



2011 Reproductive Health Quantification Exercise

United Republic of Tanzania
Ministry of Health and Social Welfare
Reproductive and Child Health Section
2011 - 2013



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2011 RH Quantification: Scope

- Purpose of the exercise is to quantify the 2011-2013 forecasted consumption and determine the procurement quantities and costs required for MOHSW Mainland & Zanzibar
- Public Sector & those supplied by public sector
 - Microgynon (COC)
 - Microval (POP)
 - Injectable
 - Implants
 - IUCD
 - Male Condoms (for all uses)
 - Oxytocin
 - Misoprostol
 - Ergometrine
 - Magnesium Sulphate



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2011 RH Quantification : Participants

- **Dr. Cosmas Swai**, Public Health Specialist, RCHS
- **Edgar Basheka**, Pharmacist, RCHS
- **Josephine Mahamba**, Senior Public Health Logistics Advisor
- **Noela Kisoka**, Senior Public Health Logistics Advisor
- **Roselinda Lugina**, Public Health Logistics Advisor-RH
- **Erin Hasselberg**, Technical Advisor



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FORECASTING



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Forecasting: Organizing, Analyzing & Adjusting Data

- MSD Zonal Issues for 2008, 2009, & 2010
 - Adjusted 2010 data for shortages/stock-outs
 - Stock shortages of Microval, Implanon, Injectables in 2010
- RCHS HMIS data
 - Adjusting for reporting (30%)
 - Converted number of “visits” to commodities using a dispensing protocol
- Demographic data
- More confidence in Zonal Issues as proxy for consumption



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2011- 2013 FINAL FORECAST

Product	2009	2010	2011	2012	2013	Forecast Notes
COC	7,123,471	5,662,387	5,945,506	6,242,782	6,554,921	5% growth rate
POP	159,985	897,427	942,298	989,413	1,038,884	5% growth rate
Implants	42,392	154,787	200,378	220,415	242,457	MSI projections taken into account for 2011; 10% growth rate for 2012 and 2013
Injectables	2,970,640	2,899,602	4,181,095	4,599,205	5,059,125	Used 2010 CPT projection for 2011; then 10% increase on 2012 and 2013
IUCD	35,643	57,205	70,497	74,022	77,723	MSI projections taken into account for 2011; 5% growth rate for 2012 and 2013
Condoms	54,367,200	38,457,106	40,379,961	42,398,959	44,518,907	5% increase for 2011-2013

2011- 2013 FORECAST in CYPs

Product	2011	CYP 2011	2012	CYP 2012	2013	CYP 2013
COC	5,945,506	396,367	6,242,782	416,185	6,554,921	436,995
POP	942,298	62,820	989,413	65,961	1,038,884	69,259
Implants	200,378	701,322	220,415	771,454	242,457	848,600
Injectables	4,181,095	1,045,274	4,599,205	1,149,801	5,059,125	1,264,781
IUCD	70,497	246,739	74,022	259,076	77,723	272,030
Condoms	40,379,961	336,500	42,398,959	353,325	44,518,907	370,991
TOTAL CYP		2,789,022		3,015,802		3,262,655



SUPPLY PLANNING



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Supply Planning

When planning shipments, the team took into account:

- Stock on Hand- MSD Central + Zones 31 Dec 2010
- Shipments received and on order for 2011
- New forecast figures for 2011, 2012, 2013
- Planned shipments using the following Min/Max Levels
 - 12 month system minimum
 - 18 month system maximum
 - 18 month desired end of year stock



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Stock on Hand- MSD Central & Zones (Jan 1st 2011)

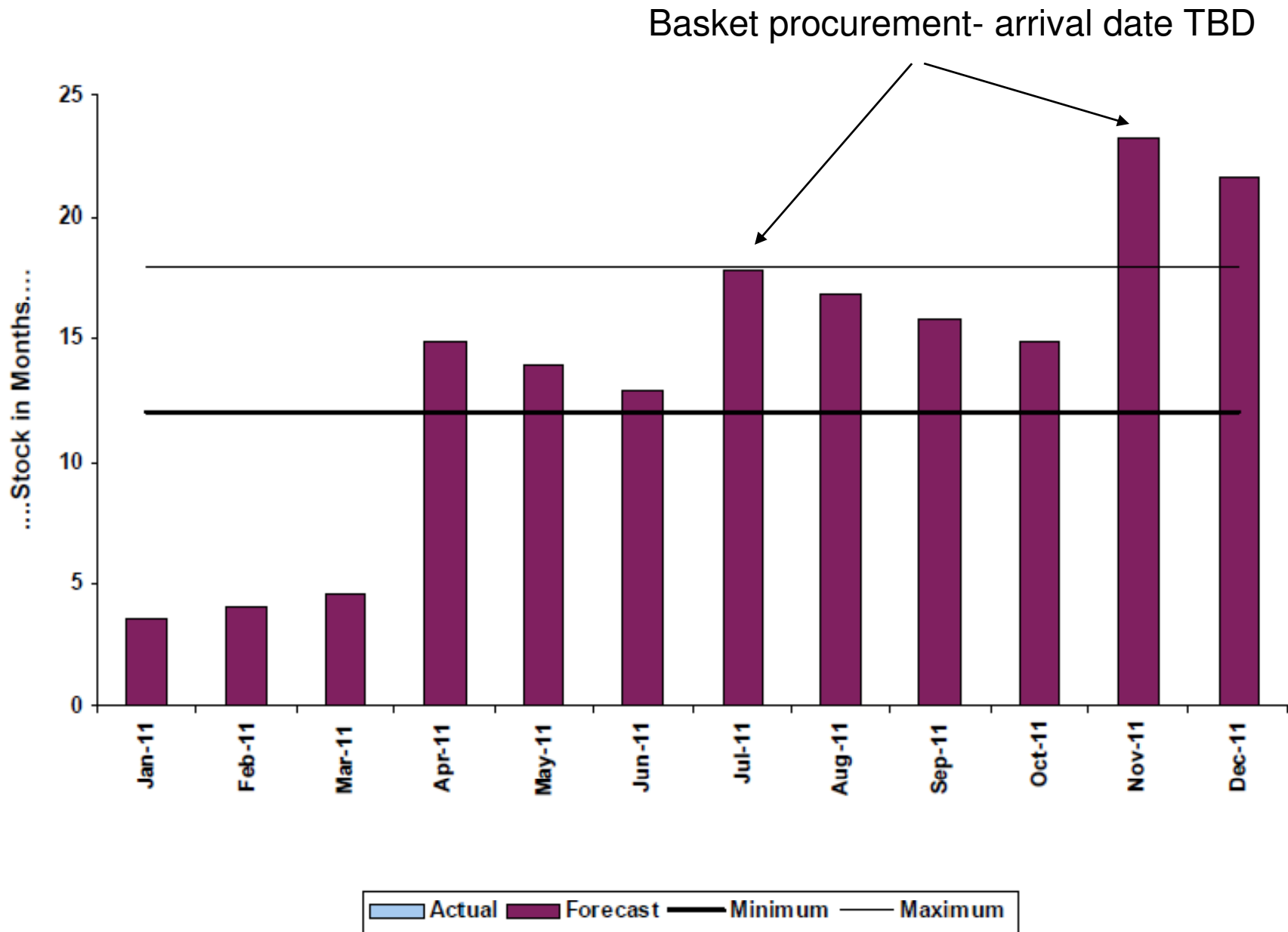
Product	Stock on Hand 1 st Jan 2011	Projected 2011 AMC	Months of Stock on Hand – 1st Jan 2011
Microgynon	4,399,355	495,459	9.2
Lo-Femenal	187,598	-----	-----
Microval	990,741	78,525	12.6
Injectables	1,089,020	348,424	3.1
IUD	53,701	5,875	9.1
Implants	75,993	16,698	4.5
Condoms	13,098,400	3,364,997	3.9



Shipments: Received / On Order / Required – 2011 (calendar year)

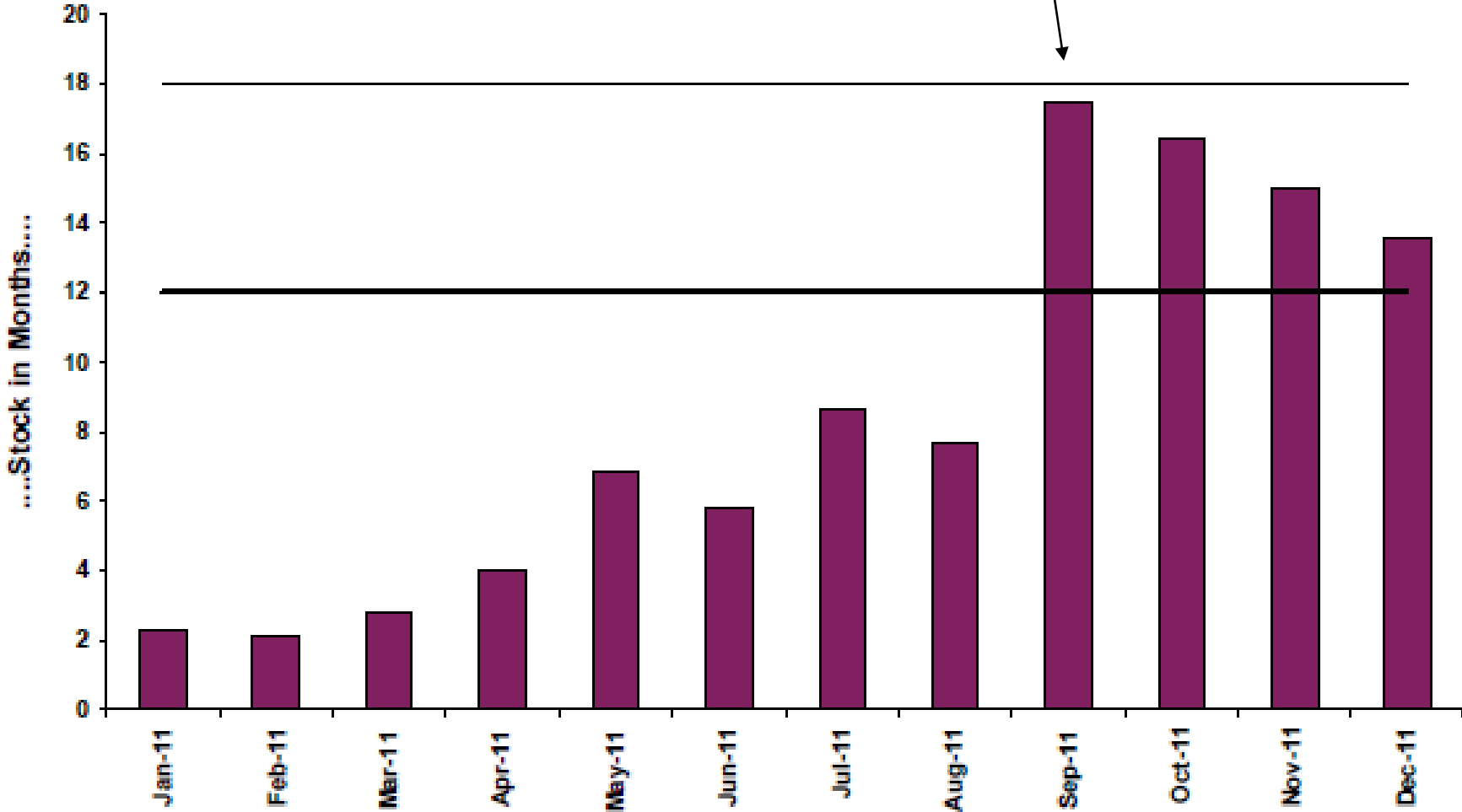
Product	Total Qty already received / on order 2011	Additional Qty Required 2011	Total Cost (USD) for additional orders
Microval	720,000 (Feb) '08 Basket 347,000 (Apr) '08 Basket	485,280 (Dec)	131,972
Microgynon <i>All USAID</i>	2,113,920 (Mar) 2,113,920 (Jun) 2,000,180 (Oct)	-----	-----
Implants	25,000 (Feb) DFID 25,000 (Mar) DFID 189,376 (Apr) DFID 269,611 (Aug) '09 Basket	*None IF Basket shipment (split) arrives in July/Nov	
Injectables	50,000 (Jan) UNFPA 300,000 (Feb) UNFPA 4,972,000 (Mar-Sept) DFID 2,815,000 (Sept) '09 Basket	1,594,800(Dec)	1,765,550
IUCDs <i>All USAID</i>	44,700 (Mar) 22,800 (Aug) 25,200 (Dec)	-----	-----
Condoms	28,000,000 (Jan) GF 24,000,000 (April) GF	20,000,000 (Oct)	591,200
TOTAL COST Additional Shipments Required for 2011			2,488,722

Stock Status 2011 Implants

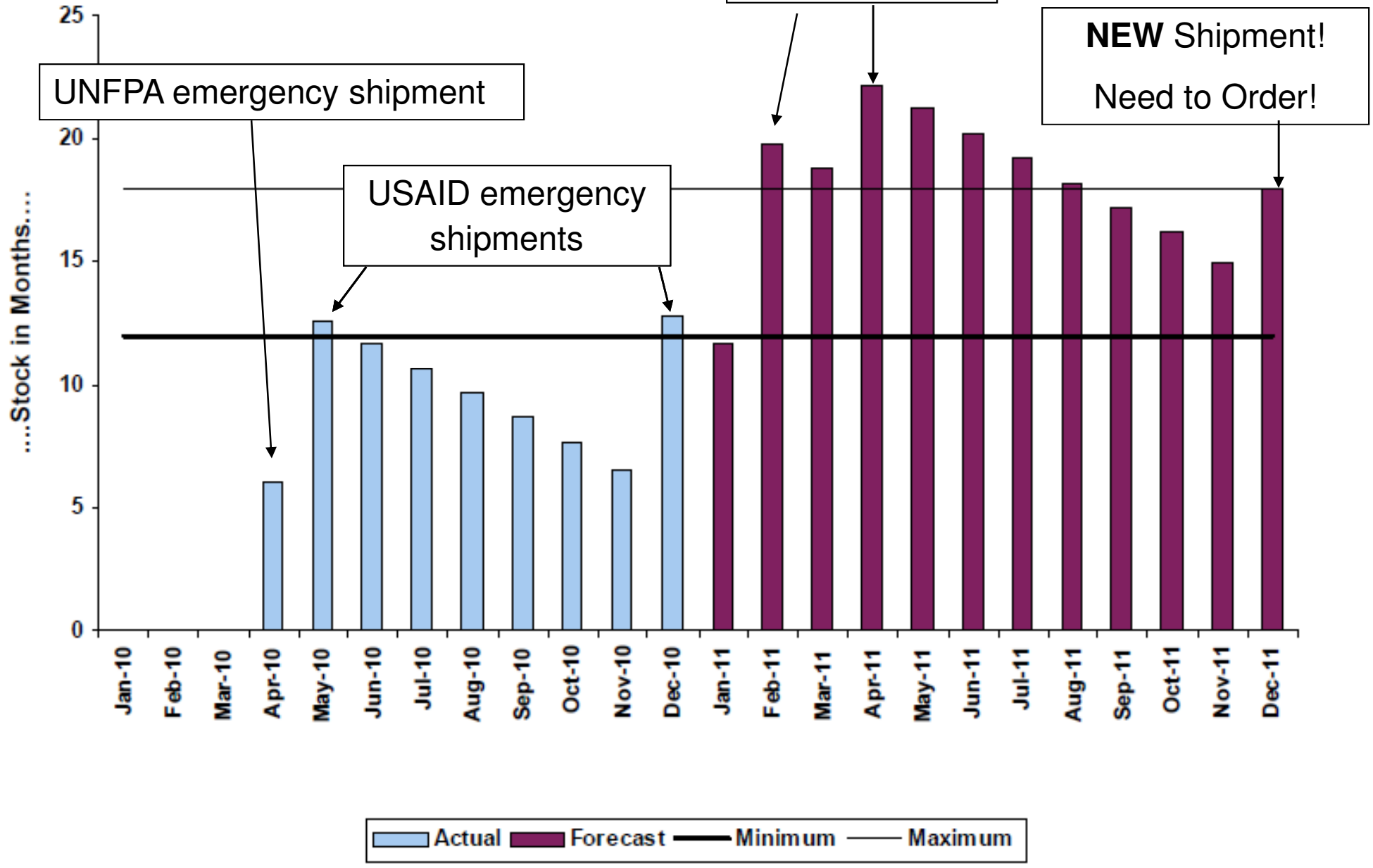


Stock Status 2011 Injectables

Basket procurement- arrival date TBD



Stock Status 2010-2011 Microval



2011/2012 MTEF Year Requirements *(for coverage through 2013)*

Product	Total Qty Required	Total Cost USD (incl. freight & MSD fee)
Microval	1,074,240 (2012) 537,120 (1 st half 2013)	\$292,142 \$146,071
Microgynon	9,698,400 (2012) 3,667,680 (1st half 2013)	\$3,067,119 \$1,159,904
Implants	189,376 (2012) 132,288 (1st half 2013)	\$4,702,281 \$3,008,253
Injectables	5,670,360 (2012) 2,760,320 (1st half 2013)	\$5,765,985 \$2,806,870
IUCDs	81,800 (2012) 46,000 (1st half 2013)	\$50,704 \$28,885
Condoms	48,090,000 (2012) 25,086,000(1st half 2013)	\$1,421,540 \$741,542
TOTAL COST REQUIRED 2011/2012		\$23,191,296

2011/2012 Proposed Suppliers (for coverage through 2013)

Product/ Proposed Supplier	Total Qty Required	PROPOSED TOTAL MOHSW Cost USD (incl. freight & MSD fee)
Microval – MOHSW	1,074,240 (2012) 537,120 (1 st half 2013)	\$292,142 \$146,071
Microgynon – USAID	9,698,400 (2012) 3,667,680 (1st half 2013)	
Implants – MOHSW	189,376 (2012) 132,288 (1st half 2013)	\$4,702,281 \$3,008,253
Injectables – MOHSW	5,670,360 (2012) 2,760,320 (1st half 2013)	\$5,765,985 \$2,806,870
IUCDs – USAID	81,800 (2012) 46,000 (1st half 2013)	
Condoms – MOHSW/Global Fund?	48,090,000 (2012) 25,086,000(1st half 2013)	\$1,421,540 \$741,542
PROPOSED <u>MOHSW</u> TOTAL COST REQUIRED 2011/2012 (Microval, Implants, Injectables, Condoms)		\$17,605,294



RECOMMENDATIONS



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Recommendation 1: **ADVOCACY**

- Begin advocacy ***now*** for a 2011/2012 allocation substantial enough to cover needs and continue building build the pipeline
- Advocate for **SINGLE release** of MTEF funds for contraceptive and RH commodity procurement
- Advocate for a more streamlined procurement approval process for procurements with Basket funds.





Recommendation 2: IMPROVE Stock Status Monitoring & Commodity Distribution

- Quarterly reviews with MSD, PSU, RCHS, and DELIVER prior to CS meetings
 - Update forecasts and shipment status
 - Assess zonal stock status
 - Determine any redistribution plans
- Manage the in-country pipeline more efficiently
 - Localized stock-outs
 - Improved distribution among zones and facilities





Recommendation 3: IMPROVE Collection of Data for Decision-Making

- Imperative to collect consumption data from R&Rs
 - Install Logistics Management Unit Staff at each MSD Zone
 - Utilize new MSD ERP to capture all columns of R&R reports including stock on hand and consumption from facilities
 - Strengthen ILS capacity at facility level
- Conduct ANNUAL Quantification in September
 - Allows for more time for Ministry advocacy for upcoming MTEF
 - Conduct quarterly reviews with half-year update in March
 - Expand product list to include all essential RCHS commodities



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Quantification for Four Critical Safe Motherhood Commodities



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Four additional critical medicines for maternal health

- Oxytocin
 - Misoprostol
 - Ergometrine
- for prevention
& treatment of
post-partum hemorrhage*
- Magnesium Sulphate *(for treatment of eclampsia)*



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Challenges with estimating future need

- Low reporting rates for HMIS data
- No consumption data collected
 - Oxytocin, magnesium sulphate and misoprostol NOT pre-printed on the R&R Form 2A (Health Centres and Dispensaries)
 - Magnesium sulphate and misoprostol NOT pre-printed on the R&R Form 2B (Hospitals)
 - MSD zonal issues data wasn't collected (due to time constraints)
- Central Level MSD issues inconsistent
- Numerous assumptions to estimate usage



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Forecasting Assumptions: Oxy, Miso, Ergo

- Used for Active Management of Third Stage of Labor and treatment of post-partum hemorrhage
 - Assumed oxytocin, misoprostol, ergometrine used at health facilities
 - Assumed misoprostol could be used outside of health facilities
- Assumed following treatment protocols:
 - Oxytocin: 1 vial (10 IUs) for AMTSL; 3 vials for PPH
 - Misoprostol: 600 mcg for AMTSL; 1000 mcg for PPH
 - Ergometrine: 1 vial (0.5 mg) for AMSTL; 1 vial for PPH



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Forecasting Assumptions for AMTSL: Oxy, Miso, Ergo

- Expected pregnancies: 1,663,165 (Projected from 2002 Census)
- 51% deliver in health facilities (2010 DHS; 7% private)
 - Assumed 93% of those health facilities are PUBLIC sector
 - Assumed 70% of public sector deliveries received oxytocin, 20% misoprostol, & 10% ergometrine
- 49% deliver outside of a health facility (2010 DHS)
 - Assumed 50% went back to a health facility for treatment
 - Of that 50%, assumed 70% received oxytocin, 20% misoprostol, & 10% ergometrine



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Forecasting Assumptions for Treatment of PPH: Oxy, Miso, Ergo

- Assumed 10% of all deliveries at a public sector health facilities are treated for PPH
 - Assumed 90% received oxytocin, 5% misoprostol, and 5% ergometrine



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Forecasting Assumptions for Eclampsia: Mag Sulph.

- Assumed 10% of all deliveries in public sector health facilities presented as cases of eclampsia
 - i.e. deliveries in public sector facilities + home births that go to hospital after delivery
- Assume 6 vials per case of eclampsia



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Comparisons

	MSD 2011 Sales Forecast	Case-based 2011 forecast	2010 MSD Central Issues
Oxytocin (vials)	1,080,000	1,354,228	660,540
Misoprostol (boxes of 20 tabs)	108,000	38,282	2,637
Ergometrine (vials)	360,000	129,202	163,710
Magnesium Sulphate (vials)	60,000	717,789	??



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2011-2013 Forecast *(based on case data)*

	2011 Forecast	2012 Forecast	2013 Forecast
Oxytocin (vials)	1,354,228	1,401,831	1,451,056
Misoprostol (boxes of 20 tabs)	38,282	39,628	41,019
Ergometrine (vials)	129,202	133,744	138,440
Magnesium Sulphate (vials)	717,789	743,020	769,111



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Current Stock Situation- February,2011

	2011 SOH	Expected Shipments	MOS (based on forecast)
Oxytocin (boxes of 10 vials)	19,428	112,720 (Apr)	9.7 months
Misoprostol (boxes of 20 tabs)	0	20,000 (Mar)	5.3 months
Ergometrine (boxes of 10 vials)	19,335	40,751	53.8 months!
Magnesium Sulphate (boxes of 25 vials)	204	1,482 (Mar)	0 months!



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2011-2012 Supply Plan & Costs

	2011 Quantity Req'd + 1 st half 2012 Quantity Req'd	Cost
Oxytocin (boxes of 10 vials)	188,605 (Jun/Dec 2011) 72,468 (Jun 2012)	\$419,252 \$161,090
Misoprostol (boxes of 20 tabs)	66,814 (May/Nov 2011) 21,034 (May 2012)	\$237,793 \$74,861
Ergometrine (boxes of 10 vials)	None required	-----
Magnesium Sulphate (boxes of 25 vials)	62,686 (Apr!/Nov 2011) 15,818 (May 2012)	\$2,414,085 \$609,163
	TOTAL COST	\$3,916,244



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Discussion



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