy procurements
- To minimize resource waste and increase resource utilization, there is need for a stronger coordination among partners so that the most demanded commodities receive more weight in terms of funding and the less demanded commodities receive lesser amount of resources. Specifically, Microgynon was a less demanded product but which tended to be oversupplied
- The R&R forms and the new ILS system had been adopted by a few health providers instead of all. Largely, this was because of lack of training. Hence, training becomes important for all health providers that are involved in filling these forms. Because of on-going workers' turn-over, such training needs to be continuous
- In this study, data availability was a serious problem, especially at the MoHSW and at the MSD. Clearly, the problem had arisen from data management. This study suggests that it is high time government sectors were made aware on the importance of data management. For that matter, it is proposed that all public institutions in Tanzania be called to strengthen their data system by having specialized people for data maintenance. For policy makers to value the importance of data, the study calls for evidence-based decision-making
- Data from this study indicated that advanced FP services such as IUCD were limited, especially in rural communities, because of lack of human resource. While this was supplemented by the use of technical support from partners, the option was rather limited because such support was not widespread in all rural areas. As such, going for services that demand less expertise could be the best alternative. Injectables are a specific commodity that is not only manageable by an ordinary health worker, but it is the most preferred among women because of its access not demanding consultations with husbands who sometimes decide to bar them from receiving such services when they actually felt they needed them
- It was found in this study that heads of health facilities had a system of redistributing commodities that were about to expire or those that could be in excess supply among themselves. This was a commendable step and should be encouraged, as saves resource wastage to serve other needy people
- In this study, Tanga did not stand out to be a unique model for distributing the commodities because the region still experienced the same problems as other regions or districts. The study suggests that the model should not be replicated elsewhere until some improvement is done for it to make a difference, especially by improving the performance of the MSD in having the needed stocks of supplies in their stores at all times, in the first place. This suggestion is made in the wake of the fact that shortage of the commodities that was found in most health facilities did not result from poor distribution system of the commodities but rather from non-availability of the commodities at the MSD. Thus, improvement of the delivery system needs to start by making the commodities available at the source.

1.0 BACKGROUND AND THE PROBLEM

1.1 Background

Statistics indicate that while in the developed world only one in every 17,400 women is at risk of dying during pregnancy or during childbirth, in low-income countries, this could be as much as one in eight.[1] In counteracting this, the Reproductive Health Supply Chain[2] notes that problems related to reproductive health can be greatly reduced if reproductive health supplies are made available, are affordable, are of good quality, are properly used, are sustainable, and are provided through an efficient and effective supportive system. A further note from the Role of Supplies in Meeting MDGs[3] indicates that if successful birth spacing and increased infant survival are to be achieved in developing countries, the use of modern family planning methods is vital. The State of the World's Children Report (2008, in the National Road Map Strategic Plan, 2008-2015), for example, affirms that spacing interval between pregnancies could reduce 20-25% of all maternal deaths. Additional statistics reveal that about ⅓ of 536,000 maternal deaths each year could be averted if women had access to reliable family planning methods; that at least ⅓ of the 190 million unintentional pregnancies could be avoided with availability of FP methods; that nearly 50 million women who resort to abortion, of which, 19 million are performed under unsafe conditions, could be prevented had the women been accessible to reliable reproductive health services; and that an estimated 68,000 women that die every year as a result of unsafe abortions and the millions more who suffer infections and complications such as infertility as a consequence of these abortions could be saved had there been sufficient supplies of reproductive health commodities.[4]

In spite of their importance, sufficient evidence exists to suggest that there is limited supply of reproductive commodities in these countries.[5] For example, while some 200 million women in resource-constrained countries would have liked to have an interval of two years before giving another birth, such wishes are hard to come-by because of these women not having access to modern contraception.[6] Roke and Rogerson (2008) showed that despite large efforts in enhancing the supplies of reproductive commodities in the Pacific region, end-users still reported receiving them inconsistently besides the goods being unsuitable and lacking quality. In Uganda, the unmet need for contraceptives stood at 28% among all women and at 35% among married women (Chattoe-Brown and Bitunda, 2006). The TDHS Preliminary Report (2010) in Tanzania indicates that although the trend has been increasing, the use of modern contraception is merely 28.8% among all women, 34.4% among married ones, and 47.8% among sexually active unmarried women.

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[1] The Role of Supplies in Meeting MDGs in *hhtp://www.unfpa.org/public/cache/offonce/home/supplies/pid/3588*

[2] The Reproductive Health Supply Chain in *hhtp://www.unfpa.org/public/home/supplies/pid/3588*

[3] The Role of Supplies in Meeting MDGs in *hhtp://www.unfpa.org/public/cache/offonce/home/supplies/pid/3588*

[4] What Are Essential Reproductive Health Supplies: *hhtp://www.unfpa.org/public/home/supplies/pid/3586*

[5] See for example:

- Global Programme to Enhance Reproductive Health in *hhtp://www.unfpa.org/public/site/global/lang/en/pid*
- The Role of Supplies in Meeting MDGs in *hhtp://www.unfpa.org/public/cache/offonce/home/supplies/pid*
- The Reproductive Health Supply Chain in *hhtp://www.unfpa.org/public/home/supplies/pid/3588*

[6] What Are Essential Reproductive Health Supplies: *hhtp://www.unfpa.org/public/home/supplies/pid/3586*

There are numerous reasons that are attributable to the situation of reproductive health commodities being insufficient. One is that of funding. In a statement of the UNFPA on RHCS (2000)[7] it was shown that not only have poor countries left the task of funding for these commodities to development partners, but also that international donor support has been declining. For example, donor support in the commodities dropped from $560m in 1995 to $460m in 2003. In addition, the Global Programme to Enhance Reproductive Health Commodity Security reveals the same trend between 2007 and 2013: [8]

Needed	$750,000,000
Received	$208,528,277
Pledged	$170,041,267
Still needed	$371,430,456

Because of such shortage, 'Tracking Donor Support'[9] notes that donor support would nearly need to double if the current unmet need is to be met by 2015. But equally important is the question of supply of the commodities, which is dependent on a number of things, including forecasting, financing, procurement, and distribution capacities.[10] For each of the goods to be well-forecasted, well-financed, well-procured, and well-distributed, good data are needed on consumption (i.e. how much is required of those commodities) and on stock status (i.e. how much is left). But to have the right consumption data and to have the right knowledge on the stock status, it requires effective systems of collecting and storing information, which in a word may be referred to as effective Logistics Management Information System to facilitate better forecasting of future needs, accurate determination funding requirements, improved establishment of (the right) quantities to be ordered and procured, and enhanced management of distribution so as to avoid shortages.[11]

1.2 Problem statement

In Tanzania, indicators suggest that Reproductive Health Commodity Security (RHCS) is low, the Logistics Management Information System (LMIS) is weak, and the MSD is faced with shortage of human resource resulting to workload management difficulties particularly given that it has parallel programmes to handle (see for example, URT-MOHSW-NFPCIP, 2010; Leahy and Druce, 2009; The National Road Map Strategic Plan, 2008). In brief, from the literatures, the RHCS is faced with challenges of low supply, continuous stock outs, and low contraceptive security to meet the needs of clients. A Review of Health Facility Report and Request Forms at MSD Zonal Stores (n.d.) indicated that at district level, the supply chain system did not have Standard Operating Procedures such that some of the zones organized R&R forms by districts while others organized them by months received or by delivery cycle. From this report it was also noted that there were no standard registers, Integrated Logistics System (ILS) reports were not harmonized, and time taken for R&R forms to move from health facility to MSD was too long. Other things that were observed in this report were ordering of supplies being untimely, districts not submitting R&R forms to MSD on regular and timely basis, some districts reporting and ordering on behalf of

[7] Statement on RHCS – Challenges 19th October 2000: *hhtp://www.unfpa.org/public/News/pid/151*
[8] Global Programme to Enhance Reproductive Health in *hhtp://www.unfpa.org/public/site/global/lang/en/pid/3591*
[9] Tracking Donor Support: *hhtp://www.unfpa.org/public/home/supplies/pid/3594*
[10] The Reproductive Health Supply Chain in *hhtp://www.unfpa.org/public/home/supplies/pid/3587*
[11] The Reproductive Health Supply Chain in *hhtp://www.unfpa.org/public/home/supplies/pid/3587*

health facilities, and districts or health facilities reproducing and submitting R&R forms with previous and identical information. At health facility level, the report noted that many facilities were not fully completing R&R forms resulting in information being incomplete, some facilities were not placing orders for certain commodities even if they were out of stock, some health facilities were using old R&R forms for ordering commodities, and some health facilities were submitting R&R forms with missing pages. It was further observed that on average, while the number of submissions of R&R forms were supposed to be 128, only 60(47%) of them were submitted. Generally, because of weak LMIS, monitoring the performance of the supply chain of the RHC became a problem (A Review of Health Facility Report and Request Forms at MSD Zonal Stores (n.d.)).

In another report by Basheka and Frank (2010) the following were noted, in addition to the above: that zonal stores ordered their commodities from the HQ based on historical trends rather than on what actually the reports were saying; that stocks at the HQ were not in full supply, causing a lot of interruptions in the supply chain for the commodities at health facility level; and also that there was no formal system linking zonal MSD and DMOs/RMOs to synchronize stocks between the two ends. Other aspects noted in this report were physical count of contraceptive stocks not matching with stocks recorded in ledger, ledgers not being updated, items ordered not being delivered, and ILS forms though available, health providers had not been trained on how to fill them. Health provider skill problem arising from lack of training was also noted regarding insertion of IUCDs and implants for family planning.

From this background, it can clearly be seen that reproductive health commodity supply chain is faced with a number of problems. Although causes for the RHCS not doing well have ranged from limited resources allocated for contraceptives, inadequate forecasting capacity, prolonged procurement process, uncoordinated distribution system, to limited knowledge in LMIS, as the above reports have highlighted, the causes raise more questions than answers. For example, why should resources allocated for contraceptive be limited? Is it because contraceptives are not prioritized in our development plan? Why is there inadequate forecasting capacity? Why is it that the coordination system is not well organized? But more than this, a keen look on these reports shows that the focus is on contraceptives rather than on reproductive health. The emerging question from this perspective is: could the situation be the same for the reproductive health commodities such as EMOC drugs and vaccines for children, among others, as it is for FP commodities? Answers to these questions formed the basis of this study.

1.3 Main objective of the study

The main objective of the assignment was to carry out an in-depth assessment of the supply chain management system including logistical and financial flow of the RHCS in Tanzania Mainland so as to identify limiting factors in making the RHCS meet its expectations. Subsequently, the study provides a situation analysis of the RHCS that highlights strengths and weaknesses of the supply system as a whole.

1.3.1 Specific objectives and thematic areas of the study

- To examine the existing policy environment of the RHCS and how RHCS is prioritized in the national development framework or in sector plans

- To assess the reproductive health situation including EmOC drugs (Oxytocin, Ferrous/Zinc Sulphate, Ergometrine, Misoprostol, SP for pregnant women, vaccines under EPI (including BCG, TT, Measles), and Low Osmolarity ORS, to mention a few, compared with FP commodities such as COC, POP, Implants, IUCD, Injectables, and condoms (males and females), to mention a few
- To assess the current Integrated Logistic System and the whole existing institutional supply and distribution arrangement of the RH commodities from the national level to the end user in terms of its strengths and weaknesses including roles and responsibilities of key staff in the ILS, and how loaded with various parallel functions the system is, especially the MSD
- To examine the M&E of the supply chain and its effectiveness, including information flow, and the LMIS tools used in the ILS (and their effectiveness)
- To establish the demand situation with respect to what is needed, how much is supplied, and how much is available
- To assess forecasting capacity of the people responsible for ordering and supplying the commodities at national level and at final destination (i.e. at district and health facility level) and also to establish what stocks are mostly available, which ones are mostly needed and over all stock piles and stock outs of each product. That is, to examine push versus pull ordering system.
- To identify challenges related to funding in terms of source of financing for various commodities, how much is being allocated for each product, how much actually is being used for that purpose, financial flow (e.g. for three years), procurement procedures such as filling forms and how simple or complex the process is, and how all these aspects differ from one product to another
- To identify if there are other parallel systems supplying RH and FP commodities to see how they are organized in terms of financing and distribution and how they are linked or could be linked to the existing system
- To establish the human resource capacity in the supply chain as to whether there are enough and competent personnel
- To establish awareness among community members on their need and use of the RHC

2.0 PHASE-ONE METHODOLOGY

2.1 Area of the study and target population

The first phase of the study was carried out to national stakeholders targeting at key people at the MOHSW that were involved in reproductive health and family planning in one way or another, key people at the MSD head office, and key people from development partners in reproductive health (see Table 1).

2.2 Sample size and selection procedures

Phase-one sample size for the study turned out to be 25 instead of the planned 13. We came to this number because in most places we visited there would be several people volunteering to be interviewed. But while from most of the development partners the people interviewed were the intended ones from those organizations, at the MoHSW and from the MSD, only representatives and mainly those who could not have the data were available. This shows

how less important research is considered in Tanzania. Nonetheless, as in most research where key informants are involved, their selection was purposive.

Table 1: Phase-one sample size and its composition

Place	Who was to be interviewed	No.	Who was interviewed	No.
MOHSW	Director of Preventive Services	1	None	0
	Chief Pharmacist	1	Pharmaceutical Service Unit (Representat.)	1
	Manager of the RCHS	1	RCHS Pharmacist and FP Focal Person	2
	Procurement Management Unit	1	None	0
	Director of Policy and Planning	1	Health Financing and Budget (Represent.)	2
MSD	MSD Managing Director	1	Customer Service Representatives	5
	Human Resource Manager*		MSD Human Resource Manager	1
Development Partners	JSI DELIVER	1	Representatives	2
	USAID	1	Actual Officers involved in RHC	2
	UNFPA	1	UNFPA Country Representatives	2
	World Bank	1	Representative	1
	Marie Stopes*	-	Managers	2
	Futures Group	1	Representative	1
	PSI*	-	Representative	1
	Pathfinder	1	Representative	3
	FHI**	1	None	0
TOTAL	**PLANNED**	**13**	**ACTUAL**	**25**

* was not in the plan; ** was not visited

2.3 Types and sources of data

The study used quantitative and qualitative data. These came from secondary sources as well as primary sources. Secondary data were from various documents while primary data came from interviews with a range of stakeholders at different levels.

2.4 Data collection methods and ethical issues

The study combined a number of data collection methods that complemented each other: documentary from various records and documents and in-depth interviews with key informants. For in-depth interviews, a study guide was used and the interviews were recorded by note-taking. Based on the types of data collected, ethical issues were not a big requirement at this stage except that of making sure the names of the respondents remained anonymous. In conducting this study smoothly, we needed to work with at least two (2) counterparts from the MOHSW who formed an important link with the people we needed to interview.

3.0 PHASE-TWO METHODOLOGY:

3.1 Area of the study

Phase-two study was carried out in seven out of the (9) MSD zones of Tanzania Mainland: Dar es Salaam South, Mtwara, Moshi, Mwanza, Tabora, Iringa, and Tanga.

3.2 Target population

Phase-two focused on the following target populations: MSD depot managers at zonal levels, district medical officers/district pharmacists, health care providers at facility level that were involved in the supply of RH and FP commodities, health providers involved in RH

and FP in both public and private health facilities, and clients accessing the RH and/or FP services.

3.3 Expected phase-one sample size and the selection procedures

The planned sample size for the phase two study was **707**. But it finally turned out to be 387. As pointed out, out of the nine (9) zones, seven (7) were visited, namely, Dar es Salaam, Mwanza, Mtwara, Iringa, Tabora, Tanga, and Moshi. The basis for selecting them was that Dar es Salaam and Moshi were considered best performers in the RHCS while Mtwara and Iringa were low performers. Tabora and Mwanza were included to represent zones with moderate performance while Tanga was selected as a special zone under pilot study to conduct direct delivery of supplies to health facilities by the MSD.

In six out of the seven zones, two regions were selected in a manner that one needed to house an MSD depot and another needed not to house it. This was for the purpose of capturing several aspects including how the location of MSD influences availability of FP and RH commodities. The seventh zone of Tanga had only one region because it was a special region. Considering that from each of the six zones two regions were selected, this means in total, thirteen (13) regions were selected for this study. While second regions were selected randomly, for Mwanza, one of the regions had to be Shinyanga because of the need to provide basic data to the UNFPA which intends to support the region in future, given its poor socio-economic indicators.

From the six zones, one district housing the MSD was selected along with another district from the second region that was distant geographically and probably having the most unfavorable socio-economic indicators. But for Tanga region, two districts were selected, one housing the MSD zone office and Lushoto that was furthest from the Zonal MSD. From these zones, the study covered a total of fourteen (**14)** districts.

From each district, the study intended to cover one (1) hospital, two (2) health centers and three (3) dispensaries, of which in the case of dispensaries, two (2) would be public and one (1) private. In total, the study expected to cover **84 health facilities**, which included seven (7) regional hospitals, if the principle of visiting a region and a district that housed the Zonal MSD depot was to be adhered to. District hospitals were also seven (7), whose selection was automatic once the districts were selected. The selection of the two (2) health centers from each district was first based on distance, such that each of them would need to be located at least 25km from the district head office to avoid urban bias towards RH and FP use, and needed to be located in remote areas, except for Dar es Salaam region, which is mostly urban. Selection of the three (3) dispensaries followed the same procedures as for the health centers. They needed to be located at least 10km from any selected health centers, one of which must be private or FBO-affiliated (though for them, distance was not a strict requirement). In essence, the private health facility could be of any level: a hospital, a health centre, or a dispensary. The breakdown and details of this sample are shown below.

(i) Phase-two sample size (covering zones, regions, districts, and health facilities)

Zonal level

- MSD managers from 7 zones x 1 KI -- -- -- -- 07

District or health facility level

• DRCHC (available only at district level)	for 14 districts		14
• Pharmacists (one from each district)	for 14 districts	--	14
• Health facility i/c or person responsible for RH supplies		--	84
• Health providers involved in the provision of RH services		--	84
• Health providers involved in the provision of FP services		--	84
• Five exiting clients from each health facility 5 x 84	--	--	420
Estimated total sample size for phase two			**707**

Except for clients at health facility level, all other respondents were regarded as key informants and were selected purposively, based on the roles and functions they had on reproductive health at different levels. In this regard, the clients at health facilities were selected randomly in what is called exit interviews from the RCH or FP services they were attending.

3.4 Phase-two actual sample size

As earlier said, the actual sample size for the second phase of the study turned to be 387 instead of the planned 707. The greatest shortfall in the planned number of respondents was with health providers. After realizing that information from heads of health facilities would be the same as the one from other health providers given that the research instrument was the same and the interviewees were nearly the same, it was decided that only one person at each health facility level be interviewed. In other health facilities or hospitals, several health providers were interviewed in a form of group interviews. As usual of course, other reasons for the lower number of interviewees included the respective people not being there at the time of the study, or just not being willing to be interviewed. But contrary to what happened at national level, most of those who were interviewed at the lower level were those who were intended and not their representatives who did not have any data as it was experienced earlier. The breakdown of this sample size is indicated in Table 2.

Table 2: Sample size

Type of respondent	**All other regions**	**Tanga**	**Lushoto**	**Total**
MSD Zones	5	1	-	6
DMOs	12	1	1	14
District Hospitals	12	-	1	13
Facility I/Cs	65	5	5	75
Exit interviews	229	25	25	279
Total	**323**	**32**	**32**	**387**

3.5 Types and sources of data

The study included both quantitative and qualitative data. Main sources were secondary and primary. Secondary data were from e.g. supply ledgers at various levels while primary data were from interviews with a range of stakeholders at different levels.

3.6 Data collection methods and ethical issues

The study combined a number of data collection methods that complemented each other: **documentary** from various records and documents at national and health facility levels; **in-depth interviews** with key informants using **interview guides**; and ordinary interviews especially with reproductive health service clients, using semi-**structured interviews**.

All ethical issues were observed in conducting the study. This included guaranteeing all respondents confidentiality of information they would provide; verbal or written informed consent before starting interviews; and free participation in the study. This informed consent was phrased in the introductory part of the data collection tool. People's identities remained anonymous throughout the study as well as in the report. All researchers and their assistants were told of what they were supposed to observe in conducting the study.

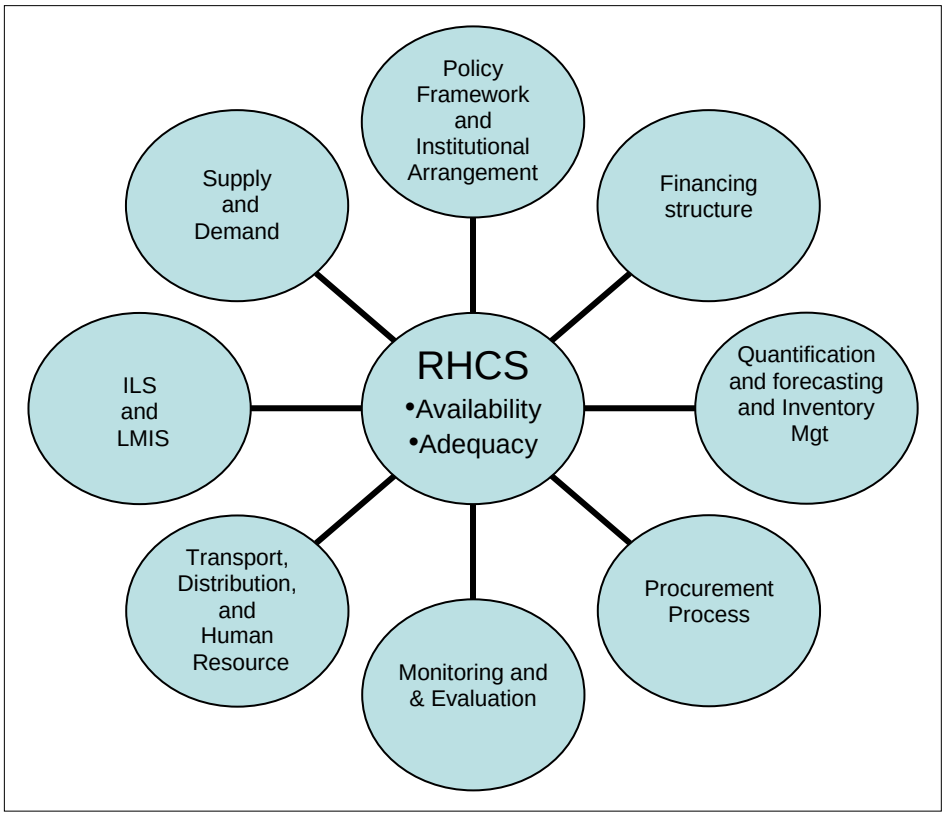
3.7 Data analysis and organization of the report

The study combined two programs in its data analysis: the Excel and SPSS for quantitative information. The report is organized as follows: the first part is on background, problem statement, and methodology. The second part presents findings on policy environment of the reproductive health commodities; the funding and the supply situation of the commodities; and the institutional organization of the supply chain to illustrate how the supply chain is organized. The third part is the discussion part. At every level of data presentation, an attempt is made to reflect the national as well as the local situation.

3.8 Model of data analysis and presentation

The study as a whole and the analysis of its findings are based on the model presented in Figure 1, which depicts that the RHCS situation in terms of availability and adequacy of the commodities hinges on a number of factors: the country's policy environment; institutional arrangement and how other key stakeholders are involved; financing structure; inventory management and forecasting; procurement process; ILS and LMIS; transportation and distribution; and M&E.

Figure 1: Model of data presentation and analysis



4.0 FINDINGS

4.1 Policy environment of the RH commodities at national and local level

The first milestone of a government's commitment to anything is its policy. Hence, the first aspect to examine in this study in judging government's dedication to Reproductive Health Services (RHS) was its policy to that effect. Based on various policy documents depicting the country's recognition and acknowledgement on RHS and the need to prioritize maternal morbidity and mortality, Tanzania's commitment is undoubtedly high. The first evidence showing how much the government is dedicated to RHS is that Tanzania is a signatory to the International Conference on Population and Development (ICPD) Program of Action which aims at having universal access of all people to RH by 2015 (URT-UNFPA, 2008-2010). The country is also a signatory to the Fourth World Conference on Women (Beijing) Platform for Action; to the Convention on the Elimination of All Forms of Discrimination Against Women; and to the 2007-2010 Maputo Plan of Action for the Operationalization of the Continental Policy Framework for Sexual and Reproductive Health Rights (URT-UNFPA, 2000-2010).

The MDGs, which Tanzania has shown a considerable commitment in implementing them, and from which most of the country's development policies are derived, are yet another cursor for government's devotion in ensuring RHS are available to the people. The MDGs clearly spell out the need to reduce child mortality, improve maternal health, and combat HIV/AIDS, malaria, and other diseases, as key achievement areas by 2015. Thus, a country committing itself to the attainment of then MDGs is a clear indicator it is committing itself to promoting RHS. Indeed, when in 2005 Tanzania developed its Development Vision 2025 - TDV, it was essentially from this perspective of translating the MDGs and showing its obligation to fulfilling the Millennium Goals agreed in 2000 of which, RH is a major component. Parts of the TDV 2025 that match the MDGs insofar as RH is concerned are: to have improved access to quality RHS for all individuals of appropriate ages; and reduction of infant and maternal mortality rates by ¾ of current levels.

Another national policy that translates the MDGs reflecting government's commitment to RH is the National Strategy for Growth and Reduction of Poverty (NSGRP) (2005), which has become the main guide in directing most of the country's social and economic aspirations today. For example, Goal 2 of Cluster II of the NSGRP spells out governments' commitment on the need to improve survival, health, and well-being of all children and women, in which RHS have a pivotal role in the achievement of such a goal (URT-NSGRP, 2005). As if this was not enough, the Primary Health Services Development Programme (PHSD-MMAM 2007-2017) has been another signpost for the country's commitment to RHS, with a pledge of ensuring fair, equitable, and quality services at community level. This policy was followed by the National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn, and Child Death in Tanzania (2008-2015), which outlined a strategic framework with numerical goals on maternal, newborn, and child health such as reduced MMR from the current 454/100,000 live births to 193/100,000 by 2015 and to reduced neonatal mortality from 26 to 19 per 1,000 live births, among others.

Yet, in 2007, the Tanzania Partnership for Maternal, Newborn, and Child Health (TPMNCH) showed another benchmark for the country's commitment to improve mother and child health, was launched. This was besides the URT-UNFPA Country Programme Action Plan 2007-2010 that emphasized on attaining increased access to quality basic social services for all; increased and equitable access to comprehensive and equitable access to comprehensive reproductive and child health intervention; increased access to comprehensive prevention care and treatment, and impact mitigation of HIV/AIDS and other major diseases, a large part of which will be addressed by government's commitment to RHS.

Lately, the former NSGRP I (2005) has been extended to NSGRP II (2010) in which Goal 3 of Cluster II of the NSGRP II is to improve the survival, health, and well-being of children, women, and marginalized and vulnerable groups, as it was in the preceding NSGRP I (2005). Assured RHS is certainly a major leverage to the attainment of these goals. NSGRP II seeks an extra mile in the reduction of a number of health indicators, as follows (Table 3):

Table 3: Some of the key health targets for the NSGRP II

Indicator	Situation in 2004	Target for 2010	Target for 2015
TFR	5.7	5.4	5
MMR	578/100,000	454/100,000	193/100,000
Neonatal MR	29/1,000	26/1,000	19/1,000
IMR	58/1,000	51/1,000	38/1,000
<5MR	91/1,000	81/1,000	54/1,000

Source: NSGRP II, 2010

Despite this high commitment from the policy perspective, the views of all respondents were that what was reflected in the policies was not backed by financial commitment. As such, RHCs had implementation problems. Unlike what was stated in the Abuja Declaration of 2001 in which the African heads of states pledged to set aside 15% of their national budgets for health, there is no policy statement in Tanzania that defines the proportion of the health budget that should be set aside for FP and other RH commodities. This dearth of definitive policy commitment on the budget share earmarked for FP and other RH commodities leaves the MOHSW with a lot of unrestricted discretion in allocating budget resources in the sector. It was noted that it looked like FP and other RH commodities did not attract a comparative competitive stance with commodities for curative services, for instance. So there is a rhetoric policy in that what is declared in the policy statement is not translated into commensurate financial action. In simple terms, it can be said that there is no authoritative financial statement of intent that commits the government towards ensuring continuous availability of FP and other RH commodities.

4.2 Institutional arrangement, key stakeholders, and their roles at national level

At national level, the institutional framework in the supply chain of RHCs was composed of several key stakeholders including the following governmental institutions: Ministry of Health and Social Welfare (MoHSW); Reproductive and Child Health Services; Pharmaceutical Services Unit; Tanzania Food and Drug Authority (TFDA); Public Procurement Regulatory Authority (PPRA); and Medical Stores Department (MSD). The

institutional framework at national level also included the following development partners: JSI Deliver, UNFPA, Marie Stopes, PSI, Futures Group, the World Bank, Pathfinder, and USAID. We briefly examine the contribution of these key players in the supply chain of RHCs to see how they were linked at national level.

(i) Ministry of Health and Social Welfare (MoHSW)

The MoHSW is certainly the starting point of the whole process of the Reproductive and Health Commodities, vested with the role of ensuring various support mechanisms are in place to address RHCs issues through issuance of elaborate policies, regulation, legislation, monitoring, and quality assurance system in the health sector using various organs under it. The Ministry is also responsible for allocating funds to the MSD for the procurement of the RHCs.

(ii) The Reproductive and Child Health Section

In so far as RHCs are concerned, one of the right arms of the MoHSW is the Reproductive and Child Health Section (RCHS). The RCHS is not a directorate in its own right, but it is a vertical program with separate financing and procurement arrangements for other primary health care programs for most of the RHCs. The RHCS, which is under the Directorate of Preventive Services, is supposed to look into policies and all matters relating to quantification of the RHCs since this is the right section for reproductive and child health supplies. As for quantification, this task was supposed to be carried out in collaboration with the Pharmaceutical Services Unit (PSU).

(iii) Pharmaceutical Services Unit (PSU)

Located under the Directorate of Hospital Services (Curative Services) in the MOHSW, the PSU plays a central technical role in the coordination of government and donor-funded commodity-related activities. It reviews, quantifies, and prepares annual commodity forecasts, including consumption and stock balances of essential drugs for various programs. The PSU informs relevant bodies of any changes in product selection that affect forecasting, budgeting, and procurement; and advocates for budgetary allocations for commodities from various sources. In fulfilling its functions, the PSU is supposed to work with various organs such as the RCHS. In other words, the PSU in collaboration with Reproductive and Child Health Section of the MoHSW is supposed to aggregate all the requirements of health facilities that are compiled by the DMOs at district level through the R&R forms and do the quantification while copies of such requirements are supposed to be sent to MSD. The total requirements by brands are then submitted to the MSD for them to place orders. The PSU in collaboration with the JSI-Deliver and other stakeholders is the one managing the Ministry's conversion from the old procurement system to the ILS and the related LMIS using the new R&R forms, thus generally setting a system that ensures improved delivery of commodities to clients. Although the PSU is responsible for quantification of the commodities, the unit has not managed to collect effectively the R&R forms from DMOs for that purpose. Data indicated that neither did the PSU communicate with the RCHS which should be the one having all the necessary information on RC in the quantification process. Instead, the quantification has been left to JSI Deliver, which, as data revealed again, did not have direct communication with the RCHS and vertical programs under Directorate of Preventive Services (DPS). However, the PSU is not responsible for procurement of commodities; instead it transfers the quantified information to the Procurement Management Unit (PMU), a unit responsible for procurement of all items for

the ministry, including bidding tenders and selection of suppliers, although this task again is assigned to the MSD, which prepares the bidding documents on behalf of the PMU, with the PMU and World Bank ratifying these processes. These processes are the cause of delays.

(iv) Tanzania Food and Drug Authority (TFDA)

The TFDA is an important government's arm in inspecting all food-related goods whose consumption can have effect on consumers. These goods include medicines coming through private and public drug outlets. In the process of procuring commodities, the TFDA requires the MSD to obtain import permit before the commodities are imported, which when they will have been acquired are also inspected by them to guarantee consumers' safety. These include medicines ordered by hospitals, wholesalers, Accredited Drug Dispensing Outlets (ADDO) *(maduka ya dawa muhimu)* and private drug shops *(maduka ya dawa baridi)*. In the process of procuring the commodities, the TFDA requires the ordering institutions to obtain import permit before items are brought in. The drugs procured are those that have full registration with TFDA. Registration process involves evaluating products for quality, safety, and effectiveness, and all suppliers must have Good Manufacturing Practice (GMP) certificate. It was reported that the import permit from TFDA usually takes only 24 hours, implying that with TFDA, there was limited bureaucracy.

(v) Medical Stores Department (MSD)

The MSD was established in 1993 as a semi-autonomous government department, which started operating after receiving seed-money from the MOHSW in carrying out its functions of distributing medical supplies at subsidized price to health facilities. Its responsibilities are to procure, clear, store, pack, and distribute supplies from the central level to district level. The mission of the MSD is to make available essential drugs and medical supplies of acceptable quality in government and approved non-government health facilities through its zonal offices. It processes commodity requirements after receiving quantified requirements from the PSU and the JSI-Deliver. The MSD also monitors the logistics and maintains financial accounts of the district hospitals and other lower level health facilities. As for contraceptives, they are procured through open International Competitive Bidding System, with contract management handled by the MSD. The items procured by the MSD are specified by the RCHS. These include condoms, oral contraceptives, and implants. Moreover, it procures and/or distributes supplies that are funded by development partners either through the basket fund system or those that are provided directly (outside the basket fund) (see also Figure 2).

(vi) John Snow Inc. (JSI – Deliver)

The JSI-Deliver is a technical advisor to the MoHSW. As specified elsewhere in this document, their main role is to quantify all products funded by the MoHSW or those that are funded outside the MoHSW. In carrying out this function, they get support of experts from Washington where they use demographic and past consumption data based on issues from MSD. This is to say information is collected from MSD concerning the status of supplies instead of getting such data from the RCHS or RHCS. The JSI-Deliver was also reported having the role of monitoring and evaluating availability of commodities by randomly visiting the sites. They track commodities up to MSD zonal level. In addition, JSI-Deliver is involved in building capacity of health workers in the supply chain. They train them on how to administer the commodities they order including the ILS, using the R&R forms. They are among key implementers of the Integrated Logistics System (ILS) with

respect to designing and preparing these data collection or reporting tools. Furthermore, the JSI-Deliver was said to procure FP commodities for money that comes through USAID that include Microgynon, Microval, IUCD, and at one time, Implant, though full commitment of the USAID is for Microgynon, Microval, and IUCD. Condoms are mostly purchased using Government funds and Global Fund.

(vii) UNFPA

Apart from collaborating with the government by contributing in the Basket Fund, the UNFPA as a development partner has been working with NGOs such as UMATI, AMREF, and TGNP to promote usage of FP commodities. It has also been financing campaigns such as ZINDUKA in the promotion of FP. The UNFPA also works with Faith Based Organizations (FBOs) in Zanzibar to promote RHCs. But more than that, it supports the government in FP during emergencies. Prior to change of her policy in 2005, the UNFPA was involved in the procurement and distribution of the FP commodities itself. But as of now, the UNFPA only acts as a 'third party' procurement for the government when need arises. It was reported that it was cheaper for the Government to order its commodities through UNFPA due to its simplified and shorter procurement procedures. UNFPA helps link Global Policy to the National Policy, focusing on the Millennium Development Goals (MDGs) by discussing with national policy makers on RHCs. The fund further provides technical assistance to the Government in aspects related to RHC Security. It further supports various surveys on Reproductive Health Services in the country.

(viii) Marie Stopes

Marie Stopes, an NGO, is involved in taking FP services to the people with unmet needs and participates in implementing Councils' Comprehensive Health Plans (CCHP) using its technical expertise. They mostly operate in districts funded by Canadian International Development Agency (CIDA). Marie Stopes has one hospital in Dar es Salaam and 14 clinics in various urban areas. The NGO provides support to fill gaps in health facilities and areas that lack the needed expertise in FP. They get their commodities from the District Medical Officers who they work with, and based on their expertise, they visit identified areas with missing staff to provide the missing FP services. According to Marie Stopes, most health facilities lack expertise to administer Implants, IUCDs, and Injectables. Due to lack of qualified staff to administer these services, these commodities are often in short supply in the facilities even if demand for them could be high. This is because ordering such commodities becomes useless when there is no expertise to manage them. Their observation was that due to shortage of contraceptives, choices of method mix are not made available in most facilities despite the involvement of various stakeholders to ensure constant supply of the commodities to clients. As such, clients have limited choice from which they could choose despite the advocacy that there should be a range of commodities to suit consumers' preferences. From their observations, the gap between supply and demand for the RHCs in the country was still wide.

(ix) Population Services International (PSI)

The PSI was established in 1993 as a social marketing and communication agency on HIV particularly in the distribution of condoms. It started getting involved in the RHCs in July 2008, focusing on two things: Family Planning and Maternal Mortality Reduction, which are in line with the MDG No. 5. Effectively, the PSI started providing FP services in 2009. In the very year (2009) after being overwhelmed with the provision of FP services, they started

providing training to private sector to help in delivering the services, though this training was extended to providers in public facilities, too. The NGO provides "Familia Kondomu". They also provide pills, injectables, implants, and IUCD. In providing these FP methods, they charge a small amount. On rare occasions, and with justification, they provide them free of charge. Structurally, the PSI operates in five (5) zones and has operational offices in each of those regions. At regional level, their staff consists of a coordinator, a service provider, a counselor/demand creation supervisor, an outreach team leader, and a product dealer. The teams at the regional level link with end users in various health facilities in the respective regions through various mechanisms including the "scratch card system", a system that allows information to be relayed into the Google network, which upon downloading, the PSI (at regional level) is able to know the consumption level of the commodities at each dispensing point that is connected to the system, which facilitates the replenishment of the items.

(x) Futures Group International (FGI)

The Futures Group International (FGI) is a USAID project that exclusively focuses on policy and advocacy geared to promoting reproductive and health activities in the country. In that respect, they follow-up on what should be included in the country's policy so that that policy favors and promotes reproductive health issues. They further check or observe how the set policies are implemented with a view to identifying weaknesses and provide support or influence to its implementation. As an advocate, the FGI influences decision-makers to allocate more resources to the RHCs. In doing this, the FGI was said to identify existing shortage of the RHCs so as to convince partners to increase their resources in the area. The FGI played a key role in setting specific health-related targets in the NSGRP II and they also participated in the development of Health Sector Strategic Plan III.

(xi) The World Bank

The World Bank is another stakeholder in the procurement of RHCs when money for the commodities is from the Basket Fund. The role of the World Bank is to provide advice and scrutinize bidding documents that have been prepared by the MSD for procurement of planned commodities to see if they have been done properly and are in accordance with the given guidelines. Based on their experience, it took two (2) weeks for a particular document to be cleared or for clearance to be obtained from them, although data from the MoHSW and the MSD indicated that the WB was a source of delay. The World Bank gives three types of approvals: approval of tender documents, approval after evaluation is done, and when tender is awarded. From the outlook, the process is inherently bureaucratic.

(xii) USAID

The United States Agency for International Development in Tanzania supports the Reproductive and Child Health Section of the MoHSW by procuring the commodities itself and supplying them to the districts through the MSD. The USAID also provides technical support to MoHSW and advocacy. In 2009-2010, USAID was the greatest donor outside the basket fund for the RHCs that were procured. About a ¼ of USAID budget in Tanzania goes to RHC. The procurement procedures under USAID do not require tendering. They just call off orders from Washington when need arises. What is to be procured by USAID depends on the agreement at CPT, but the annual spending on RHCS from the USAID is about US$ 5M. Technical assistance provided by USAID to MoHSW is through JSI. That is, all functions performed by JSI-Deliver project are supported by

USAID. The technical support includes but is not limited to quantification of all RHCs in the country, training of health facilities' staff on ILS, and monitoring and evaluation of the supply of RHCs in the country, as detailed under JSI above. In addition, USAID provides advocacy to health policies through the FGI. They work with the Parliamentary Committee on Population and Development. It was also reported that USAID is an advocate for increased resources from other donors/sources and is an advocate of how emergency procurement of RHCs and FP commodities may be done. The DFID has agreed to put money to the USAID for procurement of contraceptives. About ⅓ of the RHCs needed in the country is provided and procured by USAID, as detailed under FGI.

(xiii) Pathfinder

Pathfinder is another organization concerned with RH services, especially in FP besides also being involved in HIV and community-based care. It works with UMATI and the RHCS by providing technical services. Funded by several donors e.g. CDC, its functions include taking care of HIV issues mainly in integrating FP and HIV at community level, arranging refuge health services especially in Kigoma, advocating on health policy, assisting in home-based testing and counseling on HIV/AIDS, and in helping organize Village Community Banks (VICOBA) groups largely in Arusha, Dar es Salaam, Tanga, Kilimanjaro, and Shinyanga. Nevertheless, it is not involved in the procurement of the RHCs but in assisting in the provision of technical assistance and in mobilizing resources for the commodities. Lastly, it is a member of FP Technical Working Group.

4.3 Institutional arrangement, key stakeholders, and their roles at lower levels

At lower levels, the manner in which different stakeholders are organized in the zones was also important in mobilizing various resources for effective management of the supply chain for FP and other Reproductive Health (RH) commodities. However, it would seem most of the key stakeholders that were mentioned at national level did not have a direct link with the grassroots even if their contribution to FP and RHCs was well known by all providers and even by clients at this level. The main stakeholders at this lower level were the Zonal Medical Stores Department (MSD), the District Medical Officers (DMOs), and health facilities.

Data from the districts revealed that the Zonal MSDs was responsible for receiving FP and other RH commodities from the Central MSD, who then delivered them to the DMO. For most districts, this was done by the Zonal MSD - processing the requests from health facilities, packaging them and delivering them to the DMOs. In Tanga, the Zonal MSD sent the commodities directly to the health facilities itself. Confirming the centrality of the MSD in the supply of these commodities, it was revealed from the customers at the grassroots that the source of FP and other RH commodities was restricted to the Zonal MSD. The private sector was not mentioned at all as a source of these commodities, implying that the MSD had a monopolistic role in this chain.

In many districts (by more than 50% of them), the DMOs were seen the main players in receiving, storing, and distributing FP and other RH commodities at district level. Under this structure, requests for Reproductive Health Commodities (RHCs) originate from health facilities, according to their consumption data. Based on this framework, orders are filled using Report and Request (R&R) forms and forwarded to the DMOs who compile and

subsequently forward them to the respective Zonal MSDs. This means the DMOs receive the R&R forms from the facilities, check them for accuracy, and compile them before sending them to the zonal MSD. This process was the same for all districts including Tanga, which had its commodities delivered directly by the MSD. Designated hospitals such as Faith Based Hospitals place their orders directly to MSD instead of routing them to the DMOs. At some point, through this approach, all the requirements of health facilities are supposed to be submitted to the PSU and RHS in the MoHSW to facilitate the quantification process of these commodities at that level.

Data from the study showed that once the items reached health facility level from the DMO, the service providers were charged with the responsibility of being custodians of the commodities. Their role was to recruit clients into the program, to provide counseling for informed choice to the clients, and to issue FP and other RH commodities to them. The service providers are supposed to maintain up to date records of commodities issued to clients as well as stocks of commodities available in their facility stores. They also have to report and request commodities using appropriate R&R forms and/or the ILS forms. The R&R forms are forwarded to the DMOs who compile and subsequently forward them to the respective Zonal MSD.

4.4 Financing and the structure of financing of the RHCs at national level

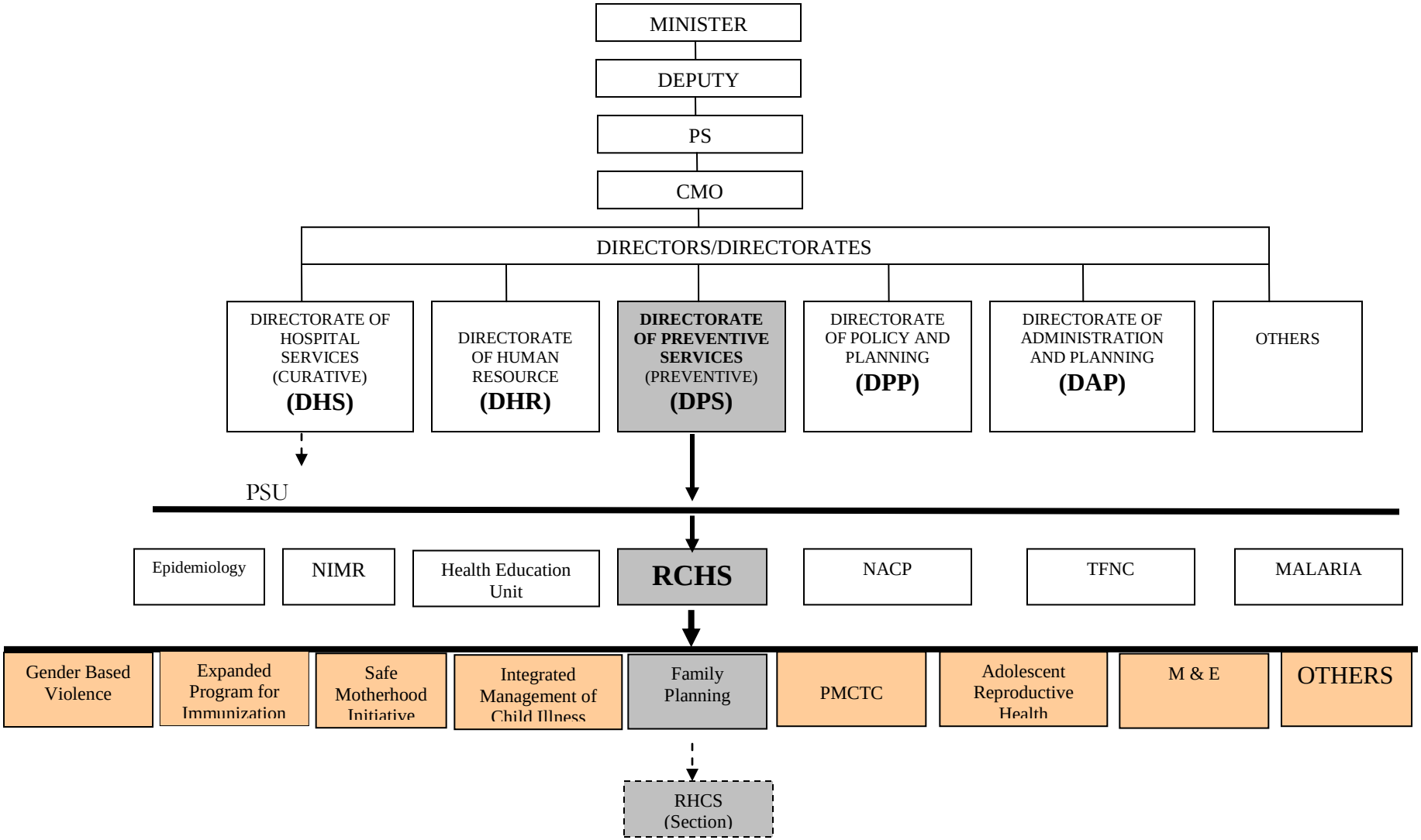
At national level, it was revealed that financing of Reproductive Health Commodities (RHCs) in Tanzania is mainly through three sources: the Central Government, Local Government own sources that include cost-sharing (by paying out of pocket or through health insurance) development partners through the Health Sector Basket Fund, or through direct material support such as the assistance that USAID and now the UK-DFID provide by purchasing the items themselves. Basically, once funds have been pooled in the basket, they are regarded as government money.

Funds from the government are divided into two: those that go to the MoHSW and those that go to LGAs through PMO RALG (Figure 2). Funds that go to the MoHSW are then allocated to all referral and regional hospitals for purchase of essential drugs. The funds are also allocated to all public district hospitals and to all other public health facilities at lower levels by depositing their money at the MSD, for similar purposes, i.e. purchase of essential drugs. This means each health facility at district level has an account with the MSD to facilitate the purchase of these essential drugs, with each having an estimated fixed amount as follows:

Dispensaries	Tshs. 1,170,000 per quarter or Tshs 390,000 per month
Health Centres	Tshs. 2,330,000 per quarter or Tshs 810,000 per month
Hospital	Vary depending on type of hospital and patient number

Funds that go through the PMO-RALG are meant to enable LGAs supplement their needs for essential drugs, most likely because the above funds were never sufficient to meet their demands. On the one hand, the general criteria used in allocating budget to districts through this system included poverty level of the residents, distance, disease burden, and population. These also became the basis for LGAs in estimating their budget needs, although they had ceilings that were fixed by the Ministry of Finance.

Figure 2: MOHSW organization structure and where RHCS belongs



We already said development partners either contribute to basket fund or outside the basket fund. Part of the development partners' contribution goes to specific health programs, particularly in the purchase of reproductive health commodities that might lack funding from government. FP commodities were among those funded purely through donor funds. These programs have their accounts at the MSD along with those that the government funds. After verification and quantification by the MoHSW on the needs of the districts, the MSD is authorized to procure the drugs using these accounts for the programs. However, as pointed out already, there are partners such as the USAID who do not want to contribute to the Basket Fund. These had their own systems of financing the commodities largely by procuring the supplies themselves but distributing them through the MSD system. While essential drugs supplied through government money were charged some user fees in what is called cost-sharing at the end-user level, commodities supplied through development partners, and in particular, RHCs, were supplied free of charge.

Data from interviews with key stakeholders at national level revealed that the Health Sector Basket Fund was implemented starting in 2000 by the government of Tanzania and a group of donors supporting the National Health Strategy, HSSP II and the NSGRP II to set off the deficit arising from limited funding capacity of the government. Eight development partners, namely Canada, Denmark, Germany, Ireland, Netherlands, Switzerland, the World Bank, and UNFPA contribute to the country's health sector. Basket partners have a Memorandum of Understanding with the government, and meet through the Basket Financing Committee. Further explanations from the study revealed that Basket Funds pledges by donors are made at the beginning of the year and when contributed the funds are drawn down and merged with government funds quarterly.

Table 3 shows budget allocation for medicines for the financial years 2007/08 to 2010/11. Data indicate that generally, there has been an increasing trend in medical supplies budgetary allocation over the years from TShs. 95,006,867,532 in 2007/08 to TShs. 343,076,194,806. From these data, government's contribution can be clearly seen, with an overall decreasing trend (Table 3). On the other hand, the contribution by other development partners including USAID, which is the only partner not contributing in the Basket Fund, is remarkable and has been growing (Table 4)

Table 4: Trends in basket fund for medicines in Tanzania (in Tshs)

	GOVERNMENT	BASKET	OTHERS	TOTAL
2007/08	36,370,959,732	9,121,830,000	49,514,077,800	**95,006,867,532**
2008/09	31,430,460,100	24,625,000,000	113,037,211,185	**169,092,671,285**
2009/10	34,720,908,400	14,898,692,000	152,697,508,400	**202,317,108,800**
2010/11	30,755,299,000	30,600,000,000	281,720,895,806	**343,076,194,806**
Total	**133,277,627,232**	**79,245,522,000**	**596,969,693,191**	**809,492,842,423**

Source: MoHSW

Figure 3 depicts a comparison between the government's contribution against the combined contribution of the Basket Fund and other financiers in general, clearly showing that government's contribution is always low and almost constant if not slightly declining every year. If the overall government contribution is low, the amount earmarked for FP and other

RH commodities should be very small or non-existent altogether, which is no wonder a greater role of financing for these commodities was left to development partners.

Figure 3: Government's contribution to RHCS vis-à-vis basket fund and others

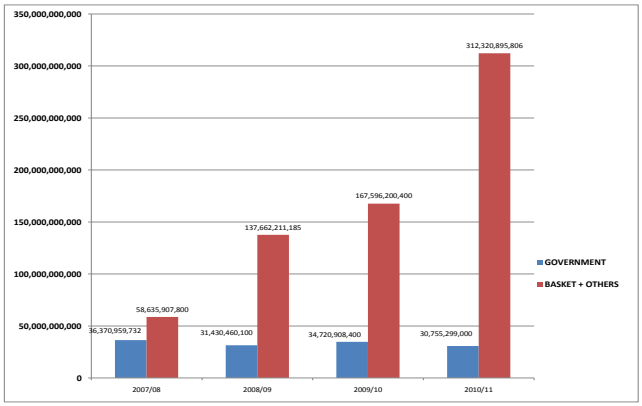
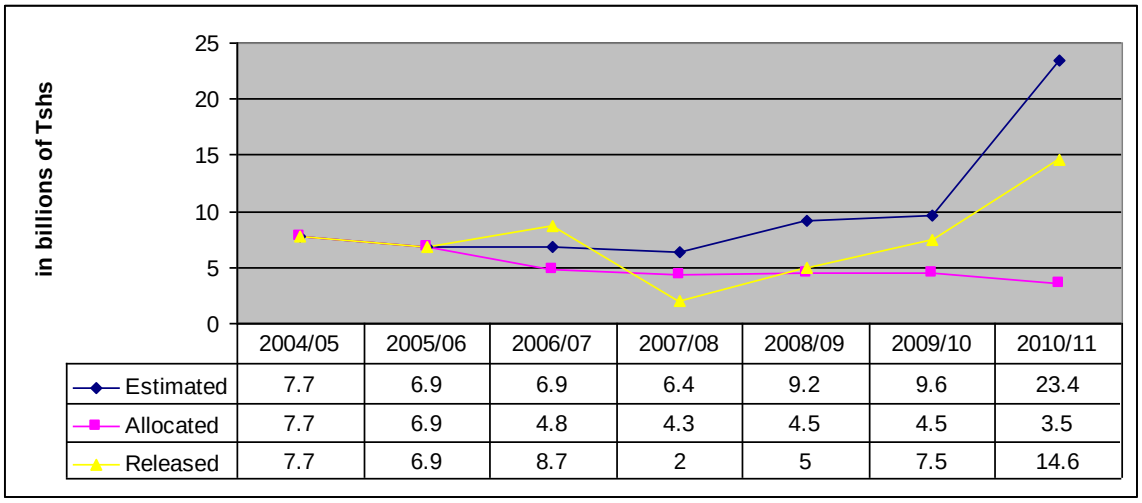


Figure 4 displays funding for RHCs from 2004/5 to 2010/11. For the years 2004/05 and 2005/06, the amounts estimated, allocated, and released, they were the same. But for the year 2007/08, there were variations. While the estimated amount was Tshs. 6.6 billion, allocated amount went down to TShs. 4.3 billion while the amount that was actually released was only Tshs. 2.2 billion. In each of the subsequent years of 2008/09 and 2009/10, the amounts estimated were quite high but the allocated amounts were far below and continually kept falling, though surprisingly the released amounts were higher than those that were allocated. The case for 2006/07 is similar to the foregoing, but it ended up with the finally released amount surpassing the estimated figure. The year 2010/11 displays a unique scenario. It had the highest estimation of Tshs 23.4 billion, and although the allocated amount went down to 3.5 billion, the released sum, just by over mid-financial year, was Tshs. 14.6 billion. Why in some cases the amount actually released was more than what was estimated or what was allocated, was startling, as pointed out earlier. In giving reasons for this situation, the explanation from some of the stakeholders at national were that because of the bureaucratic procedures in releasing the basket funds and of course because of strictness in using those funds, some of the allocated funds would still be available at the end of the financial year such that they would be released in huge amounts at the end of the year so that the unused funds would not go back to the donors or government. For example, throughout 2008/09, 2009/10 and 2010/11, the released amount exceeded what had been allocated. The issue that was not clear was where the money that exceeded what was allocated came from. Unless, some re-allocations had been made by donors or by the government, it was hard to imagine what the source of this 'extra' money was. Nevertheless, the system of releasing more funds towards the end of the year than releasing it evenly throughout the year was considered wasteful because most of such resources could not be planned for.

Divergent views emerged on the extent of government's discretion in using basket money to implement its goals. Some of the stakeholders supported donor interference in the use of funds arguing that it was only with such effort that funds could be used for the intended purposes while others argued that such a practice only served bureaucracy and delays in releasing the money as its release required a long consultative process with partners. But one agreed thing among stakeholders as to why development partners needed to put their money in one basket with the government was that without a basket fund, development partners could focus on a few aspects such as provision of medicines to improve the health status of Tanzanians without considering infrastructural and capacity building needs, which were also important in enhancing health services to the people. In addition to that, because it is the government that is better placed to know where most gaps lied in its health care goals, it was important that money be pooled together to facilitate the government meet its varied goals instead of the resources being focused on only one or two things. For this reason, the basket fund system seemed acceptable to many stakeholders. However, there were other development partners that were not in agreement with this practice, arguing that pooling money in a basket would not meet their goals of having certain areas of interest to them fulfilled such as FP because the government would always be having different priority areas.

Figure 4: Funding of RHCs between 2004/05 and 2010/11 (in billions of Tshs)



	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Estimated	7.7	6.9	6.9	6.4	9.2	9.6	23.4
Allocated	7.7	6.9	4.8	4.3	4.5	4.5	3.5
Released	7.7	6.9	8.7	2	5	7.5	14.6

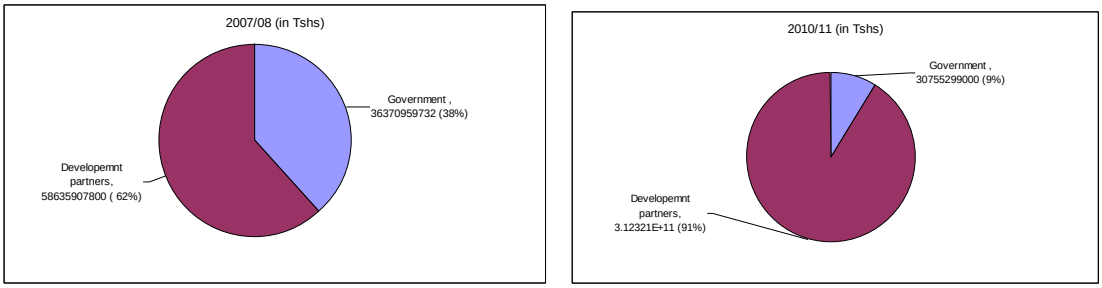
Source: RCHS – Section MoHSW

- *USAID in kind support and emergency shipments by UNFPA not included*
- *Calculated at the exchanges rate of $1 = 1,500 Tshs.*

One of the leading limiting factors in government's commitment to implement its pledges on FP and RH commodities according to the views of all respondents was funding. Figure 4 shows that little money had been set aside from the general budget for medicines as a whole, let alone funds for RH commodities. Evidence shows that the funds were in a continuously declining trend throughout the years. For example, while in 2007/08, the government contributed 38% of the basket fund for medicines leaving 62% to development partners, in 2010/11, government's contribution fell to only 9%, with development partners bearing the whole of burden of contributing 91%. Consequently, the budget for RH commodities also suffered a decline from 4.3b Tshs in 2007/08 to 3.5b in 2010/11 (Figures 4 and 5).

Because of this, stakeholders noted that the whole burden of FP was left to development partners. This made them feel that the government was not giving due weight to FP. It was observed that in part, this was because most policy makers consider FP to be only child spacing instead of it being looked at from a wider perspective of having substantial economic implications on the society in that without family planning many targets in health, education, nutrition, social welfare, and so on cannot be met.

Figure 5: Government's share in the basket fund for RHCs 2007/08 and 2010/11



Source: Extracts from Figure 4

Within the MOHSW, funds for essential drugs are allocated according to cost centres and are based on fixed estimates per centre (dispensary, health centre, hospital) per year. The views from the respondents on this were that this system implies that budget estimates do not reflect demand for goods and services on the ground. As a result of the fixed estimates system some centres could have more than what they needed while others might have less. But one respondent asked: "what is Tshs 390,000 per dispensary or Tshs 810,000 per health center going to do?"

4.6 Financing and the structure of financing of the RHCs at lower level

At national level, it was indicated that financing of FP was entirely left to the donors while RHCs and other medical supplies were shared between the government and donors through basket funding. Medical supplies not funded through basket funding were financed through Block Grants, whose source was mainly government. The funding system at the lower levels was very much reflective of what was said at national level, with the government and donors remaining the main source of funding whereby donors entirely financed FP while the basket fund largely financed RHCs. District governments were supposed to come up with their own budget requirements for the different commodities they needed although they were also faced with budget ceilings. The funds for all medical supplies would be directed to the MSD, the agent responsible for supplying the commodities to the DMOs (in all regions except Tanga) or directly to the health facilities (in the case of Tanga). Because of this system, in-charges of health facilities did not have control of votes for their medical supplies and had little knowledge of how much money they had used or was remaining, as their accounts were maintained by the MSD (see Table 5). Data from the field indicated that maintenance of the MSD accounts by health facilities was also frustrated by the fact that at times if not in most cases the MSD lacked some of what health facilities ordered.

Since commodities that were financed through basket fund were distributed free of charge at the health facilities, the some districts did not see the need of budgeting for these commodities at all. Table 4 shows that only 28% of the health facilities included RHCs in their annual budgets while the rest did not. Ideally, districts should have included the costs

of these commodities irrespective of whether they were funded by development partners or not. While in general most districts considered RHCs as a burden that was to be borne more by development partners, some districts would use their own budgets in acquiring some of the RHCs in case they ran short of them. But it was reported that priority was given to other RHCs than FP.

Table 5: Issues regarding FP and RHCs budgets

Question	Health facilities		DMOs	
	Yes	No	Yes	No
Do you include FP and RHCs in your annual budget?	17	43	4	7
Do you know the amount of budget allocated for FP and RHCs?	1	59	0	12
Do you maintain a vote book for FP and RHCs?	1	54	0	12

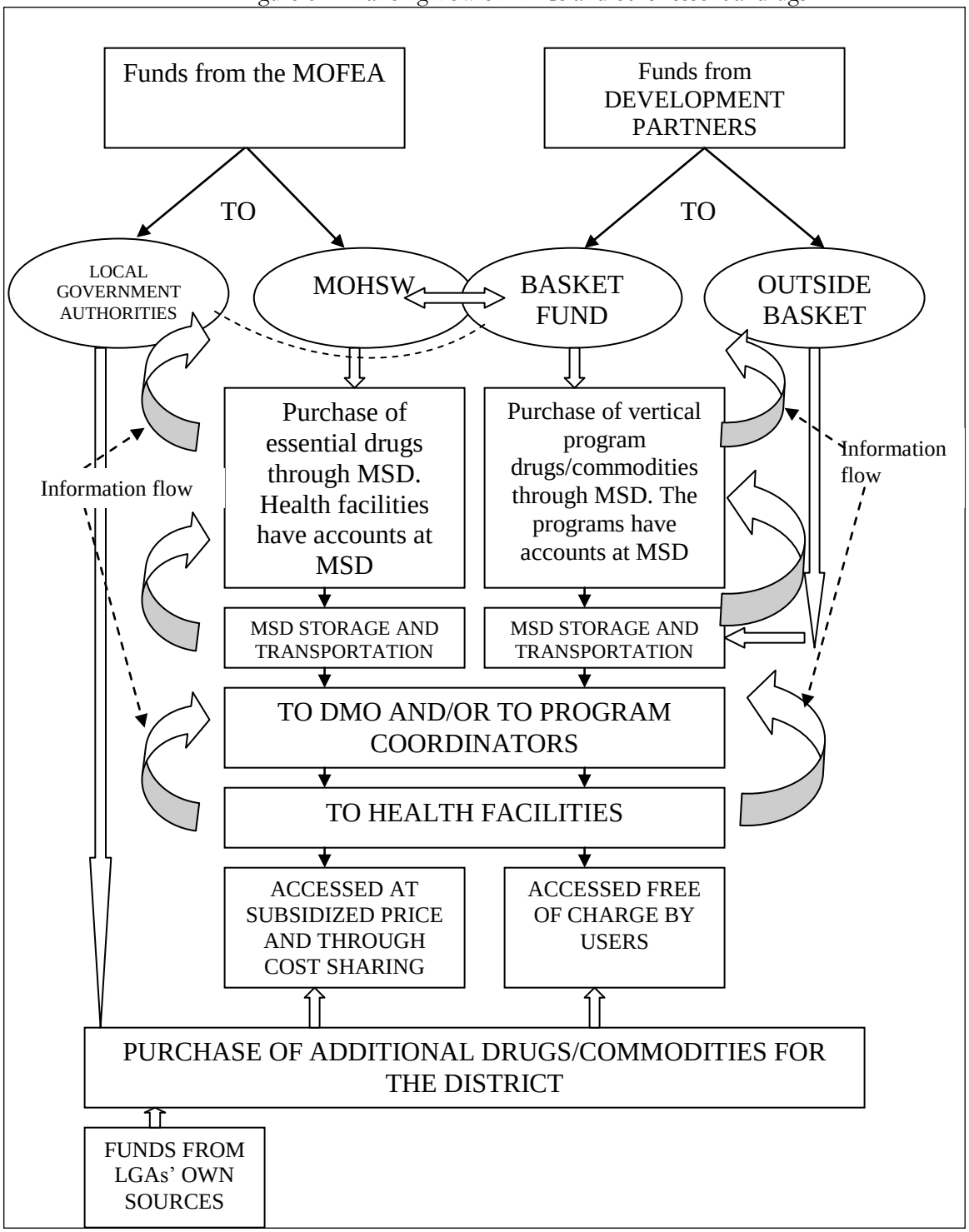
Source: Data from the field

The impression one gets from responses of the people interviewed clearly shows that FP always received low priority. In part, this was because of resource constraints districts were facing, as reflected from one of the answers: "which is more important when you have limited resources to meet your health needs; to prevent pregnancies or deaths?" Yet, another KI asked: "One important criterion in health care budgeting is that budgeting must correspond to the disease burden. On this basis, if 50% of the disease burden in a particular area arises from malaria, this can be quantifiable. But how would you go about quantifying the disease burden of family planning to give it the priority it deserves? More than that, FP does not receive priority in the minds of most people because all people see is that there is plenty of land around us, with little knowledge on the consequences of growing population on other resources including medications". From these arguments, it is clear that RHCs receive more weight than FP commodities in financing. Such a situation did not necessarily arise from health providers' ignorance, but rather from the way the public and most policy-makers think and perceive, as one RCH Coordinators commented: "if a delivering mother or a child dies from lack of medication and proper supplies, the health provider will be in a big trouble. But in FP, lack of commodities has never been life-threatening. Consequently, we are forced to put priority in RHCs even if we know that in the long run, neglecting FP ends with the same consequences anyway".

It has already been said that access to FP and RHCs was essentially free, although this was probably truer for FP than for RHCs. This is because as funding for those commodities was never sufficient, shortages of RHCs were reported to be common, resulting in patients being compelled to pay for the missing items by being told to bring them themselves. This was common especially in rural areas where instances were reported of health providers charging for clinic cards not because they just wanted people to pay money, but because they had to raise money to run refrigerators if services were to be kept going. "When a delivering mother is supposed to be assisted and the provider does not have gloves or does not have the needed supplies, which is better, to tell her go back home until such items are available at the health facility or to tell her to bring them from her own source?" she asked. But for FP, customers did not have to pay for such services because such needs could be postponed. Shortages in FP could have been filled from cost-sharing money. But because of many uncompensated services the poor, elderly, and pregnant women were getting in receiving through exemptions, available resource at district level would be directed to the

replenishment of more pressing essentials than FP commodities. In such a case, RHCs received more weight compared to FP commodities. Even when the interviewed DMOs and hospital in-charges were asked to rank between FP and RHC, 10(71%) out of the 14 ranked RHC first, while three of them thought both were equally important.

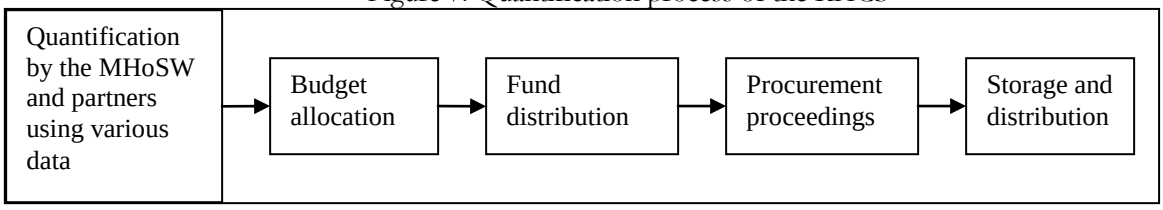
Figure 6: Financing flow of RHCs and other essential drugs



4.7 Quantification and forecasting of RHCs at national level

Quantification of the FP and RHC is important for proper budgeting to facilitate the right quantities of commodities to be supplied, which needs to go together with forecasting for consistent quantities of the required products to be maintained. It has been said that quantification and forecasting of the commodities were supposed to be done by the MOHSW specifically by the PSU in collaboration with the RCHS, through the assistance of JSI-Deliver. But according to what was reported is that, in reality, the quantification process had always been done by the JSI-Deliver alone (during February/March of every year) using experts from Washington. Data indicated that the process did not involve many partners as it might have been expected. In this process, the Permanent Secretary, the Chief Medical Officer, and the Director of Preventive Services remained distant in that they were not reported anywhere. For lack of this involvement, it was learnt that this did not provide sufficient room for internal capacity building for local staff to gain or improve their skills in the quantification exercise. The quantification results prepared by JSI were then presented to all stakeholders, including development partners and civil societies in an annual stakeholders' meeting, through the RCH Working Group. The results were said to be used by the RCHS and other stakeholders to budget for the commodities, the process which is shown in Figure 7. These results were also used by the stakeholders to advocate for contraceptives budget, as ministries competed for funding during the MTEF negotiation process in June. In inquiring about the basis of quantification, the study was informed that it was largely based on historical and issue data from the MSD, including some demographic information.

Figure 7: Quantification process of the RHCS



Determining what and how much to order are critical decisions that need strategic thinking because if the estimations are wrongly done, wrong types and wrong quantities of commodities will be procured. This study established that there were three methods of determining what FP and other RH commodities to order: consumption based method, population based method, and the rational method. The consumption based method relied on historical data, that is, data of commodities that had been issued. The population-based estimation looks at the population and the most important needs of the population. This approach takes into account the epidemiological information available in the population. The third method, the rational method combined the two methods above, which was applied by the JSI–Deliver in quantifying and forecasting the demand for FP and other RH commodities. In applying this method, a ten percent mark up is then factored into the estimates to provide a rational framework that takes into account problems of unreliable data. Generally, all methods were faced with problem of data, it was reported. For example, the population based method was reported to be impaired by lack of accurate information on population, just as the consumption method was.

Also, in determining what to order, it was found that a National Essential Medicines list existed. The list was prepared by the MOHSW for every three years. As a first rule, all orders must comply with this list. But again, orders might be made for special medicines that are not in the National Essential Medicines list. These drugs would be bought based on the existing need at a given point in time. It was learnt from the respondents that the problem here was how to determine need when record management was poor, particularly at lower levels of the supply chain.

From discussions with various stakeholders at national level, it was learnt that, in essence, quantification and procurement of FP and other RH commodities should be based on information that is derived from real demand. Real demand will actually reflect real consumption data and unfulfilled demand. Pointing out the difficulties in procuring commodities based on consumption data, the following reasons were advanced:

i. At the lower levels where actual consumption takes place, there is poor record keeping. The R&R forms, which were essential in providing basic information for planning purposes, were not filled accurately.
ii. Even if the forms would be filled correctly, the data might not reflect real demand. This is because commodities were often in short supply and many clients were being sent back without the missing commodities being recorded. This means when demand forecasts are based on issue data, the unfulfilled demand is always missed, leading to underestimation of demand with successive shortages of stocks.
iii. The R&R forms were not reaching the MOHSW for lack of a person responsible for LMIS management. Quantifiers largely relied on issue data from the MSD
iv. This study found out that there was no agreed formula, no agreed criteria, and no software for calculating demand even if general principles such as quantification being based on consumption data and demographic information were established
v. Overall, one critical problem in the procurement process was shortage of supply and logistics staff to regularly record consumption data, to record data for unfulfilled demand (unmet demand), and to make extrapolations for future commodity demand.

4.8 Quantification and forecasting of RHCs at lower level

Quantification of the commodities at lower levels could not be so much different from what was taking place at national level because, in essence, the whole process started at this lower level with health facilities having to submit their requests to the DMOs using the R&R forms, which were later taken to the Zonal MSDs. At health facility or hospital level the in-charge was the one responsible for this process while at district level, it was the DMO, and at the Zonal MSD, it was the MSD Zonal Manager. As to who specifically was responsible for quantification of these commodities at every stage, much depended on the organization and responsibilities that were assigned to various individuals at those levels. In some places, especially at district level, responses varied with some saying the quantification was done by the DMO, while others saying it was done by the DRCHO and so on. But essentially, these were doing it for the DMO. What seems to be important in this process was the need for data so that what would be quantified was realistic. In many places, data to estimate actual demand for the commodities were hard to come-by. Explaining problems facing the quantification process at lower levels, one of the hospital in-charges said that if quantification has to be correctly made, the supply must be reliable in the first place since

with frequent shortages, demand cannot be correctly forecasted because consumers fail to reveal their real needs when they are constantly not guaranteed by the supply side.

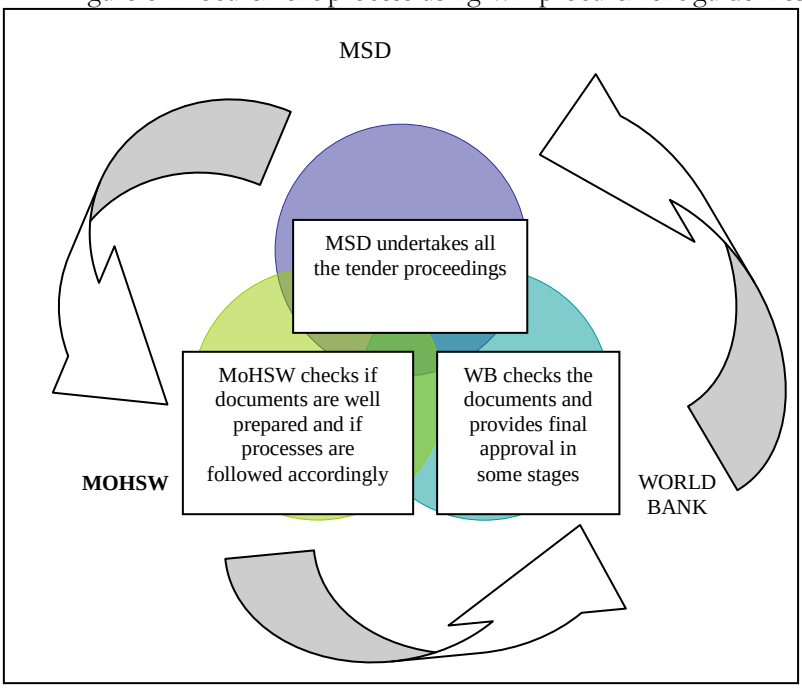
The approach towards quantification of commodities was not uniform. For example, out of 107 interviewees at various levels, 97(90.7%) responded that quantities to be ordered were based on consumption data; 4(3.7%) said they determined their requirements by using Mini-Maxi inventory system and control technique (especially the MSD Managers), 3(2.8%) mentioned historical data, and the last 3(2.8%) cited demographic data.

4.9 Procurement process of the RHCs at national level

Procurement of the FP and RH commodities can be described as a management function that deals with planning for resource acquisition, contracting, obtaining and paying for needed FP and other RH commodities at various levels, from the MSD HQs as an agent of the MoHSW to Zonal MSDs, hospitals, and health facilities. As a process, it involves a number of players, starting with the MoHSW along with its agents, to the consumer. To start with, the MSD gets supplies of RHCs from local and international sources using International Competitive Bidding (ICB) system as the main procurement method. Bids received are opened in public and are evaluated by a technical committee including staff from the Directorate of Pharmaceuticals and Technical Services. All decisions for award of tenders are made by the MSD Tender Board which is composed of senior management members answerable to the Director General of the MSD, as per Public Procurement Act of 2004 and per Regulations of 2005.

For procurement using government funds, all processes are done by the MSD, and it usually takes up to six months for commodities to be delivered (two months of tendering and four months for placing an order till delivery) if the contract is awarded to a local supplier, and up to nine months if the contract is awarded to a foreign supplier (two months of tendering and seven months of order placing till delivery). For procurement using the basket fund, the MSD uses the World Bank guidelines that require checks and approvals from the MoHSW and from the World Bank, as shown in Figure 8. Because of this process, which may need the document to go back and forth until both sides (i.e. the MoHSW and the WB) are agreed, it may take up to two years for the commodities to be delivered (that is, from preparation of tender document to delivery of supplies). Who precisely is responsible for the delay could not clearly be determined from this study. But it would seem that because most of the officers in the MoHSW are out of their offices for other duties in most cases, this became one of the reasons for the delay. In this study, we found that getting a responsible officer that we could talk to and get first hand information was a nightmare because most of them were either away or would be having other pressing things to attend to. Given the number of files and documents they may have to handle, it might not be surprising for such documents to be held up for a relatively long period of time.

Figure 8: Procurement process using WB procurement guidelines



It has been shown above that procurement of FP and other RH commodities was governed by the existing national procurement policies and guidelines. Main ones were the Public Procurement Act – PPA (2004), the World Bank Guidelines and those of TFDA (2003).

Two commonly used methods of procurement were International Competitive Bidding (ICB) and Restricted Tendering (RT). In International Competitive Procurement (ICP) the suppliers are not pre-selected. The suppliers need to produce certificate of Good Manufacturing Practices (GMP) that must be accompanied by a signed Power of Attorney. In restricted tendering, commodities could be secured from outside approved sources and was done outside procurement cycle but the requirement of observing the GMP was still applicable. Some commodities were brought into the country by development partners specifically the USAID, which did not put its money into the Basket Fund. Practical experience has demonstrated several constraints in using the policies and guidelines. For instance, PPA is bureaucratic. Some of the stakeholders pointed out that the procurement process through PPA was too long and cumbersome; it sometimes took more than 12 months to procure commodities as it involved extended processes of preparing bidding documents, advertising, receiving and processing applications, signing contract, and finally receiving FP and other RH commodities. At times, this resulted in even the little money that was budgeted and allocated to the health sector not being spent timely.

4.10 Procurement process of the RHCs at lower level

The main suppliers of FP and other RH commodities to all DMOs are the Zonal MSDs. All health facilities including hospitals order their FP and other RH commodities from the Zonal MSDs through DMOs who compiles the information and these orders through R&R form before submitting them there. DMOs consolidate their health facilities' requirements

on quarterly basis and submit such information to the MSD Zonal depots as an order to request supplies to the health facilities under their jurisdictions.

When asked *whether FP and other RH commodities were requested by the customers or were merely being pushed to them,* majority of the respondents were of the opinion that the supplies were requested by the customers, in the following rates: hospitals, 12(100%); Zonal MSDs, 5 (83%); DMOs, 14(100%); and facilities, 68(97%). Thus, generally, the supply system of FP and other RH commodities is of the pull nature, which is the most preferred mode of operation because, it always concentrates on items which are readily demanded. Nevertheless, Microgynon seemed to have been oversupplied, as it was in excess. It was also reported by some of the Zonal MSD Managers that they sometimes pushed certain items which are not preferred by consumers but were in abundance at the MSD offices for the sake of creating space in the warehouses.

A total of 108 respondents were asked the question on how often they place orders for the supply of FP and other RH commodities from their respective sources. Seventy two respondents, equivalent to 67 percent, answered that they placed orders on quarterly basis. Other thirty one (28%) of them said they placed orders every month. Three of the respondents asserted that they did that whenever required i.e. whenever the items were out of stock. The remaining two answered that it was semi-annually and every two weeks, respectively. So, going by the majority, the orders were placed on quarterly basis according to the ABC ordering and distribution system designed by the MSD and adopted by all public health facilities or entities in the FP and other RH commodities supply chain. The other durations mentioned might have been confused with other ordering and delivery systems for other parallel programmes' supplies, which are distributed by the MoHSW.

4.11 Storage, distribution, the ILS, and the LMIS at national level

(i) Storage

Storage and distribution of FP and RH commodities were some of the main functions of the MSD while the ILS and the LMIS were important in assisting the process of quantification, forecasting, procurement, and distribution of commodities. We examine some of these aspects at national level to give a picture of what prevailed.

(ii) Distribution

At national level, storage and distribution of the FP and RH commodities did not seem to be a major problem. The MSD thought they had enough storage for all their commodities. In case they needed extra storage, they could hire private warehouses provided they met the conditions for storing those commodities. But the MSD personnel considered this to be a rare phenomenon. Storage space would have been a problem if goods would be purchased in bulk. To do away with the need of having to hire warehouses arising from items being ordered in bulk, in 2010, the MSD established a framework contract (FWC) system in which only the right quantities of commodities could be ordered at a time. Since under the new system the supplier would be available for two consecutive years, the need for ordering in bulk did not arise. Under the previous system (i.e. before the FWC) when contracts were signed annually, items would be ordered in bulk to avoid stock-outs during the process of looking for a new supplier, a process that could take long and cause commodities to run out of stock.

The same situation applied to transportation. The MSD officials at national level thought they had enough transportation for distributing commodities to the districts. However, the study team was informed that the challenge was the high cost of transportation. The government usually gave the MSD 15% of the budget they would use for buying different commodities for transportation. But the MSD was experiencing higher costs than the 15% that MoHSW put aside for this activity. Besides, this money was neither being released in full nor timely. This resulted in an outstanding bill of Tshs. 7 billion that the MoHSW owed the MSD.

For convenience of time and other logistical needs, commodities must be shipped in an integrated way and not singly. Because of this need, distribution of the commodities from the MSD to lower levels was done through Integrated Logistics System (ILS). Data from interviews with some of the stakeholder showed that prior to the ILS, essential drugs were distributed under PSU through pre-packed kits. This system was finally found to be expensive because some areas were receiving medicines which they were not in need of, resulting in waste of resources while other areas received far less compared to their disease burden. This was basically a push system whereby goods were simply being pushed to consumers. Later, the indent system was developed in which the supply of commodities was based on the demand of the health facilities in what is called pull system. But again, it was discovered not to work well because each vertical program would order its own commodities such that there were more than a dozen parallel orders from one health facility for RH, for sexually transmitted infections (STIs), for malaria, and for lab equipment, etc, which became chaotic. This necessitated the development of the ILS, whereby ordering of most commodities is to be made using one system, the R&R form.

In further developments, in 2002, the MoHSW, through the PSU, began to address the question of quality of the supply chain and supply of information through having the ILS more integrated with LMIS (database system). For the ILS to work, it depends much on the efficiency of information flow through the Logistics Management Information System (LMIS). To meet this need of strengthening the flow of information and intensify the LMIS, with funding from USAID and Danish International Development Assistance (DANIDA), some capacity building geared towards promoting the LMIS and consequently the ILS at central, regional, and district levels, was conducted. These efforts culminated into all regions using the ILS. But a more advanced LMIS system is being piloted in Mtwara by the ILS Gateway. The system is aimed at facilitating transfer of information and easy monitoring of LMIS at lower levels with the use of mobile phones to send text messages to feed into information network at national level.

Although JSI Deliver through the USAID is providing holistic support to the PSU and RCHS on ILS which significantly benefits from the contraceptive forecasting process, respondents pointed out that implementation of ILS is challenging because the staff at lower levels do not understand why they need to communicate. Another challenge was also high cost of traveling to DMO offices to submit the R&R forms, resulting in poor communication and late submission of the forms; poor supervision and mentorship of health providers on how to use the R&R forms; poor internal motivation of personnel; little understanding of the ILS even after training because not all providers had access to it because of transfers or because they were new employees.

In spite of above challenges with ILS, the MSD was still in touch with the DMOs. It was reported that this was through emails in which the MSD used to send group information to all of them with the DMOs replying using their individual emails. However, the DMOs and health facilities were unable to access the developed ORION system in sending their data, as this system was only accessible at MSD level only. Hence, they continued using the R&R forms for reporting and requesting commodities from the MSD offices, which was manual.

(iii) ILS and LMIS

From the above data, it is definite that the LMIS had not been fully computerized. As reported already, in tracking and keeping records of the supplies of commodities, the MSD HQs and its zonal offices used a computerized system called ORION. The ORION is an on-line stock management tool devised to enable tracking and checking the status of stocks by the MSD. In spite of this system which might have seemed modern so to speak, data availability at the MSD was a serious problem. Consistent data at the MSD was a big problem in this study. But more than that, the system could not be accessed by the districts. At district level, the commonly used means of sharing information was through the Report and Request (R&R) forms, which were used for reporting consumption data and for requesting FP and other RH commodities for replenishment, filled manually. It was also noted that through these R&R forms, the DMOs consolidated data from all health facilities in the district and submitted them to Zonal MSDs from which the commodities were obtained. From the Zonal MSD level, the R&R data were consolidated and sent to MSD HQs for further record. A total of three R&R forms were supposed to be filled by the health facilities. One copy was to remain with the health facility. As the other two would be sent to the DMO for verification, the DMO would send one copy to the MSD, which would finally be sent to the MSD HQs and the other copy to the PSU at the MoHSW to assist the quantification of the commodities at some stage. However, at the Ministry level, nobody was sure where these forms were being sent and who was receiving or handling them. This implied there was lack of a data person to maintain the LMIS. Vertical programs used a slightly different system, as the form would start with the Program District Coordinator, to the MoHSW Program Coordinator, and finally to the MSD.

To say the least, data from the national level revealed that the LMIS was ineffective. It was reported that the existing LMIS could not enable the DMOs to track the balances of stocks at the MSD. Also, the DMOs were not able to monitor balances of their funds deposited at the MSD. Information did not flow well to the top and to the bottom of the supply chain. For instance, updated MSD catalogues for new products did not reach the districts for them to know what commodities were available at the MSD.

However, as noted earlier, the study was informed that currently, the MSD was on trial of a new system called ILS Gateway in three districts in Mtwara region (Masasi, Tandahimba, and Newala). In this, ILS cell phones with prepaid airtime were given to the respective staff in the districts for them to share information about the commodity supply situation with JSI.

4.12 Storage, distribution, the ILS, and the LMIS at lower level

(i) Storage

The storage function is essentially a custodianship role of the commodities received in the store. The items so accepted should be taken care of and kept in a manner that they remain

in a useful condition and capable of serving the intended purpose. The storage function entails responsibilities of receiving, inspecting, storing, issuing, and dispatching commodities. Storage of commodities at lower levels of the supply chain was a bit problematic. When respondents at health facilities were asked as to where they kept the commodities, varied answers came up, ranging from pharmacy store-rooms for many of them, to cup-boards. Responses on whether their existing storage was adequate were fifty-fifty, among 108 respondents. The problem of storage was more pronounced at the district and at the hospital level than at health centre and dispensary levels (4 versus 8 among DMOs; 4 versus 8 among hospital in-charge; and 35 versus 30 among dispensaries). Fortunately, however, a majority (94%) of the districts and health facilities were not receiving commodities that needed a lot of storage. As to whether districts and health facilities had the required conditions for some of the commodities needing special storage conditions, 82% of the respondents agreed while 18% thought they did not have such special storages.

Only 24(22%) of the respondents asserted that they had expired or damaged items in their stores while 84(78%) said they did not have such commodities. According explanations given by the health facility in charges, expired items were reported to District Pharmacists who collected them for further administration. Alternatively, for items that were about to expire, heads of facilities communicated with lateral facilities within the districts so that the items could be transferred to them for use before their shelf life goes off. This is professionally an appropriate approach in dealing with salvages and arisings in stores.

For the few facilities (19%) with expired commodities, FP pills and condoms were the items likely to found expired or damaged because they were in abundant in supply and their demand is somehow low. Even if Microgynon was not one of the items in the list of expired commodities, its likelihood was a bit high because of its low demand while it was also oversupplied. Other RH commodities with possibility of expiring or getting damaged were in slight rates were EmOC drugs and some vaccinations.

In follow up question regarding what they did with the damaged or expired items, once again, for the few facilities with such commodities, responses indicated that 31% of them stored the expired or damaged items separately while 30% said they usually returned them to their respective suppliers. A small number of respondents amounting to 5% said they disposed the items. Disposal of public assets/supplies needed to follow legally stipulated procedures, and no government entity was freely allowed to dispose the items under its possession. These procedures included identifying the expired items, separating them, listing and reporting them to the immediate authority, and finally sending them to the suppliers/authorities for further administration. Such procedures were stipulated in the guidelines, of which only 64% of the respondents were aware (Table 6).

When respondents were asked what they normally did with the items in case of over stocking, 37(34%) respondents found the question not applicable since overstocking situation never happened in their working context (Table 7). Thirty four (31%) respondents said that they usually communicated with pear facilities which were in need of the surplus items and issued to them formally using issue voucher. Some other 25(23%) asserted that they usually returned the goods to their respective suppliers i.e. the MSD Headquarters, MSD Zonal depots or the DMOs. The rest (11%) said they stored the surplus items for future use (Table 7).

Table 6: Are there guidelines for handling damaged or expired items

Respondent	Yes	No	Total
Hospital General	6	6	12
DMOs General	6	5	12
DMO Lushoto	1		1
Hospital Lushoto	1		1
DMO Tanga	1		1
Zonal MSD	5		5
Zonal MSD Tanga	1		1
TOTAL	21 (64%)	11(33%)	33

Table 7: What facilities did in case of overstocked items

	NA	Store for future use	Issue to peer	Return to supplier or DMO or MSD	**Total**
Hospital General	4	1	7		**12**
DMOs General	3	1	7	1	**12**
DMO Lushoto			1		**1**
Hospital Lushoto			1		**1**
Facilities General	24	10	12	19	**65**
Facilities Tanga	2		1	2	**5**
Facilities Lushoto			2	3	**5**
DMO Tanga			1		**1**
Zonal MSD	3		2		**5**
MSD Tanga	1				**1**
Total	37(34%)	12(11%)	34(31%)	25(23%)	108(100%)

Most disposal of expired and damaged FP and other RH commodities was done at the district level, as supported by 64% of the interviewees (N=66), although the study did not examine how procedurally this was conducted. But as long as there were guidelines, it could be assumed they were followed.

(ii) Distribution

The distribution of commodities to the districts and to lower levels was at three stages: goods being transported from the MSD headquarters to the MSD zones using MSD trucks, where in rare cases, the MSD could hire private trucks or ask the MSD zone offices to collect their commodities using their own trucks. It also involved transportation of the commodities to DMOs by the MSD zones using MSD zonal trucks; and from the DMOs to health facilities, by the DMOs using their own transportation.

The importance of shipping items in an integrated way has been underscored in the previous sections. Indeed, ever since the ILS system was introduced, the MSD, the districts, and health facilities have been trying to have an integrated distribution system of their commodities. For example, at the Zonal MSD level, all managers said they practiced this system. At health facility level, this integration was slightly lower, with 56(75% of the

interviewees agreeing that all the supplies were ordered together using the same R&R form while 18(24%) objected.

Interestingly among regions not using the ILS effectively was Tanga (Table 8), even if this was supposed to be a model. In this region, the two types of commodities FP and other RHCs were handled by two different people: the District Pharmacist, who handled other RH commodities and the District Maternal and Child Health Coordinator who handled FP commodities. Whereas the MSD was at one time distributing both FP and RH commodities together, of late, these were being distributed separately and the FP commodities were being delivered to the DMCH Coordinator who then distributed them to health facilities.

Table 8: Ordering of RHCs and other medical supplies using R&R forms

Health Facilities	YES	NO	TOTAL
Lushoto	5	0	5
Tanga	1	4	5
All other HFs	50	14	65
Total	56	18	75
%	75%	24%	100%

(iii) ILS and LMIS

On the ILS and LMIS at the lower level, much has been said when the ILS and LMIS at national level was examined. For example, it was pointed out at this level that while the MSD had introduced a tracking system by using the ORION system for its supplies, the DMOs were not accessible to it such that most information at this level was in the form of R&R forms, which were filled manually, starting with the in-charges of health facilities to the DMO and finally to the MSD and the respective organs.

Most R&R forms were filled on quarterly basis though in a few health facilities they said they were filling them monthly. Responses also showed that to a large extent, 95(88%) of the respondents sent the filled forms and reports in person to the DMOs. Other modes of delivering the reports and forms with insignificant scores were by e-mail, by fax, and giving to commodity delivering vehicles or supervisory visitors. This information matched with the one that was obtained at national level regarding the impediments in explaining why there were problems in timely submission of R&R forms. If these forms had to be submitted personally to the DMOs, it would depend on the distance the health facility was from the district head office for him or her to submit them timely, especially when this person had to rely on his or her own means of transportation and all that. However, the untimeliness was not that much alarming, as 84% of the receiving key respondents said health facilities were preparing and submitting the forms timely (see Table 9).

On the type of reports written and forms filled when requesting for FP and other RH commodities, the responses were that 64(65%) respondents said they used the new R&R forms while 31(32%) were using the old forms, and 3(3%) were combining the old and new forms (Table 10), signaling that the new system had not fully been adopted by all health facilities.

Table 9: Whether DMOs received R&R forms timely

Respondent	Yes	No	Total
Hospitals	10	2	12
DMOs	10	2	12
DMO Lushoto		1	1
Hospital Lushoto	1		1
DMO Tanga	1		1
Zonal MSD (General)	5		5
Total	27(84%)	5(16%)	32

Table 10: Use of new R&R forms versus old form

Respondent	New R&R	Old R&R	New and old R&R	Total
Hospital	9	3		12
DMOs	11	1		12
Facilities	37	22	2	61
Hospital Lushoto	1			1
DMO Lushoto			1	1
Facilities Tanga	2	3		5
Facilities Lushoto	4	1		5
DMO Tanga		1		1
Total	64(65%)	31(32%)	3(3%)	98

Indeed, in the case of Tanga, for example, it was vividly seen that the two systems were being applied concurrently with the new one being used for the RH commodities while the old was being used by for the FP. One contributing reason to this situation was the newness of the system, but the other reason was training. The person who was using the old system in Tanga complained of not having been trained while indeed the one who was using it had been trained. Training as an important component in ensuring that the R&R forms as well as the whole ILS and LMIS kept running smoothly was manifested by DMOs' responses on whether the forms were filled accurately when only 57% of them agreed while 43% thought the forms were not filled correctly (Table 11).

Table 11: Accuracy in filling R&R forms

Respondent	**Yes**	**No**	**Total**
Dmos General	9	3	12
Dmo Lushoto		1	1
Dmo Tanga	1		1
Total	10 (71%)	4(29%)	14

Under the ILS and LMIS system, health facilities needed to know their delivery groups. But the fact that only 58% of the respondents knew where they belonged in that system suggests that the system was not quite known (Table 12).

Table 12: Health facilities knowing their delivery groups

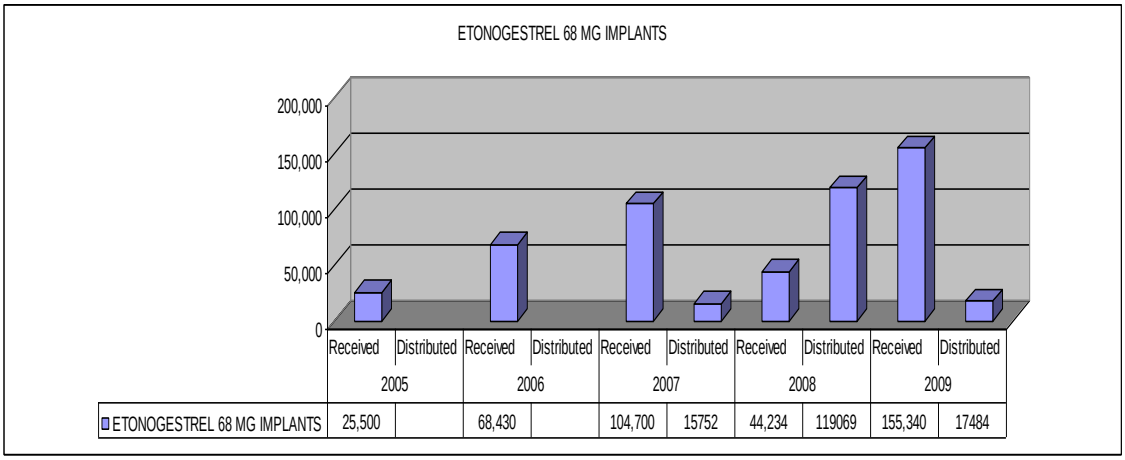
Facilities	Yes	No	Total
Lushoto	5	0	5
Tanga	1	1	2
All other facilities	33	27	60
Total	39(58%)	28(42%)	67

On how health facilities got their ending balance for the commodities, out of the 27 respondents, 59% of them used a combination of methods (ledger, R&R forms, and physical inventory, while 30% used the ledger, 7% used the R&R forms, and 4% physical inventory.

4.13 The FP and RHC situation at national level

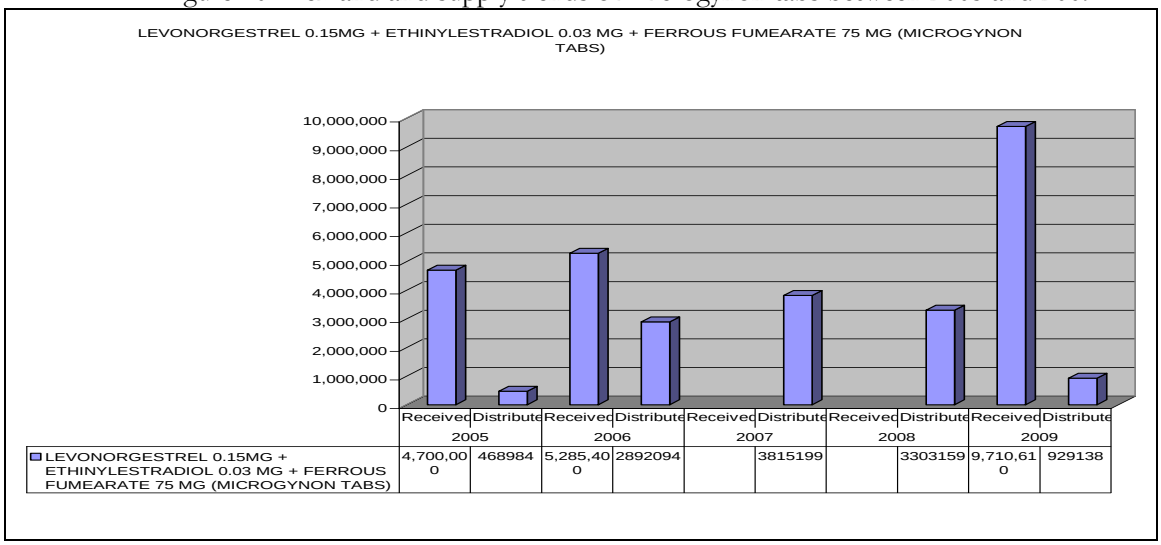
The FP and RHC situation was examine by looking at the supply and demand of the FP and RHCs. This section provides a picture of the supply and demand of the commodities. Demand in this case refers to orders by the MSD of the commodities from various sources while supply refers to the commodities that were distributed to various clients. Figures 9, 10, and 11 portray demand and supply trends for various commodities between 2005 and 2009, based on data from the USAID and MSD, for the years whose data were at least available. In all three figures, one common characteristic is that not only are there many gaps between demand (received items) and supply (distributed items), but also there was a big mismatch between them, with lots of fluctuations throughout the years, indicating that data maintenance and the whole question of LMIS were a big problem in the commodities' supply chain. The MoHSW and the MSD seemed to have more serious problems of maintaining data than in most other places we went to.

Figure 9: Demand and supply trends in Etonogestrol 68 MG Implants



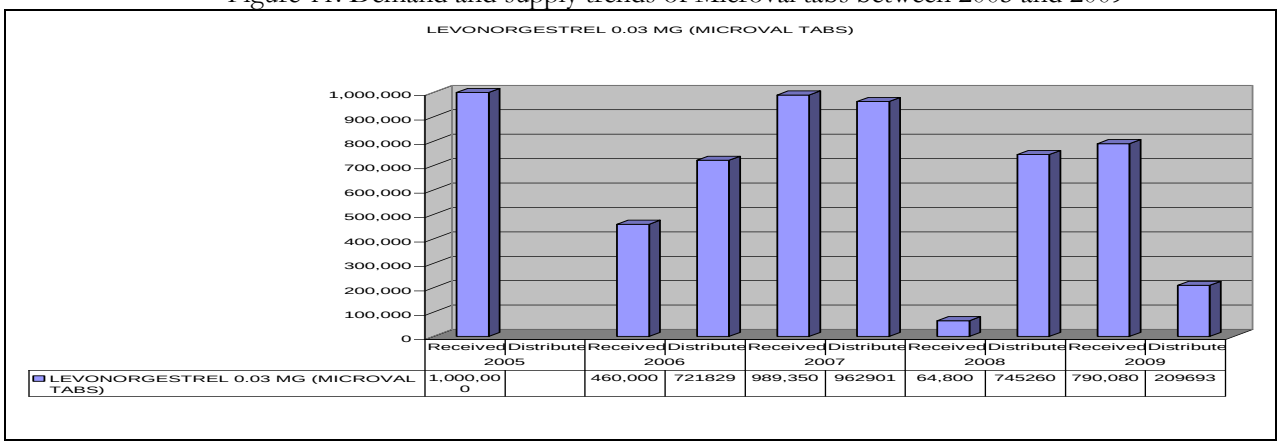
Source: USAID and MSD, Dar es Salaam

Figure 10: Demand and supply trends of Microgynon tabs between 2005 and 2009



Source: USAID and MSD, Dar es Salaam

Figure 11: Demand and supply trends of Microval tabs between 2005 and 2009



Source: USAID and MSD, Dar es Salaam

4.14 FP and RHCs situation at lower level

Largely, FP and RHCs situation is best described by examining the supply and demand of these commodities and seeing whether the commodities were in excess or in deficit. While generally the supply and demand situation was difficult to establish for lack of data especially at national level, there is enough evidence at lower levels where the customers were pointing out frequent shortage in FP and RH commodities. To start with, all Zonal MSD depots reported having stock-outs for different commodities mostly lasting from a couple of days to six months (Table 13 and Figure 12). In the case of Tanga for example, Depo Provera were reported to have been in stock-out for more than six months and in Lushoto, Depo Provera and Oxytocin had been out of stock for more than six months too. Table 13 shows that overall, 87% of the interviewees of different categories experienced some shortages of those commodities, with health facilities at lower levels bearing the brunt of the problem. Generally, most stock-outs lasted between 6 and 12 months, followed by those lasting for 3 months, up to those that went beyond 12 months (Figure 12).

Table 13: Do you ever experience stock-outs?

Respondent	Yes	No	Total
Hospital General	12		12
DMOs General	12		12
DMO Lushoto	1		1
Hospital Lushoto	1		1
Facilities General	47	12	65
Facilities Tanga	5		5
Facilities Lushoto	4	1	5
DMO Tanga	1		1
Zonal MSD General	5		5
Zonal MSD Tanga	1		
TOTAL	89(87%)	13(13%)	102

Figure 12: Duration of stock-outs for various commodities in various health facilities

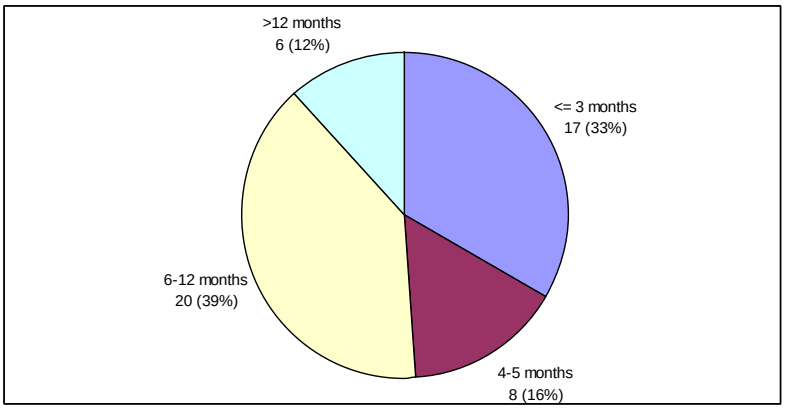


Table 14 highlights that commodities which were leading in stock-out at district level were Depo Provera (Injectables) (64% of the responses), followed by Implanon (59%). In a way, shortages of these commodities reflected that they were in high demand. On average, even if RHCs were also reported to be frequently missing, their frequency and the number of interviewees saying they were experiencing shortage of these commodities were far less than frequencies reported in the shortages of FP commodities (Table 14).

Most stock-outs at district (DMO) and hospital levels were between 3-5 months followed those that lasted 6-12 months, although one DMO reported having experienced stock-out for a commodity for more than 12 months (Table 15). This length was slightly different from the one health facilities at lower levels experienced, of an average of 6-12 months followed by those experiencing less than 3 months (Figure 12).

Table 14: Stock-outs frequently experienced by DMOs and hospitals

Type of commodity		DMOs (N=10)	Hospitals (N=7)	Average percent
FP	Implant/Implanon	6	4	58.57%
	Injectables	7	4	63.57%
	Microgynon	2	1	17.14%
	Lo-femenol	4	2	34.29%
	IUCD	1		10.00%
	Condom	1	2	19.29%
RHCs	Ferrous Sulphate	2	1	17.14%
	Zinc Sulphate	1		10.00%
	Misoprostol		1	14.29%
	SP	4	1	27.14%

Table 15: Length of stock-outs at the district and hospital level

Duration	DMOs	Hospitals
1-2 months	2	2
3-5 months	4	2
6-12 months	3	2
>12 months	1	1

Stock-out trends observed by DMOs and hospital in-charges were similar to what was observed at the facility level in the lower levels of the health system (Table 16). While Injectables were a leading commodity to be in scarcity and was mentioned by 64% of the respondents at district level followed by Implanon (59%) (Table 14), they were mentioned by 62% of health facility in-charges at lower levels who responded to the question, followed by Implanon (26%), Table 16. Comparatively, the rate of stock-out in FP was higher than that of the RHCs. But the rate of RHCs stock-outs at all levels of health facilities was lower than the rate of stock-outs of FP, implying FP commodities were in higher stock-outs than other RHCs (Tables 14 and 16).

Table 16: Stock-outs frequently experienced by health facilities at lower levels

Type of commodity		Tunduru	Manyara	Lushoto	Tanga	Mahenge	Temeke	Iringa	Kibondo	Tabora	Nya'gana	Ilemela	Moshi Urban	Total	Percent
FP	Implant	3	2	1			1	3					2	12	25.5%
	Injectables	4	1	3	3	3	3	4	1	2	1	2	2	29	61.7%
	Microval	1	1		1								1	4	8.5%
	Microgynon	1			1	1					1		3	7	14.9%
	Lo-femenol	1	1		1	2		1	1	2			2	11	23.4%
	IUCD	2									1		1	4	8.5%
	Condom	1			1									2	4.3%
RHCs	Oxytocin	1	1	2						2				6	12.8%
	Ferr. Sulph.		1	1				2	2	1		2	1	10	21.3%
	Zinc Sulp									1			4	5	10.6%
	Magn, Sulp.								1	1			1	3	6.4%
	Ergometrine			1										1	2.1%
	Misoprostol		1	1	1									3	6.4%
	SP	2	2		1		1	2	2	1		2	5	18	38.3%
Total		16	10	9	9	6	5	12	7	10	3	6	22	115	

The pattern of stock-out between districts that were close to MSD depots and those that were far away was not so obvious. Mahenge, for example, reported fewer stock-outs than Moshi Urban. Lower rates of stock-outs could just mean there was a low consumption of those commodities while high rate of stock-out could reflect a higher rate of consumption. This of course did not rule out the problems that were associated with poor forecasting in

balancing supply with demand. But in a strange case, Tanga and Lushoto that had the MSD directly delivering the commodities to the health facilities reported higher instances of stock-outs than Mahenge or Kibondo, which received their commodities from the MSD depots that were far away from them (Table 17). For most respondents, main reasons for stock-outs were poor forecasting and long procurement procedures. However, one nursing officer from one of the health facilities noted that increased rate of sock-out was also a result of low funding from donors who in recent times have shifted their focus on HIV than FP or RHCs.

Table 17: Duration of stock-outs for various commodities in various districts

Duration	Tunduru	Manyara	Lushoto	Tanga	Mahenge	Temeke	Iringa	Kibondo	Tabora	Nyamagana	Ilemela	Moshi Urban	Total
1-5 months	2	1	2	5	2	2	2		1	2	1		20
6-12 months	2	2	1		1	1	2	2	3			4	14
>12 months	1												1

4.15 Human resource at national level

Human resource is an important component in perfecting the supply chain of the FP and RCHs from many angles such as planning for the commodities, quantification, and distribution, among others. At national level, human resource did not seem to be an issue even if there was a big deficiency in personnel to handle data management which was in a critical situation especially at the MSD and at the MoHSW. At both of the se levels, record-keeping was in a big mess, which is why the study did not have organized data for financing of FP and RH commodities.

4.16 Human resource at lower level

All the people who were consulted during the study had the same opinion regarding the staffing position for FP and other RH commodities. They were strongly convinced that there was significant shortage of staff particularly at lower levels of the FP and other RH supply chain. This observation is in agreement with what the Health Sector Strategic Plan III (2009 – 2015) shows; in that staffing in the health sector stands at only 35% of the actual needs according to defined staffing norms. The available number of professional health workers in the public sector is 35,202 with a deficit of 90,722. Shortages in the private sector, especially in FBO-related health facilities are also immense'. The HSSP III continues to note the following, 'there is an enormous shortage of human resources for health across all cadres: clinicians, nurses, pharmaceutical technicians, laboratory technicians, radiographers, physiotherapists, health officers and health administration cadres. The shortage is more severe in rural districts. The high attrition rate is a threat and is compounded by the HIV/AIDS epidemic'.

The problem of shortage of staff is aggravated by the fact that the few that are available do not possess the knowledge and skills necessary for managing the FP and other RH commodities supply chain. This means that they might not be able to do important things like determining demand for relevant commodities and determining order quantities in the first place. For that matter very often demand for FP supplies is underestimated leading to shortages in their supply status and frequent stock outs. But secondly, responses showed that there is scarcity of human resource in terms of needed skills to handle more advanced services such as IUD, Implants, and Injectables, especially at lower levels of the health hierarchy, which means the situation with respect to human resource gets worse in remoter

areas. Lack of human resource causes supply of such commodities to be unavailable because they cannot be ordered when there is no expertise to handle them.

From the JSI-Deliver respondents, there was evidence of this observation. Although JSI Deliver is a technical advisory organ charged with preparing quantification of FP and other RH commodities for the country, it did not have enough staff. The few who were available did not have appropriate skills and experience to do quantification. This explains why they relied on experts from Washington to complete the quantification of commodities.

When some of the interviewees were asked to state the adequacy of the personnel directly involved in managing the supply chain of FP and RH commodities, with the exception of the Zonal MSDs where a fifty-fifty opinion on adequacy of personnel was recorded, the situation depicted at the level of DMOs and facilities was similar, that there was great shortage of staff (Table 18).

Table 18: Opinions on adequacy of RHCS personnel at each level of supply chain

Respondent	Response	Frequency	Percent
Zonal MSD level	Yes	3	50.0
	No	3	50.0
DMOs level	Yes	4	33
	No	8	67
Facilities level	Yes	15	21.4
	No	54	77.1
Total	Yes	22	25
	No	65	73.9

Using the same levels above, an assessment was carried out to determine the skill level of the personnel responsible for managing RHCS. It was found that at the DMOs and the facilities levels the level of skills possessed by RHCS personnel was inadequate (66.7% and 50% respectively). A difference was noted this time when five (83.3%) Zonal MSDs indicated that the small number of personnel that they had possessed an adequate level of skills required for them to carry out their RHCS functions. Specific level results are presented in Table 19.

Table 19: Opinions on the level of skills of RCHS personnel

Respondent	Response	Frequency	Percent
Zonal MSDs level	Yes	5	83.3
	No	1	16.7
DMOs level	Yes	4	33.3
	No	8	66.7
Facilities level	Yes	31	44
	No	35	50
Total	**Yes**	**40**	**45**
	No	**44**	**50**

To confirm the level of skills possessed by the RHCS personnel a question was asked to the respondents on whether or not had they ever attended some training on RHC Security. The results show that six (50%) DMOs had attended training and the other six DMOs (50%) had not attended training (Table 20). Equally at the level of the Zonal MSD three respondents had attended training while another three (50%) had not attended training. At the level of

the facilities the situation was different since only thirty eight (54.3%) respondents indicated having attended training while twenty nine (41.4%) had not attended (Table 20).

Table 20: Experience on training on RHCS

Respondent	Response	Frequency	Percent
Zonal MSDs level	Yes	3	50
	No	3	50
DMOs level	Yes	6	50
	No	6	50
Facilities level	Yes	29	41.4
	No	38	54.3.
Total	**Yes**	**38**	**43.2**
	No	**44**	**50.0**

The other component that was assessed was the contents area of the RHCS training. Respondents at the Zonal MSD level, at the DMO level, at the hospital level and at the facility level were asked to try to remember some of the contents of the training programme that they had attended. It was difficult for the respondents to remember the contents but were able to point out a few including:

- Tanzania Logistics Management System;
- Ordering of RHC commodities;
- Assessing contraceptive and other reproductive commodity supply status;
- Short term methods;
- PCMTC

4.17 Monitoring and evaluation at national level

Monitoring and evaluation of the FP and other RH commodities are a critical activity in any program that is being implemented. Without it being undertaken, it is likely availability of the commodities and their overall security will be jeopardized. The activities of the supply of commodities have to be checked on regular basis to ensure that they are taking place according to plan so that the commodities are available in their right quantities, at the right time, and right place, ready for use by customers.

At the MSD HQs, it was established that monitoring and evaluation activities are conducted regularly. Several reports like weekly reports, monthly reports, biannual, and annual reports were prepared. Different kinds of meetings were planned and conducted with relevant stakeholders for sharing the status of FP and other RH commodities in the country as part of M&E.

Data from FGD at the MSD HQs indicated that the MSD was using the Open Performance Review and Appraisal System (OPRAS) in evaluating its workers and its activities. This is one of the effective quality management tools in organizations. Every employee at the MSD prepares plan of action with smart performance objectives which was discussed and agreed between them and their supervisors. The agreed performance plan was a guide to the performance of the staff during that period. Biannual and annual review sessions were then conducted to monitor and evaluate progress.

From the study, it was reported that procurement zonal capacity building activities were planned and conducted every 3 months. These orientations and training up-dates were

necessary for monitoring and evaluating group performance. The experience from doing this was shared during capacity building sessions, which was quite enriching in terms of know how and how the supply chain was behaving in ensuring FP and other RH commodities were regularly available.

4.18 Monitoring and evaluation at lower level

The emphasis of the assessment of M&E at lower level was on logistics management information system (LMIS) to determine its effectiveness and efficiency in terms of collecting reliable and realistic data about the status of FP and other RH commodities along the supply chain. In addition, the assessment of M&E examined the information flow up and down the supply chain as well as the LMIS tools in use and their effectiveness.

The Zonal Medical Stores Departments (MSDs)

The study assessed knowledge and memory of logistics staff in the zones about the supervision they got from Central Medical Stores Department. Unquestionably, all six zones acknowledged being supervised by the central level staff. Unfortunately, as Table 21 shows, the zones were divided when they were needed to say how often they were being supervised. The results show that one zone (Dar es Salaam) was supervised monthly, three zones (Iringa, Moshi and Mwanza) were supervised quarterly, one zone (Tabora) said it was supervised twice annually and one zone (Mtwara) was supervised on an annual basis.

On the question of scheduled visits the zones were split in halves with three of them (Dar es Salaam, Tabora, and Mwanza) supporting scheduled visits and the other three (Iringa, Moshi and Mtwara) saying the supervision visits were not scheduled. While there was 100% agreement among the zones on the supervisors providing on-the-job training based on supervision results, they were divided in confirming the use of checklist during supervision. The following zones: Dar es Salaam, Moshi, Mwanza, and Tabora said the supervisors used some checklist while Iringa and Mtwara said the supervisors did not use any checklist at all (Table 21).

District Medical Officers

In the area of supervision it was established that all twelve (100%) districts were supervised by logistics staff from higher levels. However there was disagreement among the DMOs when they were asked to indicate the frequency of supervision visits made by staff from higher levels. Eight (66.7%) DMOs said supervision was quarterly while Kahama DMO said every month, Tabora and Temeke DMOs said twice annually, and Tunduru DMO did not remember how often supervision was done (Table 21).

The majority (66.7%) of DMOs indicated that supervision of district staff by staff from higher levels was scheduled, with four (33.3%) DMOs (Iringa, Tabora, Temeke, and Tunduru) saying the supervision visits were not scheduled. All twelve districts agreed on the following areas: that a checklist was used during supervision; that supervision findings were shared; that and on the job training was conducted where needed. The study wanted to establish the practice of the DMOs in supervising staff at lower level facilities. It was found that staff from district headquarters conducted supervisory visits to staff in lower level facilities. As was the case with staff from higher levels, in supervising district level staff, the DMOs did not agree on the frequency of supervision. DMOs for Iringa, Mbulu, Moshi Urban, and Mwanza (33.3%), supervised lower levels on monthly basis. Kahama DMO

(8.3%) supervised lower levels every two months and the other seven (58.3%) DMOs supervised lower levels on quarterly basis (Table 21).

District Hospitals

Experience was also sought from DMOs about the system and practice of monitoring and supervision from higher levels that is from the districts and the Zonal Medical Stores Departments. The study revealed that all hospital authorities were supervised by logistics staff from their higher levels. Also all hospitals had uniform answer indicating that the supervisors provided on-the-job where it deemed necessary. On the contrary there were differences in their responses to the questions on the supervision being scheduled, on sharing results of supervision and on the supervisors using some checklist during supervision. For instance seven (58.3) hospitals said supervision was done quarterly and three (25%) said it was done monthly (Table 21).

Furthermore, nine (75%) hospitals said the supervisors were using some checklist while three (25%) said supervisors were not using any checklist. Concerning the supervisors sharing the results of supervision eight (66.7%) respondents said supervisors were using some checklist but four (33.3%) of the respondents said they were not using checklists (Table 21).

Lower Level Health Facilities

The feedback given by lower level health facilities, that is, health centres and dispensaries, on the supervision by logistics staff from higher level was positive. The scores for all the items assessed in the supervision theme were 70-100% except for the question 'how often' and 'are the supervision visits scheduled' each of which scored 55.7% (Table 21).

Findings on aspects of supervision that were assessed lead to the conclusion that there are some weaknesses in the frequency at which supervision visits are made at each level in the supply chain. Similarly, there are weaknesses in the scheduling supervision visits to lower levels in the supply chain. Table 22 provides a general landscape on supervision status from the Zonal Medical Stores Department to the lowest health facility.

Table 21: Majority responses on the question of supervision

Variable	Majority response	ZMSD (n=6)	DMO (n=12)	HOSP (n=12)	FACIL (n=70)
Do logistics staffs get supervision visits from higher levels?	Answer	Yes	Yes	Yes	Yes
	Frequency	6	12	12	69
	%	100	100	100	98.6
If YES how often do they get supervision visits?	Answer	Quarterly	Quarterly	Quarterly	Quarterly
	Frequency	3	7	7	39
	%	50	58.3	58.3	55.7
Are such supervision visits scheduled or not scheduled?	Answer	Yes/No	Scheduled	Scheduled	Scheduled
	Frequency	3	9	12	39
	%	50	75	100	55.7
Does the staff from higher level use some checklist during supervision?	Answer	Yes	Yes	Yes	Yes
	Frequency	4	8	12	51
	%	66.7	66.7	100	72.9
Do staffs from the higher level share the supervision findings?	Answer	-	Yes	Yes	Yes
	Frequency	-	10	12	70
	%	-	83.3	100	100
During supervision visits do they provide on-the-job training?	Answer	Yes	Yes	Yes	Yes
	Frequency	6	12	12	70
	%	100	100	100	100

Key: *DMO=District Medical Officer, FACIL=Facility, HOSP=Hospital, ZMSD=Zonal Medical Stores Department*

4.19 Reporting on FP and other RH commodities

Reporting of any programme activities is also a critical phenomenon of monitoring and evaluation. This study assessed at depth the practice of reporting the FP and other RH commodities at different levels of the supply chain to determine how effective they were in ensuring a desired security of the commodities.

The results show that all four levels visited namely the ZMSD, the District (DMOs), the hospitals and the lower level (PHC) facilities were reporting using the new R&R forms. However it was found out that the different levels did not agree in their responses on how often they prepared the reports. The main categories of responses showed that reports were prepared monthly and quarterly. Equally there was no clarity among the responding levels about where they sent the reports that they prepared. Table 22 is about the practice of preparing and reporting for different levels of the internal supply chain in the country.

There were several challenges confronting the management of the FP and other RH commodities in Tanzania. It was revealed by the DMOs, the hospitals and PHC facilities that they had problems in ensuring commodity security in the country as a whole (Table 23). From the study's results, it can be seen that some of the operators of the system did not know how to prepare the reports. This is attributable to several things: first the reports need some calculations to be made while some of the operators lack the skills to do so; in some other cases the data available is not accurate at all in the sense that data does not reflect the commodities consumed by the clients.

Table 22: The practice of reporting in the zones (n=6)

Variable	All responses	ZMSD (n = 6)	DMO (n = 12)	HOSP (n = 12)	FACILITY (n = 70)
Do you always prepare and submit reports timely?	Answer	Yes	Yes	Yes	**Yes**
	Frequency	6	10	12	69
	%	100	83.3	100	98.7
What reports or forms do you prepare or fill to request FP and other RH commodities?	Answer	-	New R&R	New R&R	New R&R
	Frequency	-	10	10	41
	%	-	83.3	83.3	58.6
	Answer	-	-		Old R&R
	Frequency	-	-		23
	%	-	-		32.9
How often do you prepare the reports or fill the forms?	Answer	Monthly	Monthly	Monthly	Monthly
	Frequency	2	6	6	35
	%	33.3	50	50	50
	Answer	Quarterly	Quarterly	Quarterly	Quarterly
	Frequency	2	6	6	33
	%	33.3	50	50	47.1
Do you receive R&R forms from lower levels timely?	Answer	-	Yes		No
	Frequency	-	5		NA
	%	-	41.6		NA
	Answer	-	No		No
	Frequency	-	6		NA
	%		50		NA
Where do you send the prepared reports or filled forms?	Answer	MSD HQs	ZMSD & PSU	ZMSD & PSU	DMO
	Frequency	4	5	4	57
	%	66.7	41.7	33.3	81.4
	Answer	MSD HQs & PSU	ZMSD	ZMSD & RCHS	-
	Frequency	2	3	4	-
	%	33.3	25	33.3	-

Table 23: Common problems encountered during writing reports

Variable	All responses	ZMSD	DMO	HOSP	FACIL
Do not know how to write reports or fill the forms	Answer	-	Yes	Yes	**Yes**
	Frequency	-	2	2	7
	%	-	16.6	16.7	10.8
No accurate data on amount of FP and other RH commodities consumed	Answer	-	Yes	yes	Yes
	Frequency	-	2	2	4
	%	-	16.6	16.7	6.2
Do not know how to write or fill form and there is no accurate data of commodities consumed	Answer	-		Yes	-
	Frequency	-	2	3	-
	%	-	16.6	25	-
It requires calculations which are not familiar	Answer	-		Yes	Yes
	Frequency	-		1	11
	%	-		8.3	16.9
Changes of duty	Answer	-			-
	Frequency	-	1		-
	%	-	8.3		-
No any problems in writing or filling the forms	Answer	-	Yes	Yes	Yes
	Frequency	-	5	3	26
	%	-	41.7	25	40

4.20 What was the FP situation from the clients' perspective?

We now examine data from exit interviews. The above analysis has shown that FP were in a greater rate of scarcity than other RH commodities. We thus focus on the examination of the FP from clients' perspectives. This examination should be considered as having been derived from lower level study than from the national level. One important caution to make in this analysis is that with unreliable supply of the items, obviously, this limited the consumers in revealing their actual demand for the commodities. This is because when consumers do not have a wide choice; it will always be hard for them or for someone to determine what their needs for those items are, as the goods are just not there. One very spectacular thing in the data from exit interviews was that out of the 220 people interviewed, there was only one male, implying FP was a feminine issue. Figure 13 shows that nearly 30% of the clients who went for FP were first timers, which means that new comers at any given time were at the rate of 30%, implying a high demand for FP among people. Majority of them were for child spacing and a few for stoppage of fertility, 201 versus 5, respectively (Table 24). Very few people were likely to visit private health facilities for FP; instead, the majority relied on public health facilities, with FBO-related health facilities being depended upon marginally, too (Table 24). Among public health facilities, dispensaries seemed to serve the majority of the clients, 88 out of 219, suggesting an increased attention should be given to the grassroots facilities if FP services are to serve more people. Since the majority of those who accessed FP were rural people, one may conclude that the demand for FP is "highest" in those areas, calling for urgent strengthening of rural services for greater impact.

Figure 13: First time?

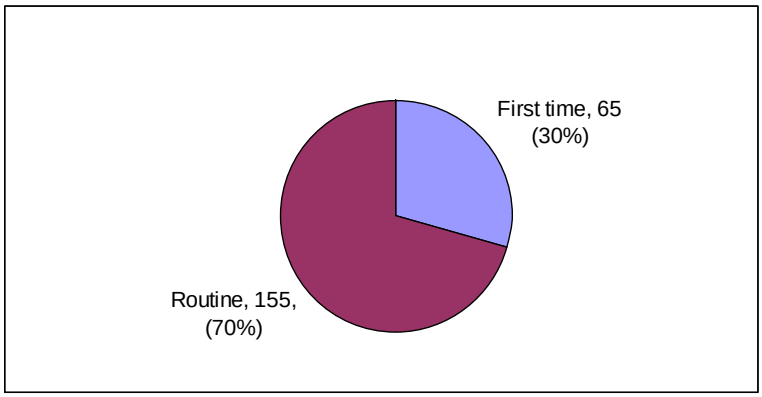


Table 24: FP and the kind of health facilities offering the services

Type of facility	Spacing of birth	Stoppage of fertility	Clinic	Total
Private Hosp	1	0	0	1
Government Hosp	71	3	0	75
FBO	7	0	2	9
Dispensary	78	2	8	88
Health Centre	39	0	3	42
Unknown	5	0	0	5
Total	**201**	**5**	**13**	**219**

Majority of the clients wished to have child-spacing services than stoppage of fertility (Figure 14). An interesting spectrum of who those were going for FP were in terms of marital status, 82% were married while 18% were singles, implying that the demand for FP services is for both married and non-married, even if the demand among married people is substantially higher than the other group (Figure 15).

Figure 14: What did you come for?

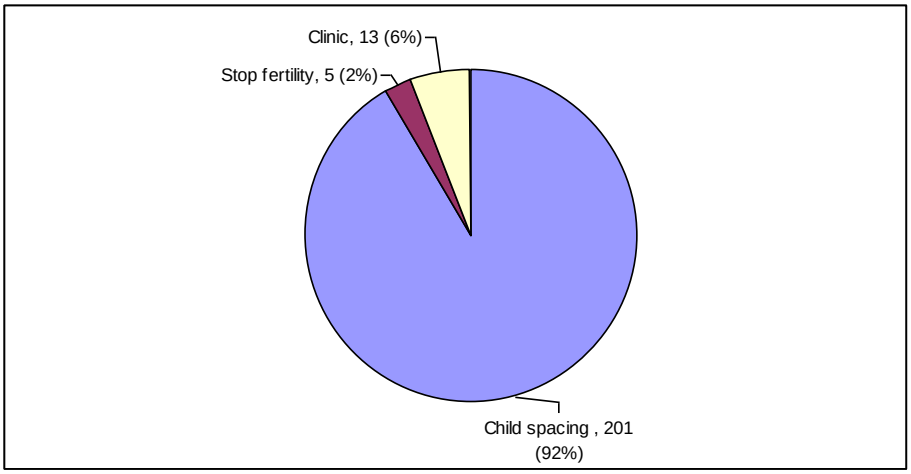
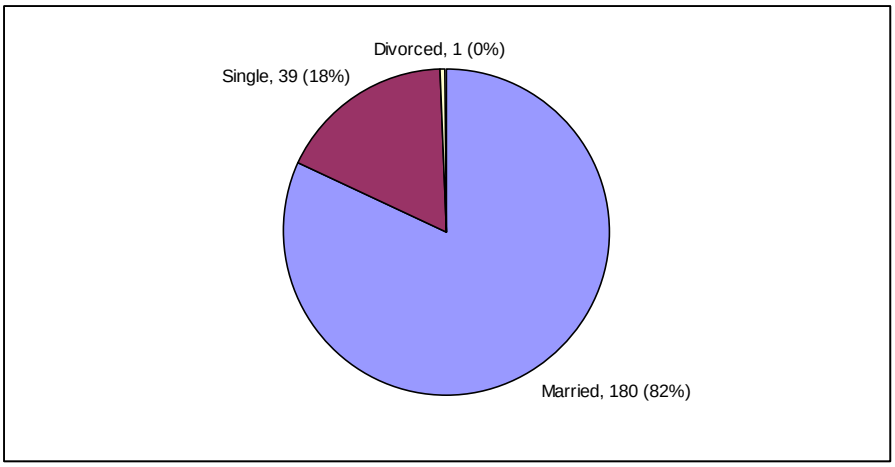


Figure 15: Marital status of FP seekers



The age distribution vis-à-vis the type of services they needed provides an interesting picture. They ranged 15 years to 49, which indeed is almost within the commonly agreed child-bearing range, with the greatest demand for FP being among 20-34 years of age (Table 25 and Figure 16). However, it was not clear why stoppage of fertility would start as early as 25 years! We think the usage of the word stoppage of fertility might have mixed with family planning. But it was logical to see that the number of those needing stoppage of fertility at a much higher age tending to increase (Table 25). Demand for child spacing seemed to decline with age (Figure 16), which is a natural phenomenon for child bearing tending to decline with age.

Table 25: Age versus what the client came for

Age	Age group	Spacing of birth	Stoppage of fertility	Clinic	Total
	15-19	7	0	4	11
	20-24	46	0	3	49
	25-29	60	1	3	64
	30-34	49	1	3	53
	35-39	27	1	0	29
	40-44	10	2	0	12
	45-49	2	0	0	2
Total		201	5	13	219

Figure 16: Need for child spacing services according to age

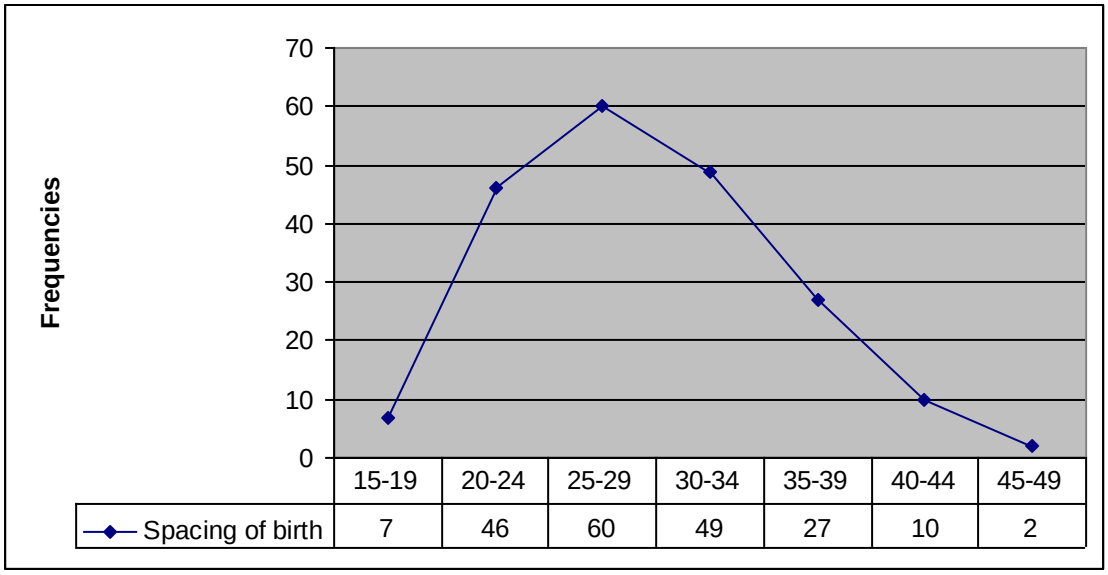


Table 27: Demand for FP based on number of children

Number of children	Age range	Spacing of birth	Stoppage of fertility	Clinic	Total
	1-3	143	0	7	150
	4-6	49	1	3	53
	7-9	5	2	0	7
	10 and above	0	2	0	2
	None	4	0	3	7
Total		**201**	**5**	**13**	**219**

The relationship between the number of children and FP service demand was another interesting scene. All people with 1-3 children demanded was child spacing while fertility stoppage started with 4-6 children and increased as the number of children grew up to the point where people with 10 children needing only stoppage than family planning (Table 27).

Another interesting scene is when people without children being in need of only family planning services than fertility stoppage. These should have been mainly the younger people who were not yet married.

The leading question in this analysis was what was the FP situation, anyway? Figure 17 indicates that those that reported having missed FP services in one of their visits at health facility were 32%, the leading commodity, as usual being the injectables by more than 60%. As a result of having missed the commodity one went for, 90% of the clients had to go for the commodity that was advised by a health provider than those of their choice (Figure 18).

Figure 17: Ever missed the commodity you went for?

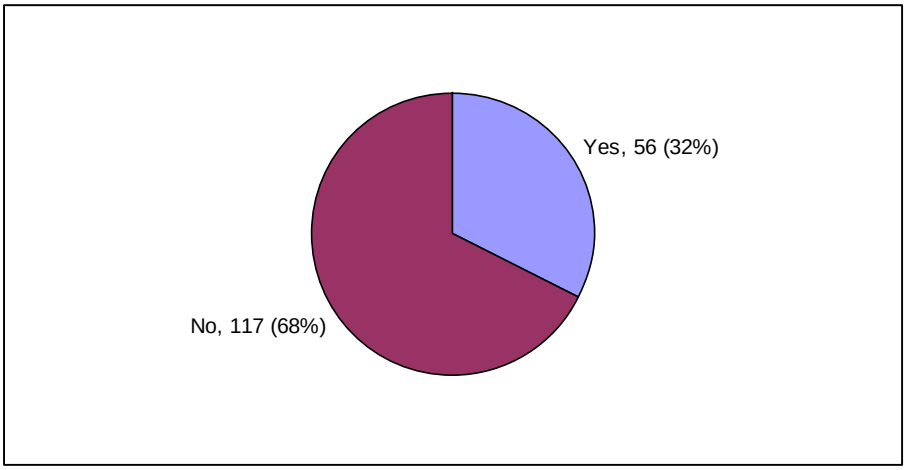
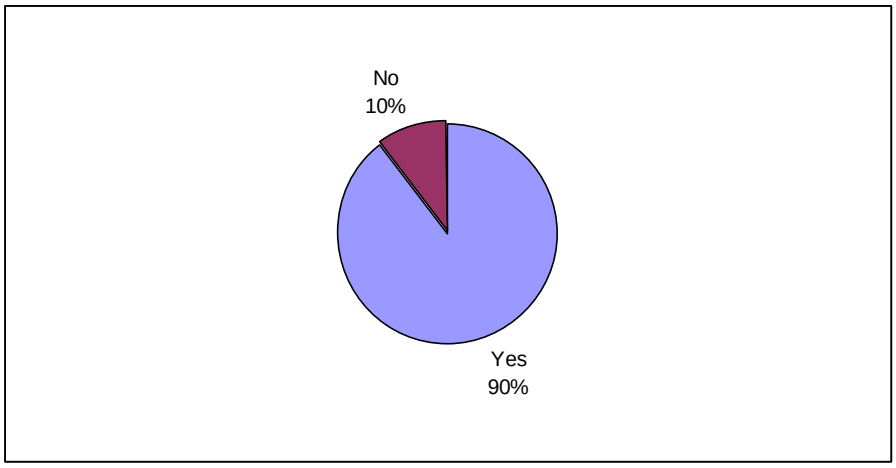


Figure 18: Did you have to go for the commodity you were advised by the provider?



5.0 DISCUSSION OF THE FINDINGS

From the policy perspective, the government of Tanzania has shown a high level of commitment. However, for any policy to be effective and get implemented, it must be backed by enough resources. In this study, findings showed little financial commitment by the government to FP; instead, this role had been left to development partners. Of course, the government was contributing in the form of human resource as well as other infrastructure like health facilities structures. Whether this is was a sufficient commitment is subject to debate. But many respondents thought this situation had been contributed by low awareness among policy makers and decision-makers on the importance of FP in an economy and especially in poor countries. In discussions with various stakeholders, feelings were that most decision-makers probably do not have a clear understanding on the relationship between population growth and development; between population and welfare of the people in terms of food consumption, health needs, and education needs; and between population growth and natural resource use. Discussions with various stakeholders portrayed that it was only through limited population growth that households' welfare could be improved by providing the children with better education, better health, and better nutrition that will make them lead a better life through increased productivity. But for these wishes to be realized, it takes only visionary leaders to put priority in this area. Those without this vision do not realize the long term impacts of increasing population on the already strained resources, and it is for this reason that they eventually give little or no priority to FP. No wonder did this observation coincide with the views of one respondent at lower level of the study who said most people did not give priority in FP because all they see is that Tanzania has plenty of land without considering the land has very limited resources to continue supporting the growing population.

The institutional arrangement for implementing FP and RH services comprised a number of organs and stakeholders along with rules and regulations governing the procurement process of the commodities overseen by specific bodies. While all these institutions were in place to facilitate the supply chain of the FP and RHCs, the bureaucracy created by their existence and the procurement procedures was a hindrance to timely acquisition of the commodities. Above that, the organs dealing with this supply chain were probably too many to the extent there might have been a duplication of functions, which could have been merged to reduce administrative costs and save resources for improvement of the RH services. While the RCHS was supposed to be at the centre of looking into the quantification and forecasting of the commodities for budgeting purposes, the task seemed to be left to the JSI-Deliver who did it without fully involving the RCHS. In this system, the answerability question was not addressed. For example, to whom was the JSI-Deliver answerable? At most data indicated that JSI-Deliver was answerable to the sponsors than to the government. The little or non-involvement of the main stakeholders in the planning of FP and RHCs did not only feature between JSI-Deliver and the RCHS but nowhere in the hierarchy did the Permanent Secretary, the Chief Medical Officer, and the Director of Preventive Services seem to be taking part in this process, which implied that key policy makers were completely detached from the whole process. This had major implications in that whatever was being planned or suggested by the JSI-Deliver or the RCHS on FP could not receive its due weight. Indeed, when the JSI-Deliver had completed its task of quantifying the commodities there were consultative meetings. The question that rose was who chaired these meetings for any

serious commitment of the government? Were any of the above key people there? Data indicated that they were not there; which made FP appear a secondary issue in the MoHSW.

As effort was made by the JSI-Deliver to quantify the FP commodities around February and March, the question was the extent to which those quantifications were mainstreamed in the MTEF budgeting process of the MoHSW. This study did not find any serious integration of the quantified data in the budgeting process of the Ministry. February and March was the time when the government budgetary process took place. So when was the quantified information taken on board when the exercise was taking place at the same time? Budgeting for FP at lower levels also bore a similar picture, with some of the LGAs saying they included the budget for FP commodities and others saying they did not.

Funding for FP and RHCs was obviously inadequate. As for FP, it has been said that the task was almost solely left to the development partners, who according to the observations of some respondents, in recent times, they seem to have shifted their interest towards HIV than FP and RHCs as funding for HIV seemed to be on the rise while that of the RHCs was declining. Funding for other commodities did not seem to be adequate either because if a dispensary was really getting Tshs. 390,000 in a month, that was just too meager to meet essential requirements of such centers in full. Besides, flat rate allocations across health facilities were unjust because there is no way the centers could have been uniform in their disease burden. For other funds, the estimated or requested amounts were never honored even if the criteria used in reaching those estimates or requests were met, such as disease burden.

It was important for the procurement process for the commodities to be governed by some rules and regulations. This is because the procedures are helpful in minimizing leakage or wastage of the resources. But when it took too long to acquire the intended items, this could be costly and wasteful. To improve efficiency in the delivery of the commodities, the government could use some of its development partners to help order the items for the country, as their process takes a shorter time.

The ILS is an important tool in reducing handling costs for the FR and RHCs by ensuring items are ordered and distributed as one package. Yet, the system did not seem to work properly because of the new R&R forms not being adopted by all health facilities for lack of training. The R&R forms were also important in improving the LMIS. But the fact that the forms had not been adopted in full, the LMIS could not also be complete. The forms also being handled manually was another limiting factor in maintaining the LMIS. This seems like calling for computerization of the whole system. While such an idea is good, the limiting factor would be whether the economy can allow the application of the computer especially in rural areas.

For any program to succeed, human resource is a critical factor. It was obvious in the FP and RH chain, human resource was not sufficient from two angles: personnel to handle data, which is a critical problem in many institutions in Tanzania, and human resource to manage advanced services in family planning. Without adequate data, planning cannot be carried out properly. In the face of all these problems, definitely, the supply of FP and RHCs could not be smooth. Thus, the reported stock-outs for various commodities at various stages did not come as surprise.

Tanga was said to be a model for distributing commodities directly to health facilities by the MSD. But this study did not find anything outstanding is that system, as the supply status of the commodities in the region was similar to other regions and districts, particularly with respect to shortages of the commodities.

6.0 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

6.1 Summary of key findings

This study examined the situation of Family Planning (FP) and Reproductive Health (RH) Commodities in Tanzania Mainland and was conducted in two phases: phase-one, which was at national level, and phase-two, which was at zonal/regional/district/health facility level. Issues examined included (i) policy environment and institutional arrangement of the FP and RHCs; (ii) financing system for the commodities; (iii) storage, distribution, ILS and LMIS of the supply chain; (iv) the situation of FP and other RH commodities (i.e. supply and demand of the commodities); (v) quantification and forecasting capacity in the supply chain; (vi) human resource capacity; and (vii) clients' or community members' response to the commodities.

On the policy environment of the FP and RH commodities, the results showed that Tanzania had a high commitment level in ensuring its people had access to reproductive health as seen from various policy documents developed. However, this commitment had not been backed by adequate financing to reflect what the policies were promising.

The institutional set up to facilitate the implementation of FP and RH services comprised a number of internal as well as external stakeholders. Internal stakeholders included the MoHSW itself along with several of its other organs including the MSD, which is the main agent for the government to procure and supply the commodities. Most external stakeholders were development partners: the USAID, UNFPA, the World Bank, JSI-Deliver, Marie Stopes, PSI, and Pathfinder, to mention a few. However, the government did not take a leading role in advocating for FP; leaving this function to development partners mostly. In joint meetings, which were an important forum to show each partner's commitment to FP and RHCs, key policy makers and key decision makers such as the Permanent Secretary, the Chief Medical Officer, and the Director of Preventive Services were not there, leaving their assistants to chair these meetings, which translated to low priority being given to FP and RHCs.

Financing of RHCs was done collaboratively between the government and development partners in what was commonly known as the Basket Fund. However, financing of FP was largely left to the development partners. Even if commodities funded through the basket fund were supposed to be accessed freely at the point of service, at the grassroots, there were signs of patients or clients paying for them indirectly because of their scarcity at critical need. There were divided views on the FP having been left to the development partners, with a majority of respondents thinking it arose from government's negligence as well as ignorance on the role of family planning to check population growth in a resource-

constrained economy like ours while a few others thought it arose from the government being resource constrained.

Quantification and forecasting of the commodities was the role of the RCHS, to be assisted by the JSI-Deliver, on the technical side. But data showed that the responsibility was left to the JSI-Deliver. There were several problems with the quantification process. One is that the exercise was undertaken in February and March during when the national budget was also being prepared such that the quantified data could not feed into the MTEF of the Ministry's budgetary planning process well in advance. The purpose of quantification and forecasting having been to help in coming up with a good budget, the exercise needed to be undertaken early enough to inform planners so that they take the matter on board. Second, the work was prepared by experts from Washington without fully involving the RCHS such that local capacity in this exercise was not being developed. Whether the problem was with JSI-Deliver not wanting to share their knowledge with the local counterparts or the local counterparts not taking interest in the matter, this could not be established. As already highlighted, when it came to sharing the output from JSI-Deliver in joint meetings in which the government and partners needed to show their commitment in funding and advocating for FP and RH services, the participation of key policy makers from the Ministry who should have been in the forefront, was reported minimal. Moreover, the quantification exercise relied on consumption data. But the fact that the consumption of the commodities by itself was already thwarted by supply having been erratic, the whole work was basically unrealistic because it was based on frustrated demand.

Procurement of the commodities was done using the International Competitive Bidding (ICB) that needed adherence to Public Procurement Act. However, the system was confronted by a heavy bureaucracy, resulting in a lot of delays, the source being the tendering procedures, inadequacy of funds, and untimely release of the funds. The distribution system of the commodities was faced with a problem of money for transportation not being released fully and timely, resulting in outstanding arrears of up to Tshs 7b that the government needed to clear with the MSD.

The ILS system had been introduced to improve ordering and distribution system of these commodities in a fashion that would save costs by having the goods ordered in an integrated way. Alongside it was the LMIS, which was crucial in maintaining data, for the supply chain to keep running smoothly. Unfortunately, data showed that the ILS using the newly introduced R&R forms to feed into the LMIS was partially adopted by health facilities in ordering their items. Largely, this was attributable to lack of training on how to use the forms. The ORION system, an online-based system to track various records for the commodities in strengthening the LMIS, was only accessible to the MSD and not to others at lower levels, especially the DMOs. But even with the new ORION system, it would seem data were not well maintained, as researchers of this study could not get any organized information to show what the FP and RHC situation was. Whether this was deliberately done or it reflected the truth about information not being well managed, that is something not clear. One thing that clearly came from this study was how critically the MSD as well as the MoHSW were faced with the problem of data, be it on the supply and demand for the commodities or on funding of those items. As usual, human resource for health was scarce especially in advanced services of FP, and was even scarcer when it came to personnel to manage data.

Assessment of the FP and RH commodities was also done by looking at the supply and demand for the commodities. Besides data to show the real picture of the situation being limited, also, given that financing was limited, that the procurement process was difficult, that the quantification of the commodities was unrealistic, and that skilled health workers were scarce, the supply side was definitely affected. This study found that stock-outs were a common phenomenon for many of the FP and RH commodities, except for a few of them such as Microgynon and condoms. Microgynon was the only reported commodity to be readily available in most health facilities, suggesting that there was lack of coordination among development partners in responding to what was really demanded. On the whole, erratic supply of the commodities frustrated the demand side also.

From the clients' perspective, demand for FP services was high, as depicted from 30% of the clients having gone for FP services for first time. However, for all those who had gone for FP services, 32% reported having missed the service they wanted. Most FP services needed were by 98% for child spacing than for stoppage of fertility, which was only 2%. Demand for stoppage of fertility increased with the number of children one had. However, out of 219 people from exit interviewees, only one was male who had gone for FP services, implying that the services were largely perceived as being a feminine thing, suggesting the need for increased advocacy for the services to be taken up males, too.

6.2 Similarities and dissimilarities of this study's findings with other studies

Item	Findings from this study	Findings from other studies
Funding	Inadequate, untimely, and erratic funding for RHCs with regard to budget requested, budget allocated, and budget finally released	Inadequate and erratic disbursement of funds for RHCs [12]
	Decreasing resources to FP	Decreasing budget for FP from 50% of the total RH in 2003/03 to 8% in 2005/06[13]
	Increased development partners' attention to HIV	Increased development partners' contribution to HIV from 47% of HIV funding in 2002/03 to 67% in 2005/06[14]
	Main source of RHCs funding was development partners by 90% in 2010/11	Main source of RHCs funding was Central Government e.g. 44.2% compared to 21.6% in 2005/06[15]
	Funding problems the main cause of inadequate and erratic supply of the commodities by the MSD	MSD performance in meeting demand for the RHCs being affected by funding problems[16]

[12] UNFPA, Rapid Assessment of Reproductive and Child Health Financial Resources at the Central and Local Levels, 2009
[13] Ibid.
[14] Ibid.
[15] Ibid.
[16] Contraceptive Commodities Follow Up Supervision Report 2010

ILS and LMIS	ILS using the R&R forms having been adopted by only 65% of the providers for lack of training	Inadequate knowledge on filling R&R forms by health providers as well as CHMTs/RHMTs[17]
	R&R forms not being filled correctly by 29% of the respondents	R&R forms not being filled correctly[18]
	Quantification and forecasting of RHCs being based on historical data	Quantification and forecasting of RHCs based on historical data[19]
	Data management a serious problem	Record keeping a serious problem[20]
	Erratic and inadequate supportive supervision	Lack of supportive supervision[21]
Storage	Because of shortages, storage of commodities was not a problem	Insufficient security for contraceptives[22]
S&D	Widespread of stock outs for various commodities, lasting 3-12 months	Extensive shortages of commodities especially implanons and condoms[23]
	Unmet demand for FP at 32%	Unmet demand for FP at 22%[24]
	Leading commodity to be in stock-out and hence reflecting greatest demand was injectables by 64% of the responses, followed by implanon, 59%	Injectables was the commodity in greatest demand[25]
	Moshi Urban was a leading district facing highest shortages of FP commodities	In Tz, Kilimanjaro is leading in contraceptive demand at 69.6%[26]
Human Resource	Lack of skills among providers for advanced FP services such as IUCDs	Lack of providers for insertion of IUCDs and implants[27]

6.3 Conclusion

The demand for FP and RH commodities is yet to be fully met. While indeed attempts by the Tanzania government in promoting the services are clearly seen from the policy perspectives, this has not been at translational level. Implementation in the delivery of services is largely faced with a host of challenges, the leading being financing, which has been inadequate and irregular, and the cumbersomeness of the procurement procedures that have resulted in the supply of the commodities being erratic and insufficient. This implies that a lot more is needed if the intended goals of the MDG, TDV 2025, and the NSGRP are to be realized in the country. Specifically, Reproductive Health Commodity Security can only be achieved if resources are increased and applied more efficiently. This requires all players to commit adequate funds, and exercise timely release of the funds including simpler procurement procedures that give room to better contract framework. For the services to

[17] Ibid.
[18] Ibid.
[19] Ibid.
[20] Ibid.
[21] Ibid.
[22] Contraceptive Commodities Follow Up Supervision Report 2010
[23] Ibid.
[24] MoHSW, HSSP 2009-2015 (HSSP III)
[25] URT, DHS 2004-2005, National Family Costed Implementation Program
[26] Ibid.
[27] Contraceptive Commodities Follow Up Supervision Report 2010

receive the weight and respect they deserve, the Permanent Secretary, the Chief Medical Officer, and the Director of Preventive Services need to take a leading role and become champions for FP and RH services, starting with them chairing joint meetings with development partners and show government commitment as key policy and decision makers. Tanga, which was claimed to be a model in the MSD delivering the commodities directly to the health facilities, did not make any difference with other regions that had their commodities delivered by DMOs. As utilization of some FP services demanded advanced skills to handle them and skills were to handle them were rare except in urban areas, such services remained thus more urban-biased.

6.4 Policy recommendations

- Since policy promises on the FP and RH commodities were not backed by financial commitment and that funding for FP was left to development partners, let the government demonstrate this by putting more resources into these services. Let also the Abuja Declaration to have the health sector receive 15% of the budget be implemented.
- In the study, it was echoed that the government and development partners were tending to divert their attention and resources to HIV more than to FP and RHCs. This needs to be redressed towards a balanced focus
- Findings have shown in the quantification and forecasting processes, the JSI-Deliver did not fully involve the stakeholders except at the stage of sharing output. It is suggested that this process should involve the RCHS as well as other stakeholders while the RHCS and other stakeholders also should take interest in the matter.
- Since the quantification and forecasting of the RHCs was done in February and March of each year during when the national budgetary process was also taking place such that this information could not be used in the MTEF, which is the main budgetary tool, it is suggested that, for the purpose of making use of the quantified data, the exercise be made to feed into the MTEF
- Budget ceilings generally watered down the whole essence of the quantification exercise. For this to be redressed, it is suggested that the budget process honors what the quantification says. To this effect, the budgeting process should be based on available evidence or on data says
- In this study, it was seen that in joint meetings with various stakeholders through which FP services could receive more advocacy, key policy makers such as the Permanent Secretary, the Chief Medical Officer, and the Director of Preventive Services who were supposed to chair the meetings were not there, leaving this role, to their assistants. This downgraded the position of FP services. For FP and RH services to receive the weight and advocacy they deserve, let the biannual meetings that are conducted with various stakeholders be chaired by the respective key people. Likewise, let the Quarterly Contraceptive Security Meeting be chaired by the Director of Preventive Services instead of Assistant Director of RCHS.
- Findings from this study indicated that FP received less weight and this was attributed to low awareness among policy makers and leaders on the effects of growing population on limited resources. Raising policy makers' and other key stakeholders' awareness is a key aspect if a healthy population and sustainable economy are to be maintained. Also, let there be advocacy to key stakeholders such

as the parliamentarians and CSOs on the importance of FP to promote a healthy population and a sustainable economy

- Since procurement procedures are cumbersome, causing delays in acquiring the commodities, and since some development partners have shown efficiency in ordering them directly, the government could consider learning something from this practice and where possible, think of using one the partners or its system to order its commodities timely.
- Additionally, in ensuring smooth and speedy supply of the commodities, not only do we need advocacy for increased resources for FP and RHCs, but also there is need to look into the issues of taxation, customs and clearing, and procurement requirement such that this does not become a question of the RCHS or the MoHSW alone but an issue of various stakeholders: the MOFEA in allocating and releasing funds timely; the TRA in looking into the question of taxes; and the Customs and PPRA, among others.
- For optimal resource utilization, there is need for a stronger coordination among partners so that the most demanded commodities receive more weight in terms of funding. Microgynon was obviously a product that was less demanded and its continued supply was not as helpful as those products that were in high demand
- Given that the R&R forms and the new ILS system had been adopted by a few health providers instead of all, largely because of lack of training, training becomes important for all health providers that are involved in filling these forms. Such training needs to be continuous because of workers' turn over
- This study was faced with a serious lack of data from the MoHSW and from the MSD. It was obvious that data management was a big problem. For this reason, it is suggested that it is high time government sectors were made aware on the importance of research and evaluation. It is also suggested that all institutions in Tanzania be called to strengthened data management by having personnel solely engaged in data maintenance. The study also calls on evidence-based decision-making to give impetus to policy makers to value data
- Human resource to manage advanced FP services such as IUCD was limited, mostly among rural communities. While the use of technical support from partners was a commendable alternative, the choice had some limitations because such support was not widespread in all rural areas. As such, going for services that demand less expertise could be the best alternative. Injectables are a specific commodity that is not only manageable by an ordinary health worker, but it is the most preferred among women because of its access not demanding consultations with husbands who would sometimes decide to bar them when they felt they needed the services
- Training and continuous training of health providers on R&R forms is important if the system is to be used by all health facilities in improving the ILS and the LMIS
- Redistributing commodities that were about to expire or those that could be in excess, as was practiced by some of the health facilities, was a commendable step and should be encouraged to save resources from waste and serve other needy people
- Since Tanga did not stand out to be a special model for distributing the commodities, it should not be replicated elsewhere until some improvement is done to make it different, chiefly by improving the performance of the MSD in acquiring the commodities in their stores in the first place. This is suggestion is made in

awareness that shortage of the commodities that was found at the health facilities did not result from poor distribution system but rather from non-availability of the commodities from the MSD. This improving the delivery system needed to start with making the commodities available at the source.

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